OECD Skills Outlook 2013

FIRST RESULTS FROM THE SURVEY OF ADULT SKILLS



OECD

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BETTER POLICIES FOR BETTER LIVES

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Foreword

It is no exaggeration to use the word "revolution" when talking about how our lives have changed over the past few decades. Today we rely on information and communication technologies and devices that hadn't even been imagined in 1980. The way we live and work has changed profoundly – and so has the set of skills we need to participate fully in and benefit from our hyper-connected societies and increasingly knowledge-based economies.

Governments need a clear picture not only of how labour markets and economies are changing, but of the extent to which their citizens are equipping themselves with the skills demanded in the 21st century, since people with low skills proficiency face a much greater risk of economic disadvantage, a higher likelihood of unemployment, and poor health. Our new publication series, *the OECD Skills Outlook*, aims to provide that picture. It will offer an annual overview of how skills are being developed, activated and used across OECD and partner countries, and highlight the kinds of education, employment, tax and other social policies that encourage and allow people to make the most of their potential.

This inaugural edition of the *OECD Skills Outlook* is devoted to reporting the results of the first round of the Survey of Adult Skills, a product of the Programme for the International Assessment of Adult Competencies (PIAAC). The survey provides a rich source of data on adults' proficiency in literacy, numeracy and problem solving in technology-rich environments – the key information-processing skills that are invaluable in 21st-century economies – and in various "generic" skills, such as co-operation, communication, and organising one's time.

If there is one central message emerging from this new survey, it is that what people know and what they do with what they know has a major impact on their life chances. The median hourly wage of workers who can make complex inferences and evaluate subtle truth claims or arguments in written texts is more than 60% higher than for workers who can, at best, read relatively short texts to locate a single piece of information. Those with low literacy skills are also more than twice as likely to be unemployed. The survey also shows that how literacy skills are distributed across a population has significant implications on how economic and social outcomes are distributed within the society. If large proportions of adults have low reading and numeracy skills, introducing and disseminating productivity-improving technologies and work-organisation practices can therefore be hampered. But the impact of skills goes far beyond earnings and employment. In all countries, individuals with lower proficiency in literacy are more likely than those with better literacy skills to report poor health, to believe that they have little impact on political processes, and not to participate in associative or volunteer activities. In most countries, they are also less likely to trust others.

These results, and results from future rounds of the survey, will inform much of the analysis contained in subsequent editions of the *Outlook*. The *Outlook* will build on the extensive body of OECD work in education and training, including findings from its Programme for International Student Assessment (PISA) and its policy reviews of vocational education and training, and its work on skills, particularly the Skills Strategy – the integrated, cross-government framework developed by experts across the Organisation to help countries understand more about how to invest in skills in ways that will transform lives and drive economies. The *OECD Skills Outlook* will show us where we are, where we need to be, and how to get there if we want to be fully engaged citizens in a global economy.



Angel Gurría
OECD Secretary-General

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The international Consortium was responsible for developing the assessment instruments and preparing the underlying data under the direction of Irwin Kirsch. Iddo Gal, Stan Jones, Ken Mayhew, Jean-François Rouet and John P. Sabatini led the expert groups that oversaw the development of the background questionnaire and cognitive assessment instruments. Cees Glas chaired the project's Technical Advisory Group.

The development of the project was steered by the PIAAC Board of Participating Countries, chaired by Satya Brink (Canada) from 2008 to 2010, Dan McGrath (United States) from 2010 to 2013 and Paolo Sestito (Italy) from 2008 to 2013. A full list of the members of the Board together with the names of the National Project Managers, experts, members of the international Consortium and staff of the OECD Secretariat who have contributed to the project can be found in Annex C of *The Survey of Adult Skills: Reader's Companion*.

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Reader's Guide

Data underlying the figures

Detailed data tables corresponding to the figures presented in the main body of the report can be found in Annex A. These figures and tables share a common reference number, are numbered according to the corresponding chapters, and include an abbreviation in brackets to denote one of the three direct measures of skills for which there are data in the Survey of Adult Skills (PIAAC) – literacy (L), numeracy (N) and problem solving in technology-rich environments (P). As an example, Figure 3.1 (L) denotes the first figure in Chapter 3 based on the literacy scale and it has Table A3.1 (L) as a corresponding data table in Annex A.

Annex B includes other detailed data tables that either correspond to figures included in boxes or to citations in the main body of the report, but for which no figure was provided.

Unless otherwise stated, the population underlying each of the figures and tables covers adults aged 16-65.

Web package

Figures included in Chapters 3 through 6 and the corresponding data tables contained in Annex A present data for only one of the three direct measures of skills, either literacy (L), numeracy (N) or problem solving in technology-rich environments (P). A more comprehensive set of tables (and figures, when available) can be found on the web at *www.oecd.org/site/piaac/*. This more comprehensive web package includes all the figures and tables included in the report as well as data tables for the other skills domains referred to but not examined in the report. The package consists of Excel® workbooks that can be viewed and downloaded by chapter.

StatLinks

A *StatLink* URL address is provided under each figure and table. Readers using the pdf version of the report can simply click on the relevant *StatLinks* url to either open or download an Excel® workbook containing the corresponding figures and tables. Readers of the print version can access the Excel® workbook by typing the *StatLink* address in their Internet browser.

Calculating international averages (means)

Most figures and tables presented in this report and in the web package include a cross-country average in addition to values for individual countries or sub-national entities. The average in each figure or table corresponds to the arithmetic mean of the respective estimates for each of the OECD member countries included in the figure or table. As partner countries, Cyprus* and the Russian Federation are not included in the cross-country averages presented in any of the figures or tables.

Standard error (S.E.)

The statistical estimates presented in this report are based on samples of adults, rather than values that could be calculated if every person in the target population in every country had answered every question. Therefore, each estimate has a degree of uncertainty associated with sampling and measurement error, which can be expressed as a standard error. The use of confidence intervals provides a way to make inferences about the population means and proportions in a manner that reflects the uncertainty associated with the sample estimates. In this report, confidence intervals are stated at 95% confidence level. In other words, the result for the corresponding population would lie within the confidence interval in 95 out of 100 replications of the measurement on different samples drawn from the same population.

Statistical significance

Differences considered to be statistically significant from either zero or between estimates are based on the 5% level of significance, unless otherwise stated. In the figures, statistically significant estimates are denoted in a darker tone.

Symbols for missing data and abbreviations

a	Data are not applicable because the category does not apply.
c	There are too few observations or no observation to provide reliable estimates (i.e. there are fewer than 30 individuals). Also denotes unstable odds ratios which may occur when probabilities are very close to 0 or 1.
m	Data are not available. The data are not submitted by the country or were collected but subsequently removed from the publication for technical reasons.
w	Data have been withdrawn at the request of the country concerned.
S.E.	Standard Error
S.D.	Standard Deviation
Score dif.	Score-point difference between x and y
% dif.	Difference in percentage points between x and y
(L)	Literacy domain
(N)	Numeracy domain
(P)	Problem solving in technology-rich environments domain
GDP	Gross Domestic Product
ISCED	International Standard Classification of Education
ISCO	International Standard Classification of Occupations

Country coverage

This publication features data on 20 OECD countries: Australia, Austria, Canada, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Ireland, Italy, Japan, Korea, the Netherlands, Norway, Poland, the Slovak Republic, Spain, Sweden and the United States. Three OECD sub-national entities include: Flanders (Belgium), England (United Kingdom), and Northern Ireland (United Kingdom). In addition, two countries that are not members of the OECD participated in the survey: Cyprus* and the Russian Federation**.

Data estimates for England (UK) and Northern Ireland (UK) are presented separately as well as combined in the data tables, but only as combined (i.e. England/N. Ireland [UK]) in the figures.

Data estimates for France are included only in Chapters 2 and 3 of the report. Data estimates for the Russian Federation are included only in the data tables of Chapter 2 in Annex A of the report due to the timing of the availability of a final data set. Comprehensive data for both countries are expected to be available as part of the web package (see web package section in this Guide).

The Survey of Adult Skills (PIAAC) is being implemented in nine additional countries: Chile, Greece, Indonesia, Israel, Lithuania, New Zealand, Singapore, Slovenia and Turkey. Data collection will take place in 2014 and the results will be released in 2016.

Rounding

Data estimates, including mean scores, proportions, odds ratios and standard errors, are generally rounded to one decimal place. Therefore, even if the value (0.0) is shown for standard errors, this does not necessarily imply that the standard error is zero, but that it is smaller than 0.05.

Education levels

The classification of levels of education is based on the International Standard Classification of Education (ISCED 1997).

Further documentation and resources

The details of the technical standards guiding the design and implementation of the Survey of Adult Skills (PIAAC) can be found at (*www.oecd.org/site/piaac/*). Information regarding the design, methodology and implementation of the Survey of Adult Skills can be found in summary form in *The Survey of Adult Skills: Reader's Companion* (OECD, 2013) and, in detail, in the *Technical Report of the Survey of Adult Skills* (OECD, 2013, forthcoming).

**Notes regarding Cyprus*

Readers should note the following information provided by Turkey and by the European Union Member States of the OECD and the European Union regarding the status of Cyprus:

Note by Turkey

The information in this document with reference to "Cyprus" relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Turkey recognises the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of the United Nations, Turkey shall preserve its position concerning the "Cyprus issue".

Note by all the European Union Member States of the OECD and the European Union

The Republic of Cyprus is recognised by all members of the United Nations with the exception of Turkey. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus.

Throughout this report, including the main body, boxes and annexes, Cyprus is accompanied by a symbol pointing to these notes.

***A note regarding the Russian Federation*

The data from the Russian Federation are *preliminary* and may be subject to change. Readers should note that the sample for the Russian Federation does not include the population of the Moscow municipal area. The data published, therefore, do not represent the entire resident population aged 16-65 in Russia but rather the population of Russia *excluding* the population residing in the Moscow municipal area.

More detailed information regarding the data from the Russian Federation as well as that of other countries can be found in the *Technical Report of the Survey of Adult Skills* (OECD, 2013, forthcoming).

References

OECD (2013), *The Survey of Adult Skills: Reader's Companion,* OECD Publishing.
http://dx.doi.org/10.1787/9789264204027-en

OECD (2013, forthcoming), *Technical Report of the Survey of Adult Skills,* OECD Publishing.



Executive Summary

The technological revolution that began in the last decades of the 20th century has affected nearly every aspect of life in the 21st: from how we "talk" with our friends and loved ones, to how we shop, and how and where we work. Quicker and more efficient transportation and communication services have made it easier for people, goods, services and capital to move around the world, leading to the globalisation of economies. These social and economic transformations have, in turn, changed the demand for skills as well. With manufacturing and certain low-skill tasks increasingly becoming automated, the need for routine cognitive and craft skills is declining, while the demand for information-processing and other high-level cognitive and interpersonal skills is growing. In addition to mastering occupation-specific skills, workers in the 21st century must also have a stock of information-processing skills and various "generic" skills, including interpersonal communication, self-management, and the ability to learn, to help them weather the uncertainties of a rapidly changing labour market.

The Survey of Adult Skills (PIAAC) was designed to provide insights into the availability of some of these key skills in society and how they are used at work and at home. It directly measures proficiency in several information-processing skills – namely literacy, numeracy and problem solving in technology-rich environments. The main findings of the survey and of the analysis of results are presented below.

WHAT ADULTS CAN DO IN LITERACY, NUMERACY AND PROBLEM SOLVING IN TECHNOLOGY-RICH ENVIRONMENTS

- In most countries, there are significant proportions of adults who score at lower levels of proficiency on the literacy and numeracy scales. Across the countries involved in the study, between 4.9% and 27.7% of adults are proficient at only the lowest levels in literacy and 8.1% to 31.7% are proficient at only the lowest levels in numeracy.
- In many countries, there are large proportions of the population that have no experience with, or lack the basic skills needed to use ICTs for many everyday tasks. At a minimum, this ranges from less than 7% of 16-65 year-olds in the Netherlands, Norway and Sweden to around 23% or higher in Italy, Korea, Poland, the Slovak Republic and Spain. Even among adults with computer skills, most scored at the lowest level of the problem solving in technology-rich environments scale.
- Only between 2.9% and 8.8% of adults demonstrate the highest level of proficiency on the problem solving in technology-rich environments scale.

HOW CERTAIN SOCIO-DEMOGRAPHIC CHARACTERISTICS ARE LINKED TO SKILLS PROFICIENCY

- Adults with tertiary-level qualifications have, on average, a 36 score-point advantage in literacy – the equivalent of five years of formal schooling – over adults who have completed lower-than-upper secondary education, after other characteristics have been taken into account.
- The combination of poor initial education and lack of opportunities to further improve proficiency has the potential to evolve into a vicious cycle in which poor proficiency leads to fewer opportunities to further develop proficiency and vice versa.
- Immigrants with a foreign-language background have significantly lower proficiency in literacy, numeracy and problem solving in technology-rich environments than native-born adults whose first or second language learned as child was the same as the language of assessment, even when other factors are taken into account.
- While older adults generally have lower proficiency than their younger counterparts, the extent of the gap between generations varies considerably among countries, suggesting that policy and other circumstances may weaken the impact of the factors responsible for the otherwise negative relationship between key information-processing skills and age.

- Men have higher scores in numeracy and problem solving in technology-rich environments than women, but the gap is not large and is further reduced when other characteristics are taken into account. Among younger adults, the gender gap difference in proficiency is negligible.

HOW SKILLS ARE USED IN THE WORKPLACE

- The use of skills in the workplace influences a number of labour market phenomena, including productivity and the gender gap in wages.
- It is not uncommon that more proficient workers use their skills at work less intensively than less proficient workers do, indicating that mismatches between skills proficiency and the use of skills in the workplace are pervasive.
- An individual's occupation is more strongly associated with how that person uses skills at work than either his or her educational attainment or the type of employment contract he or she has.
- About 21% of workers are over-qualified and 13% are under-qualified for their jobs, which has a significant impact on wages and productivity.

HOW SKILLS ARE DEVELOPED AND MAINTAINED – AND LOST

- Proficiency in literacy, numeracy and problem solving in technology-rich environments is closely related to age, reaching a peak at around 30 years of age and declining steadily, with the oldest age groups displaying lower levels of proficiency than the youngest. The decline in proficiency over time is related both to differences in the amount and quality of the opportunities that individuals have had to develop and maintain proficiency (particularly, but not exclusively, through formal education and training) over their lifetimes, and to the effects of biological ageing.
- At the country level, there is a clear relationship between the extent of participation in organised adult learning activities and average proficiency in key information-processing skills.
- Adults who engage more often in literacy- and numeracy-related activities and use ICTs more – both at and outside of work – have greater proficiency in literacy, numeracy and problem-solving skills, even after accounting for educational attainment. Engagement in relevant activities outside of work has an even stronger relationship with proficiency in the skills assessed than engagement in similar activities at work.

THE RELATIONSHIP BETWEEN SKILLS PROFICIENCY AND ECONOMIC AND SOCIAL WELL-BEING

- Proficiency in literacy, numeracy and problem solving in technology-rich environments is positively and independently associated with the probability of participating in the labour market and being employed, and with higher wages.
- In all countries, individuals who score at lower levels of proficiency in literacy are more likely than those with higher proficiency to report poor health, believe that they have little impact on the political process, and not participate in associative or volunteer activities. In most countries, individuals with lower proficiency are also more likely to have lower levels of trust in others.

Overview

ABOUT THE SURVEY OF ADULT SKILLS (PIAAC)

A decade after the publication of results from the first round of the Programme for International Student Assessment (PISA), its seminal assessment of the knowledge and skills of 15-year-olds, the OECD has conducted its first Survey of Adult Skills, which extends the assessment of skills to the entire adult population. The survey, a product of the OECD Programme for the International Assessment of Adult Competencies (PIAAC), focuses on skills – literacy, numeracy and problem solving – similar to those assessed in PISA; but the two studies use different assessment tasks, reflecting the different contexts in which 15-year-old students and older adults live. The surveys have complementary goals: PISA seeks to identify ways in which students can learn better, teachers can teach better, and schools can operate more effectively; the Survey of Adult Skills focuses on how adults develop their skills, how they use those skills, and what benefits they gain from using them. To this end, the Survey of Adult Skills collects information on how skills are used at home, in the workplace and in the community; how these skills are developed, maintained and lost over a lifetime; and how these skills are related to labour market participation, income, health, and social and political engagement. With this information, the Survey of Adult Skills can help policy makers to:

- examine the impact of reading, numeracy and problem-solving skills on a range of economic and social outcomes;
- assess the performance of education and training systems, workplace practices and social policies in developing the skills required by the labour market and by society, in general; and
- identify policy levers to reduce deficiencies in key competencies.

Key facts about the Survey of Adult Skills (PIAAC)

What is assessed

The Survey of Adult Skills (PIAAC) assesses the proficiency of adults from age 16 onwards in literacy, numeracy and problem solving in technology-rich environments. These skills are "key information-processing competencies" that are relevant to adults in many social contexts and work situations, and necessary for fully integrating and participating in the labour market, education and training, and social and civic life.

In addition, the survey collects a range of information on the reading- and numeracy-related activities of respondents, the use of information and communication technologies at work and in everyday life, and on a range of generic skills, such as collaborating with others and organising one's time, required of individuals in their work. Respondents are also asked whether their skills and qualifications match their work requirements and whether they have autonomy over key aspects of their work.

Methods

- Around 166 000 adults aged 16-65 were surveyed in 24 countries and sub-national regions: 22 OECD member countries – Australia, Austria, Belgium (Flanders), Canada, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Ireland, Italy, Japan, Korea, the Netherlands, Norway, Poland, the Slovak Republic, Spain, Sweden, the United Kingdom (England and Northern Ireland), and the United States; and two partner countries – Cyprus (see notes at the end of this chapter) and the Russian Federation.
- Data collection for the Survey of Adult Skills took place from 1 August 2011 to 31 March 2012 in most participating countries. In Canada, data collection took place from November 2011 to June 2012; and France collected data from September to November 2012.

...

- The language of assessment was the official language or languages of each participating country. In some countries, the assessment was also conducted in widely spoken minority or regional languages.
- Two components of the assessment were optional: the assessment of problem solving in technology-rich environments and the assessment of reading components. Twenty of the 24 participating countries administered the problem-solving assessment and 21 administered the reading components assessment.
- The target population for the survey was the non-institutionalised population, aged 16-65 years, residing in the country at the time of data collection, irrespective of nationality, citizenship or language status.
- Sample sizes depended primarily on the number of cognitive domains assessed and the number of languages in which the assessment was administered. Some countries boosted sample sizes in order to have reliable estimates of proficiency for the residents of particular geographical regions and/or for certain sub-groups of the population such as indigenous inhabitants or immigrants. The achieved samples ranged from a minimum of approximately 4 500 to a maximum of nearly 27 300.
- The survey was administered under the supervision of trained interviewers either in the respondent's home or in a location agreed between the respondent and the interviewer. The background questionnaire was administered in Computer-Aided Personal Interview format by the interviewer. Depending on the situation of the respondent, the time taken to complete the questionnaire ranged between 30 and 45 minutes.
- After having answered the background questionnaire, the respondent completed the assessment either on a laptop computer or by completing a paper version using printed test booklets, depending on their computer skills. Respondents could take as much or as little time as needed to complete the assessment. On average, the respondents took 50 minutes to complete the cognitive assessment.
- Respondents with very low literacy skills bypassed the full literacy, numeracy and problem solving in technology-rich environment assessments and went directly to a test of basic "reading component" skills instead. This test assessed vocabulary knowledge, the ability to process meaning at the level of the sentence, and to fluently read passages of text. The test had no time limit but the time taken by respondents to complete the tasks was recorded. The reading components assessment was also taken by all respondents taking the paper version of the assessment.

Additional countries

- A second round of the Survey of Adult Skills started in 2012 involving nine additional countries. Data will be collected in 2014 and the results will be released in 2016.

WHAT THE RESULTS SHOW AND WHAT THIS MEANS FOR POLICY

Skills transform lives and drive economies

Skills have a major impact on each individual's life chances.

Skills transform lives, generate prosperity and promote social inclusion. Without the right skills, people are kept at the margins of society, technological progress does not translate into economic growth, and enterprises and countries can't compete in today's globally connected and increasingly complex world. Getting the best returns on investment in skills requires good information about the skills that are needed and available in the labour market. It also requires policies that ensure that skills are used effectively to generate better jobs that lead to better lives. To support these goals, the OECD has begun to measure the skills of adult populations.

If there is one central message emerging from this new Survey of Adult Skills, it is that what people know and what they can do with what they know has a major impact on their life chances. For example, the median hourly wage of workers scoring at Level 4 or 5 in literacy – those who can make complex inferences and evaluate subtle truth claims or arguments in written texts – is more than 60% higher than for workers scoring at Level 1 or below – those who can, at best, read relatively short texts to locate a single piece of information that is identical to the information given in the question or directive or to understand basic vocabulary. Those with low literacy skills are also more than twice as likely to be unemployed.

Low-skilled individuals are increasingly likely to be left behind...

As the demand for skills continues to shift towards more sophisticated tasks, as jobs increasingly involve analysing and communicating information, and as technology pervades all aspects of life, those individuals with poor literacy and numeracy skills are more likely to find themselves at risk. Poor proficiency in information-processing skills limits adults' access to many basic services, to better-paying and more-rewarding jobs, and to the possibility of participating in further education and training, which is crucial for developing and maintaining skills over the working life and beyond.

...and countries with lower levels of skills risk losing in competitiveness as the world economy becomes more dependent on skills.

Those relationships hold not just for individuals; they also apply to countries: per capita incomes are higher in countries with larger proportions of adults who reach the highest levels of literacy or numeracy proficiency and with smaller proportions of adults at the lowest levels of proficiency.

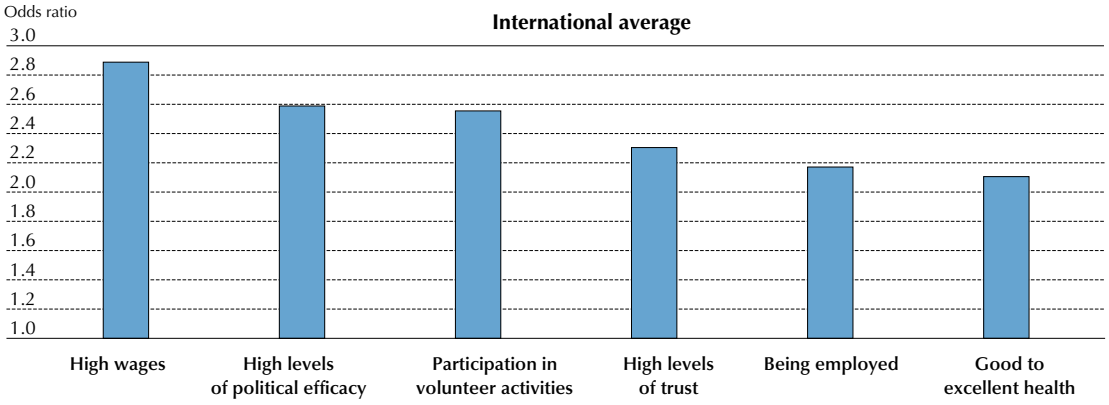
Inequality in skills is associated with inequality in income.

How literacy skills are distributed across a population also has significant implications on how economic and social outcomes are distributed within the society. The Survey of Adult Skills shows that higher levels of inequality in literacy and numeracy skills are associated with greater inequality in the distribution of income, whatever the causal nature of this relationship. If large proportions of adults have low reading and numeracy skills, introducing and disseminating productivity-improving technologies and work-organisation practices can be hampered; that, in turn, will stall improvements in living standards.

■ Figure 0.1 ■

Likelihood of positive social and economic outcomes among highly literate adults

Increased likelihood (odds ratio) of adults scoring at Level 4/5 in literacy reporting high earnings, high levels of trust and political efficacy, good health, participating in volunteer activities and being employed, compared with adults scoring at or below Level 1 in literacy (adjusted)



Notes: Odds ratios are adjusted for age, gender, educational attainment and immigrant and language background. High wages are defined as workers' hourly earnings that are above the country's median.
Source: Survey of Adult Skills (PIAAC) (2012).
StatLink http://dx.doi.org/10.1787/888932903633

Those with lower skills proficiency also tend to report poorer health, lower civic engagement and less trust.

But the impact of skills goes far beyond earnings and employment. In all countries, individuals with lower proficiency in literacy are more likely than those with better literacy skills to report poor health, to believe that they have little impact on political processes, and not to participate in associative or volunteer activities. In most countries, they are also less likely to trust others. For example, on average across countries, individuals who perform at Level 1 in literacy are twice as likely to report low levels of trust as individuals who score at Level 4 or 5, even after accounting for their education and social background. While the causal nature of these relationships is difficult to discern, these links clearly matter, because trust is the glue of modern societies and the foundation of economic behaviour. Without trust

in governments, public institutions and well-regulated markets, public support for ambitious and innovative policies is difficult to mobilise, particularly where short-term sacrifices are involved and where long-term benefits are not evident. Less trust can also lead to lower rates of compliance with rules and regulations and therefore lead to more stringent and bureaucratic regulations. Citizens and businesses may avoid taking risks, delaying decisions regarding investment, innovation and labour mobility that are essential to jump-start growth and regain competitiveness. Emphasising fairness and integrity in policy development and implementation, ensuring that policy making is more inclusive, and building real engagement with citizens all involve citizens' skills.

The survey results provide new insights into the policy challenges facing skills systems.

Taken together, these results underscore the crucial importance of information-processing skills in adults' participation in the labour market, education and training, and in social and civic life. These skills are also highly transferable and therefore relevant to many social contexts and work situations. Accessing, analysing and communicating information takes now place largely through the use of digital devices and applications, such as personal computers, smart phones and the Internet. The capacity to use these devices intelligently to manage information is thus becoming essential.

The survey results offer vital insights for policy makers working to tackle the challenges involved in developing skills, activating the supply of skills, and putting skills to more effective use so as to achieve better outcomes for individuals and societies. While the survey only shows correlations, these results, when combined with the wealth of OECD policy analysis, can inform improvements to skills systems.

The level and distribution of skills differs markedly across countries

All countries can shape their own skills profile.

Perhaps most important in the context of public policy, the information-processing skills measured by the Survey of Adult Skills are "learnable". That is, countries can shape the level and distribution of these skills in their populations through the quality and equity of learning opportunities both in formal educational institutions and in the workplace. Against this backdrop, it is striking how widely countries vary in how well their populations are prepared.

Finland and Japan have large shares of top-performers...

Roughly every fifth Finn and Japanese reads at high levels (Level 4 or 5 on the Survey of Adult Skills). This means, for example, that they can perform multiple-step operations to integrate, interpret, or synthesise information from complex or lengthy texts that involve conditional and/or competing information; and they can make complex inferences and appropriately apply background knowledge as well as interpret or evaluate subtle truth claims or arguments. They are also good at numbers: they can analyse and engage in complex reasoning about quantities and data, statistics and chance, spatial relationships, change, proportions and formulae; perform tasks involving multiple steps and select appropriate problem-solving strategies and processes; and understand arguments and communicate well-reasoned explanations for answers or choices.

...while in other countries, large proportions of adults struggle with the most basic skills.

In other countries large proportions of young people leave school with poor skills in literacy, numeracy and problem solving, and significant numbers of adults have low levels of proficiency in the information-processing skills increasingly needed in the information societies of today. In Italy and Spain, for example, only 1 in 20 adults is proficient at the highest level of literacy (Level 4 or 5). Nearly 3 out of 10 adults in these countries performs at or below the lowest level of proficiency (Level 1) in both literacy and numeracy. These individuals can, at best, read relatively short texts to locate a single piece of information that is identical to the information given in the question or directive, understand basic vocabulary, determine the meaning of sentences, and read continuous texts with some degree of fluency. They can, at best, perform one-step or simple mathematical processes involving counting, sorting, basic arithmetic operations, understanding simple percentages, and locating and identifying elements of simple or common graphical or spatial representations.

Most of the variation in skills proficiency is observed within, not between, countries.

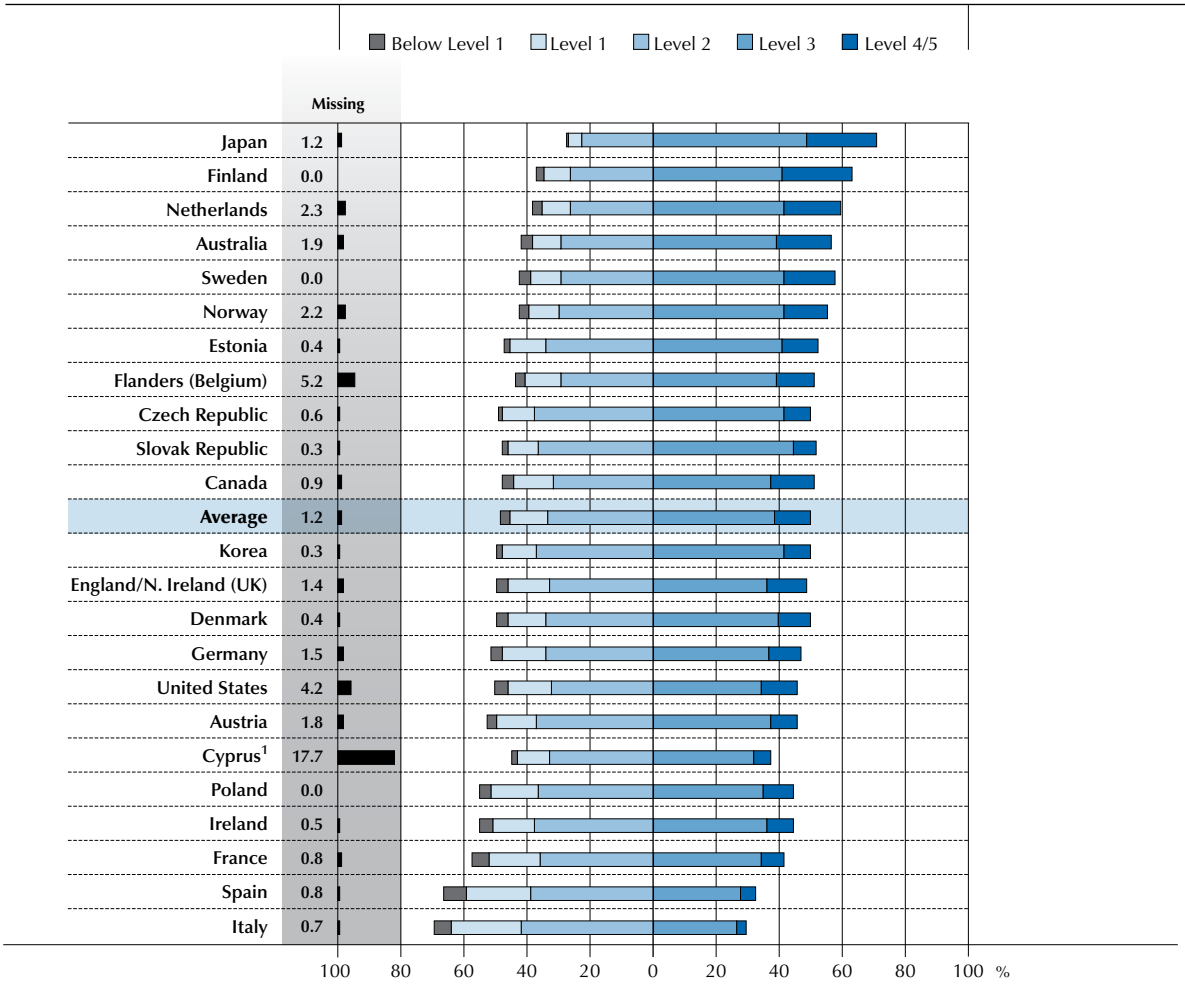
However, even highly literate nations have significant liabilities in their talent pool. Indeed, a closer look at the results reveals that more than nine-tenths of the overall variation in literacy skills observed through the survey lies within, rather than between, countries. In fact, in all but one participating country, at least one in ten adults is proficient only at or below Level 1 in literacy or numeracy. In other words, significant numbers of adults do not possess the most basic information-processing skills considered necessary to succeed in today's world. Policy makers should be particularly

concerned about low proficiency in literacy and numeracy among workers in elementary occupations, as it may hamper the introduction of changes in technologies and organisational structures that can improve productivity. Poor literacy and numeracy skills may also place workers at considerable risk in the event that they lose their jobs or have to assume new or different duties when new technologies, processes and forms of work organisation are introduced.

■ Figure 0.2 ■

Literacy proficiency among 16-65 year-olds

Percentage of adults scoring at each proficiency level in literacy



1. See notes at the end of this chapter.

Notes: Adults in the missing category were not able to provide enough background information to impute proficiency scores because of language difficulties, or learning or mental disabilities (referred to as literacy-related non-response).

Countries are ranked in descending order of the mean score in literacy.

Source: Survey of Adult Skills (PIAAC) (2012), Tables A2.1 and A2.2a.

StatLink http://dx.doi.org/10.1787/888932903652

In nearly all countries, at least 10% of adults lack the most elementary computer skills.

The Survey of Adult Skills also shows that, in most countries, significant shares of adults have trouble using digital technology, communication tools and networks to acquire and evaluate information, communicate with others and perform practical tasks. Across participating countries, from 7% to 27% of adults report having no experience in using computers or lack the most elementary computer skills, such as the ability to use a mouse. In addition, there are also adults who lack confidence in their ability to use computers. Of the adults undertaking the problem-solving assessment, most are only capable of using familiar applications to solve problems that involve few steps and explicit criteria, such as sorting e-mails into pre-existing folders.

Naturally, young adults are more likely than their older counterparts to have computer skills or to have higher proficiency in problem solving in technology-rich environments; yet in some countries, there are surprisingly small proportions of young adults who can solve more complex problems in computer environments. The Nordic countries and the Netherlands have been far more successful than other countries in creating an environment in which most adults have experience with computers and few have only the most basic computer skills.

Social background has a strong impact on skills in some countries...

In England/Northern Ireland (UK), Germany, Italy, Poland and the United States, social background has a major impact on literacy skills. In these countries more so than in others, the children of parents with low levels of education have significantly lower proficiency than those whose parents have higher levels of education, even after taking other factors into account.

...but Japan, Australia, the Netherlands, Norway and Sweden combine above-average performance with a high level of equity.

Interestingly, the data show no relationship between a country's average literacy skills and the impact of social background on those skills, suggesting that high average proficiency does not need to come at the expense of social inequities. Japan, and to a lesser extent Australia, the Netherlands, Norway and Sweden, combine above-average performance with a high level of equity. France, Germany, Poland and the United States all show both below-average performance and large social disparities.

The fact that the countries with the greatest social inequities in the OECD Programme for International Student Assessment (PISA) are also those with low rates of social mobility as observed in the Survey of Adult Skills suggests that the relationship between social disadvantage and lower skills proficiency may be established early in individuals' lives.

In Korea and the United States, the relationship between socio-economic background and skills proficiency is much weaker among younger adults than among older adults.

Moreover, the relationship between parents' education and skills proficiency varies across generations. In Korea and the United States, for example, the relationship between socio-economic background and skills proficiency is much weaker among younger adults than among older adults. In Australia and the Slovak Republic, the reverse is true. In some countries, improvements in access to and the quality of education for individuals from disadvantaged backgrounds have weakened the relationship between socio-economic background and skills proficiency among younger adults. In others, the ways in which skills are developed and used later in life may reinforce initial social disparities. For example, in some contexts access to school may be closely related to social background while subsequent skills development may primarily reflect an individual's ability, irrespective of his or her social background. Either way, breaking the cycle of disadvantage across generations and enhancing social mobility is a key policy goal – and challenge.

Foreign-language immigrants with low levels of education tend to have low skills proficiency, and successful integration is not simply a matter of time.

In most countries, immigrants with a foreign-language background have significantly lower proficiency in literacy and numeracy than native-born adults. Countries with relatively large immigrant populations, such as Flanders (Belgium), France, the Netherlands, Sweden and the United States, need to consider more effective ways to support immigrants in learning the host language, through pre- and/or post-arrival interventions.

Successful integration is not simply a matter of time. In some countries, the time elapsed since immigrants arrived appears to make little difference to their proficiency in literacy and numeracy, suggesting either that the incentives to learn the language of the receiving country are not strong or that policies that encourage learning the language of the receiving country are of limited effectiveness.

Foreign-language immigrants who have low levels of education are particularly at risk. When low educational attainment is combined with poor proficiency in the language of the host country, integration into the labour market and society becomes even more difficult. The challenges posed by migration and social diversity are, if anything, likely to increase over the years to come, both in countries that traditionally benefit from immigration and in those that have not previously seen high rates of immigration. In some countries, the rapid ageing of populations will also contribute to massive shifts in the composition of the talent pool.

Some countries have made significant progress in improving skills proficiency

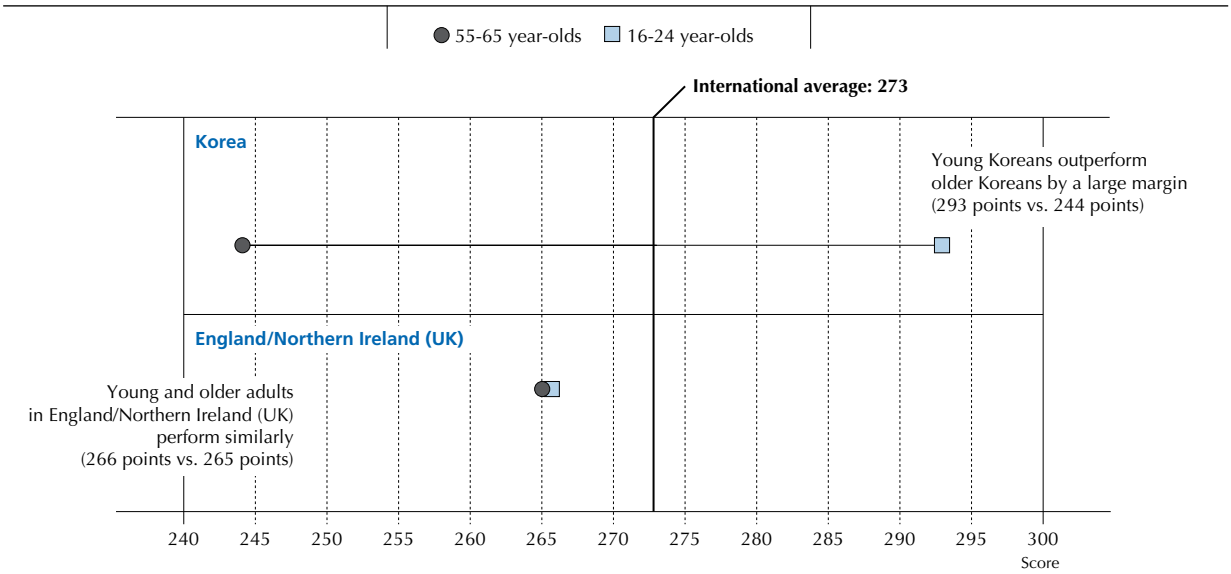
Older Koreans have low skills while younger ones are top performers.

The Survey of Adult Skills results show how effective countries have been in developing literacy skills through successive generations. The gains made in some countries illustrate the pace of progress that is achievable. For example, Korea is among the three lowest-performing countries when comparing the skills proficiency of 55-65 year-olds; however, when comparing proficiency among 16-24 year-olds, Korea ranks second only to Japan. Similarly, older Finns perform at around the average among the countries taking part in the Survey of Adult Skills while younger Finns are, together with young adults from Japan, Korea and the Netherlands, today's top performers.

■ Figure 0.3 ■

Literacy skills gap between older and younger generations

Mean scores in literacy



Source: Survey of Adult Skills (PIAAC) (2012), Table A3.1(L).

StatLink http://dx.doi.org/10.1787/888932903671

In other countries, the talent pool is shrinking...

However, progress has been highly uneven across countries. In England/Northern Ireland (UK) and the United States, improvements between younger and older generations are barely apparent. Young people in these countries are entering a much more demanding labour market, yet they are not much better prepared than those who are retiring. England/Northern Ireland (UK) is among the three highest-performing countries in literacy when comparing 55-65 year-olds; but England/Northern Ireland (UK) is among the bottom three countries when comparing literacy proficiency among 16-24 year-olds. In numeracy, the United States performs around the average when comparing the proficiency of 55-65 year-olds, but is lowest in numeracy among all participating countries when comparing proficiency among 16-24 year-olds. This is not necessarily because performance has declined in England/Northern Ireland (UK) or the United States, but because it has risen so much faster in so many other countries across successive generations.

...which could imply a decline in the relative standing of these countries.

Of course, the survey data are results from a cross-section of populations, not cohorts, so some of the observed differences across generations are attributable to changes in the composition of populations, such as increased social diversity, income inequality or migration, or to different rates with which skills depreciate with age. At the same time, the fact that socio-economic patterns explain part of the observed changes is little consolation to countries whose economic success depends on the quality of their actual labour force, not the hypothetical labour force that they might have had in a different context. The implication for these countries is that the stock of skills available to them is bound to decline over the next decades unless action is taken both to improve skills proficiency among young people, both through better teaching of literacy and numeracy in school, and through providing more opportunities for adults to develop and maintain their skills as they age.

Key points for policy

- **Provide high-quality initial education and lifelong learning opportunities**. The impressive progress that some countries have made in improving the skills of their population over successive generations shows what can be achieved. These countries have established systems that combine high-quality initial education with opportunities and incentives for the entire population to continue to develop proficiency in reading and numeracy skills, whether outside work or at the workplace, after initial education and training are completed.
- **Make lifelong learning opportunities accessible to all**. While countries cannot change the past, policies designed to provide high-quality lifelong opportunities for learning can help to ensure that the adults of the future maintain their skills. This requires a concerted engagement of all stakeholders. Governments, employers, employees, parents and students need to establish effective and equitable arrangements as to who pays for what, when and how. Since individuals with poor skills are unlikely to engage in education and training on their own initiative and tend to receive less employer-sponsored training, second-chance options can offer them a way out of the low-skills/low-income trap. The survey shows that some countries have been much better than others in establishing systems that combine high-quality initial education with opportunities and incentives for the entire population to continue to develop proficiency in reading and numeracy skills after the completion of initial education and training, whether outside work or at the workplace.
- **Make sure all children have a strong start in education**. As PISA has shown, initial education can do much to ensure that all school-leavers, regardless of their background, have the skills and attitudes necessary to be successful in modern societies. Investing in high-quality early childhood education and initial schooling, particularly for children from socio-economically disadvantaged backgrounds, has proved to be an efficient strategy to ensure that all children start strong and become effective learners. Financial support targeted at disadvantaged students and schools can improve the development of skills.

More education does not automatically translate into better skills

Formal education plays a key role in developing foundation skills...

Formal education is one of the main mechanisms through which proficiency in literacy, numeracy and problem solving is developed and maintained. Indeed, reading, writing, literature and mathematics make up close to half of the school curricula across OECD countries. Also, adults who have completed tertiary education will have spent more time in education and received higher levels of instruction than their less-qualified peers. And generally adults with higher qualifications also have greater ability and motivation for study. Completing higher levels of education also often provides access to jobs that involve further learning and more information-processing tasks.

...and educational attainment is closely correlated with proficiency in foundation skills.

For all these reasons, it is not surprising, then, that the Survey of Adult Skills finds that educational attainment is positively related to proficiency. For example, adults with tertiary-level qualifications have an average 36 score-point lead on the literacy scale – the equivalent of about five years of formal schooling – over adults who have not completed secondary education, even after accounting for differences in their social background and age. This is close to the overall 46 score-point difference between the highest- and lowest-performing country in the survey. But the skills gap between adults with tertiary education and those who have not completed secondary education varies considerably: in Canada and the United States, for example, it is over a third wider than it is in Australia, Austria, Estonia, Finland, Italy, Japan, Norway and the Slovak Republic.

While educational attainment is related to proficiency, skills levels vary considerably among individuals with similar qualifications.

What is most surprising is the extent to which information-processing skills vary among individuals with similar qualifications, both within and across countries. While the Survey of Adult Skills only assesses some components of the knowledge and skills certified by educational qualifications, proficiency in literacy, numeracy and problem solving represents outcomes that are expected to be developed through formal education. Irrespective of any other outcomes, across countries, the extent to which graduates with similar qualifications differ in their proficiency in information-processing skills is striking.

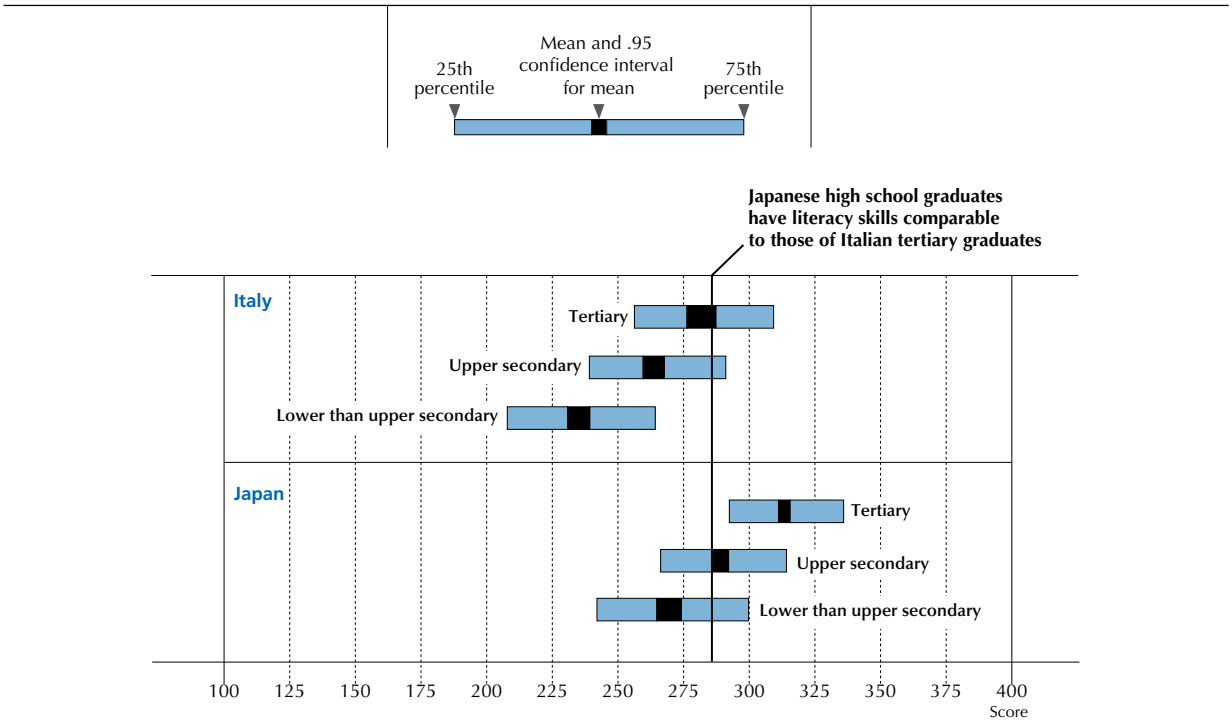
Japanese and Dutch 25-34 year-olds who have only completed high school easily outperform some countries' university graduates of the same age.

The Survey of Adult Skills shows that, in some countries, actual skills levels differ markedly from what data on formal qualifications suggest. For example, Italy, Spain and the United States rank much higher internationally in the proportion of 25-34 year-olds with tertiary attainment than they do in literacy or numeracy proficiency among the same age group. Even more striking is that, on average, Japanese and Dutch 25-34 year-olds who have only completed high school easily outperform Italian or Spanish university graduates of the same age. The performance gaps observed across countries cannot be explained by the proportion of the age group attending tertiary education. In Austria and Germany, a comparatively small share of 25-34 year-olds are tertiary graduates, but that age group performs around the average on the literacy scale, while Japan has a large share of tertiary graduates who do very well. The picture is similar, albeit less pronounced, among people with less formal education.

■ Figure 0.4 ■

Distribution of literacy proficiency scores and education in Italy and Japan

Mean literacy proficiency and distribution of literacy scores, by educational attainment



Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932903690

In virtually all countries, there is also significant overlap in the distribution of skills among individuals with different levels of educational attainment. For example, significant shares of individuals with secondary education as their highest level of attainment outperform adults with a university degree.

Skills and qualifications may diverge for several reasons.

People may have acquired new skills since they completed their formal education or lost some skills that they did not use. Indeed, the longer a person is out of formal education, the weaker the direct relationship between his or her formal education and proficiency, and the greater the role of other factors that may affect proficiency, such as the work or social environment. In other words, a 55-year-old's experience in formal education is likely to have less of a direct impact on his or her proficiency than that of a 26-year-old. The quality of education may also have changed considerably over the decades, even within the same country, so that individuals with ostensibly the same qualifications or level of attainment may have had very different experiences in education.

But the survey results may also imply real differences in the relevance and quality of education in different countries.

Still, the data from the Survey of Adult Skills raise questions about the relevance and quality of formal education in some countries, at least when these are compared internationally. This is important because the level and type of formal learning completed, and the qualifications earned, are indirectly related to individuals' proficiency in information-processing skills: they determine access to the jobs and further education and training that could help individuals maintain and develop their skills.

Success is increasingly about building skills beyond formal education

Much of learning takes place outside formal education.

Beyond formal education, learning occurs in a range of other settings, including within the family, at the workplace and through self-directed individual activity. For skills to retain their value, they must be continuously developed throughout life. Lifelong learning opportunities are relevant for workers in both high-skilled and low-skilled occupations. In high-technology sectors, workers need to update their competencies and keep pace with rapidly changing techniques. Workers in low-technology sectors and those performing low-skilled tasks must learn to be adaptable, since they are at higher risk of losing their job as routine tasks are increasingly performed by machines, and since companies may relocate to countries with lower labour costs.

Proficiency levels are closely related to age.

The Survey of Adult Skills shows proficiency in literacy, numeracy and problem-solving skills to be closely related to age in all countries, reaching a peak at around age 30. While this survey simply compares different age groups at the same point in time, a longitudinal survey following Canadian students who participated in PISA in 2000 also showed significant gains being made in literacy and numeracy proficiency between the ages of 15 and 24, even for those without post-secondary education. But skills proficiency falls off steadily for those in their 30s and older.

And yet, while older adults generally have lower proficiency than their younger counterparts, the gap between generations varies considerably across countries. To some extent this may reflect differences in the quality of education, but it may also reflect the opportunities available to pursue further training or to engage in practices that help to maintain and develop proficiency over a lifetime.

Participation rates in adult education exceed 60% in Denmark, Finland, the Netherlands, Norway and Sweden, while in Italy they remain well below half that rate.

Participation in adult education and training is now common in many countries, but the Survey of Adult Skills indicates major differences across countries. Countries showing higher levels of participation in organised adult learning activities also demonstrate higher literacy and numeracy skills. The large variation among countries at similar levels of economic development suggests major differences in learning cultures, learning opportunities at work, and adult-education structures.

The survey results show a strong positive relationship between participation in adult education and skills proficiency...

The skills adults already have explain some of the differences in participation patterns. The survey results show a strong positive relationship between participation in adult education and skills proficiency. On average, an adult with Level 4 or Level 5 in literacy proficiency is around three times more likely to participate in adult education than someone who is at or below Level 1. Participation in adult learning helps to develop and maintain literacy and numeracy skills, especially when the learning programmes require participants to read and write, and confront and solve new problems.

...but those whose skills are already weak are less likely to improve their skills through adult education and training.

Yet, in most countries, adults with already-high levels of literacy and numeracy skills tend to participate the most, while those with lower levels of skills participate less – and often much less. In all countries except Norway, participation rates in job-related education and training are at least twice as high among adults who attained at least Level 4 in literacy than they are among those who attained at most Level 1. In Austria, Flanders (Belgium), Japan, Poland and Spain the odds are larger than three to one, and in Italy, Korea and the Slovak Republic, highly literate adults are between four and five times as likely to benefit from such training as people with poor literacy skills.



Higher levels of literacy and numeracy facilitate learning; therefore people with greater proficiency are more likely to have higher levels of education and be in jobs that demand ongoing training. They may also have the motivation and engagement with work that encourage individuals to learn and/or their employers to support them. All this can create a virtuous cycle for adults with high proficiency – and a vicious cycle for those with low proficiency.

Low-skilled adults risk getting trapped in a situation in which they rarely benefit from adult learning, and their skills remain weak or deteriorate over time – which makes it even harder for these individuals to participate in learning activities. This presents a formidable policy challenge for countries such as Canada, England/Northern Ireland (UK), Ireland, Italy, Spain and the United States, where significant shares of adults are at or below Level 1 on the literacy and numeracy scales. Helping low-skilled adults to break this vicious cycle is crucial. Many countries offer subsidised adult literacy and numeracy programmes, designed to upgrade the skills of low-skilled adults. In addition, policies may aim specifically to increase the participation of low-skilled adults in adult learning, for example through targeted subsidies. Results from the Survey of Adult Skills suggest that Denmark, Finland, the Netherlands, Norway and Sweden have been most successful in extending opportunities for adult learning to those adults who score at or below Level 1.

Key points for policy

- **Develop links between the world of learning and the world of work**. Skills development can be more relevant and effective if the world of learning and the world of work are linked. Learning in the workplace allows young people to develop "hard" skills on modern equipment, and "soft" skills, such as teamwork, communication and negotiation, through real-world experience. Hands-on workplace training can also help to motivate disengaged youth to stay in or re-engage with the education system and makes the transition from education into the labour market smoother.
- **Provide training for workers**. Employers have an important role in training their own staff; but some, particularly small and medium-sized enterprises, might need public assistance to provide such training.
- **Ensure that the training is relevant**. Employers and trade unions can also play an important role in shaping education and training, to make it relevant to the current needs of the labour market but also to ensure that workers' broader employability is enhanced.
- **Allow workers to adapt their learning to their lives**. Programmes to enhance adult information-processing skills need to be relevant to users and flexible enough, both in content and in how they are delivered (part-time, flexible hours, convenient location) to adapt to adults' needs. Distance learning and the open educational resources approach have also allowed users to adapt their learning to their lives.
- **Identify those most at risk of poor skills proficiency**. The most disadvantaged adults need to be not only offered, but also encouraged, to improve their proficiency. This means identifying low-skilled adults who require support, particularly foreign-language immigrants, older adults and those from disadvantaged backgrounds, and providing them with learning opportunities tailored to their needs. This is likely to require innovative approaches and significant community engagement.
- **Show how adults can benefit from better skills**. More adults will be tempted to invest in education and training if the benefits of improving their skills are made apparent to them. For example, governments can provide better information about the economic benefits, including wages net of taxes, employment and productivity, and non-economic benefits, including self-esteem and increased social interaction, of adult learning.
- **Provide easy-to-find information about adult education activities**. Less-educated individuals tend to be less aware of education and training opportunities, and may find the available information confusing. A combination of easily searchable, up-to-date online information and personal guidance and counselling services to help individuals define their own training needs and identify the appropriate programmes has often made a real difference.
- **Recognise and certify skills proficiency**. Providing recognition and certification of competencies can facilitate and encourage adult learners to undertake continued education and training. Transparent standards, embedded in a framework of national qualifications, and reliable assessment procedures are important instruments to this end. Recognising prior learning can also reduce the time needed to obtain a certain qualification and, thus, the cost in foregone earnings.

Using skills, particularly outside of work, is closely related to proficiency.

Adults who engage more often in literacy- and numeracy-related activities and use ICTs more both at and outside of work show higher proficiency in literacy, numeracy and problem solving. Notably, engagement in relevant activities outside of work has an even stronger relationship with the skills assessed than engagement in the corresponding activities at work. While reading often is likely to aid in developing and maintaining reading skills, having better reading skills is also likely to result in greater enjoyment of reading and, thus, in reading more frequently. Beyond instruction, the opportunity to engage in relevant practices is important both for developing proficiency and preventing its loss. Within the workplace, for example, redesigning work tasks to maximise engagement in activities that require the use of literacy, numeracy and ICT skills should be considered in conjunction with providing training.

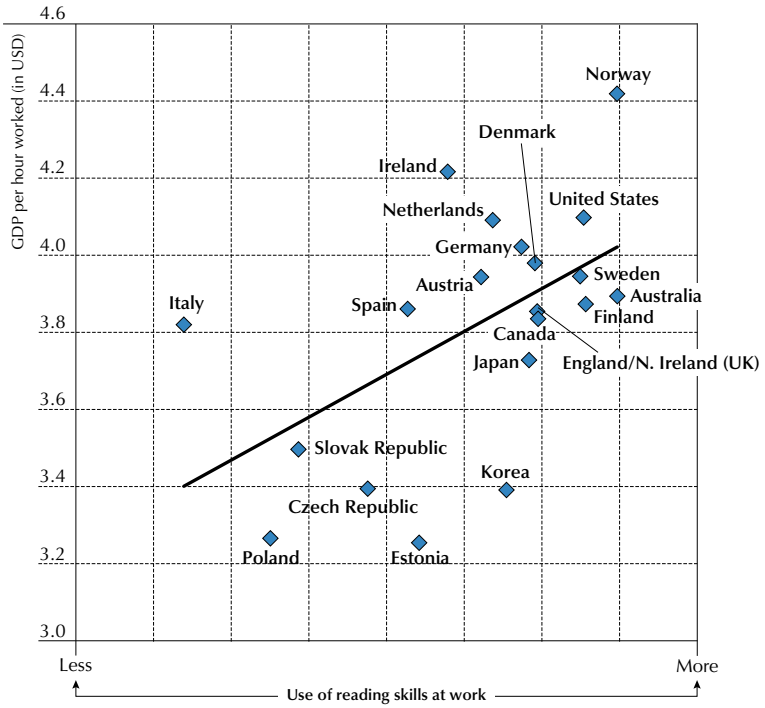
Activating the supply of skills

Unused skills can become obsolete or atrophy.

Skills are only of value when they are used – whether in the labour market or in other non-market settings, such as voluntary work, home production or even in leisure activities. Unused skills represent a waste of skills and of initial investment in those skills. As the demand for skills changes, unused skills can also become obsolete; and skills that are unused during inactivity are bound to atrophy over time. Conversely, the more individuals use their skills and engage in complex and demanding tasks, both at work and elsewhere, the more likely it is that skills decline due to ageing can be prevented. Some inactivity might be voluntary and temporary, such as that among young people who are still engaged in full-time education or skilled women who are caring for family members.

■ Figure 0.5 ■

Correlation between labour productivity and the use of reading skills at work



Notes: The bold line is the best linear prediction. Labour productivity is equal to the GDP per hour worked, in USD current prices (Source: OECD.Stat).
Source: Survey of Adults Skills (PIAAC) (2012), Table A4.4.
StatLink http://dx.doi.org/10.1787/888932903709

Only around one in two adults who have low literacy proficiency is employed.

To the extent that workers' productivity is related to the knowledge and skills they possess, and that wages reflect such productivity, individuals with more skills should expect higher returns from labour market participation and would thus be more likely to participate. That is also what the results from the Survey of Adult Skills suggest: average literacy proficiency



is generally higher among employed adults than among unemployed and inactive individuals. Just over half of adults scoring at or below Level 1 in literacy proficiency are employed in contrast to four out of five adults scoring at Level 4 or 5. Employed adults also tend to have higher mean proficiency scores in literacy and numeracy than unemployed adults, who score higher, in turn, than those outside the labour force. But these overall results hide some striking variations across countries. Unemployed Japanese adults, for example, outperform employed individuals in every other country.

Some countries make greater economic use of their highly skilled talent pool than others.

Some countries have been far more effective in activating their more highly skilled adults – those at proficiency Levels 4 and 5. In Norway around 9% of adults at proficiency Level 4 or 5 do not participate in the labour force; in Korea, 32% of adults who score at those levels do. In the Czech Republic, Italy, Japan, Poland and the Slovak Republic more than 20% of the most proficient adults are out of the labour force. This represents a relatively large pool of skills that could be activated. In many cases, the under-use of highly skilled workers is a reflection of the general under-use of labour.

The economic implications of this inactivity can be significant. For example, less than 5% of Italy's workforce attains Level 4 or 5 in literacy proficiency, and yet close to one in four Italian adults with that level of proficiency does not participate in the labour market at all – and another 5% are unemployed. In contrast, the Netherlands not only has a more highly proficient workforce overall, it also does much better at activating its most highly skilled workers: only 11% of adults with that level of proficiency are outside the workforce.

Similarly, many adults who perform at Level 3 proficiency are also outside the labour force, although the proportions vary significantly across countries. In Ireland and Japan, for example, around one in four adults with Level 3 proficiency is outside the labour force, while in the United States, fewer than one in five adults at this proficiency level does not participate in the labour market.

Many adults with low skills proficiency are outside the workforce.

The survey results show that low-skilled adults are less likely to participate in the labour force, although here, too, there are significant differences across countries. Two out of three Korean adults who score at or below Level 1 are employed, while in the Slovak Republic, only two in five adults with this level of proficiency are employed. These patterns may be affected by the extent of jobs available for those with very low skills; they may also reflect weak financial rewards for working, especially if interactions between the tax and benefit systems mean that low-skilled adults face high marginal effective tax rates.

The large shares of low-skilled adults outside the labour force present additional challenges to policy makers because these adults' lack of skills is likely to be closely linked to their prospects for employment. Indeed, on average 7% of those at or below Level 1 in literacy proficiency are unemployed, compared with less than 4% of those performing at Level 4 or 5. As noted above, employment is both a source of economic independence and an environment where skills can be maintained and developed. Yet a lack of skills presents a formidable obstacle to employment for these adults; tackling these skills deficits will be important to enhance their longer-term employment prospects and to expand the overall supply of skills.

Earnings increase with proficiency, but to very different degrees across countries.

Hourly wages are strongly associated with reading proficiency. The median hourly wage of workers who score at Level 4 or 5 on the literacy scale is more than 60% higher than that of workers who score at or below Level 1. But again, these differences vary significantly across countries. In the Czech Republic, Estonia, Poland, the Slovak Republic and Sweden, differences in wages are much narrower than those in Canada, Germany, Ireland, Korea and the United States. There is also significant overlap in the distribution of wages by skills proficiency. For example, the top 25% of best-paid Japanese and Korean workers who score at Level 2 in literacy earn more than the median hourly wage of those who score at Level 4 or 5.

There is also significant overlap in the distribution of wages for each skill level within countries, even in countries where the overall returns for proficiency do not differ widely. For instance, a Finn with skills at or below Level 1 and wages at the 75th percentile earns half as much again as a Finn with this proficiency level but who earns only at the 25th percentile, and earns around 20% of what a quarter of Finnish workers at Level 4 or 5 earns. This may be because some of the higher-scoring individuals with poorer employment or earnings outcomes may lack other key skills – such as job-specific or generic skills – needed to get a job. It may also reflect how wages are set in a country or occupational structures that do not adequately capture these proficiencies.

Indeed, both education, whether measured in years or in attainment level, and proficiency levels are independently related to wages.

Key points for policy

- **Provide high-quality early childhood education and care at reasonable cost**. Ensuring the availability of high-quality early childhood education and care and after-school care at reasonable cost makes it easier for parents of young children to bring their skills to the labour market.
- **Encourage employers to hire those who temporarily withdrew from the labour force**. Labour market arrangements and hiring practices that make it easy for those who have withdrawn from the labour force for a period of time to re-enter and put their skills to use will help countries to mobilise their untapped economic potential.
- **Encourage older workers to remain in the labour market**. This may require re-examining the factors that lead these workers to withdraw, including the age of retirement, early-retirement policies, the interaction among financial incentives to remain or withdraw, as well as company practices in human-resource management. Lifelong learning and targeted training, especially in mid-career, can improve employability in later life and discourage early withdrawal from the labour market. A rise in the pensionable age lengthens the period of time over which employers could recover training costs; hence, it is likely to prompt more employers and older employees to invest in training.
- **Create flexible working arrangements to accommodate workers with care obligations and disabilities**. Inflexible working conditions can make it difficult for people with care obligations and individuals with disabilities to participate in the labour force. For people with disabilities, incentives to withdraw from the labour force largely depend on their access to full disability-benefit schemes.
- **Tax policies should encourage workers to make their skills available to the labour market**. High marginal effective tax rates undermine the economic returns to supplying skills to the labour market. For parents of young children, the financial returns to work may be further undermined by the cost of childcare and after-school care.
- **Take stock of the skills held by unemployed adults**. This can help public employment services to identify the most appropriate course of action for each job-seeker, particularly at the start of a period of unemployment.
- **Offer economic rewards for greater proficiency**. Economic rewards for greater proficiency provide an incentive for investing in developing and maintaining skills. Greater proficiency in information-processing skills appears to be more generously rewarded in some countries than others, where wage-setting and other labour market arrangements may limit those incentives.
- **Continue to promote educational attainment**. The skills measured in this survey only tell part of the story. Employers still rely on qualifications when deciding whom to hire because proficiency in information-processing skills is less transparent or because qualification play a large role in wage negotiations. However, over-reliance on qualifications and years of education may make it harder for those with higher proficiency, but who did not have the same access to education as others, to gain entry into jobs where those skills can be put to full use.

Putting skills to more effective use

Skills will only translate into better economic and social outcomes if they are used effectively.

All this being said, developing skills and making them available to the labour market will not translate into better social and economic outcomes if those skills are not used effectively on the job. Ensuring a good match between the skills acquired in education and on the job and those required in the labour market is essential if countries want to make the most of their talent. A mismatch between the two has potentially significant economic implications. At the individual level, the under-use of skills in specific jobs in the short to medium term may lead to skills loss. Workers whose skills are under-used in their current jobs earn less than similarly-skilled workers who are well-matched to their jobs. This situation tends to generate more employee turnover, which is likely to affect a firm's productivity. Under-skilling is also likely to affect productivity and, as with skills shortages, slow the rate at which more efficient technologies and approaches to work are adopted. By implication, it increases unemployment and reduces GDP growth at the macro-economic level. The fact that employers in some countries report skills shortages during times of high unemployment indicates that a population's stock of skills – and the investment made to develop those skills – may be partly going to waste.



Using information-processing skills at work is closely linked to labour productivity.

The Survey of Adult Skills shows that countries where a large proportion of the workforce is employed in jobs requiring greater use of reading skills have higher output per hour worked, a standard indicator of labour productivity. Differences in the average use of reading skills explain around 30% of the variation in labour productivity across countries. The positive link between labour productivity and reading at work remains strong even after adjusting for average proficiency scores in literacy and numeracy. In other words, how workers use the skills they have makes a difference to labour productivity.

Interestingly, skills-use indicators correlate weakly with measures of skills proficiency: the distributions of skills use among workers at different levels of proficiency overlap substantially. As a result, it is not uncommon that more proficient workers use their skills at work less intensively than less-proficient workers do. This is usually the result of significant mismatch between skills and how they are used at work, particularly among some socio-demographic groups.

The results also show that under-use of qualifications is particularly common among young and foreign-born workers and those employed in small establishments, in part-time jobs or on fixed-term contracts. This has a significant impact on their wages, even after adjusting for proficiency, and on workers' productivity. The Survey of Adult Skills shows that mismatches in skills proficiency have a weaker impact on wages than qualifications mismatch. This can either be because labour market mismatch is more often related to job-specific or generic skills than to the literacy, numeracy and problem-solving skills measured by the Survey of Adult Skills, and/or because employers succeed in identifying their employees' real skills, irrespective of their formal qualifications, and adapt job content accordingly.

Some skills mismatch is inevitable and even positive for the economy.

Requirements regarding skills and qualifications are never fixed. The task content of jobs changes over time in response to technological and organisational change, the demands of customers, and in response to the evolution of the supply of labour. Young people leaving education and people moving from unemployment into employment, for example, may take jobs that do not necessarily fully match their qualifications and skills. Thus, for a number of reasons, some workers are likely to be employed in jobs that do not fully use their qualifications; others may be in jobs, at least temporarily, for which they lack adequate qualifications. Skills mismatch on the job can also be a temporary phenomenon. Sometimes, for example, the demand for skills takes time to adjust to the fact that there is a larger pool of highly skilled workers available. Thus, not all types of skills mismatch are bad for the economy.

More could be done to address the match between demand for and supply of skills.

Mismatch on the job, where it adversely affects economic and social outcomes, can be tackled in various ways. In the case of under-skilling, public policies can help to identify workers with low levels of information-processing skills and offer incentives to both employees and employers to invest in skills development to meet the requirements of the job. When the skills available aren't adequately used, better management practices can make a difference. For example, employers can grant workers some autonomy to develop their own working methods so that they use their skills effectively. As workers assume more responsibility for identifying and tackling problems, they are also more likely to "learn by doing", which, in turn, can spark innovation. Trade unions can also play an important role in improving the match between skills demand and supply.

Under-skilling, under-use of skills and unemployment can also reflect lack of information and transparency.

The under-use of skills is often related to field-of-study mismatch, whereby individuals work in an area that is unrelated to their field of study and in which their qualifications are not fully valued. Under-skilling could be the result of skills shortages that force employers to hire workers who are not the best fit for the jobs on offer.

Skills mismatches may be the result of geographical constraints.

Another reason why the skills shortages frequently reported by employers can co-exist with high unemployment is that people with the relevant skills are not in same geographical location as the jobs that require those skills. Reducing costs and other barriers associated with internal mobility helps employees to find suitable jobs and helps employers to find suitable workers. Importing skills from outside a country without first considering the potential for skills supply through internal mobility can have adverse consequences for overall employment and skills use in the country.

Linking skills with broader economic-development strategies can help countries to move towards greater skills-driven prosperity.

A perfect match between available skills and job tasks is not always a positive situation: people can be matched with their jobs, but at a very low level. Such low-skills equilibria can adversely affect the economic development of a local

economy or region, or indeed an entire country. To tackle such a situation, policies can "shape" demand, rather than merely respond to it. Government programmes can influence both employer-competitiveness strategies (how a company organises its work to gain competitive advantage in the markets in which it is operating) and product-market strategies, which determine in what markets the company competes. As companies move into higher value-added product and service markets, the levels of skills that they require, and the extent to which they use these skills, tend to increase. By fostering competition in the market for goods and services, policy makers can promote productive economic activities that contribute to stronger economic growth and the creation of more productive and rewarding jobs. While such policies primarily fall into the realm of economic-development actors, educational institutions focusing on new technologies and innovation can also be involved in developing the skills that will shape the economies of the future.

Key points for policy

- **Collect timely information about demand for and supply of skills**. Better information and greater transparency about skills demand and supply across economies is essential for addressing skills mismatch.
- **Create flexible labour market arrangements**. Labour market arrangements, including employment protection, can facilitate or hinder the effective use of skills and address skill mismatches. These can have a particularly pernicious effect on young people making the transition into the labour market as well as others, such as displaced workers or those seeking to re-enter the workforce. They may also discourage workers from moving from one job to another that would offer them a better skills match but also expose them to greater risk.
- **Provide quality career guidance**. Competent personnel who have the latest labour market information at their fingertips can steer individuals to the learning programmes that would be best for their prospective careers. Public employment services can also play a crucial role in facilitating skill matching especially at local levels working closely with local employers as well as education and training providers.
- **Ensure that qualifications are coherent and easy to interpret.** In order to match prospective employees to a job, employers need to be able to identify a candidate's skills. Qualifications should thus not only be clear, but consistently awarded. Continuous certification that incorporates non-formal and informal learning over the working life is also essential, as is recognition of foreign diplomas. One of the biggest obstacles immigrants face when looking for work is that their qualifications and foreign work experience may not be fully recognised in the host country. As a result, many immigrant workers hold jobs for which they are over-qualified.

Equal skills don't always imply equal opportunities

Women and men have very similar proficiency levels.

The Survey of Adult Skills shows little variation in proficiency between men and women. On average, men have higher scores on the numeracy and problem solving in technology-rich environments scales than women, but the gap is not large and is further reduced when other characteristics, such as educational attainment and socio-economic status, are taken into account. In literacy, the gap in proficiency in favour of men is even narrower. Moreover, in half the countries surveyed, there is no difference between young men and young women in their proficiency in numeracy, and they are equally proficient in literacy, with young women slightly more proficient in some countries.

On average, men and women use their skills in different ways, partly because of their jobs.

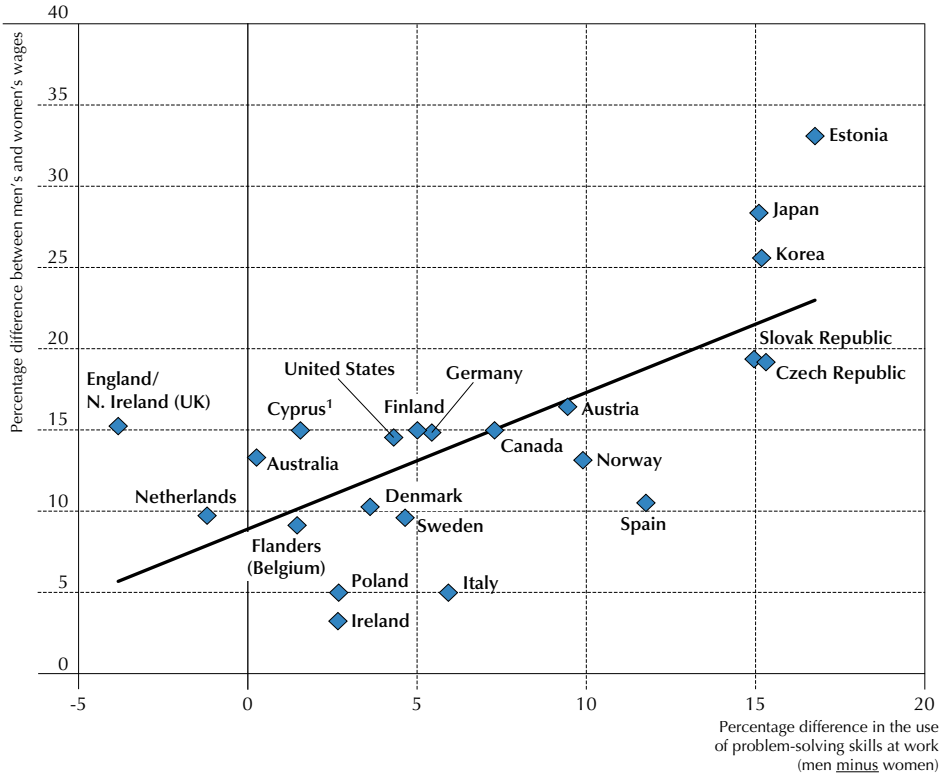
With only a few country exceptions, the Survey of Adult Skills shows that men use literacy and numeracy skills at work more frequently than women, on average. Differences in skills use between men and women may be the result of gender discrimination, but they can also be due to differences in literacy and numeracy skills and/or in the nature of the job. For instance, if literacy and numeracy skills were used less frequently in part-time jobs than in full-time jobs, this may explain part of the difference in skills use between genders, as women are more likely to work part-time than men. This reasoning could apply to occupations as well, with women more likely to be found in low-level jobs that presumably require less intensive use of skills. Indeed, when these factors are taken into account, differences in skills use by gender are smaller.

The results confirm that gender differences in the use of literacy and numeracy skills are partly due to the fact that men appear to be slightly more proficient but also that they are more commonly employed in full-time jobs, where skills are

used more intensively. At the same time, this is not the case when the type of job is taken into account; when it is, the differences in how men and women use their skills at work are larger. One explanation is that while women tend to be concentrated in certain occupations, they use their skills more intensively than do the relatively few men who are employed in similar jobs.

■ Figure 0.6 ■

Correlation between gender gap in wages and in the use of problem-solving skills at work



1. See notes at the end of this chapter.

Notes: The gender gap in wages is computed as the percentage difference between men's and women's average hourly wages, including bonuses. The wage distribution was trimmed to eliminate the 1st and 99th percentiles. The bold line is the best linear prediction. The sample includes only full-time employees.

Source: Survey of Adults Skills (PIAAC) (2012), Table A4.7.

StatLink http://dx.doi.org/10.1787/888932903728

The use of problem-solving skills at work explains about half of the gender gap in wages. In fact, about half of the cross-country differences in the gender gap in wages can be predicted by differences in the use of problem-solving skills at work. However, this relationship is no longer apparent once gender differences in a number of other factors, namely proficiency in literacy and numeracy skills, educational qualifications, occupation, and the industry of the jobs, are taken into account.

Key points for policy

- **Understand how skills are used at work** in order to identify the roots of the gender gap in pay.

Some policy challenges

Since it is costly to develop a population's skills, countries need to prioritise investment of scarce resources and design skills policies such that investments reap the greatest economic and social benefits. In doing so, they need to weigh short- and long-term considerations. Effective skills policies need to respond to structural and cyclical challenges, such as rising unemployment when economies contract or acute skills shortages when sectors boom, but also support longer-term strategic planning for the skills that are needed to foster a competitive edge and support required structural changes.

In periods of depressed economic conditions and when public budgets are tight, governments tend to cut investments in human capital first. But cutting investment in skills at such times may be short-sighted, as a skilled workforce will play a crucial role in generating future jobs and growth. If cuts to public spending have to be made, they should be based on the long-term cost/benefit ratios of alternative public investments. On these grounds, there is a strong case to be made for maintaining public investment in skills and in using them effectively.

The results from the Survey of Adult Skills also underline the need to move from a reliance on initial education towards fostering lifelong, skills-oriented learning. Seeing skills as a tool to be honed over an individual's lifetime will also help countries to better balance the allocation of resources to maximise economic and social outcomes. In turn, if skills are to be developed over a lifetime, then a broad range of policy fields are implicated, including education, science and technology, employment, economic development, migration and public finance. Aligning policies among these diverse fields will be key for policy makers to identify policy trade-offs that may be required and to avoid duplication of efforts and ensure efficiency. Similarly, with major geographical variations in the supply of and the demand for skills within countries, there is a strong rationale for considering skills policies at the local level to align national aspirations with local needs.

Effective skills policies are everybody's business, and countries need to address the tough question of who should pay for what, when and how, particularly for learning beyond school. Employers can do a lot more to create a climate that supports learning, and invest in learning; some individuals can shoulder more of the financial burden; and governments can do a lot to design more rigorous standards, provide financial incentives, and create a safety net so that all people have access to high-quality education and training. Designing effective skills policies requires more than co-ordinating different sectors of public administration and aligning different levels of government. A broad range of non-governmental actors, including employers, professional and industry associations and chambers of commerce, trade unions, education and training institutions and, of course, individuals must also be involved.

ABOUT THE *OECD SKILLS OUTLOOK*

This report is the first edition of a new annual publication – the *OECD Skills Outlook*. *The OECD Skills Outlook* will present cross-cutting comparative analyses of key issues, trends and data in the field of skills. Building upon the OECD Skills Strategy framework, the *Outlook* will bring together content, drawn from across the OECD, that sheds light on the development, activation and use of skills in OECD and partner countries. It will feature analysis from across the Organisation in the fields of education, employment, tax, innovation and economic development at the national, regional and local levels related to key issues in skills policy. The focus of the 2014 edition of the *Outlook* will be on skills and employability for youth.

The results of the Survey of Adult Skills (PIAAC) have been released as the first edition of the *OECD Skills Outlook* because the data from the survey will underpin much of the analysis included in forthcoming editions of the *Outlook*. This report, which provides the first results from the countries and regions that participated in the Survey of Adult Skills is presented in two volumes. This volume examines the first results of the study in six chapters:

- Chapter 1 offers an overview of some of the main factors that have reshaped the demand for skills over recent decades, particularly those skills involved in processing text-based information.
- Chapter 2 presents the overall results in each of the three domains assessed, by country.
- Chapter 3 examines the distribution of skills across socio-demographic groups.
- Chapter 4 looks at the use of skills in the workplace and the evidence and extent of mismatch between both the qualifications and the skills that individuals possess and those that they are required at work.
- Chapter 5 discusses the ways in which skills in literacy, numeracy and problem solving in technology-rich environments are developed and maintained over a lifetime.
- Chapter 6 presents evidence of the relationship between the skills assessed and labour force status, wages and other outcomes, such as health and social participation.

The second volume, *The Survey of Adult Skills: Reader's Companion* (OECD, 2013), describes the design and methodology of the survey and its relationship to other international assessments of young students and adults.



Notes regarding Cyprus

Note by Turkey: The information in this document with reference to "Cyprus" relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Turkey recognises the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of the United Nations, Turkey shall preserve its position concerning the "Cyprus issue".

Note by all the European Union Member States of the OECD and the European Union: The Republic of Cyprus is recognised by all members of the United Nations with the exception of Turkey. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus.

Reference

OECD (2013), *The Survey of Adult Skills: Reader's Companion,* OECD Publishing.
http://dx.doi.org/10.1787/9789264204027-en



1

The Skills Needed for the 21st Century

This chapter introduces the Survey of Adult Skills (PIAAC). It first gives a brief overview of how and why the demand for skills has been changing over the past decades, focusing particularly on the advent and widespread adoption of information and communication technologies and on structural changes in the economy. It then describes how the survey – the first international survey of adult skills to directly measure skills in literacy, numeracy and problem solving in technology-rich environments – can assist policy makers in responding to the challenges of a rapidly changing global labour market.



The technological revolution that began in the last decades of the 20th century has affected nearly every aspect of life in the 21st: from how we "talk" with our family and friends, to how we shop, to how and where we work. Quicker and more efficient transportation and communication services have made it easier for people, goods, services and capital to move around the world, leading to the globalisation of economies. New means of communication and types of services have changed the way individuals interact with governments, service suppliers and each other. These social and economic transformations have, in turn, changed the demand for skills as well. While there are many factors responsible for these changes, this chapter focuses on technological developments, particularly information and communications technologies, because they have profoundly altered what are considered to be the "key information-processing skills" that individuals need as economies and societies evolve in the 21st century.

With manufacturing and other low-skill tasks in the services sector becoming increasingly automated, the need for routine cognitive and craft skills is declining, while the demand for information-processing skills and other high-level cognitive and interpersonal skills is growing. In addition to mastering occupation-specific skills, workers in the 21st century must also have a stock of information-processing skills, including literacy, numeracy and problem solving, and "generic" skills, such as interpersonal communication, self-management, and the ability to learn, to help them weather the uncertainties of a rapidly changing labour market.

Improving the supply of skills is only half the story: skills shortages co-exist with high unemployment; and better use can be made of existing skills. There is growing interest among policy makers not only in creating the right incentives for firms and individuals to invest in developing skills, but also in ensuring that economies fully use the skills available to them. To that end, the OECD Skills Strategy emphasised three pillars: developing relevant skills, activating skills supply, and putting skills to effective use (OECD, 2012a).

The Survey of Adult Skills (a product of the Programme for the International Assessment of Adult Competencies, or PIAAC) was designed to provide insights into the availability of some of the key skills in society and how they are used at work and at home. A major component of the survey was the direct assessment of a select number of skills that are considered to be "key information-processing skills", namely literacy, numeracy and problem solving in the context of technology-rich environments. This chapter describes the social and economic context in which the Survey of Adult Skills was conceived and conducted. Subsequent chapters focus on specific aspects of skills supply and demand across participating countries that can inform related policy making.

MAJOR TRENDS INFLUENCING THE DEVELOPMENT AND USE OF SKILLS

Access to computers and ICTs is widespread and growing

Access to, and use of, computers both at home and at work is now widespread in OECD countries. Between 1999 and 2009, the number of Internet subscriptions in OECD countries nearly tripled, and the number of mobile phone subscriptions more than tripled (see Table B1.1 in Annex B). In over two-thirds of OECD countries, over 70% of households have access to computers and the Internet in their homes (Figure 1.1). Internet access is also pervasive in the workplace. In most OECD countries, workers in over 95% of large businesses and those in over 85% of medium-sized businesses have access to and use the Internet as part of their jobs (see Table B1.2 in Annex B), and workers in at least 65% of small businesses connect to the Internet for work.

ICTs are changing how services are provided and consumed

Computers and ICTs are changing the ways in which public and other services are provided and consumed. Familiarity with and use of ICTs has become almost a prerequisite for accessing basic public services and exercising the rights and duties of citizenship. Many governments are delivering public services, including taxation and health and other welfare services, via the Internet and this trend is likely to continue. The proportion of citizens and businesses using the Internet to interact with public authorities grew rapidly in many OECD countries between 2005 and 2010: an average of 40% of citizens and 80% of businesses in OECD countries interacted with public authorities via the Internet in 2010 (Figure 1.2).

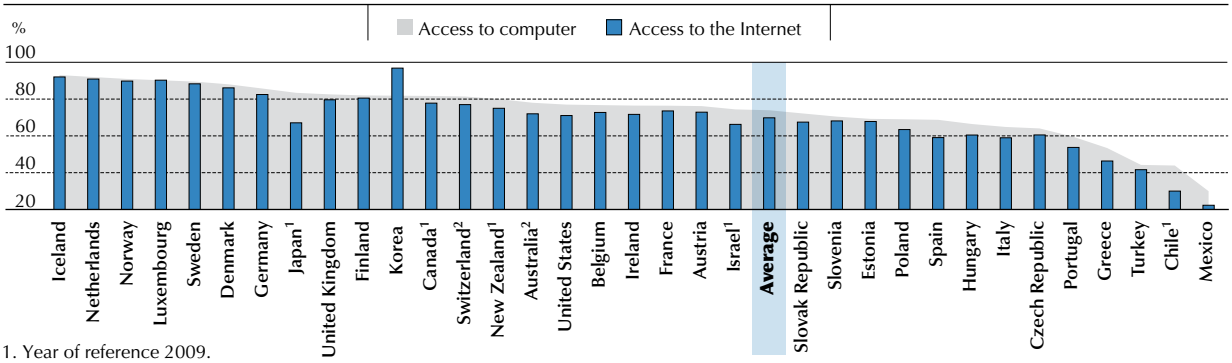
E-commerce accounts for less than 5% of retail trade in many countries (OECD, 2009). However, the proportion of adults who purchase goods or services on line continues to grow (see Table B1.3 in Annex B). In Korea, e-commerce grew seven-fold between 2001 and 2010, while in Australia, the volume of e-commerce in 2008 was over eight times the level in 2001.



■ Figure 1.1 ■

Access to computers and the Internet at home

Percentage of households with access, 2010 or latest available year



1. Year of reference 2009.
2. Year of reference 2008.

Note: The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

Countries are ranked in descending order of the percentage of households having access to a computer.

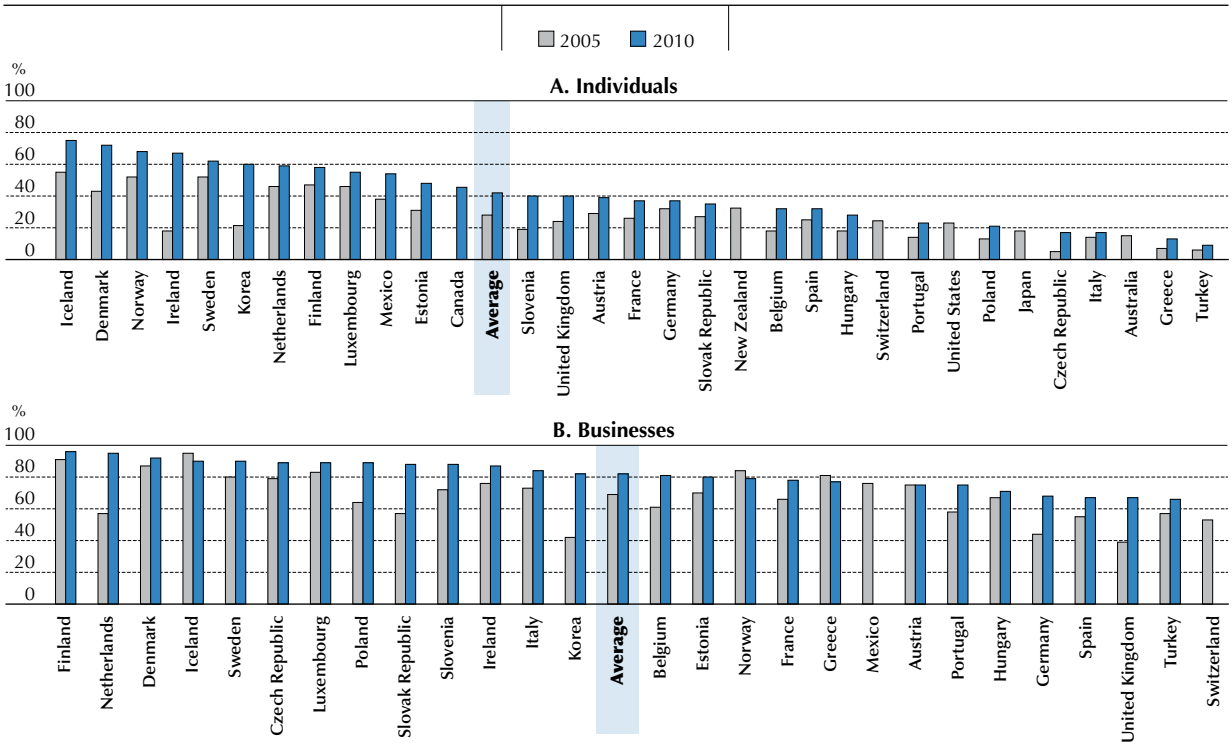
Source: OECD, ICT Database and Eurostat, Community Survey on ICT usage in households and by individuals, November 2011. See Table A1.1 in Annex A.

StatLink http://dx.doi.org/10.1787/888932900232

■ Figure 1.2 ■

The growth of e-government

Percentage of individuals and businesses using the Internet to interact with public authorities, 2005 and 2010



Notes: For Australia, Japan and the United States, 2005 data refer to 2003. For Switzerland, 2005 data refer to 2004. For Denmark, France, Germany, New Zealand and Spain, 2005 data refer to 2006. For Canada and Mexico, 2010 data refer to 2007. For Iceland, 2010 data refer to 2009.

In Panel A, 2005 data are missing for Canada and 2010 data are missing for Australia, Japan, New Zealand, Switzerland and the United States. In Panel B, 2005 data are missing for Australia, Canada, Japan, New Zealand and the United States and 2010 data are missing for Australia, Canada, Japan, Mexico, New Zealand, Switzerland and the United States. Countries with missing data for both years in the same panel have been removed.

Countries are ranked in descending order of the percentage of individuals and businesses using the Internet to interact with public authorities in 2010 (data for 2005 are used for countries in which there is no data available in 2010).

Source: Eurostat Information Society Database, OECD, ICT Database and Korean Survey by Ministry of Public Administration and Security on ICT usage. See Table A1.2 in Annex A.

StatLink http://dx.doi.org/10.1787/888932900251



Employment in services and high-skilled occupations is growing

The introduction of ICTs into the workplace has not just changed the kinds and levels of skills required of workers; in many cases, it has changed the very structure of how work is organised. A shift towards more highly skilled jobs is observed in most countries. The trend regarding low- and medium-skilled jobs is less evident.

Change in employment by industry sector

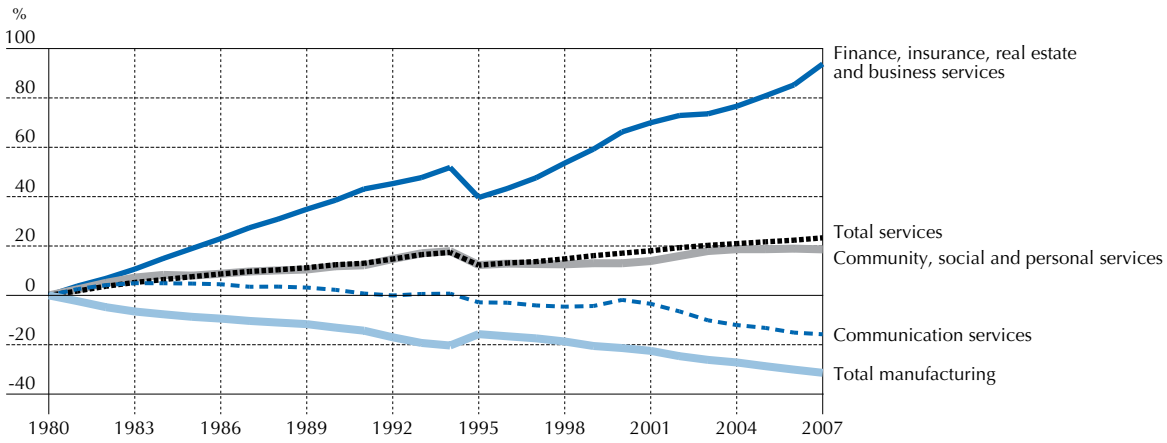
Over the past four decades, the decline in manufacturing sector employment has been offset by growth in the service sector (Figure 1.3). Services requiring the highest levels of skills, such as finance, real estate, insurance and business services, are growing fastest. These services are based on the analysis and transformation of information and, as such, are highly dependent on computers and ICTs. Despite the relative decline in manufacturing activity, the share of employment in high-technology manufacturing continues to increase (see Table A1.3 in Annex A).

In over half of all OECD countries, at least one-third of economic activity is concentrated in high-tech manufacturing, communications, finance, real estate and insurance (see Table B1.4 in Annex B). This is likely to underestimate the impact of new technologies on the economy since many traditionally low-skilled sectors, such as primary production and extractive industries, are also using advanced technologies. Agriculture, for example, is being transformed by bio-technology and computerisation (e.g. GPS technology and the use of IT to manage sales and monitor markets).

■ Figure 1.3 ■

Change in the share of employment, by industrial sectors

Percentage change in share of employment relative to 1980, OECD average



Notes: Only the OECD countries available in the 1980 STAN Database are included for the period 1980-90. Similarly, only the OECD countries available in the 1991 STAN Database are included for the period 1991-94, and only the OECD countries available in the 1995 STAN Database are included for the period 1995-2007.

Source: OECD (2010), "STAN Indicators 2009", STAN: OECD Structural Analysis Statistics (database). *http://dx.doi.org/10.1787/data-00031-en* (Accessed January 2013). See Table A1.3 in Annex A.

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Changes in the occupational structure

In most OECD countries, more than a quarter of all workers are professionals, associate professionals or skilled technicians. Between 1998 and 2008 the number of people employed in these categories increased more rapidly than did overall employment rates in most OECD countries (OECD, 2011 and see Table B1.5 in Annex B).

The evolution of employment shares for occupations with mostly low- and medium-educated workers is more complex. Trends over the period 1998-2008 in the share of employment for three types of occupational groups – in which workers have, on average, high, medium and low levels of education – are shown in Figure 1.4. On average, the share of occupations with highly educated workers has grown, while the share of occupations with both medium- and low-educated workers has declined.



There is some evidence of job polarisation, or a "hollowing out" of the skills content of occupations in certain OECD economies (Goos, Manning and Salomons, 2009, Oesch and Menes, 2010 and Fernandez-Macias, 2012), although this is by no means the case in all countries. In half the OECD countries for which data are available, the loss of jobs associated with a medium level of education was greater than the loss of jobs associated with a low level of education (see Table B1.6 in Annex B). In the remaining countries, the share of jobs that require a medium level of education grew (four countries) or declined to a lesser extent than the share of jobs requiring a low level of education.

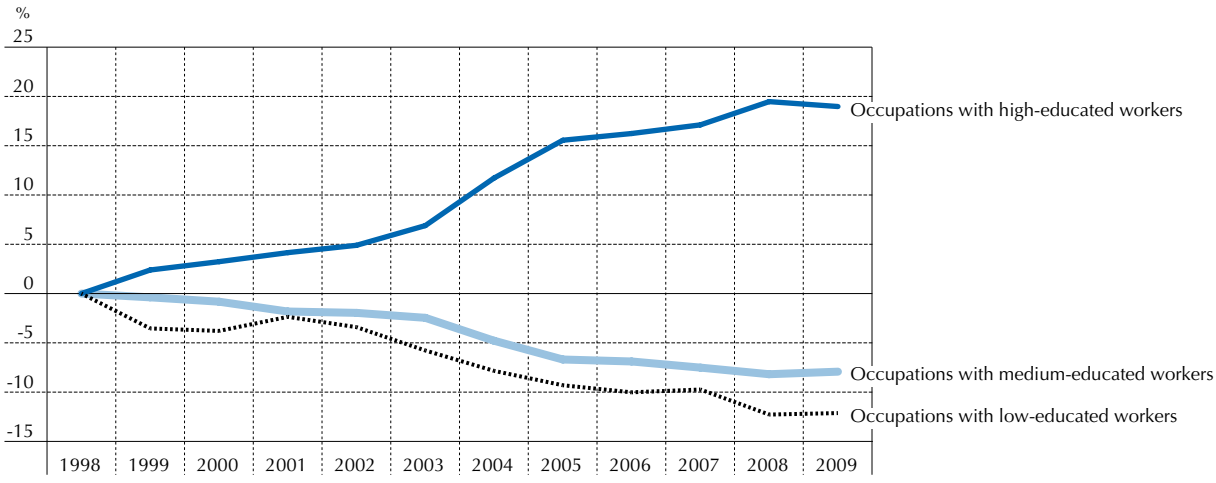
Another way of looking at the evolution of demand for skills is provided by Autor, Levy and Murnane (2003), who classify jobs into routine and non-routine tasks. They argue that the share of non-routine analytic and interactive job tasks (tasks that involve expert thinking and complex communication skills) performed by American workers has increased steadily since 1960 (Figure 1.5). The share of routine cognitive and manual tasks began to decline in the early 1970s and 1980s, respectively – coinciding with the introduction of computers and computerised production processes. These are tasks that are more readily automated and put into formal algorithms. The share of non-routine manual tasks also declined, but stabilised in the 1990s, possibly due to the fact that they cannot be easily computerised or outsourced.

Additional information provided by the Survey of Adult Skills can be used to examine the growth in share of employment for occupations associated with different average levels of information-processing skills (Figure 1.6). Strong growth is evident in the share of employment in occupations associated with the highest average levels of key information-processing skills. Employment in occupations corresponding to the lowest average levels of information-processing skills has been rather stable. In between, the results are more mixed. Occupations corresponding to the next-highest average levels of literacy and numeracy have been stable, but those corresponding to the next-lowest average levels have experienced a sharp decline in employment share between 1998 and 2008. The country-by-country patterns (see Table B1.7 in Annex B), in most cases, are similar to the overall trend.

■ Figure 1.4 ■

Evolution of employment in occupational groups defined by level of education

Percentage change in the share of employment relative to 1998, by occupational groups defined by workers' average level of education



Notes: Only the 24 OECD countries available in the 1998 LFS Database are included in the analysis. High level of education refers to tertiary level or more than 15 years of schooling; medium level of education refers to no tertiary but at least upper secondary education or around 12 years of schooling; low level of education refers to less than upper secondary education or 11 years of schooling. Occupations with high-educated workers: legislators and senior officials; corporate managers; physical, mathematical and engineering science professionals; life science and health professionals; teaching professionals; other professionals; physical and engineering science associate professionals; life science and health associate professionals; teaching associate professionals; and other associate professionals. Occupations with medium-educated workers: managers of small enterprises; office clerks; customer services clerks; personal and protective services workers; models, salespersons and demonstrators; extraction and building trades workers; metal, machinery and related trades workers; precision, handicraft, craft printing and related trades workers; stationary plant and related operators; and drivers and mobile plant operators. Occupations with low-educated workers: other craft and related trades workers; machine operators and assemblers; sales and services elementary occupations; and labourers in mining, construction, manufacturing and transport.

Source: Eurostat, LFS Database. See Table A1.4 in Annex A.

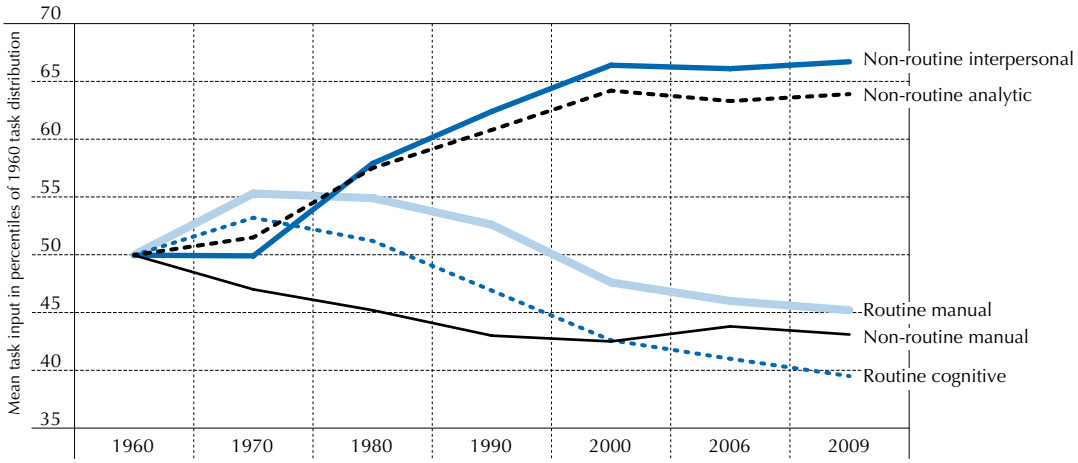
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■ Figure 1.5 ■

Change in the demand for skills

Trends in routine and non-routine tasks in occupations, United States, 1960 to 2009



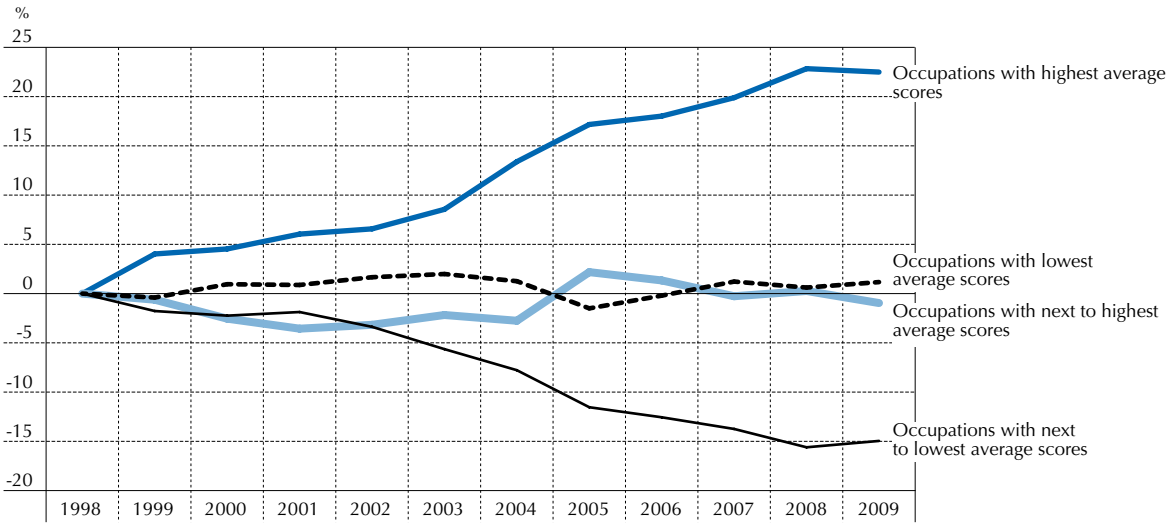
Source: Autor, D.H. and B.M. Price (2013), see Table A1.5 in Annex A.

StatLink http://dx.doi.org/10.1787/888932900308

■ Figure 1.6 ■

Evolution of employment in occupational groups defined by level of skills proficiency

Percentage change in the share of employment relative to 1998, by occupational groups defined by workers' average level of proficiency in literacy and numeracy



Notes: The Survey of Adult Skills (PIAAC) is used to identify occupations associated with high and low literacy and numeracy scores, and then time series data available from the Labour Force Survey (LFS) Database are used to track changes in those occupations over time. See Chapter 2 of this volume and *The Survey of Adult Skills: Reader's Companion* (OECD, 2013) for an extended discussion describing the literacy and numeracy scales. Only the 24 OECD countries available in the 1998 LFS Database are included in the analysis. Highest average scores are in or near the upper half of Level 3 for literacy and numeracy; next to highest average scores are in or near the lower half of Level 3 for literacy and numeracy; next to lowest average scores are in or near the upper half of Level 2 for literacy and numeracy; lowest average scores are in or near the lower half of Level 2 for literacy and numeracy.

Source: Eurostat, LFS Database; Survey of Adults Skills (PIAAC) (2012). See Table A1.6 in Annex A.

StatLink http://dx.doi.org/10.1787/888932900327



The effect of globalisation

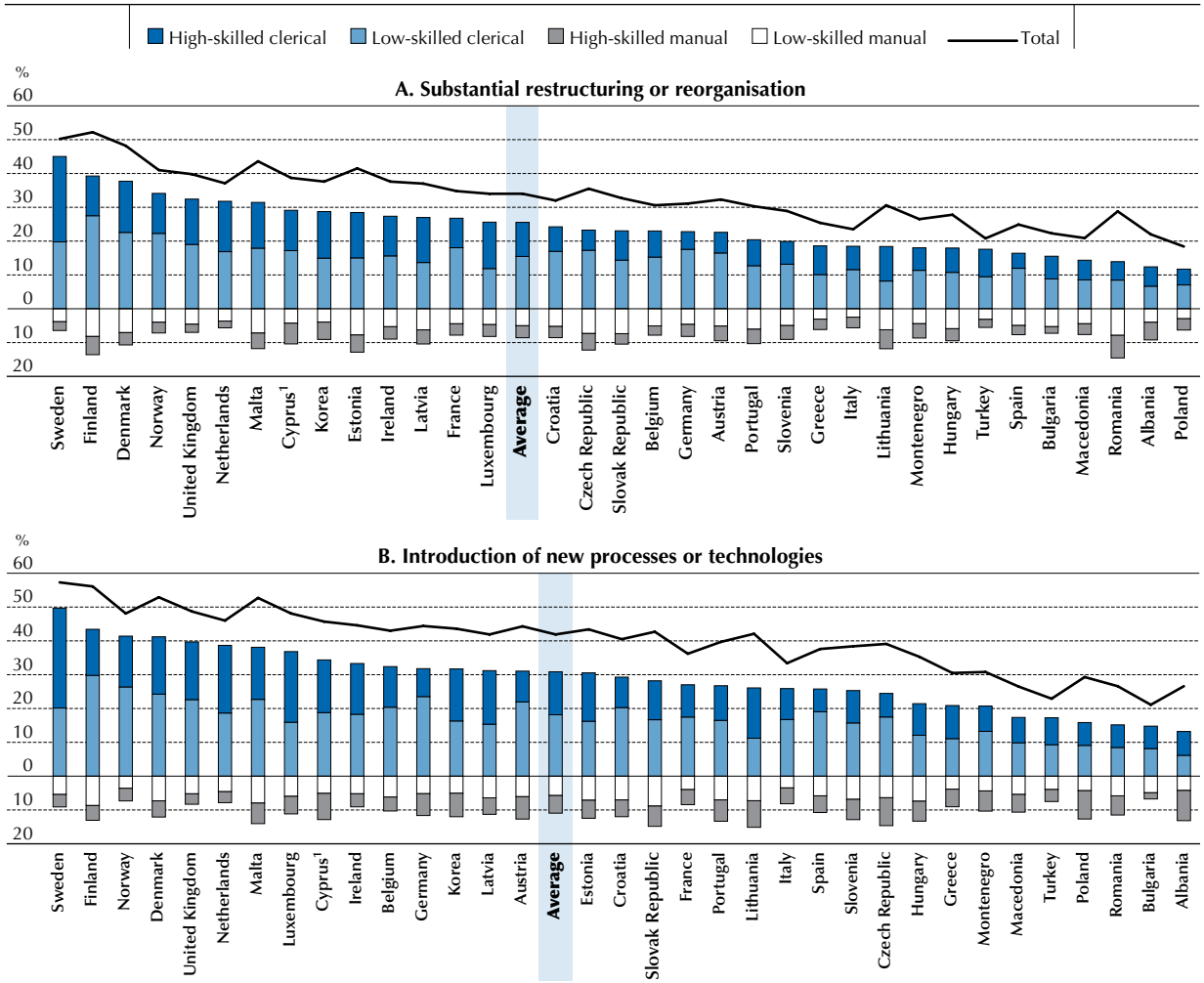
Technology has played a central role in enabling the globalisation of markets primarily by increasing the reach and speed of communication and helping to reduce costs, both of which have eased the flow of goods, capital, people and information across borders. In turn, globalisation has had a strong impact on job opportunities and the demand for skills in local labour markets. On balance, trade can play an important role in creating better jobs, increasing wages in both rich and poor countries, and improving working conditions; but these potential benefits do not accrue automatically. Policies that complement more open trade, including skills-related policies, are needed if the full positive effects on growth and employment are to be realised (OECD, 2012b).

Globalisation has also led to the outsourcing of production. Low-skilled jobs are increasingly seen as being "offshore-able" – i.e. being relocated from high wage or high cost locations to low wage and low cost locations in less developed countries. Offshoring is increasingly spreading from manufacturing to technology-intensive industries, including services. While offshoring accounts for only a small percentage of aggregate job losses on balance, the offshoring of jobs to countries with workforces that are moderately educated but earn comparatively lower wages has been cited as a possible reason for the decline in mid-level jobs in more advanced economies (Autor, 2010).

■ Figure 1.7 ■

Organisational change and new technologies

Percentage of workers who reported changes in their current workplace during the previous three years that affected their work environment



1. See notes at the end of this chapter.

Countries are ranked in descending order of the percentage of workers with low and high clerical related skills who report changes.

Source: European Working Conditions Survey, 2010. See Tables A1.7a and A1.7b in Annex A.

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The role of organisational change

Competitive pressures and technological change mean that the modern workplace is in a state of constant change. Work is regularly re-organised either to support the introduction of technology or to reduce costs or improve productivity. A substantial proportion of workers are in workplaces that have introduced new technologies and/or undergone significant restructuring (see Figure 1.7, Panels A and B). Irrespective of their origin, changes to the way work is organised contribute to a changing demand for skills and require that individuals adapt and learn new things (e.g. Green, 2012; Caroli and van Reenen, 2001).

Imbalances between the supply of, and demand for, skills in labour markets are widespread

In the 1990s, responses to structural change emphasised the supply of skills. Most of the policy discussion centred on the need for training and upgrading; much less thought was given to skill imbalances, and how a lack of use and low levels of demand for skills can be linked to low-skill traps and skills atrophy.

More recently, countries have developed a more comprehensive account of the demand for, and use of, skills, including how work and organisational practices can either perpetuate or eliminate skills imbalances (e.g. Bevan and Cowling, 2007) and low-skills traps (OECD 2012a). While certain countries focus on the imbalances between education levels and requirements (Green, 2013), a concern for all is to ensure that changes in work and organisational practices result in a more effective use of the skills of highly educated workers, which, in turn, will limit skills atrophy and wasted opportunities to increase productivity.

Another challenge is the coexistence of high levels of unemployment with skills shortages and other skills imbalances, such as shortages and so-called skill gaps or mismatches. Skill mismatches manifest themselves in situations where workers with low levels of skills are found to be employed in jobs that require relatively high levels of skills (underskilling); or where highly qualified workers underuse their skills (overskilling). Chapter 4 elaborates on the extent and distribution of mismatch by analysing the measures of skills mismatch collected by the Survey of Adult Skills.

WHAT THE SURVEY OF ADULT SKILLS CAN TELL US

The level of skills proficiency among adults

The Survey of Adult Skills directly assesses skills that are considered to be key information-processing skills: literacy, numeracy and problem solving in technology-rich environments. It is thought that these skills provide a foundation for effective and successful participation in the social and economic life of advanced economies. Understanding the level and distribution of these skills among adult populations in participating countries is thus important for policy makers in a range of social and economic policy areas. To this end, **Chapter 2** provides a descriptive, comparative analysis of the distribution of skills within the adult population.

Which groups in the population have low, medium and high levels of key information-processing skills

Given the centrality of written information in all areas of life, individuals must be able to understand and respond to textual information and communicate in written form in order to fulfil their roles in society, whether as citizen, consumer, parent or employee. Many jobs now require the use of numerical tools and models, and in many countries individuals are being required to assume more responsibility for such matters as retirement planning. The presence of ICTs in the workplace and elsewhere, and related changes in the delivery of many services (e.g. online banking, e-government, electronic shopping), may well have made mastery of literacy and numeracy skills even more important for full participation in modern life. In addition, a certain level of proficiency in literacy and numeracy appears to be a pre-condition for success in undertaking more complex problem-solving tasks – for which, in turn, demand is growing as a consequence of ongoing structural changes. To this end, **Chapter 3** addresses the question of who in the adult population has low, medium or high proficiency in literacy, numeracy and problem solving in the context of technology-rich environments.

The supply of, and demand for, key information-processing and generic skills in labour markets

Concerns about the adequacy of the supply of the skills needed to meet changing labour market requirements are now balanced by views that there are many highly educated and skilled adults who do not necessarily supply their skills to the workforce, or fully use their skills in their jobs. Based on the belief that skills requirements are rapidly evolving, the



Survey of Adult Skills collected considerably more information on the use of skills in the workplace than did previous surveys. **Chapter 4** goes beyond providing an overview of the skills available in labour markets to providing a more comprehensive account of the extent and distribution of skills use and skills mismatch.

How key information-processing skills are developed and maintained over a lifetime

Proficiency in skills such as literacy, numeracy and problem solving is not fixed once and for all on leaving formal education. What an individual does at work, the activities he or she engages in outside of work, the opportunities available for ongoing learning as well as the processes of biological ageing all affect whether proficiency increases or declines over time and at what rate. Ensuring that adults can develop and maintain their skills and positively adapt to changes in the economy and society is especially relevant in ageing societies. Gaining insight into how key skills are developed and maintained over a lifetime is thus a key issue for policy makers. **Chapter 5** examines various factors that are believed to be important for acquiring and maintaining skills.

How key information-processing skills translate into better economic and social outcomes

To what extent does proficiency in literacy, numeracy and problem solving translate into better outcomes for individuals and for nations? Are adults with higher levels of proficiency in literacy, for example, more likely than others to be employed, to have higher wages and to have better health? This information is important for policy makers deciding where to invest scare resources. **Chapter 6** presents evidence on the potential links between adult skills and economic and social outcomes and discusses how skills and these outcomes may be linked.

Notes regarding Cyprus

Note by Turkey: The information in this document with reference to "Cyprus" relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Turkey recognises the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of the United Nations, Turkey shall preserve its position concerning the "Cyprus issue".

Note by all the European Union Member States of the OECD and the European Union: The Republic of Cyprus is recognised by all members of the United Nations with the exception of Turkey. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus.

A note regarding Israel

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

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2

Proficiency in Key Information-Processing Skills among Working-Age Adults

This chapter gives an overview of the level and distribution of proficiency in key information-processing skills among the adult populations of countries participating in the Survey of Adult Skills (PIAAC). Results are presented separately for literacy, numeracy and problem solving in technology-rich environments. The presentation shows how adults are distributed across the different proficiency levels, the mean proficiency of adults, and the variations in proficiency across the population. To help readers interpret the findings, the results are linked to descriptions of what adults with particular scores can do.



The Survey of Adult Skills (PIAAC) assesses the proficiency of adults in literacy, numeracy and problem solving in technology-rich environments. These are considered to be "key information-processing skills" in that they are:

- necessary for fully integrating and participating in the labour market, education and training, and social and civic life;
- highly transferable, in that they are relevant to many social contexts and work situations; and
- "learnable" and, therefore, subject to the influence of policy.

At the most fundamental level, literacy and numeracy skills constitute a foundation for developing higher-order cognitive skills, such as analytic reasoning, and are essential for gaining access to and understanding specific domains of knowledge. In addition, these skills are relevant across the range of life contexts, from education through work to home and social life and interaction with public authorities. The capacity to manage information and solve problems in technology-rich environments – that is, to access, evaluate, analyse and communicate information through the use of digital devices and applications – is becoming a necessity as information and communication technology (ICT) applications permeate the workplace, the classroom and lecture hall, the home, and social interaction more generally. Individuals who are highly proficient in the skills measured by the Survey of Adult Skills are likely to be able to make the most of the opportunities created by the technological and structural changes discussed in the previous chapter; those who struggle to use new technologies are likely to be at considerable risk of losing out.

This chapter shows the level and distribution of proficiency in information-processing skills among the adult populations of the countries participating in the survey (see Box 2.1). To help readers interpret the findings, the results are linked to descriptions of what adults with particular scores can do in concrete terms. The relationships between proficiency and socio-demographic characteristics and other factors influencing the development and maintenance of skills are explored later in this report (see Chapters 3 and 5), as is the relationship between proficiency and economic and social outcomes (see Chapter 6).

The results should be of concern to many governments. First, in most countries there are significant proportions of adults with low proficiency in literacy and in numeracy. Across the countries involved in the study, between 4.9% and 27.7% of adults are proficient at the lowest levels in literacy and 8.1% to 31.7% are proficient at the lowest levels in numeracy. At these levels, adults can regularly complete tasks that involve very few steps, limited amounts of information presented in familiar contexts with little distracting information present, and that involve basic cognitive operations, such as locating a single piece of information in a text or performing basic arithmetic operations, but have difficulty with more complex tasks.

Second, in many countries, large proportions of the population do not have experience with, or lack the basic skills needed to use ICTs for many everyday tasks. At a minimum, this ranges from less than 7% of the 16-65 year-old population in countries such as the Netherlands, Norway and Sweden to around 23% or higher in Italy, Korea, Poland, the Slovak Republic and Spain. Even among adults with computer skills, most scored at the lowest level of the problem solving in technology-rich environments scale. At this level, individuals are able to use familiar and widely available computer applications to access and use information to solve problems that involve explicit goals and the application of explicit criteria, and whose solution involves few steps. Only between 2.9% and 8.8% of the population demonstrate the highest level of proficiency on the problem solving in technology-rich environments scale, where tasks require the ability to use a wider range of applications in less familiar contexts, and to solve problems involving complex pathways to solutions that require navigating around impasses.

Box 2.1. **A context for cross-national comparisons of proficiency**

The Survey of Adult Skills was designed to ensure that the comparisons of proficiency in literacy, numeracy and problem solving in technology-rich environments are as robust as possible. Considerable effort was expended to make the content of the assessment equivalent in difficulty in each of the 34 language versions and to standardise implementation in the 24 participating countries, for example, in terms of sample design and field operations. The quality-assurance and quality-control procedures put in place are among the most comprehensive and stringent ever implemented for an international household-based survey. The details of the technical standards guiding the design and implementation of the survey can be found in the *Reader's Companion* to this report (OECD, 2013) and in the *Technical Report of the Survey of Adult Skills* (OECD, 2013, forthcoming).

Interpreting differences in results among countries is nonetheless a challenging task, particularly as the Survey of Adult Skills covers adults born between 1947 and 1996 who started their schooling from the early 1950s to the

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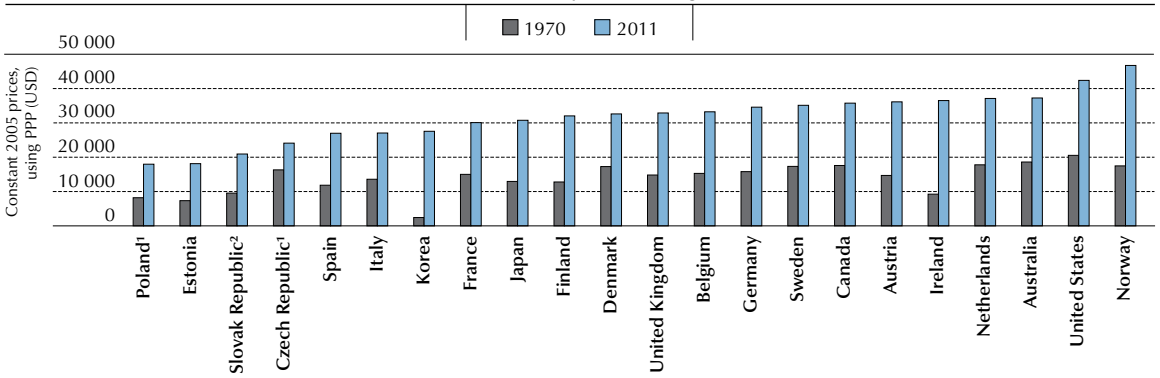
early 2000s and who entered the labour market from the early 1960s to the present day. The results observed for each participating country, at least at the aggregate level reported in this chapter, represent the outcomes of a period of history that extends as far back as the immediate post-war era, which has been marked by significant social, political and economic change. For this reason, the results of the Survey of Adult Skills should not be interpreted only, or even primarily, in light of current policy settings or those of the recent past, important as these may be. The opportunities to develop, enhance and maintain the skills assessed will have varied significantly between countries over this period, and among different age cohorts within countries, depending on the evolution of education and training systems and policies, the path of national economic development, and changes in social norms and expectations.

The diversity of the countries in the Survey of Adult Skills is evident in the different starting points and pace of economic development since the 1950s, the timing and extent of educational expansion, and the growth of the immigrant population. As Figure "a" below illustrates, while there has been an overall increase in GDP per capita from 1970 to 2011 in all of the participating countries, Ireland, Korea and Norway have seen particularly large increases during the period. At the same time, some participating countries, such as Korea and Poland, have seen rapid educational expansion (Figure "b" below) from a relatively low starting point, reflected in larger differences in the rates of tertiary attainment between older and younger age groups, while other countries, such as Canada and the United States, have had high levels of participation at the tertiary level throughout the post-war period.

■ Figure a ■

GDP per capita, USD

Constant 2005 prices, using PPP



1. Year of reference 1990.
2. Year of reference 1992.

Countries are ranked in ascending order of the GDP per capita in 2011.

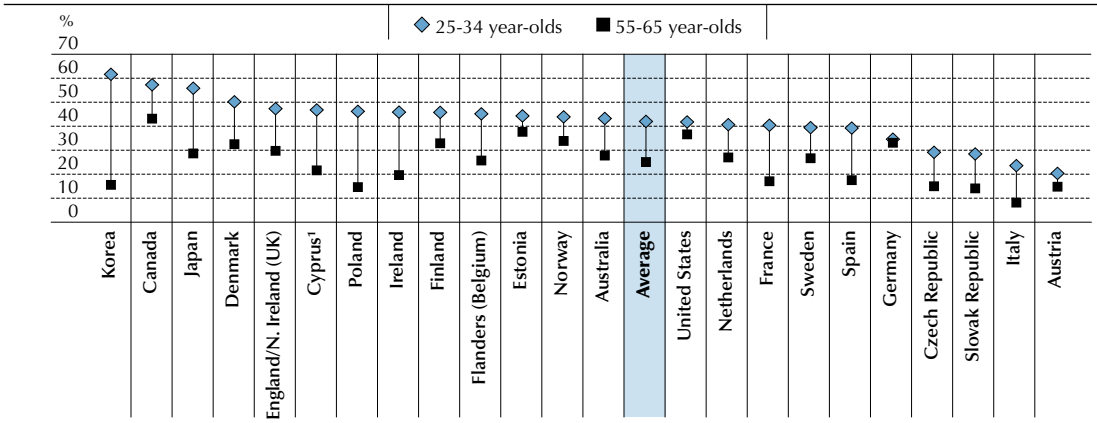
Source: OECD National Accounts; Table B2.1 in Annex B.

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■ Figure b ■

Population with tertiary education

Percentage, by age group



1. See notes at the end of this chapter.

Countries are ranked in descending order of the percentage of 25-34 year-olds with tertiary education.

Source: Survey of Adult Skills (PIAAC) (2012), Table B2.2 in Annex B.

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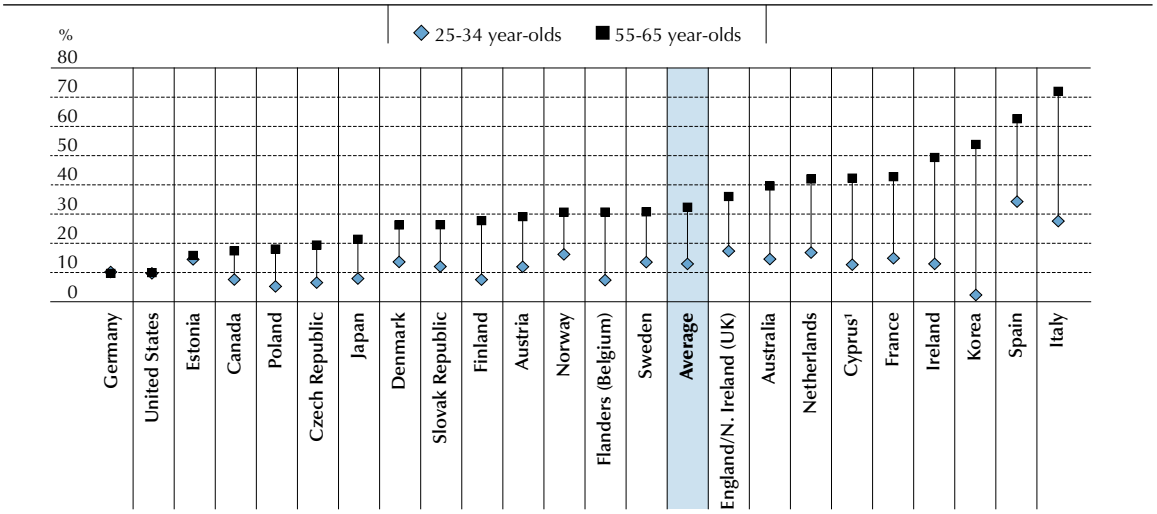
By contrast, in some participating countries, large proportions of older adults have not completed upper secondary education (Figure "c" below). This proportion is as large as around 72% in Italy and more than 40% in France, Ireland, Korea, the Netherlands and Spain. While some of these countries, such as Ireland and Korea, have seen substantial decreases in the proportion of young adults without upper secondary education, more than 25% of young adults in Italy and Spain have not attained upper secondary education.

The proportion of the population that is foreign-born adds to the diversity of country contexts. As shown in Figure "d" below, more than 15% of the total population in Australia, Austria, Canada, Estonia and Ireland were foreign-born, compared to less than 5% of the population in Finland in 2009. Ireland and Spain reported particularly large increases in their immigrant populations between 1996 and 2009.

■ Figure c ■

Population without upper secondary education

Percentage, by age group



1. See notes at the end of this chapter.

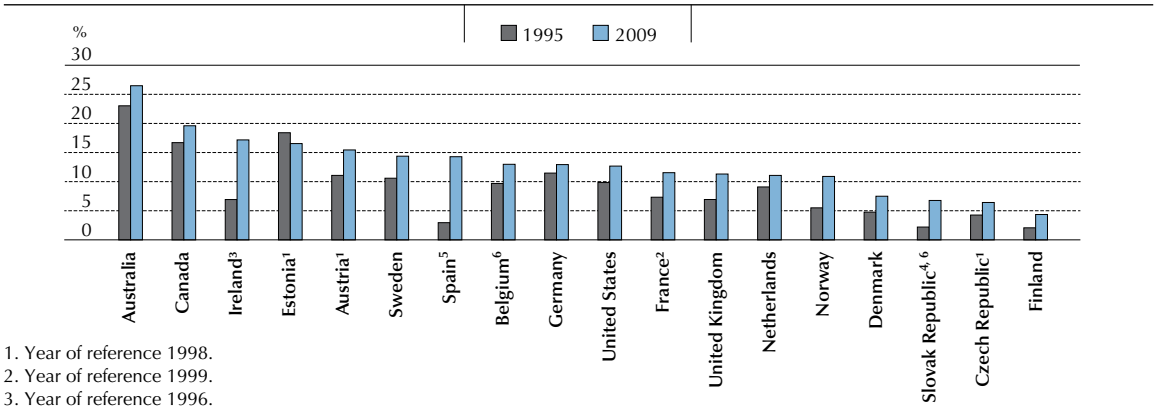
Countries are ranked in ascending order of the percentage of 55-65 year-olds without upper secondary education.

Source: Survey of Adult Skills (PIAAC) (2012), Table B2.2 in Annex B.

StatLink http://dx.doi.org/10.1787/888932900745

■ Figure d ■

Foreign-born population as a percentage of total population



1. Year of reference 1998.
2. Year of reference 1999.
3. Year of reference 1996.
4. Year of reference 2001.
5. Year of reference 1996.
6. Year of reference 2008.
7. See notes at the end of this chapter.

Countries are ranked in descending order of the percentage of foreign-born population in 2009.

Note: Data are not available for Italy, Poland, Japan, Korea and Cyprus.[7]

Source: OECD International Migration Database, Table B2.3 in Annex B.

StatLink http://dx.doi.org/10.1787/888932900764



DEFINING LITERACY, NUMERACY AND PROBLEM SOLVING IN TECHNOLOGY-RICH ENVIRONMENTS

The skills assessed in the Survey of Adult Skills are each defined by a framework that guided the development of the assessment and provides a reference point for interpreting results. Each framework defines the skills assessed in terms of:

- **content** – the texts, artefacts, tools, knowledge, representations and cognitive challenges that constitute the corpus to which adults must respond or use when they read, act in a numerate way or solve problems in technology-rich environments;
- **cognitive strategies** – the processes that adults must bring into play to respond to or use given content in an appropriate manner; and
- **context** – the different situations in which adults have to read, display numerate behaviour, and solve problems.

Table 2.1 provides an overview of each of the three domains, including a definition of the skills in question and the content, cognitive strategies and contexts related to each. More information on the definition of these skills can be found in Chapter 1 of the *Reader's Companion* to this report (OECD, 2013).

Table 2.1
Summary of assessment domains in the Survey of Adult Skills (PIAAC)

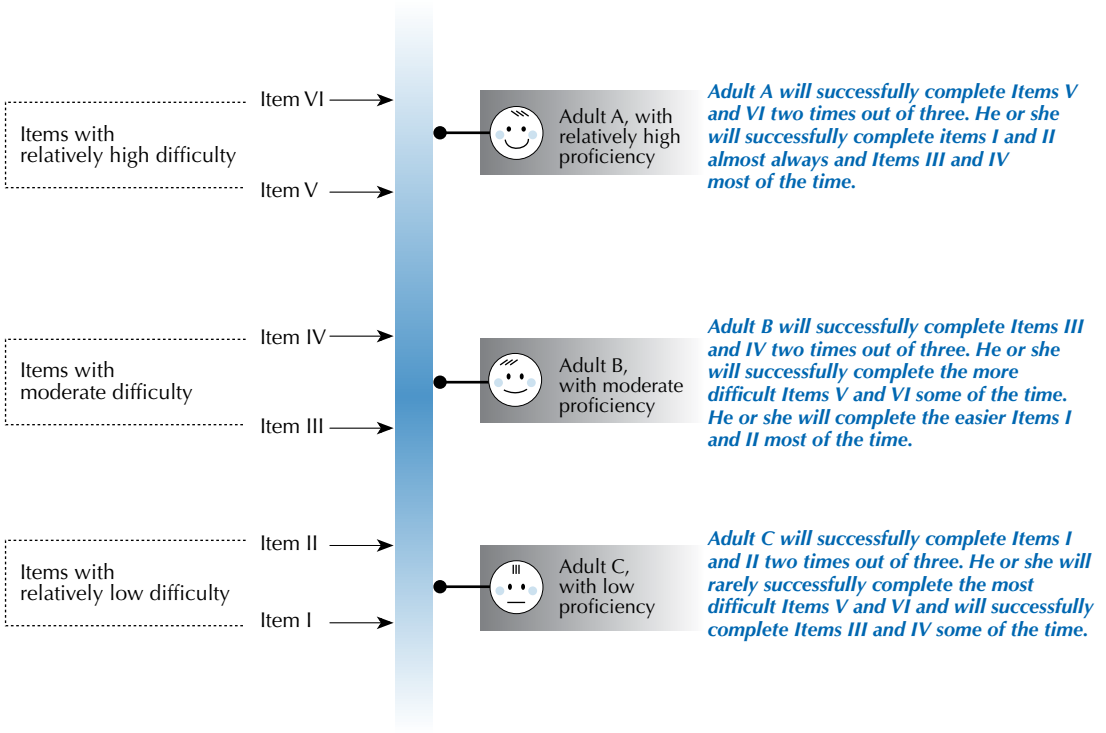
	Literacy	Numeracy	Problem solving in technology-rich environments
Definition	Literacy is defined as the ability to understand, evaluate, use and engage with *written texts* to participate in society, to achieve one's goals, and to develop one's knowledge and potential. Literacy encompasses a range of skills from the decoding of written words and sentences to the comprehension, interpretation, and evaluation of complex texts. It does not, however, involve the production of text (writing[1]). Information on the skills of adults with low levels of proficiency is provided by an assessment of reading components that covers text vocabulary, sentence comprehension and passage fluency.	Numeracy is defined as the ability to access, use, interpret and communicate mathematical information and ideas in order to engage in and manage the mathematical demands of a range of situations in adult life. To this end, numeracy involves managing a situation or solving a problem in a real context, by responding to mathematical content/information/ideas represented in multiple ways.	Problem solving in technology-rich environments is defined as the ability to use digital technology, communication tools and networks to acquire and evaluate information, communicate with others and perform practical tasks. The assessment focuses on the abilities to solve problems for personal, work and civic purposes by setting up appropriate goals and plans, and accessing and making use of information through computers and computer networks.
Content	Different types of text. Texts are characterised by their medium (print-based or digital) and by their format: ▪ Continuous or prose texts ▪ Non-continuous or document texts ▪ Mixed texts ▪ Multiple texts	Mathematical content, information and ideas: ▪ Quantity and number ▪ Dimension and shape ▪ Pattern, relationships and change ▪ Data and chance Representations of mathematical information: ▪ Objects and pictures ▪ Numbers and symbols ▪ Visual displays (e.g. diagrams, maps, graphs, tables) ▪ Texts ▪ Technology-based displays	Technology: ▪ Hardware devices ▪ Software applications ▪ Commands and functions ▪ Representations (e.g. text, graphics, video) Tasks: ▪ Intrinsic complexity ▪ Explicitness of the problem statement
Cognitive strategies	▪ Access and identify ▪ Integrate and interpret (relating parts of text to one another) ▪ Evaluate and reflect	▪ Identify, locate or access ▪ Act upon and use (order, count, estimate, compute, measure, model) ▪ Interpret, evaluate and analyse ▪ Communicate	▪ Set goals and monitor progress ▪ Plan ▪ Acquire and evaluate information ▪ Use information
Contexts	▪ Work-related ▪ Personal ▪ Society and community ▪ Education and training	▪ Work-related ▪ Personal ▪ Society and community ▪ Education and training	▪ Work-related ▪ Personal ▪ Society and community

REPORTING THE RESULTS

In each of the three domains assessed, proficiency is considered as a continuum of ability involving the mastery of information-processing tasks of increasing complexity. The results are represented on a 500-point scale. At each point on the scale, an individual with a proficiency score of that particular value has a 67% chance of successfully completing test items located at that point. This individual will also be able to complete more difficult items (those with higher values on the scale) with a lower probability of success and easier items (those with lower values on the scale) with a greater chance of success.

This is illustrated in Box 2.2. For example, Adult C, with low proficiency will be able to successfully complete items I and II around two-thirds of the time. He or she will also be able to complete items of moderate difficulty some of the time and very difficult items only rarely. Adult A, with high proficiency, will be able to successfully complete items V and VI two-thirds of the time, items III and IV most of the time, and items I and II almost always.

Box 2.2. **Relationship between difficulty of assessment items and proficiency of adults on the literacy, numeracy and problem solving in technology-rich environments scales**



The proficiency scale in each of the domains assessed can be described in relation to the items that are located at the different points on the scale according to their difficulty (see Chapter 4 of the *Reader's Companion* to this report [OECD, 2013]). The scales have been divided into "proficiency levels", defined by particular score-point ranges and the level of difficulty of the tasks within these ranges. The descriptors provide a summary of the types of tasks that can be successfully completed by adults with proficiency scores in a particular range. In other words, they suggest what adults with particular proficiency scores in a particular skills domain can do. Six proficiency levels are defined for literacy and numeracy (Levels 1 through 5 plus below Level 1) and four for problem solving in technology-rich environments (Levels 1 through 3 plus below Level 1).[2] The value ranges defining the levels and their respective descriptors are presented in Tables 2.2, 2.3 and 2.4 in this chapter and in Chapter 4 of the *Reader's Companion* to this report (OECD, 2013).[3]



Tasks located at a particular proficiency level can be successfully completed by the "average" person at that level approximately two-thirds of the time. However, a person with a score at the bottom of the level would successfully complete tasks at that level only about half the time and someone with a score at the top of the level would successfully complete tasks at the level about 80% of the time.

In this report, proficiency levels have a *descriptive* purpose. They are intended to aid the interpretation and understanding of the reporting scales by describing the attributes of the tasks that adults with particular proficiency scores can typically successfully complete. In particular, they have no *normative* element and should not be understood as "standards" or "benchmarks" in the sense of defining levels of proficiency appropriate for particular purposes (e.g. access to post-secondary education or fully participating in a modern economy) or for particular population groups.[4]

In order to interpret differences in scores between countries or groups, it is useful to have a reference point to help illustrate what score-point differences of different magnitudes mean. A possible reference point is provided by the differences in the proficiency scores of individuals similar in all respects other than their level of completed education. The average score-point difference associated with an additional year of completed education or training (i.e. between a person who has completed n years of education and one who has completed n+1 years) is approximately 7 score points, on average, on both the literacy and numeracy scales.[5] One standard deviation on the literacy scale (47.7 score points) and the numeracy scale (52.6 score points) is thus the approximate equivalent of the average difference in score points associated with a difference of seven years of education.

Non-response represents a potential source of bias in any survey. Considerable efforts were made by the countries participating in the Survey of Adult Skills to reduce the level of non-response and to minimise its effects. Response rates varied between 45% and 75%. All countries with response rates of less than 70% were required to undertake extensive analyses of the bias associated with non-response. The outcome of these analyses was that the bias associated with non-response is regarded as being minimal to low in most countries. Nonetheless, readers should be aware that non-response was present in all countries and that response rates varied between the countries participating in the survey. Both the response rates for individual participating countries and a discussion of the potential bias associated with non-response can be found in Chapter 3 of the *Reader's Companion* to this report (OECD, 2013).

PROFICIENCY IN LITERACY

The Survey of Adult Skills defines literacy as the ability to understand, evaluate, use and engage with written texts to participate in society, achieve one's goals, and develop one's knowledge and potential. In the survey, the term "literacy" refers to the reading of written texts; it does not involve either the comprehension or production of spoken language or the production of text (writing). In addition, given the growing importance of digital devices and applications as a means of generating, accessing and storing written text, the reading of digital texts is an integral part of literacy measured in the Survey of Adult Skills (see Box 2.3). Digital texts are texts that are stored as digital information and accessed in the form of screen-based displays on devices such as computers and smart phones. Digital texts have a range of features that distinguish them from print-based texts: in addition to being displayed on screens, these include hypertext links to other documents, specific navigation features (e.g. scroll bars, use of menus) and interactivity. The Survey of Adult Skills is the first international assessment of adult literacy to cover this dimension of reading.

Box 2.3. Reading on a screen or on paper: Does it affect proficiency in literacy?

Literacy and numeracy assessments in the Survey of Adult Skills were available in both a computer-based and a paper-based version. On average across countries, 74% of respondents took the computer-based assessment and some 21% took the paper-based assessment as they had no or very low computer skills or expressed a preference to do so (see Figure "a" in this box).

The computer-based and paper-based assessments of literacy differ in two main ways. First, the paper-based assessment tests the reading of *print* texts exclusively whereas the computer-based version covers the reading of *digital texts*, such as simulated websites, results pages from search engines and blog posts, in addition to the reading of *print texts* presented on a screen. Second, the response modes differ. In the paper-based test, respondents provide written answers in paper test booklets. In the computer-based test, responding to the assessment tasks involves interacting with text and visual displays on a computer screen using devices such as a keyboard and a mouse, and functions such as highlighting and drag and drop.

...

The difference in format and content of the computer-based and paper-based versions of the literacy assessment raises two important questions. First, to what extent are the results from the computer-based and paper-based versions of the assessment comparable? Second, given that the computer-based assessment covers the reading of digital texts that are not covered in the paper-based version, is the comparability of results between countries affected by the fact that varying proportions of the population in the participating countries took the computer-based version?

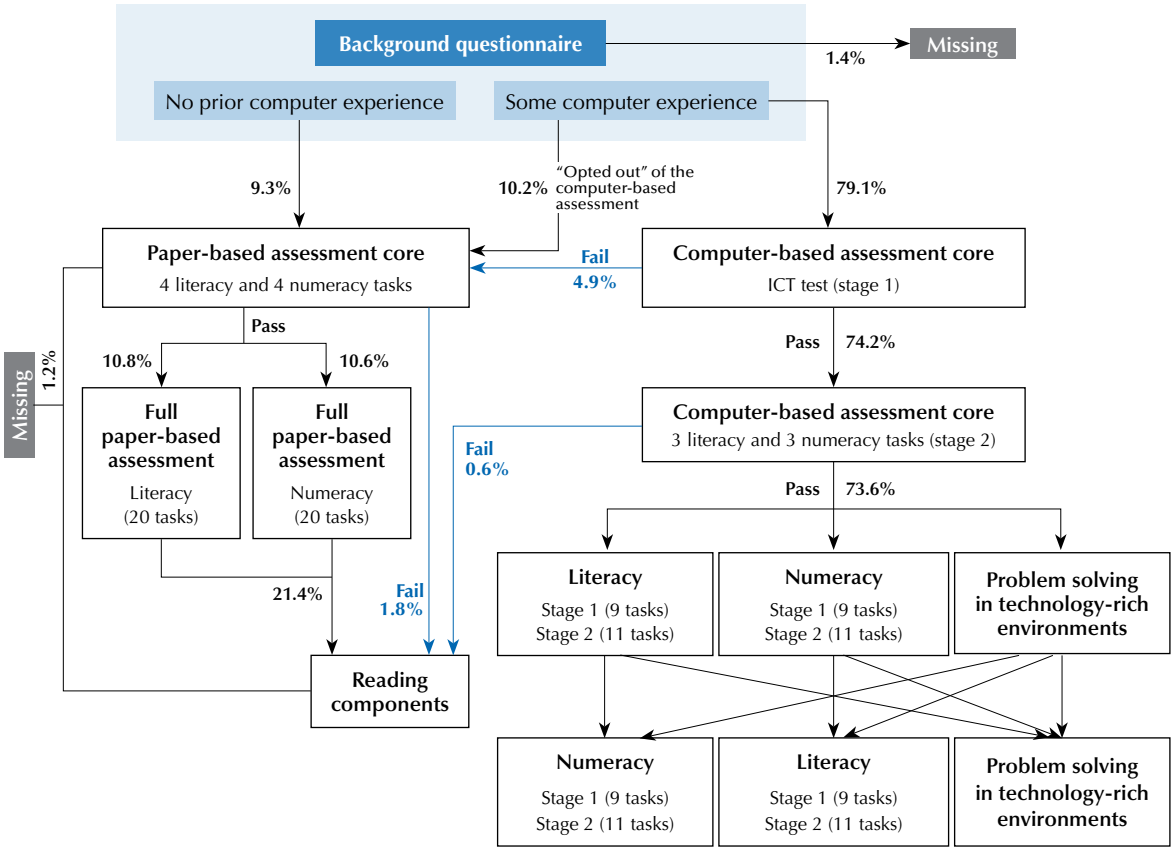
The extent to which the mode of delivery of the assessment affected results was examined in the field test for the survey that took place in 2010 using a design that randomly assigned participants to the computer-based and paper-based versions of the assessment. The analysis of the field test results concluded that difficulty and discrimination of most of the test items common to the two versions was largely unaffected by the mode in which the test was taken.

The field test analysis also concluded that the paper-based and computer-based items could be placed on the same scale. In other words, the processes of understanding the meaning of text are fundamentally the same for all types of text. The reading of printed texts and the reading of digital texts involves the same cognitive operations. The difficulty of assessment tasks involving print-based and digital texts is related to the same factors, such as the amount of distracting information.

Analysis of the results from the Survey of Adult Skills show that there are no systematic differences between the scores of adults who took the paper-based assessment and those who took the computer-based assessment when socio-demographic factors (age, educational attainment, immigrant background and gender) are controlled for (see Table B2.6 in Annex B).

■ Figure a ■

Percentage of respondents taking different pathways in the Survey of Adult Skills (PIAAC)



Note: The figures presented in this diagram are based on the average of OECD countries participating in the Survey of Adult Skills (PIAAC).

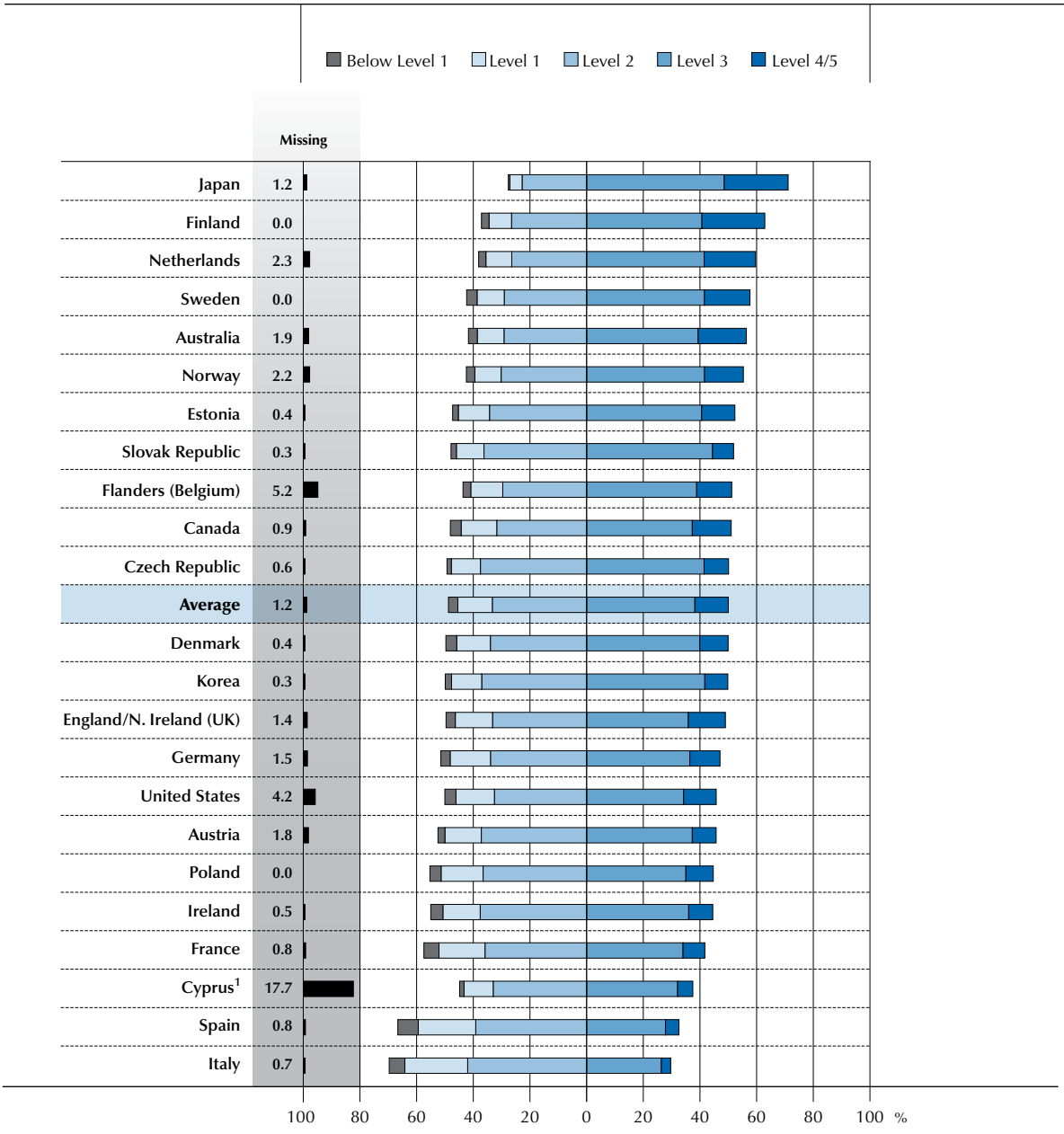
WHAT ADULTS CAN DO AT DIFFERENT LEVELS OF LITERACY PROFICIENCY

Figure 2.1 presents the percentage of adults aged 16-65 in each participating country who score at each of the six levels of proficiency (Levels 1 through 5 and below Level 1) on the literacy scale. The features of the tasks at these levels are described in detail in Table 2.2 and examples of literacy items are described in Box 2.4.

■ Figure 2.1 ■

Literacy proficiency among adults

Percentage of adults scoring at each proficiency level in literacy



1. See notes at the end of this chapter.

Notes: Adults in the missing category were not able to provide enough background information to impute proficiency scores because of language difficulties, or learning or mental disabilities (referred to as literacy-related non-response).

Countries are ranked in descending order of the combined percentage of adults scoring at Level 3 and Level 4/5.

Source: Survey of Adult Skills (PIAAC) (2012), Table A2.1.

StatLink http://dx.doi.org/10.1787/888932900365



Table 2.2
Description of proficiency levels in literacy

Level	Score range	Percentage of adults scoring at each level (average)	Types of tasks completed successfully at each level of proficiency
Below Level 1	Below 176 points	3.3%	The tasks at this level require the respondent to read brief texts on familiar topics to locate a single piece of specific information. There is seldom any competing information in the text and the requested information is identical in form to information in the question or directive. The respondent may be required to locate information in short continuous texts. However, in this case, the information can be located as if the text were non-continuous in format. Only basic vocabulary knowledge is required, and the reader is not required to understand the structure of sentences or paragraphs or make use of other text features. Tasks below Level 1 do not make use of any features specific to digital texts.
1	176 to less than 226 points	12.2%	Most of the tasks at this level require the respondent to read relatively short digital or print continuous, non-continuous, or mixed texts to locate a single piece of information that is identical to or synonymous with the information given in the question or directive. Some tasks, such as those involving non-continuous texts, may require the respondent to enter personal information onto a document. Little, if any, competing information is present. Some tasks may require simple cycling through more than one piece of information. Knowledge and skill in recognising basic vocabulary determining the meaning of sentences, and reading paragraphs of text is expected.
2	226 to less than 276 points	33.3%	At this level, the medium of texts may be digital or printed, and texts may comprise continuous, non-continuous, or mixed types. Tasks at this level require respondents to make matches between the text and information, and may require paraphrasing or low-level inferences. Some competing pieces of information may be present. Some tasks require the respondent to ▪ cycle through or integrate two or more pieces of information based on criteria; ▪ compare and contrast or reason about information requested in the question; or ▪ navigate within digital texts to access and identify information from various parts of a document.
3	276 to less than 326 points	38.2%	Texts at this level are often dense or lengthy, and include continuous, non-continuous, mixed, or multiple pages of text. Understanding text and rhetorical structures become more central to successfully completing tasks, especially navigating complex digital texts. Tasks require the respondent to identify, interpret, or evaluate one or more pieces of information, and often require varying levels of inference. Many tasks require the respondent to construct meaning across larger chunks of text or perform multi-step operations in order to identify and formulate responses. Often tasks also demand that the respondent disregard irrelevant or inappropriate content to answer accurately. Competing information is often present, but it is not more prominent than the correct information.
4	326 to less than 376 points	11.1%	Tasks at this level often require respondents to perform multiple-step operations to integrate, interpret, or synthesise information from complex or lengthy continuous, non-continuous, mixed, or multiple type texts. Complex inferences and application of background knowledge may be needed to perform the task successfully. Many tasks require identifying and understanding one or more specific, non-central idea(s) in the text in order to interpret or evaluate subtle evidence-claim or persuasive discourse relationships. Conditional information is frequently present in tasks at this level and must be taken into consideration by the respondent. Competing information is present and sometimes seemingly as prominent as correct information.
5	Equal to or higher than 376 points	0.7%	At this level, tasks may require the respondent to search for and integrate information across multiple, dense texts; construct syntheses of similar and contrasting ideas or points of view; or evaluate evidence based arguments. Application and evaluation of logical and conceptual models of ideas may be required to accomplish tasks. Evaluating reliability of evidentiary sources and selecting key information is frequently a requirement. Tasks often require respondents to be aware of subtle, rhetorical cues and to make high-level inferences or use specialised background knowledge.

Note: The percentage of adults scoring at different levels of proficiency adds up to 100% when the 1.2% of literacy-related non-respondents across countries are taken into account. Adults in this category were not able to complete the background questionnaire due to language difficulties or learning and mental disabilities (see section on literacy-related non-response).



Box 2.4. Examples of literacy items

Items that exemplify the pertinent features of the proficiency levels in the domain of literacy are described below (see also Table 4.2 in the *Reader's Companion* to this report [OECD, 2013]).

Below Level 1: Election results (Item ID: C302BC02)
Cognitive strategies: Access and identify
Text format: Mixed
Medium: Print
Context: Society and community
Difficulty score: 162

The stimulus consists of a short report of the results of a union election containing several brief paragraphs and a simple table identifying the three candidates in the election and the number of votes they received. The test-taker is asked to identify which candidate received the fewest votes. He or she needs to compare the number of votes that the three candidates received and identify the name of the candidate who received the fewest votes. The word "votes" appears in both the question and in the table and nowhere else in the text.

Level 1: Generic medicine (Item ID: C309A321)
Cognitive strategies: Integrate and interpret
Text format: Mixed
Medium: Print
Context: Personal (health and safety)
Difficulty score: 219

The stimulus is a short newspaper article entitled "Generic medicines: Not for the Swiss". It has two paragraphs and a table in the middle displaying the market share of generic medicines in 14 European countries and the United States. The test-taker is asked to determine the number of countries in which the generic drug market accounts for 10% or more of total drug sales. The test-taker has to count the number of countries with a market share greater than 10%. The percentages are sorted in descending order to facilitate the search. The phrase "drug sales", however, does not appear in the text; therefore, the test-taker needs to understand that "market share" is a synonym of "drug sales" in order to answer the question.

Level 2: Lakeside fun run (Item ID: C322P002)
Cognitive strategies: Evaluate and reflect
Text format: Mixed
Medium: Digital
Context: Personal (leisure and recreation)
Difficulty score: 240

The stimulus is a simulated website containing information about the annual fun run/walk organised by the Lakeside community club. The test-taker is first directed to a page with several links, including "Contact Us" and "FAQs". He or she is then asked to identify the link providing the phone number of the organisers of the event. In order to answer this item correctly, the test-taker needs to click on the link "Contact Us". This requires navigating through a digital text and some understanding of web conventions. While this task might be fairly simple for test-takers familiar with web-based texts, some respondents less familiar with web-based texts would need to make some inferences to identify the correct link.

Level 3: Library search (Item ID: C323P003)
Cognitive strategies: Access and identify
Text format: Multiple
Medium: Digital
Context: Education and training
Difficulty score: 289

The stimulus displays results from a bibliographic search from a simulated library website. The test-taker is asked to identify the name of the author of a book called *Ecomyth*. To complete the task, the test-taker has to scroll through a list of bibliographic entries and find the name of the author specified under the book title. In addition to scrolling, the test-taker must be able to access the second page where *Ecomyth* is located by either clicking the page number (2) or the word "next". There is considerable irrelevant information in each entry to this particular task, which adds to the complexity of the task.

...



Level 4: Library search (Item ID: C323P002)
Cognitive strategies: Integrate and interpret
Text format: Multiple
Medium: Digital
Context: Education and training
Difficulty score: 348

This task uses the same stimulus as the previous example. The test-taker is asked to identify a book suggesting that the claims made both for and against genetically modified foods are unreliable. He or she needs to read the title and the description of each book in each of the entries reporting the results of the bibliographic search in order to identify the correct book. Many pieces of distracting information are present. The information that the relevant book suggests that the claims for and against genetically modified foods are unreliable must be inferred from the statement that the author "describes how both sides in this hotly contested debate have manufactured propaganda, tried to dupe the public and...[text ends]".

Proficiency at Level 5 (scores equal to or higher than 376 points)

Level 5 is the highest proficiency level on the literacy scale. Adults reaching this level can perform tasks that involve searching for and integrating information across multiple, dense texts; constructing syntheses of similar and contrasting ideas or points of view, or evaluating evidence and arguments. They can apply and evaluate logical and conceptual models, and evaluate the reliability of evidentiary sources and select key information. They are aware of subtle, rhetorical cues and are able to make high-level inferences or use specialised background knowledge.

Less than 1% (0.7%) of adults perform at Level 5 in any participating country. Finland has the highest proportion of adults at this level (2.2%), followed by Australia and the Netherlands (both at 1.3%), Japan and Sweden (both at 1.2%).

Proficiency at Level 4 (scores from 326 points to less than 376 points)

At Level 4, adults can perform multiple-step operations to integrate, interpret, or synthesise information from complex or lengthy continuous, non-continuous, mixed, or multiple-type texts that involve conditional and/or competing information. They can make complex inferences and appropriately apply background knowledge as well as interpret or evaluate subtle truth claims or arguments.

On average, 11.1% of adults score at Level 4 and 11.8% score at Level 4 or higher. Japan (21.4%) and Finland (20.0%) have the largest proportion of adults scoring at this level and the largest proportion of adults scoring at this level or higher. At the other end of the scale, Italy (3.3%) and Spain (4.6%) have less than half the average proportion of adults performing at this level. They also have the smallest proportion of adults scoring at Level 4 or higher.

Proficiency at Level 3 (scores from 276 points to less than 326 points)

Adults performing at Level 3 can understand and respond appropriately to dense or lengthy texts, including continuous, non-continuous, mixed, or multiple pages. They understand text structures and rhetorical devices and can identify, interpret, or evaluate one or more pieces of information and make appropriate inferences. They can also perform multi-step operations and select relevant data from competing information in order to identify and formulate responses.

Across countries, 38.2 % of adults score at Level 3, on average. In most countries, more adults perform at this level than at any other level. This is true for all of the participating countries except France, Ireland, Italy, Poland and Spain, where larger proportions of adults score at Level 2. Japan (48.6%), the Slovak Republic (44.4%) and Korea (41.7%) have the largest proportions of adults at this level, while Italy has the smallest proportion of adults scoring at Level 3 (26.4%), followed by Spain (27.8%).

At the same time, half of adults score at Level 3 or higher, on average across countries. More than 60% of adults in Japan (71.1%) and Finland (62.9%) score at this level or higher while less than 40% of adults in Italy (29.7%) and Spain (32.6%) do.

Proficiency at Level 2 (scores from 226 points to less than 276 points)

At Level 2, adults can integrate two or more pieces of information based on criteria, compare and contrast or reason about information and make low-level inferences. They can navigate within digital texts to access and identify information from various parts of a document.



On average, one-third of adults (33.3%) perform at Level 2. Italy (42.0%) and Spain (39.1%) have the highest proportions of adults scoring at this level, and Ireland (37.6%), the Czech Republic (37.5%), Austria (37.2%) and Korea (37.0%) also have particularly large proportions of adults scoring at this level. By contrast, Japan (22.8%), the Netherlands (26.4%) and Finland (26.5%) have the smallest proportions of adults scoring at Level 2.

Across countries, 83.3% of adults reach at least Level 2. Countries with the largest proportion of adults reaching at least this level include Japan (93.9%), Finland (89.4%), the Slovak Republic (88.1%) and the Czech Republic (87.6%) while Italy (71.7%), Spain (71.7%) and the United States (78.3%) have the smallest proportions of adults reaching at least Level 2.

Proficiency at Level 1 (scores from 176 points to less than 226 points)

At Level 1, adults can read relatively short digital or print continuous, non-continuous, or mixed texts to locate a single piece of information, which is identical to or synonymous with the information given in the question or directive. These texts contain little competing information. Adults performing at this level can complete simple forms, understand basic vocabulary, determine the meaning of sentences, and read continuous texts with a degree of fluency.

Across countries, 12.2% of adults score at Level 1. Just over one in five adults in Italy (22.2%) and Spain (20.3%) score at this level. In contrast, just over one in 25 adults (4.3%) in Japan score at this level. Finland (8.0%), the Netherlands (9.1%), Norway (9.3%), Australia (9.4%), Sweden (9.6%) and the Slovak Republic (9.7%) also have small proportions of adults scoring at this level.

Countries with the largest proportions of adults scoring at or below Level 1 include Italy (27.7%), Spain (27.5%) and France (21.6%), while Japan (4.9%), Finland (10.6%), the Slovak Republic (11.6%) and the Netherlands (11.7%) have the smallest proportion of adults scoring at or below Level 1.

Proficiency below Level 1 (scores below 176 points)

Individuals at this level can read brief texts on familiar topics and locate a single piece of specific information identical in form to information in the question or directive. They are not required to understand the structure of sentences or paragraphs and only basic vocabulary knowledge is required. Tasks below Level 1 do not make use of any features specific to digital texts.

On average, 3.3% of adults perform below Level 1. Spain has the largest proportion of adults scoring below Level 1 (7.2%), followed by Italy (5.5%), France (5.3%), and Ireland (4.3%). Again, Japan has the smallest proportion of adults scoring at this level (0.6%), followed by the Czech Republic (1.5%), the Slovak Republic (1.9%) and Estonia (2.0%). More information about the skills of readers with very low proficiency was provided by the reading components assessment (see Box 2.5).

Box 2.5. Reading components

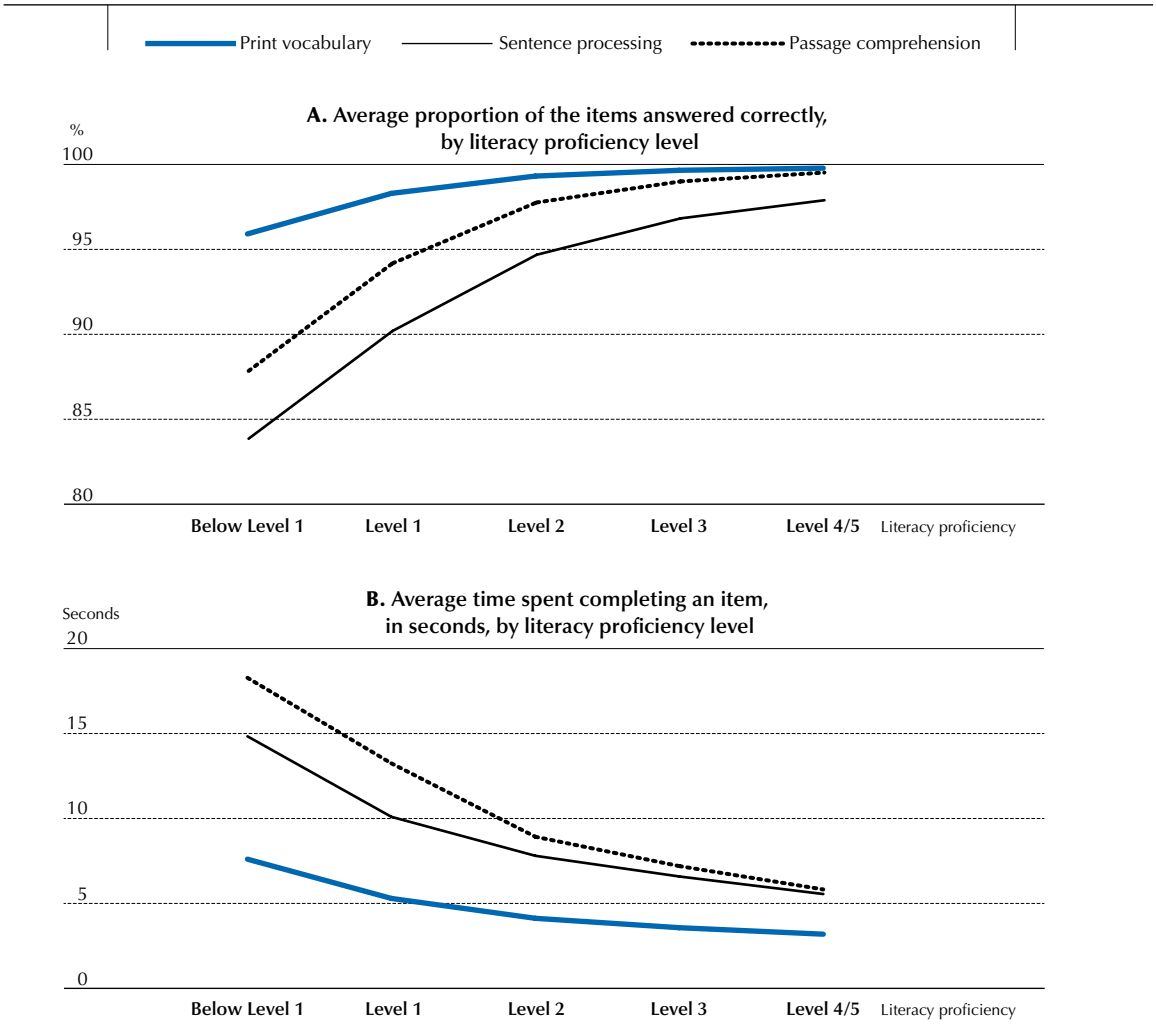
The Survey of Adult Skills included an assessment of *reading components* designed to provide information about adults with very low levels of proficiency in reading. This module was implemented in 21 of the 24 participating countries (Adults in Finland, France and Japan did not take part in this assessment). The skills tested by the reading components assessment are those that are essential for understanding the meaning of written texts: knowledge of vocabulary (word recognition), the ability to evaluate the logic of sentences, and fluency in reading passages of text. Skilled readers are able to undertake these types of operations automatically.

Three elements of reading proficiency were assessed in reading components: print vocabulary, sentence processing and passage comprehension. The print vocabulary tasks required test takers to select the word corresponding to a picture of an object from a selection of four alternative words. The sentence processing tasks required test takers to identify whether a sentence made logical sense in terms of the properties of the real world. The passage comprehension tasks entailed reading a prose text. At certain points in the text, test takers were given a choice of two words and required to select the word that made the most sense in the context of the passage. Chapter 1 in the *Reader's Companion* (OECD, 2013) to this report presents samples of the reading components tasks. The time taken by respondents to complete the tasks was recorded in each test.

...

■ Figure a ■

Relationship between literacy proficiency and performance in reading components



Notes: The results for each country can be found in the tables mentioned in the source below. Finland, France and Japan did not participate in the reading components assessment.
Source: Survey of Adult Skills (PIAAC) (2012), Tables B2.4a and B2.4b in Annex B.
StatLink http://dx.doi.org/10.1787/888932900783

The assessment of reading components was completed by respondents who failed the literacy and numeracy core assessment in the computer-based version of the assessment and by all respondents taking the paper version of the assessment in order to obtain comparative results (see Box 2.3 – Figure a).

Figure "a" shows the relationship between proficiency on the literacy scale and the performance in the three components of this assessment on average across the 21 countries that participated in the reading components assessment. In Figure "a", Panel A shows the relationship between literacy proficiency and the percentage of items answered correctly (accuracy) and Panel B shows the relationship between proficiency and the time taken (in seconds) to complete an item (speed). Both accuracy and speed increases with proficiency for all three of the components. There is little improvement in either accuracy or speed for individuals with proficiency at Level 3 or above in literacy.

The results from the reading components assessment will be explored in detail in a subsequent report examining the characteristics and skills of adults with very low levels of literacy proficiency.



Literacy-related non-response

In all of the participating countries, some adults were unable to complete the background questionnaire as they were unable to speak or read the language of the assessment, had difficulty reading or writing, or had learning or mental disabilities. In the case of the background questionnaire, there was no one present (either the interviewer or another person) to translate into the language of the respondent or answer on behalf of the respondent. In the case of these respondents, only their age, gender and, in some cases, educational attainment is known. In most countries, non-respondents represented less than 5% of the total population. This category is identified separately in Figure 2.1 as a black bar in each country (categorised as missing). While the proficiency of this group is likely to vary between countries, in most cases, these persons are likely to have low levels of proficiency (Level 1 or below) in the test language or languages of the country concerned.

HOW DISTRIBUTIONS OF PROFICIENCY SCORES COMPARE ACROSS COUNTRIES

Comparison of average proficiency scores in literacy

Mean literacy scores of participating countries in the Survey of Adult Skills are presented in Figure 2.2a. Countries with mean scores that are not statistically different from other countries are identified (see Box 2.6). For example, the mean score for Norway (278 points) is similar to that of Australia (280 points) and Sweden (279 points), but is lower than that of the Netherlands (284 points), Finland (288 points) and Japan (296 points) and higher than that of Estonia (276 points) and the countries whose mean scores are lower than that of Estonia. Countries whose scores are statistically similar to, above and below the average across countries are also identified.

Box 2.6. Comparing results among countries and population subgroups

The statistics in this report are estimates of national performance based on samples of adults, rather than values that could be calculated if every person in the target population in every country had answered every question. Consequently, it is important to measure the degree of uncertainty of the estimates. In the Survey of Adult Skills, each estimate has an associated degree of uncertainty, which is expressed through a standard error. The use of confidence intervals provides a way to make inferences about the population means and proportions in a manner that reflects the uncertainty associated with the sample estimates. From an observed sample statistic, and assuming a normal distribution, it can be inferred that the result for the corresponding population would lie within the confidence interval in 95 out of 100 replications of the measurement on different samples drawn from the same population.

In many cases, readers are primarily interested in whether a given value in a particular country is different from a second value in the same or another country, e.g. whether women in a country perform better than men in the same country. In the tables and figures used in this report, differences are labelled as statistically significant when there is less than a 5% chance of a reported difference between the populations of interest being erroneously attributed as real.

In addition to error associated with sampling, there are a range of other possible sources of error in sample surveys such as the Survey of Adult Skills including error associated with survey non-response (see Chapter 3 of the *Reader's Companion* (OECD, 2013) to this report for a discussion of response rates and non-response bias). While the likely level of bias associated with non-response is assessed as minimal to low for most countries participating in the study, the possibility of biases associated with non-response cannot be ruled out. Readers should, therefore, exercise caution in drawing conclusions from small score point differences between countries or population groups, even if the differences concerned are statistically significant.

Literacy-related non-respondents are not included in the calculation of the mean scores presented in Figure 2.2a[6] which, thus, present an upper bound of the estimated literacy proficiency of the population. Figure 2.2b presents a sensitivity analysis showing the impact on country mean scores if literacy-related non-respondents are taken into account and are all assumed to score 85 points on the literacy scale. This is believed to be a reasonable representation



of a lower bound for the proficiency of this group.[7] With the exception of the countries with high proportions of literacy-related non-respondents (missing), the effect on average scores and/or relative rankings of most countries are relatively small. The discussion that follows focuses on the data in Figure 2.2a.

■ Figure 2.2a ■

Comparison of average literacy proficiency among adults

Mean literacy proficiency scores of 16-65 year-olds

Significantly **above** the average
Not significantly different from the average
Significantly **below** the average

Mean	Comparison country	Countries whose mean score is NOT significantly different from the comparison country
296	**Japan**	
288	**Finland**	
284	**Netherlands**	
280	**Australia**	Norway, Sweden
279	**Sweden**	Australia, Norway
278	**Norway**	Australia, Sweden
276	**Estonia**	Czech Republic, Flanders (Belgium)
275	**Flanders (Belgium)**	Czech Republic, Estonia, Slovak Republic
274	**Czech Republic**	Canada, Estonia, Korea, Slovak Republic, Flanders (Belgium), England/N. Ireland (UK)
274	**Slovak Republic**	Canada, Czech Republic, Korea, Flanders (Belgium), England/N. Ireland (UK)
273	**Canada**	Czech Republic, Korea, Slovak Republic, England/N. Ireland (UK)
273	**Average**	**Canada, Czech Republic, Korea, Slovak Republic, England/N. Ireland (UK)**
273	**Korea**	Canada, Czech Republic, Slovak Republic, England/N. Ireland (UK)
272	**England/N. Ireland (UK)**	Canada, Czech Republic, Denmark, Germany, Korea, Slovak Republic, United States
271	**Denmark**	Austria, Germany, United States, England/N. Ireland (UK)
270	**Germany**	Austria, Denmark, United States, England/N. Ireland (UK), Cyprus[1]
270	**United States**	Austria, Denmark, Germany, England/N. Ireland (UK), Cyprus[1]
269	**Austria**	Denmark, Germany, United States, Cyprus[1]
269	**Cyprus[1]**	Austria, Germany, Ireland, United States
267	**Poland**	Ireland
267	**Ireland**	Poland, Cyprus[1]
262	**France**	
252	**Spain**	Italy
250	**Italy**	Spain

1. See notes at the end of this chapter.

Notes: Statistical significance is at the 5% level. Literacy-related non-response (missing) is excluded from the calculation of mean scores. Figure 2.2b, however, presents an estimate of lower-bound mean scores by attributing a very low score (85 points) to those adults who were not able to provide enough background information because of language difficulties, or learning or mental disabilities (literacy-related non-response).

Countries are ranked in descending order of the mean score.

Source: Survey of Adult Skills (PIAAC) (2012), Table A2.2a.

StatLink http://dx.doi.org/10.1787/888932900384

The average literacy score for the OECD member countries participating in the assessment is 273 points. Japan (296 points) has the highest average level of proficiency in literacy followed by Finland (288 points). Italy (250 points) and Spain (252 points) record the lowest average scores. More concretely, the mean score for the Netherlands is 284 points, which corresponds to Level 3. Thus, an adult with a proficiency score equal to the mean score in the Netherlands can typically successfully complete assessment items at Level 3, such as the *Library search* item in Box 2.4. An adult with a proficiency score at the mean for Italy (250 points) is able to successfully complete tasks of Level 2 difficulty, such as *Lakeside fun run* in Box 2.4.

Overall, the variation in proficiency between the adult populations in the participating countries is relatively small. Some 46 score points separate the countries with the highest and lowest mean score. Most countries (19 out of 21) have mean scores within the range of 267 to 288 points (21 score points or less) and 14 countries have scores within the range of 267 to 276 points (9 score points). By way of comparison, the average score point gap between the highest and lowest performing 10% of adults is 116 score points in literacy across all countries.



■ Figure 2.2b ■

Comparison of average literacy proficiency among adults (adjusted)

Mean literacy proficiency scores of 16-65 year-olds, assuming a score of 85 points for literacy-related non-response

Significantly **above** the average
Not significantly different from the average
Significantly **below** the average

Adjusted mean	Comparison country	Countries whose mean score is NOT significantly different from the comparison country
294	**Japan**	
288	**Finland**	
280	**Netherlands**	Sweden
279	**Sweden**	Netherlands
277	**Australia**	Estonia
275	**Estonia**	Australia, Czech Republic, Norway, Slovak Republic
274	**Norway**	Czech Republic, Estonia, Slovak Republic
273	**Slovak Republic**	Canada, Czech Republic, Estonia, Korea, Norway
273	**Czech Republic**	Canada, Estonia, Korea, Norway, Slovak Republic
272	**Korea**	Canada, Czech Republic, Slovak Republic
272	**Canada**	Czech Republic, Korea, Slovak Republic, England/N. Ireland (UK)
270	**Average**	**Denmark, England/N. Ireland (UK)**
270	**Denmark**	England/N. Ireland (UK)
270	**England/N. Ireland (UK)**	Canada, Denmark
267	**Germany**	Austria, Ireland, Poland
267	**Poland**	Austria, Germany, Ireland
266	**Austria**	Germany, Ireland, Poland
266	**Ireland**	Austria, Germany, Poland
262	**United States**	France
261	**France**	United States
251	**Spain**	Italy
249	**Italy**	Spain
236	**Cyprus**[1]	

1. See notes at the end of this chapter.

Notes: Statistical significance is at the 5% level. The adjusted mean includes adults who were not able to provide enough background information because of language difficulties, or learning or mental disabilities (literacy-related non-response). They are attributed a very low score (85 points), which represents a lower bound for the mean score in each country. The results for Flanders (Belgium) are not shown at the country's request.

Countries are ranked in descending order of the adjusted mean score.

Source: Survey of Adult Skills (PIAAC) (2012), Table A2.2b.

StatLink http://dx.doi.org/10.1787/888932900403

Comparison of average proficiency scores for 16-24 year-olds in literacy

The level of proficiency of the adult population as a whole represents the outcome of a range of influences both past and present. The proficiency of young adults reflects much more recent influences including current or recent participation in schooling and other forms of post school education and training. In addition, the proficiency of the younger cohorts leaving education is an important factor in shaping the proficiency of the adult population of the future in the participating countries. For these reasons, a focus has been placed on the proficiency of 16-24 year-olds in addition to that of the 16-65 year-old population. Chapters 3 and 5 provide more detailed discussions of the relationship between age and proficiency.[8]

Mean literacy scores of individuals aged 16-24 are presented in Figure 2.3a. The mean score for this age group is 280 score points, 7 points higher than that for all adults (273 score points). The difference in scores between the countries with the highest and lowest scores is 38 score points for the 16-24 year-olds as opposed to 46 score points for the 16-65 year-olds. The 16-24 population in Japan (299 points), Finland (297 points), the Netherlands (295 points) and Korea (293 points) have the highest mean scores, while those in Italy (261 points), Spain (264 points) and England/Northern Ireland (UK) (266 points) have the lowest mean scores.



Literacy-related non-respondents are excluded from the calculation of the mean scores presented in Figure 2.3a. These figures represent an upper bound for the estimated proficiency of the young adult population. The proportion of literacy-related non-respondents is lower among 16-24 year-olds than among the working age population. Figure 2.3b presents a sensitivity analysis showing the impact on country mean scores if literacy-related non-respondents are taken into account and are all assumed to have very low scores (85 points) on the literacy scale.[9] The discussion that follows focuses on the data in Figure 2.3a.

■ Figure 2.3a ■

Comparison of average literacy proficiency among young adults

Mean literacy proficiency scores of 16-24 year-olds

Significantly **above** the average
Not significantly different from the average
Significantly **below** the average

Mean	Comparison country	Countries whose mean score is NOT significantly different from the comparison country
299	**Japan**	Finland
297	**Finland**	Japan, Korea, Netherlands
295	**Netherlands**	Finland, Korea
293	**Korea**	Finland, Netherlands
287	**Estonia**	Australia, Flanders (Belgium)
285	**Flanders (Belgium)**	Australia, Czech Republic, Estonia, Poland, Sweden
284	**Australia**	Czech Republic, Estonia, Germany, Poland, Sweden, Flanders (Belgium)
283	**Sweden**	Australia, Czech Republic, Germany, Poland, Flanders (Belgium)
281	**Poland**	Australia, Czech Republic, Germany, Sweden, Flanders (Belgium)
281	**Czech Republic**	Australia, Austria, Canada, Denmark, Germany, Poland, Slovak Republic, Sweden, Flanders (Belgium)
280	**Average**	**Austria, Czech Republic, Germany, Poland, Sweden**
279	**Germany**	Australia, Austria, Canada, Czech Republic, Denmark, France, Norway, Poland, Slovak Republic, Sweden
278	**Austria**	Canada, Czech Republic, Denmark, France, Germany, Norway, Slovak Republic
276	**Denmark**	Austria, Canada, Czech Republic, France, Germany, Norway, Slovak Republic, United States
276	**Slovak Republic**	Austria, Canada, Czech Republic, Denmark, France, Germany, Norway, United States
276	**Canada**	Austria, Czech Republic, Denmark, France, Germany, Norway, Slovak Republic, United States
275	**Norway**	Austria, Canada, Denmark, France, Germany, Ireland, Slovak Republic, United States
275	**France**	Austria, Canada, Denmark, Germany, Norway, Slovak Republic, United States
272	**United States**	Canada, Denmark, France, Ireland, Norway, Slovak Republic, England/N. Ireland (UK), Cyprus[1]
271	**Ireland**	Norway, United States, England/N. Ireland (UK), Cyprus[1]
267	**Cyprus[1]**	Ireland, Spain, United States, England/N. Ireland (UK)
266	**England/N. Ireland (UK)**	Ireland, Italy, Spain, United States, Cyprus[1]
264	**Spain**	Italy, England/N. Ireland (UK), Cyprus[1]
261	**Italy**	Spain, England/N. Ireland (UK)

1. See notes at the end of this chapter.

Notes: Statistical significance is at the 5% level. Literacy-related non-response (missing) is excluded from the calculation of mean scores. Figure 2.3b, however, presents an estimate of lower-bound mean scores by attributing a very low score (85 points) to those adults who were not able to provide enough background information because of language difficulties, or learning or mental disabilities (literacy-related non-response).

Countries are ranked in descending order of the mean score.

Source: Survey of Adult Skills (PIAAC) (2012), Table A3.2 (L).

StatLink http://dx.doi.org/10.1787/888932900422

In most countries, the mean score for 16-24 year-olds is higher than that of 16-65 year-olds. The advantage of the 16-24 age group is particularly significant in Korea (20 score points) and Poland (14 score points). In only three countries is the mean score for the 16-24 year-olds lower than that of the 16-65 year-old population: Cyprus[10] (-2 points), England/Northern Ireland (UK) (-6 points) and Norway (-3 score points).

There are some marked differences in the ranking of countries relative to the mean for the 16-24 year-olds and the 16-65 year-olds. The proficiency of the 16-24 year-old population in Korea is above average for 16-24 year-olds but not significantly different from the average for 16-65 year-olds. In Poland, the proficiency of 16-24 year-olds is close to the average and less than average for the adult population as a whole. In contrast, in England/Northern Ireland (UK) and Norway, the average proficiency of the 16-24 year-old population is far lower relative to the average than that of the 16-65 year-old population as a whole.



■ Figure 2.3b ■

Comparison of average literacy proficiency of young adults (adjusted)

Mean literacy proficiency scores of 16-24 year-olds, assuming a score of 85 points for literacy-related non-response

Significantly **above** the average
Not significantly different from the average
Significantly **below** the average

Adjusted mean	Comparison country	Countries whose mean score is NOT significantly different from the comparison country
297	**Finland**	Japan, Korea, Netherlands
296	**Japan**	Finland, Korea, Netherlands
293	**Korea**	Finland, Japan, Netherlands
292	**Netherlands**	Finland, Japan, Korea
286	**Estonia**	Australia, Sweden
283	**Australia**	Czech Republic, Estonia, Germany, Poland, Sweden
283	**Sweden**	Australia, Czech Republic, Estonia, Poland
281	**Poland**	Australia, Czech Republic, Germany, Sweden
280	**Czech Republic**	Australia, Austria, Germany, Poland, Slovak Republic, Sweden
278	**Average**	**Austria, Czech Republic, Denmark, Germany, Slovak Republic**
278	**Germany**	Australia, Austria, Canada, Czech Republic, Denmark, France, Norway, Poland, Slovak Republic
276	**Austria**	Canada, Czech Republic, Denmark, France, Germany, Norway, Slovak Republic
275	**Slovak Republic**	Austria, Canada, Czech Republic, Denmark, France, Germany, Norway
275	**Denmark**	Austria, Canada, France, Germany, Norway, Slovak Republic
275	**France**	Austria, Canada, Denmark, Germany, Ireland, Norway, Slovak Republic
274	**Canada**	Austria, Denmark, France, Germany, Ireland, Norway, Slovak Republic
273	**Norway**	Austria, Canada, Denmark, France, Germany, Ireland, Slovak Republic
270	**Ireland**	Canada, France, Norway
263	**Spain**	Italy, United States, England/N. Ireland (UK)
262	**England/N. Ireland (UK)**	Italy, Spain, United States
261	**United States**	Italy, Spain, England/N. Ireland (UK)
260	**Italy**	Spain, United States, England/N. Ireland (UK)
250	**Cyprus**[1]	

1. See notes at the end of this chapter.

Notes: Statistical significance is at the 5% level. The adjusted mean includes adults who were not able to provide enough background information because of language difficulties, or learning or mental disabilities (literacy-related non-response). They are attributed a very low score (85 points), which represents a lower bound for the mean score in each country. The results for Flanders (Belgium) are not shown at the country's request.

Countries are ranked in descending order of the adjusted mean score.

Source: Survey of Adult Skills (PIAAC) (2012), Table A2.3.

StatLink http://dx.doi.org/10.1787/888932900441

Comparison of scores at the 5th, 25th, 75th and 95th percentiles

In addition to examining the distribution of proficiency in absolute terms against the international levels of proficiency, it is also useful to examine the distribution of proficiency relative to the national mean. This can be done by identifying the score points below which 5%, 25%, 75% and 95% of adults perform. In other words, this indicator measures the extent of inequality in the distribution of literacy proficiency in each participating country or sub-national region. Figure 2.4 presents the distribution of scores within countries in addition to the mean score. A longer gradient bar indicates greater variations in literacy proficiency within a country; a shorter bar indicates smaller variations.

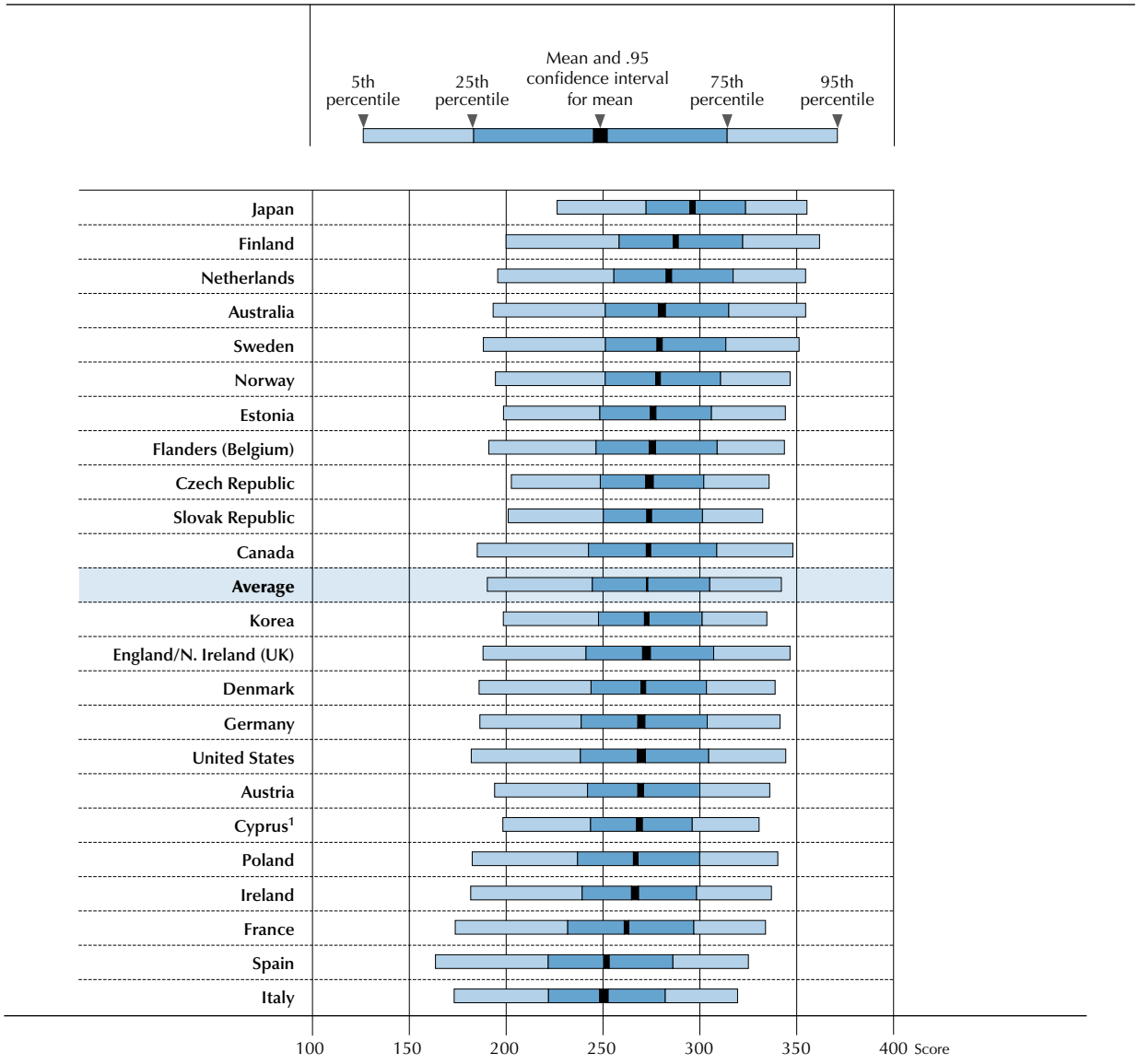
On average, 152 score points separate the highest and lowest 5% of performers in literacy. A number of countries have comparatively small variations in literacy proficiency among their adults. These include Japan (129 points), the Slovak Republic (131 points), the Czech Republic (133 points) and Korea (136 points). Countries with comparatively large variations in scores include Sweden (163 points), Canada (163 points), the United States (162 points), Finland (162 points), Spain (162 points) and Australia (161 points).

Adults in Finland (362 points) have the highest scores at the 95th percentile followed by adults in Australia, Japan and the Netherlands (all 355 points). At the other end of the scale, adults in the Czech Republic (203 points), Japan (226 points) and the Slovak Republic (201 points) have the highest scores at the 5th percentile. These three countries are also those with the least variation in scores.

■ Figure 2.4 ■

Distribution of literacy proficiency scores

Mean literacy proficiency and distribution of literacy scores, by percentile



1. See notes at the end of this chapter.

Notes: Mean scores are shown with a .95 confidence interval. Literacy-related non-response (missing) is excluded from the calculation of mean scores. Figure 2.2b, however, presents an estimate of lower-bound mean scores by attributing a very low score (85 points) to those adults who were not able to provide enough background information because of language difficulties, or learning or mental disabilities (literacy-related non-response).

Countries are ranked in descending order of the mean score.

Source: Survey of Adult Skills (PIAAC) (2012), Table A2.4.

StatLink http://dx.doi.org/10.1787/888932900460

Interestingly, there is no clear relationship between overall level of proficiency in literacy and the variation in scores. Small variations in scores are found in countries in which adults have high (Japan), middle (Korea) and low (Austria) overall levels of proficiency in literacy, while large variations are found in countries with high (Australia), middle (Canada) and low (Spain) levels of literacy proficiency.

The reasons for the differences in performance variations are undoubtedly complex and likely to be affected by such factors as the historical patterns of participation in education, support for adult learning, and patterns of immigration.

PROFICIENCY IN NUMERACY

The Survey of Adult Skills defines numeracy as the ability to access, use, interpret and communicate mathematical information and ideas in order to engage in and manage the mathematical demands of a range of situations in adult life. A numerate adult is one who responds appropriately to mathematical content, information, and ideas represented in various ways in order to manage situations and solve problems in a real-life context. While performance on numeracy tasks is, in part, dependent on the ability to read and understand text, numeracy involves more than applying arithmetical skills to information embedded in text.

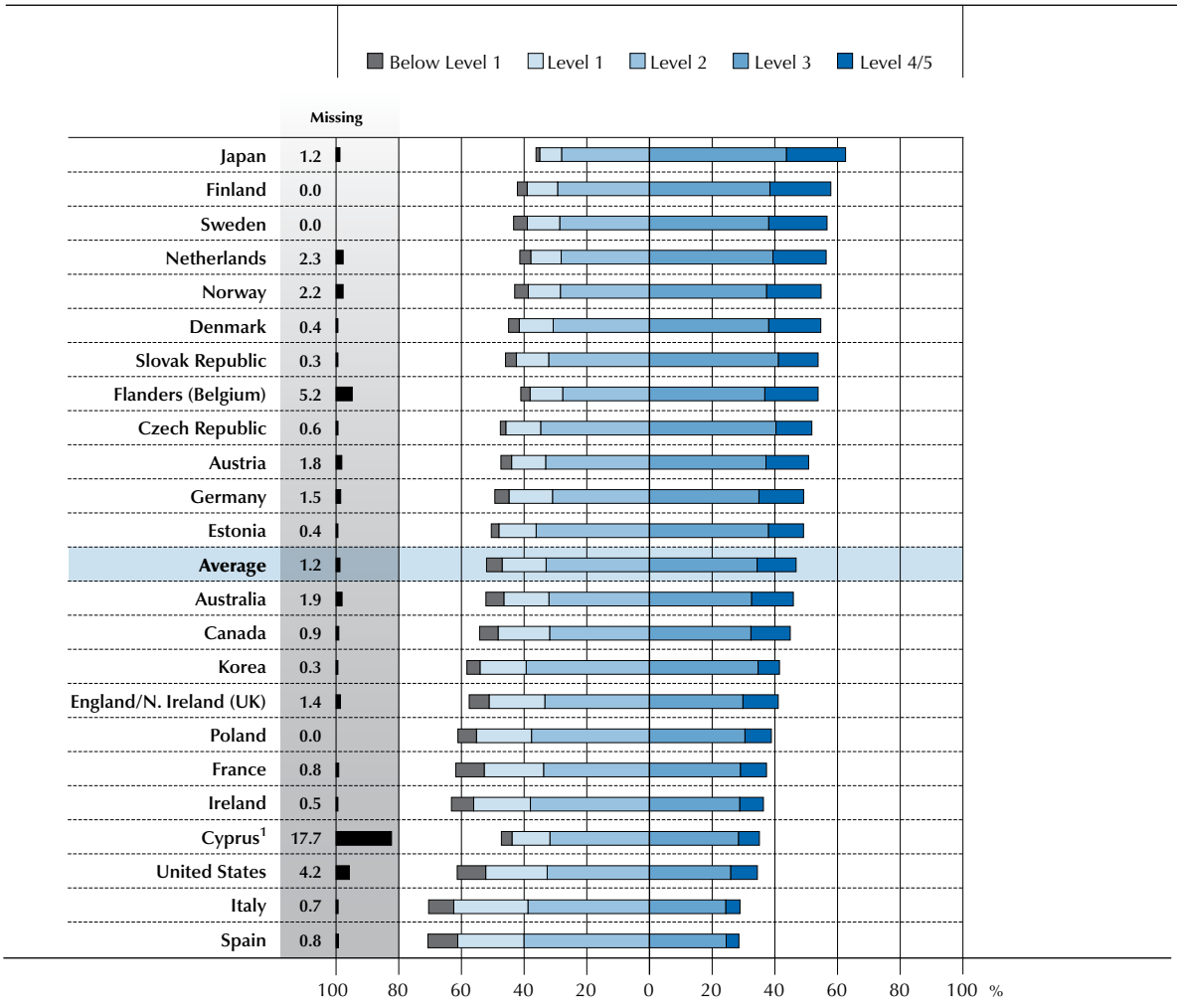
What adults can do at different levels of numeracy proficiency

Figure 2.5 presents the percentage of adults aged 16-65 who scored at each of the six levels of proficiency (Levels 1 through 5 plus below Level 1) on the numeracy scale in each participating country. The features of the tasks located in these levels are described in detail in Table 2.3 and some examples of numeracy items are described in Box 2.7.

■ Figure 2.5 ■

Numeracy proficiency among adults

Percentage of 16-65 year-olds scoring at each proficiency level in numeracy



1. See notes at the end of this chapter.

Notes: Adults in the missing category were not able to provide enough background information to impute proficiency scores because of language difficulties, or learning or mental disabilities (referred to as literacy-related non-response).

Countries are ranked in descending order of the combined percentage of adults scoring at Level 3 and Level 4/5.

Source: Survey of Adult Skills (PIAAC) (2012), Table A2.5.

StatLink http://dx.doi.org/10.1787/888932900479



Table 2.3
Description of proficiency levels in numeracy

Level	Score range	Percentage of adults scoring at each level (average)	The types of tasks completed successfully at each level of proficiency
Below Level 1	Below 176 points	5%	Tasks at this level require the respondents to carry out simple processes such as counting, sorting, performing basic arithmetic operations with whole numbers or money, or recognising common spatial representations in concrete, familiar contexts where the mathematical content is explicit with little or no text or distractors.
1	176 to less than 226 points	14.0%	Tasks at this level require the respondent to carry out basic mathematical processes in common, concrete contexts where the mathematical content is explicit with little text and minimal distractors. Tasks usually require one-step or simple processes involving counting, sorting, performing basic arithmetic operations, understanding simple percents such as 50%, and locating and identifying elements of simple or common graphical or spatial representations.
2	226 to less than 276 points	33.0%	Tasks at this level require the respondent to identify and act on mathematical information and ideas embedded in a range of common contexts where the mathematical content is fairly explicit or visual with relatively few distractors. Tasks tend to require the application of two or more steps or processes involving calculation with whole numbers and common decimals, percents and fractions; simple measurement and spatial representation; estimation; and interpretation of relatively simple data and statistics in texts, tables and graphs.
3	276 to less than 326 points	34.4%	Tasks at this level require the respondent to understand mathematical information that may be less explicit, embedded in contexts that are not always familiar and represented in more complex ways. Tasks require several steps and may involve the choice of problem-solving strategies and relevant processes. Tasks tend to require the application of number sense and spatial sense; recognising and working with mathematical relationships, patterns, and proportions expressed in verbal or numerical form; and interpretation and basic analysis of data and statistics in texts, tables and graphs.
4	326 to less than 376 points	11.4%	Tasks at this level require the respondent to understand a broad range of mathematical information that may be complex, abstract or embedded in unfamiliar contexts. These tasks involve undertaking multiple steps and choosing relevant problem-solving strategies and processes. Tasks tend to require analysis and more complex reasoning about quantities and data; statistics and chance; spatial relationships; and change, proportions and formulas. Tasks at this level may also require understanding arguments or communicating well-reasoned explanations for answers or choices.
5	Equal to or higher than 376 points	1.1%	Tasks at this level require the respondent to understand complex representations and abstract and formal mathematical and statistical ideas, possibly embedded in complex texts. Respondents may have to integrate multiple types of mathematical information where considerable translation or interpretation is required; draw inferences; develop or work with mathematical arguments or models; and justify, evaluate and critically reflect upon solutions or choices.

Note: The proportion of adults scoring at different levels of proficiency adds up to 100% when the 1.2% of numeracy-related non-respondents across countries are taken into account. Adults in the missing category were not able to provide enough background information to impute proficiency scores because of language difficulties, or learning or mental disabilities (see section on literacy-related non-response above).



Box 2.7. Examples of numeracy items

Items that exemplify the pertinent features of the proficiency levels in the domain of numeracy are described below (see Table 4.3 in the *Reader's Companion* to this report).

Below Level 1: Price tag (Item ID: C602A501)

Content: Quantity and number

Cognitive strategies: Act upon, use

Context: Personal

Difficulty score: 168

The stimulus for this item consists of four supermarket price tags. These identify the product, the price per kilogramme, the net weight, the date packed and the total price. The test-taker is asked to indicate the item that was packed first by simply comparing the dates on the price tags.

Level 1: Candles (Item ID: C615A602)

Content: Dimension and shape

Cognitive strategies: Interpret, evaluate

Context: Education and training

Difficulty score: 221

The stimulus for this item consists of a photo of a box containing tea light candles. The packaging identifies the product (tea light candles), the number of candles in the box (105 candles) and its weight. While the packaging partially covers the top layer of candles, it can be seen that the candles are packed in five rows of seven candles each. The instructions inform the test-taker that there are 105 candles in a box and asks him or her to calculate how many layers of tea candles are packed in the box.

Level 2: Logbook (Item ID: C613A520)

Content: Pattern, relationships, change

Cognitive strategies: Act upon, use

Context: Work-related

Difficulty score: 250

The stimulus for this item consists of a page from a motor vehicle logbook with columns for the date of the trip (start and finish), the purpose of the trip, the odometer reading (start and finish), the distance travelled, the date of entry and the driver's name and signature. For the first date of travel (5 June), the column for the distance travelled is completed. The instructions inform the test-taker that "a salesman drives his own car and must keep a record of the kilometres he travels in a Motor Vehicle Log. When he travels, his employer pays him €0.35 per kilometre plus €40.00 per day for various costs such as meals". The test taker is asked to calculate how much he will be paid for the trip on 5 June. (Note: both units of distance and currency are adapted to reflect the units applying in each participating country.)

Level 3: Package (Item ID: C657P001)

Content: Dimension and shape

Cognitive strategies: Interpret, evaluate

Context: Work-related

Difficulty score: 315

The stimulus for this item consists of an illustration of a box constructed from folded cardboard. The dimensions of the cardboard base are identified. The test-taker is asked to identify which plan best represents the assembled box out of four plans presented in the stimulus.

...



Level 4: Education level (Item ID: C632P001)
Content: Data and chance
Cognitive strategies: Interpret, evaluate
Context: Society and community
Difficulty score: 354

The stimulus for this item consists of two stacked-column bar graphs presenting the distribution of the Mexican population by years of schooling for men and women separately. The y axis of each of the graphs is labelled "percentage" with 6 grid lines labelled "0%", "20%", "40%", "60%", "80%" and "100%". The x axis is labelled "year" and data are presented for 1960, 1970, 1990, 2000 and 2005. A legend identifies three categories of schooling: "more than 6 years of schooling", "up to 6 years of schooling" and "no schooling". The test-taker is asked to approximate what percentage of men in Mexico had more than 6 years of schooling in 1970, choosing from a pull-down menu that has 10 response categories: "0-10%", "10-20%", and so on.

Proficiency at Level 5 (scores equal to or higher than 376 points)

Adults at Level 5 on the numeracy scale can understand complex representations, and abstract and formal mathematical and statistical ideas, sometimes embedded in complex texts. They can integrate several types of mathematical information where considerable translation or interpretation is required; draw inferences; develop or work with mathematical arguments or models; and justify, evaluate and critically reflect upon solutions or choices.

Only 1.1% of adults score at Level 5 on average. Finland has the highest proportion of adults at this level (2.2%), followed by Sweden (1.9%), Norway (1.7%), Denmark (1.7%) and Flanders (Belgium) (1.6%).

Proficiency at Level 4 (scores from 326 points to less than 376 points)

At this level, adults understand a broad range of mathematical information that may be complex, abstract or embedded in unfamiliar contexts. They can perform tasks involving multiple steps and select appropriate problem-solving strategies and processes. They can analyse and engage in more complex reasoning about quantities and data, statistics and chance, spatial relationships, change, proportions and formulae. They can also understand arguments and communicate well-reasoned explanations for answers or choices.

On average, 11.4% of adults score at Level 4. Japan (17.3%) and Finland (17.2%) have the largest proportion of adults scoring at this level and the largest proportion of adults scoring at this level or higher. In contrast, Spain (4.0%) and Italy (4.3%) have less than half of the average proportion of adults scoring at this level. They also have the smallest proportion of adults scoring at Level 4 or higher.

Proficiency at Level 3 (scores from 276 points to less than 326 points)

Adults at Level 3 can successfully complete tasks that require an understanding of mathematical information that may be less explicit, embedded in contexts that are not always familiar, and represented in more complex ways. They can perform tasks requiring several steps and that may involve a choice of problem-solving strategies and relevant processes. They have a good sense of number and space; can recognise and work with mathematical relationships, patterns, and proportions expressed in verbal or numerical form; and can interpret and perform basic analyses of data and statistics in texts, tables and graphs.

Some 34.4% of adults score at Level 3. Japan has the highest proportion of adults at this level (43.7%), followed by the Slovak Republic (41.1%), the Czech Republic (40.4%), and the Netherlands (39.4%). By contrast, Italy has the smallest proportion of adults scoring at Level 3 (24.4%), followed by Spain (24.5%) and the United States (25.9%).

On average, 46.8% of adults score at Level 3 or higher. More than 55% of adults in Japan (62.6%), Finland (57.9%), Sweden (56.6%) and the Netherlands (56.4%) score at this level or higher, while less than 35% of adults in Spain (28.5%), Italy (28.9%), and the United States (34.4%) do.



Proficiency at Level 2 (scores from 226 points to less than 276 points)

Adults at this level can successfully perform tasks that require identifying and acting upon mathematical information and ideas embedded in a range of common contexts where the mathematical content is fairly explicit or visual with relatively few distractors. The tasks may require applying two or more steps or processes involving, for example, calculations with whole numbers and common decimals, percents and fractions; simple measurement and spatial representations; estimation; or interpreting relatively simple data and statistics in texts, tables and graphs.

On average, one in three adults (33.0%) scores at Level 2. Spain has the largest proportion of adults scoring at this level (40.1%), followed by Korea (39.4%) and Italy (38.8%), while Flanders (Belgium) (27.7%), Japan (28.1%) and the Netherlands (28.2%) have the smallest proportions of adults scoring at this level.

Some 79.8% of adults reach at least Level 2. Countries with the largest proportion of adults reaching at least Level 2 include Japan (90.6%), Finland (87.2%), the Czech Republic (86.5%) and the Slovak Republic (86%). By contrast, the United States (67.0%), Italy (67.1%) and Spain (68.6%) have the smallest proportions of adults who reach at least Level 2.

Proficiency at Level 1 (scores from 176 points to less than 226 points)

Adults at Level 1 can complete tasks involving basic mathematical processes in common, concrete contexts where the mathematical content is explicit with little text and minimal distractors. They can perform one-step or simple processes involving counting, sorting, basic arithmetic operations, understanding simple percents, and locating and identifying elements of simple or common graphical or spatial representations.

Some 14% of adults score at Level 1. Japan has the smallest proportion of adults scoring at this level (7.0%) followed by the Netherlands (9.7%), Finland (9.7%), the Slovak Republic and Sweden (both 10.3%). By contrast, Italy has the largest proportion of adults scoring at Level 1 (23.7%), followed by Spain (21.1%) and the United States (19.6%).

Countries with the largest proportions of adults reaching Level 1 or below include Italy (31.7%), Spain (30.6%) and the United States (28.7%). By contrast, Japan (8.1%), Finland (12.8%), the Czech Republic (12.9%) and the Netherlands (13.2%) have the smallest proportions of adults reaching Level 1 or below.

Proficiency below Level 1 (scores below 176 points)

Adults at this level can only cope with very simple tasks set in concrete, familiar contexts where the mathematical content is explicit and that require only simple processes such as counting; sorting; performing basic arithmetic operations with whole numbers or money, or recognising common spatial representations. Adults who score less than 176 points are considered to be below Level 1.

On average, 5% of adults scored below Level 1. Spain (9.5%), France (9.1%), and the United States (9.1%) have the largest proportion of adults scoring below Level 1 – almost twice as large as the average share. Japan has the smallest proportion of adults scoring below Level 1 (1.2%), followed by the Czech Republic (1.7%), Estonia (2.4%), Flanders (Belgium) (3.0%) and Finland (3.1%).

Literacy-related non-response

In all countries, some adults were unable to complete the background questionnaire as they were unable to speak or read the language of the assessment, have difficulty reading or writing, or have learning or mental disability. This category is identified separately in Figure 2.5 as a black bar in each country (categorised as missing). While there will be variation between countries, it can be assumed that, in most cases, these persons will have low levels of proficiency (Level 1 or below) in numeracy when assessed in the test language or languages of the country concerned.

HOW DISTRIBUTIONS OF PROFICIENCY SCORES COMPARE ACROSS COUNTRIES

Comparison of average proficiency scores in numeracy

Mean scores on the numeracy scale for the countries participating in the Survey of Adult Skills are presented in Figure 2.6a. Countries with mean scores that are not statistically different from other countries are identified. For example, the mean score for Poland (260 points) is similar to that of England/Northern Ireland (UK) (262 points), but is significantly different from that of other countries at the 95% confidence level (see Box 2.6).



Literacy-related non-respondents are excluded from the calculation of the mean score presented in Figure 2.6a.[11] Figure 2.6b presents sensitivity analyses showing the impact on country mean scores if literacy-related non-respondents are taken into account and are all assumed to score 85 points on the numeracy scale.[12] With the exception of the countries with high proportions of literacy-related non-respondents (missing), the effect on average scores and/or relative rankings of most countries are relatively small. The discussion that follows focuses on the data in Figure 2.6a.

■ Figure 2.6a ■

Comparison of average numeracy proficiency among adults

Mean numeracy proficiency scores of 16-65 year-olds

Significantly **above** the average
Not significantly different from the average
Significantly **below** the average

Mean	Comparison country	Countries whose mean score is NOT significantly different from the comparison country
288	**Japan**	
282	**Finland**	Netherlands, Flanders (Belgium)
280	**Flanders (Belgium)**	Denmark, Finland, Netherlands, Norway, Sweden
280	**Netherlands**	Finland, Norway, Sweden, Flanders (Belgium)
279	**Sweden**	Denmark, Netherlands, Norway, Flanders (Belgium)
278	**Norway**	Denmark, Netherlands, Sweden, Flanders (Belgium)
278	**Denmark**	Norway, Sweden, Flanders (Belgium)
276	**Slovak Republic**	Austria, Czech Republic
276	**Czech Republic**	Austria, Slovak Republic
275	**Austria**	Czech Republic, Estonia, Slovak Republic
273	**Estonia**	Austria, Germany
272	**Germany**	Estonia
269	**Average**	**Australia**
268	**Australia**	Canada
265	**Canada**	Australia, Cyprus[1]
265	**Cyprus[1]**	Canada, Korea
263	**Korea**	England/N. Ireland (UK), Cyprus[1]
262	**England/N. Ireland (UK)**	Korea, Poland
260	**Poland**	England/N. Ireland (UK)
256	**Ireland**	France, United States
254	**France**	Ireland, United States
253	**United States**	France, Ireland
247	**Italy**	Spain
246	**Spain**	Italy

1. See notes at the end of this chapter.

Notes: Statistical significance is at the 5% level. Literacy-related non-response (missing) is excluded from the calculation of mean scores. Figure 2.6b, however, presents an estimate of lower-bound mean scores by attributing a very low score (85 points) to those adults who were not able to provide enough background information because of language difficulties, or learning or mental disabilities (literacy-related non-response).

Countries are ranked in descending order of the mean score.

Source: Survey of Adult Skills (PIAAC) (2012), Table A2.6.

StatLink http://dx.doi.org/10.1787/888932900498

The average score among the OECD member countries participating in the assessment is 269 points. Japan has the highest average level of proficiency in numeracy (288 points), followed by Finland (282 points). Spain (246 points) and Italy (247 points) record the lowest average scores. An adult with a score equal to the national average in Ireland (256 points) or the United States (253 points), for example, can typically successfully complete assessment items at Level 2, such as the *Logbook* item in Box 2.7. Overall, the variation between countries is relatively small. Some 42 score points separates the means of the highest and lowest performing countries. The majority of countries (14 out of 22) have mean scores within the range of 263 to 282 points (19 score points). By way of comparison, the average score point gap between the highest and lowest performing 10% of adults across all countries is 127 score points in numeracy.



■ Figure 2.6b ■

Comparison of average numeracy proficiency among adults (adjusted)

Mean numeracy proficiency scores of 16-65 year-olds, assuming a score of 85 points for literacy-related non-response

Significantly **above** the average
Not significantly different from the average
Significantly **below** the average

Adjusted mean	Comparison country	Countries whose mean score is NOT significantly different from the comparison country
286	**Japan**	
282	**Finland**	
279	**Sweden**	Denmark
278	**Denmark**	Netherlands, Sweden
276	**Netherlands**	Czech Republic, Denmark, Norway, Slovak Republic
275	**Slovak Republic**	Czech Republic, Netherlands, Norway
275	**Czech Republic**	Estonia, Netherlands, Norway, Slovak Republic
274	**Norway**	Czech Republic, Estonia, Netherlands, Slovak Republic
272	**Estonia**	Austria, Czech Republic, Norway
272	**Austria**	Estonia, Germany
269	**Germany**	Austria
266	**Average**	
264	**Australia**	Canada, Korea
264	**Canada**	Australia, Korea
263	**Korea**	Australia, Canada
260	**Poland**	England/N. Ireland (UK)
259	**England/N. Ireland (UK)**	Poland
255	**Ireland**	France
253	**France**	Ireland
246	**Italy**	Spain, United States
246	**United States**	Italy, Spain
245	**Spain**	Italy, United States
233	**Cyprus**[1]	

1. See notes at the end of this chapter.

Notes: Statistical significance is at the 5% level. The adjusted mean shows the effect on mean scores if literacy-related non-respondents are included in the calculation and attributed a score of 85. This shows a lower bound for the mean score in each country assuming all literacy-related non-respondents have very low proficiency scores. The results for Flanders (Belgium) are not shown at the country's request.

Countries are ranked in descending order of the adjusted mean score.

Source: Survey of Adult Skills (PIAAC) (2012), Table A2.6b.

StatLink http://dx.doi.org/10.1787/888932900517

While most countries' ranking in literacy and numeracy are similar, there are some notable exceptions. Australia, for example, is an average performer in numeracy, but an above-average performer in literacy. Austria, Germany and Denmark are above-average performers in numeracy, but below average in literacy. England/Northern Ireland (UK) and the United States are much poorer performers in numeracy than in literacy (see Figure 2.13).

Comparison of average proficiency scores for 16-24 year-olds in numeracy

As in the case of literacy, the mean numeracy proficiency of 16-24 year-olds is examined in addition to that of the 16-65 year-old population.[13]

Mean numeracy scores of individuals aged 16-24 are presented in Figure 2.7a. The mean score for this age group is 271 points, 2 score points higher than that for all adults (269 points). The advantage of the younger adults is smaller in numeracy than in literacy. The difference between the countries with the highest and lowest scores is 36 score points for the 16-24 year-olds as opposed to 42 score points for the 16-65 year-olds. The 16-24 year-old populations in the Netherlands (285 points), Finland (285 points), Japan (283 points), and Flanders (Belgium) (283 points) have the highest mean scores, while those in Italy (251 points), Spain (255 points) and England/Northern Ireland (UK) (257 points), and the United States (249 points) have the lowest mean scores.



■ Figure 2.7a ■

Comparison of average numeracy proficiency among young adults

Mean numeracy proficiency scores of 16-24 year-olds

Significantly **above** the average
Not significantly different from the average
Significantly **below** the average

Mean	Comparison country	Countries whose mean score is NOT significantly different from the comparison country
285	**Netherlands**	Finland, Japan, Korea, Flanders (Belgium)
285	**Finland**	Japan, Korea, Netherlands, Flanders (Belgium)
283	**Japan**	Austria, Czech Republic, Estonia, Finland, Korea, Netherlands, Slovak Republic, Sweden, Flanders (Belgium)
283	**Flanders (Belgium)**	Austria, Finland, Japan, Korea, Netherlands, Slovak Republic, Sweden
281	**Korea**	Austria, Czech Republic, Estonia, Finland, Japan, Netherlands, Slovak Republic, Sweden, Flanders (Belgium)
279	**Austria**	Czech Republic, Estonia, Germany, Japan, Korea, Slovak Republic, Sweden, Flanders (Belgium)
279	**Estonia**	Austria, Czech Republic, Germany, Japan, Korea, Slovak Republic, Sweden
278	**Sweden**	Austria, Czech Republic, Estonia, Germany, Japan, Korea, Slovak Republic, Flanders (Belgium)
278	**Czech Republic**	Austria, Estonia, Germany, Japan, Korea, Slovak Republic, Sweden
278	**Slovak Republic**	Austria, Czech Republic, Estonia, Germany, Japan, Korea, Sweden, Flanders (Belgium)
275	**Germany**	Australia, Austria, Czech Republic, Denmark, Estonia, Norway, Slovak Republic, Sweden
273	**Denmark**	Australia, Germany, Norway
271	**Average**	**Australia, Canada, Denmark, Norway, Poland**
271	**Norway**	Australia, Canada, Denmark, Germany, Poland
270	**Australia**	Canada, Denmark, Germany, Norway, Poland, Cyprus[1]
269	**Poland**	Australia, Canada, Norway, Cyprus[1]
268	**Canada**	Australia, Norway, Poland, Cyprus[1]
264	**Cyprus[1]**	Australia, Canada, France, Poland
263	**France**	Cyprus[1]
258	**Ireland**	Italy, Spain, England/N. Ireland (UK)
257	**England/N. Ireland (UK)**	Ireland, Italy, Spain
255	**Spain**	Ireland, Italy, England/N. Ireland (UK)
251	**Italy**	Ireland, Spain, United States, England/N. Ireland (UK)
249	**United States**	Italy

1. See notes at the end of this chapter.

Notes: Statistical significance is at the 5% level. Literacy-related non-response (missing) is excluded from the calculation of mean scores. Figure 2.7b, however, presents an estimate of lower-bound mean scores by attributing a very low score (85 points) to those adults who were not able to provide enough background information because of language difficulties, or learning or mental disabilities (literacy-related non-response).

Countries are ranked in descending order of the mean score.

Source: Survey of Adult Skills (PIAAC) (2012), Table A3.2 (N).

StatLink http://dx.doi.org/10.1787/888932900536

Literacy-related non-respondents are excluded from the calculation of the mean scores presented in Figure 2.7a. Figure 2.7b presents a sensitivity analysis showing the impact on country mean scores if literacy-related non-respondents are taken into account and are all assumed to score 85 points on the numeracy scale.[14] The discussion that follows focuses on the data in Figure 2.7b.

The mean score for 16-24 year-olds is higher than that of 16-65 year-olds in 16 out of 23 countries. The advantage of the 16-24 age group is particularly large in Korea (18 score points), Spain (9 score points) and Poland (9 score points). Among countries where 16-24 year-olds score lower on average than the 16-65 year-old population, the disadvantage of the young is greatest in Norway (-5 score points), Denmark (-6 score points), England/Northern Ireland (UK) (-6 score points), Japan (-5 score points) and the United States (-6 score points).



As in the case of literacy, there are some marked differences in the ranking of countries relative to the average across countries for 16-24 year-olds and for 16-65 year-olds. The mean score for 16-24 year-olds in Korea is significantly above the average. This is in contrast to that of the 16-65 year-old population, which is significantly below the average. In Norway, where the 16-65 year-old population had an average level of proficiency above the average across countries, the proficiency of 16-24 year-olds is around the average across countries. The mean proficiency of 16-24 year-olds in the United States is the lowest of all countries; that of 16-65 year-olds was the third lowest.

■ Figure 2.7b ■

Comparison of average numeracy proficiency among young adults (adjusted)

Mean numeracy proficiency scores of 16-24 year-olds, assuming a score of 85 points for literacy-related non-response

Significantly **above** the average
Not significantly different from the average
Significantly **below** the average

Adjusted mean	Comparison country	Countries whose mean score is NOT significantly different from the comparison country
285	**Finland**	Japan, Korea, Netherlands
283	**Netherlands**	Finland, Japan, Korea, Sweden
281	**Korea**	Austria, Czech Republic, Estonia, Finland, Japan, Netherlands, Slovak Republic, Sweden
281	**Japan**	Austria, Czech Republic, Estonia, Finland, Korea, Netherlands, Slovak Republic, Sweden
278	**Sweden**	Austria, Czech Republic, Estonia, Germany, Japan, Korea, Netherlands, Slovak Republic
278	**Czech Republic**	Austria, Estonia, Germany, Japan, Korea, Slovak Republic, Sweden
278	**Estonia**	Austria, Czech Republic, Germany, Japan, Korea, Slovak Republic, Sweden
277	**Austria**	Czech Republic, Estonia, Germany, Japan, Korea, Slovak Republic, Sweden
277	**Slovak Republic**	Austria, Czech Republic, Estonia, Germany, Japan, Korea, Sweden
274	**Germany**	Australia, Austria, Czech Republic, Denmark, Estonia, Norway, Slovak Republic, Sweden
272	**Denmark**	Australia, Germany, Norway
270	**Average**	**Australia, Canada, Denmark, Norway, Poland**
269	**Norway**	Australia, Canada, Denmark, Germany, Poland
269	**Australia**	Canada, Denmark, France, Germany, Norway, Poland
269	**Poland**	Australia, Canada, Norway
267	**Canada**	Australia, France, Norway, Poland
263	**France**	Australia, Canada, Ireland
258	**Ireland**	France, Italy, Spain, England/N. Ireland (UK)
254	**Spain**	Ireland, Italy, England/N. Ireland (UK)
253	**England/N. Ireland (UK)**	Ireland, Italy, Spain, Cyprus[1]
251	**Italy**	Ireland, Spain, England/N. Ireland (UK), Cyprus[1]
247	**Cyprus[1]**	Italy, United States, England/N. Ireland (UK)
240	**United States**	Cyprus[1]

1. See notes at the end of this chapter.

Notes: Statistical significance is at the 5% level. The adjusted mean shows the effect on mean scores if literacy-related non-respondents are included in the calculation and attributed a score of 85. This shows a lower bound for the mean score in each country assuming all literacy-related non-respondents have very low proficiency scores. The results for Flanders (Belgium) are not shown at the country's request.

Countries are ranked in descending order of the adjusted mean score.

Source: Survey of Adult Skills (PIAAC) (2012), Table A2.7.

StatLink http://dx.doi.org/10.1787/888932900555

Comparison of scores at the 5th, 25th, 75th and 95th percentiles

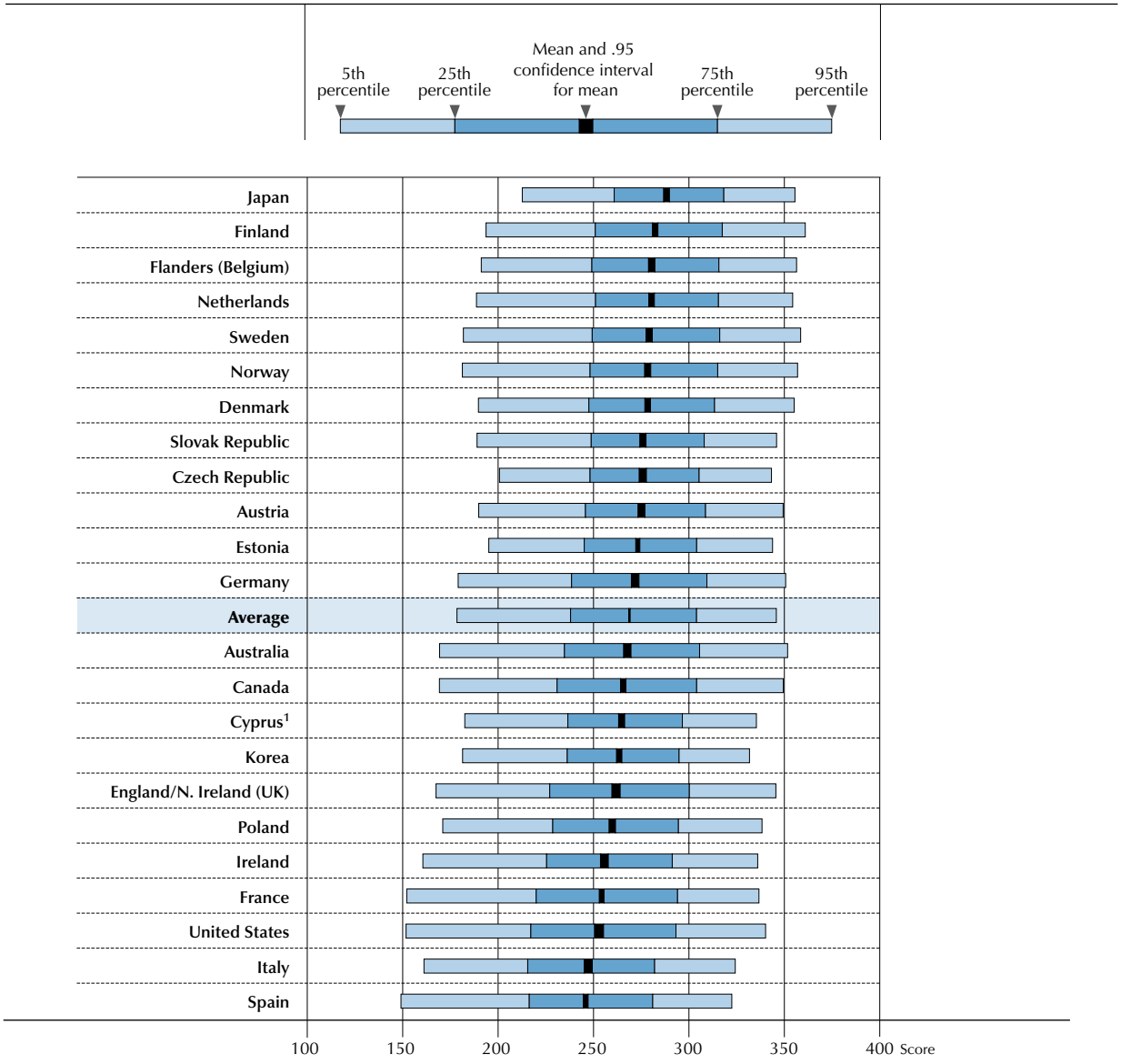
Examining the variation in performance within a country, by identifying the score points below which 5%, 25%, 75%, and 95% of adults perform, shows the gap in proficiency between high and low performers.[15] In other words, this indicator measures the extent of inequality in the distribution of numeracy proficiency in each participating country or sub-national region. Figure 2.8 presents the distribution of scores within countries in addition to the mean score. A longer gradient bar indicates greater variations in numeracy proficiency within a country; a shorter bar indicates smaller variations.

On average, 167 score points separate the highest and lowest performers in numeracy. The Czech Republic has the narrowest distribution of scores (143-point difference) on the numeracy scale. The United States has the widest gap between the lowest and the highest performers (188 points).

■ Figure 2.8 ■

Distribution of numeracy proficiency scores

Mean numeracy proficiency and distribution of numeracy scores, by percentile



1. See notes at the end of this chapter.

Notes: Mean scores are shown with a .95 confidence interval. Literacy-related non-response (missing) is excluded from the calculation of mean scores. Figure 2.6b, however, presents an estimate of lower-bound mean scores by attributing a very low score (85 points) to those adults who were not able to provide enough background information because of language difficulties, or learning or mental disabilities (literacy-related non-response).

Countries are ranked in descending order of the mean score.

Source: Survey of Adult Skills (PIAAC) (2012), Table A2.8.

StatLink http://dx.doi.org/10.1787/888932900574

France (184-point difference), Australia (182-point difference), Canada (180-point difference), England/Northern Ireland (UK) (178-point difference), and Sweden (177-point difference) also have wide distributions of scores, signalling a large gap between the lowest and highest performers.

Adults in Finland (361 points) have the highest scores at the 95th percentile, followed by Sweden (358 points) and Norway (357 points). The countries in which adults have the highest scores at the 5th percentile are Japan (213 points), the Czech Republic (201 points) and Estonia (195 points).



Correlations between proficiency in literacy and numeracy

Individuals' proficiency in literacy and numeracy is closely related. The correlation between proficiency in literacy and numeracy at the individual level for the entire sample is 0.87 (see Figure 2.9). The correlation is highest in Norway (0.90), the United States (0.89), Australia (0.89) and the Netherlands (0.89) and lowest in the Czech Republic (0.80), Italy (0.82) and Estonia (0.83). The level of correlation is in line with expectations. For example, similar levels of correlation are found in PISA between reading literacy and mathematical literacy (OECD, 2012a, p. 194) and in the Adult Literacy and Life Skills Survey (ALL) between prose and document literacy and numeracy.

Literacy and numeracy, nevertheless, constitute distinct skills, each defined by their respective frameworks. At the individual level, the strength of the relationship with other outcomes, such as employment and wages, varies between literacy and numeracy. Numeracy, for example, has a stronger relationship to wages than does literacy (see Chapter 6).

■ Figure 2.9 ■

Correlation among key information-processing skills

Correlation between literacy and numeracy proficiency scores of 16-65 year-olds

	Correlation coefficient
Norway	0.901
United States	0.890
Sweden	0.890
Australia	0.889
Spain	0.887
Netherlands	0.886
Korea	0.883
Denmark	0.881
Germany	0.876
Ireland	0.873
England/N. Ireland (UK)	0.873
Flanders (Belgium)	0.872
Canada	0.868
Average	0.867
France	0.867
Finland	0.864
Austria	0.863
Poland	0.858
Slovak Republic	0.855
Japan	0.846
Estonia	0.829
Italy	0.823
Cyprus[1]	0.805
Czech Republic	0.803

1. See notes at the end of this chapter.

Countries are ranked in descending order of the Pearson correlation coefficient.

Source: Survey of Adult Skills (PIAAC) (2012), Table A2.9.

StatLink http://dx.doi.org/10.1787/888932900593



PROFICIENCY IN PROBLEM SOLVING IN TECHNOLOGY-RICH ENVIRONMENTS

The Survey of Adult Skills defines problem solving in technology-rich environments as "using digital technology, communication tools and networks to acquire and evaluate information, communicate with others and perform practical tasks". It focuses on "the abilities to solve problems for personal, work and civic purposes by setting up appropriate goals and plans, and accessing and making use of information through computers and computer networks" (OECD, 2012b).

Problem solving in technology-rich environments represents the intersection of what are sometimes described as "computer literacy" skills (i.e. the capacity to use ICT tools and applications) and the cognitive skills required to solve problems. Some basic knowledge regarding the use of ICT input devices, such as a keyboard and mouse and display screen, file-management tools, applications (Internet browsers, spreadsheets, e-mail), and graphic interfaces is essential for performing assessment tasks (see Box 2.8). However, the objective is not to test proficiency in the use of ICT tools and applications in isolation, but rather to assess the capacity of adults to use these tools to access, process, evaluate and analyse information effectively in a goal-oriented way. The difficultly of the problem-solving tasks is related to both the cognitive demands and complexity of the tasks, and the range and nature of the tools and applications that the test-taker is required to use to arrive at a solution. For example, the more difficult problem solving tasks tended to involve transferring information from one application to another, and then transforming that information in addition to requiring the test-taker to follow a relatively complex sequence of actions involving multiple steps and negotiating impasses in order to arrive at a solution.

A prerequisite for displaying proficiency in problem solving in technology-rich environments is having some rudimentary skills in using computer tools and applications. Given the very different levels of familiarity with computer applications in the countries participating in the Survey of Adult Skills, the proportions of the population to which the estimates of proficiency in this domain refer vary widely among countries.[16]

The survey provides two different, albeit related, pieces of information regarding the capacity of adults to manage information in technology-rich environments. The first is the proportion of adults who have sufficient familiarity with computers to use them to perform information-processing tasks. The second is the proficiency of adults with at least some ICT skills in solving the types of problems commonly encountered in their roles as workers, citizens and consumers in a technology-rich world.

Box 2.8. Problem solving in technology-rich environments: Beyond using ICT tools to manage information

The assessment of problem solving in technology-rich environments is designed to evaluate the ability of adults to solve problems in which the information they use is accessed through ICT applications and the solution either requires the use of, or is made easier by the use of, ICT tools. In some cases, the problem itself is partly generated by the very existence of these tools.

The assessment was developed to provide information not only about access to and familiarity with ICTs, but also to understand the extent to which adults can use these tools efficiently and effectively to solve the types of problems that arise in their everyday lives as workers, consumers and citizens. The assessment involved a series of problem scenarios. Respondents had to find a solution to a problem using the information and tools that were accessible in simulated computer environments that contained applications, such as an Internet browser and web pages, or a computer-based room-reservation system and other common applications, such as e-mail, word processing and spreadsheet tools. In addition, the scenarios involved different levels of cognitive complexity. The solution path could entail a few or many steps, with or without built-in impasses. The problem statement could be more or less explicit; and arriving at a solution could demand greater or lesser levels of self-monitoring, inferential reasoning, and evaluation of the relevance and credibility of information.

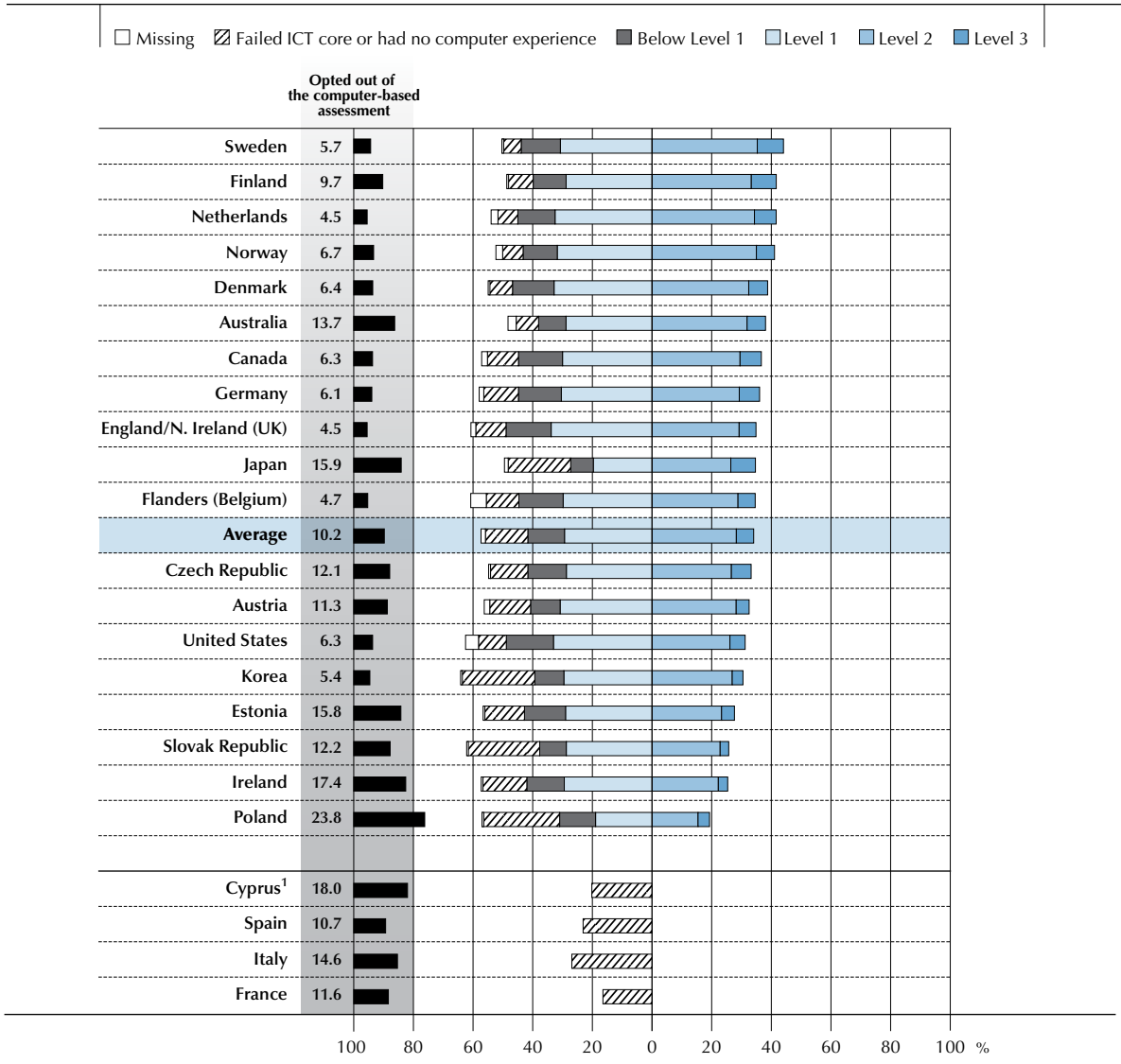
WHAT ADULTS CAN DO AT DIFFERENT LEVELS OF PROFICIENCY IN PROBLEM SOLVING IN TECHNOLOGY-RICH ENVIRONMENTS

Figure 2.10a presents the proportion of all adults aged 16-65, across all participating countries, at the four levels of proficiency (Level 1 through 3 plus below Level 1) on the problem solving in technology-rich environments scale. The features of the tasks at these levels are described in detail in Table 2.4 and some examples of problem-solving items are described in Box 2.9. The range in the proportion of adults who completed the assessment in this domain (from a high of 87.9% in Sweden to a low of 50.2% in Poland) means that comparisons of mean scores across countries are not particularly meaningful for comparing proficiency.

■ Figure 2.10a ■

Proficiency in problem solving in technology-rich environments among adults

Percentage of 16-65 year-olds scoring at each proficiency level



1. See notes at the end of this chapter.

Notes: Adults included in the missing category were not able to provide enough background information to impute proficiency scores because of language difficulties, or learning or mental disabilities (referred to as literacy-related non-response). The missing category also includes adults who could not complete the assessment of problem solving in technology-rich environments because of technical problems with the computer used for the survey. Cyprus,[1] France, Italy and Spain did not participate in the problem solving in technology-rich environments assessment.

Countries are ranked in descending order of the combined percentage of adults scoring at Levels 2 and 3.

Source: Survey of Adult Skills (PIAAC) (2012), Table A2.10a.

StatLink http://dx.doi.org/10.1787/888932900612



Table 2.4
Description of proficiency levels in problem solving in technology-rich environments

Level	Score range	Percentage of adults able to perform tasks at each level (average)	The types of tasks completed successfully at each level of proficiency
No computer experience	Not applicable	9.3%	Adults in this category reported having no prior computer experience; therefore, they did not take part in the computer-based assessment but took the paper-based version of the assessment, which did not include the problem solving in technology-rich environment domain.
Failed ICT core	Not applicable	4.9%	Adults in this category had prior computer experience but failed the ICT core test, which assesses the basic ICT skills, such as the capacity to use a mouse or scroll through a web page, needed to take the computer-based assessment. Therefore, they did not take part in the computer-based assessment, but took the paper-based version of the assessment, which did not include the problem solving in technology-rich environment domain.
"Opted out" of taking computer-based assessment	Not applicable	10.2%	Adults in this category opted to take the paper-based assessment without first taking the ICT core assessment, even if they reported some prior experience with computers. They also did not take part in the computer-based assessment, but took the paper-based version of the assessment, which did not include the problem solving in technology-rich environment domain.
Below Level 1	Below 241 points	12.3%	Tasks are based on well-defined problems involving the use of only one function within a generic interface to meet one explicit criterion without any categorical or inferential reasoning, or transforming of information. Few steps are required and no sub-goal has to be generated.
1	241 to less than 291 points	29.4%	At this level, tasks typically require the use of widely available and familiar technology applications, such as e-mail software or a web browser. There is little or no navigation required to access the information or commands required to solve the problem. The problem may be solved regardless of the respondent's awareness and use of specific tools and functions (e.g. a sort function). The tasks involve few steps and a minimal number of operators. At the cognitive level, the respondent can readily infer the goal from the task statement; problem resolution requires the respondent to apply explicit criteria; and there are few monitoring demands (e.g. the respondent does not have to check whether he or she has used the appropriate procedure or made progress towards the solution). Identifying content and operators can be done through simple match. Only simple forms of reasoning, such as assigning items to categories, are required; there is no need to contrast or integrate information.
2	291 to less than 341 points	28.2%	At this level, tasks typically require the use of both generic and more specific technology applications. For instance, the respondent may have to make use of a novel online form. Some navigation across pages and applications is required to solve the problem. The use of tools (e.g. a sort function) can facilitate the resolution of the problem. The task may involve multiple steps and operators. The goal of the problem may have to be defined by the respondent, though the criteria to be met are explicit. There are higher monitoring demands. Some unexpected outcomes or impasses may appear. The task may require evaluating the relevance of a set of items to discard distractors. Some integration and inferential reasoning may be needed.
3	Equal to or higher than 341 points	5.8%	At this level, tasks typically require the use of both generic and more specific technology applications. Some navigation across pages and applications is required to solve the problem. The use of tools (e.g. a sort function) is required to make progress towards the solution. The task may involve multiple steps and operators. The goal of the problem may have to be defined by the respondent, and the criteria to be met may or may not be explicit. There are typically high monitoring demands. Unexpected outcomes and impasses are likely to occur. The task may require evaluating the relevance and reliability of information in order to discard distractors. Integration and inferential reasoning may be needed to a large extent.



Box 2.9. Examples of problem solving in technology-rich environments

Items that exemplify the pertinent features of the proficiency levels in the domain of problem solving in technology-rich environments are described below (see Table 4.4 in the *Reader's Companion* to this report [OECD, 2013]).

Level 1: Party invitations (Item ID: U01A)
Cognitive strategies: Plan and use information
Technology: E-mail
Context: Personal
Difficulty score: 286

This task involves sorting e-mails into pre-existing folders. An e-mail interface is presented with five e-mails in an Inbox. These e-mails are responses to a party invitation. The test-taker is asked to place the response e-mails into a pre-existing folder to keep track of who can and cannot attend a party. The item requires the test-taker to "Categorise a small number of messages in an e-mail application in existing folders according to a single criterion." The task is performed in a single and familiar environment and the goal is explicitly stated in operational terms. Solving the problem requires a relatively small number of steps and the use of a restricted range of operators and does not demand a significant amount of monitoring across a large number of actions.

Level 2: Club membership (Item ID: U19b)
Cognitive strategies: Set goals and monitor progress, plan, acquire and evaluate information and use information
Technology: Spreadsheet, E-mail
Context: Society and community
Difficulty score: 296

This task involves responding to a request for information by locating information in a spreadsheet and e-mailing the requested information to the person who asked for it. The test-taker is presented with a word-processor page containing a request to identify members of a bike club who meet two conditions, and a spreadsheet containing 200 entries in which the relevant information can be found. The required information has to be extracted by using a sort function. The item requires the test-taker to "Organise large amounts of information in a multiple-column spreadsheet using multiple explicit criteria and locate and mark relevant entries." The task requires switching between two different applications and involves multiple steps and operators. It also requires some amount of monitoring. Making use of the available tools greatly facilitates identifying the relevant entries.

Level 3: Meeting rooms (Item ID: U02)
Cognitive strategies: Set goals and monitor progress, plan, acquire and evaluate information and use information
Technology: E-mail, Internet
Context: Work-related
Difficulty score: 346

This task involves managing requests to reserve a meeting room on a particular date using a reservation system. Upon discovering that one of the reservation requests cannot be accommodated, the test-taker has to send an e-mail message declining the request. Successfully completing the task involves taking into account multiple constraints (e.g. the number of rooms available and existing reservations). Impasses exist, as the initial constraints generate a conflict (one of the demands for a room reservation cannot be satisfied). The impasse has to be resolved by initiating a new sub-goal, i.e. issuing a standard message to decline one of the requests. Two applications are present in the environment: an e-mail interface with a number of e-mails stored in an inbox containing the room reservation requests, and a web-based reservation tool that allows the user to assign rooms to meetings at certain times. The item requires the test-taker to "Use information from a novel web application and several e-mail messages, establish and apply criteria to solve a scheduling problem where an impasse must be resolved, and communicate the outcome." The task involves multiple applications, a large number of steps, a built-in impasse, and the discovery and use of ad hoc commands in a novel environment. The test-taker has to establish a plan and monitor its implementation in order to minimise the number of conflicts. In addition, the test-taker has to transfer information from one application (e-mail) to another (the room-reservation tool).

Proficiency at Level 3 (scores equal to or higher than 341 points)

Adults at Level 3 can complete tasks involving multiple applications, a large number of steps, impasses, and the discovery and use of ad hoc commands in a novel environment. They can establish a plan to arrive at a solution and monitor its implementation as they deal with unexpected outcomes and impasses.



Some 5.8% of adults score at Level 3. Sweden (8.8%), Finland (8.4%) and Japan (8.3%) have the largest proportions of adults scoring at this level, followed by the Netherlands (7.3%), Canada (7.1%) and Germany (6.8%).

Proficiency at Level 2 (scores from 291 points to less than 341 points)

At Level 2, adults can complete problems that have explicit criteria for success, a small number of applications, and several steps and operators. They can monitor progress towards a solution and handle unexpected outcomes or impasses.

On average, 28.2% of adults score at Level 2. More than 30% of adults in Sweden (35.2%), Norway (34.9%), the Netherlands (34.3%), Finland (33.2%), Denmark (32.3%) and Australia (31.8%) achieve this level while less than 25% of adults in Poland (15.4%), Ireland (22.1%), the Slovak Republic (22.8%) and Estonia (23.2%) do. On average, 34.0% of adults are proficient at Level 2 or higher. In other words, just over one in three adults, on average, can successfully complete assessment items such as the *Club membership* item described in Box 2.9. More than 40% of adults in Sweden (44%), Finland (41.6%), the Netherlands (41.5%) and Norway (41%) score at this level or higher. Poland has the smallest proportion of adults scoring at Level 2 or higher (19.2%), followed by Ireland (25.3%) and the Slovak Republic (25.6%).

Proficiency at Level 1 (scores from 241 points to less than 291 points)

At Level 1, adults can complete tasks in which the goal is explicitly stated and for which the necessary operations are performed in a single and familiar environment. They can solve problems in the context of technology-rich environments whose solutions involve a relatively small number of steps, the use of a restricted range of operators, and a limited amount of monitoring across a large number of actions.

Some 29.4% of adults score at Level 1. England/Northern Ireland (UK) (33.9%), the United States (33.1%) and Denmark (32.9%) have the largest proportions of adults scoring at this level.

Proficiency below Level 1 (scores below 241 points)

Below Level 1, adults can complete tasks in which the goal is explicitly stated and for which the necessary operations are performed in a single and familiar environment. They can solve problems whose solutions involve a relatively small number of steps, the use of a restricted range of operators, and a limited amount of monitoring across a large number of actions.

Some 12.3% of adults score below Level 1. The United States (15.8%), England/Northern Ireland (UK) (15.1%), Flanders (Belgium) (14.8%) and Canada (14.8%) have the largest proportions of adults scoring below Level 1.

The proportion of adults with basic ICT skills

In each participating country, some adults were unable to display proficiency in problem solving in technology-rich environments. This group includes adults who had no prior computer experience and adults with some computer experience who did not have the basic computer skills – the ability to use a mouse, scroll through text, highlight text, and use drag and drop functionality – necessary to take the assessment component of the Survey of Adult Skills in its computer-based version. In addition, some respondents opted to take the paper-based version of the assessment without first taking the test of basic ICT skills, even though they reported that they had experience with computers.

Overall, the results suggest that in all countries participating in the survey, there is a reasonably large proportion of adults who have either no experience in the use of computers or at most a very low level of familiarity with computer devices and applications. On average, 9.3% of adults reported having no prior computer experience. This ranged from around 2% in Sweden (1.6%), Norway (1.6%) and Denmark (2.4%) to over 20% in Italy (24.4%) and the Slovak Republic (22.0%). A further 4.9% of adults did not possess the basic ICT skills, such as the capacity to use a mouse or scroll through a web page, needed to take the assessment in its computer-based form (see Figure 2.10a) that were assessed by the ICT core test. This was true of 3% or less of adults in the Czech Republic (2.2%), the Slovak Republic (2.2%) and Italy (2.5%). Japan (10.7%)[17] Korea (9.1%), Poland (6.5%) and Spain (6.2%) had high proportions of adults who did not pass the core test.

Some adults preferred not to use a computer in an assessment situation, even if they reported some prior experience with computers. In all participating countries, a proportion of adults opted to take the paper-based version of the assessment without first taking the ICT core test (see Box 2.10). Some 10.2% of adults opted to take the paper-based assessment without first taking the ICT core test (illustrated as a black bar in each country in Figure 2.10a). Poland (23.8%), Ireland (17.4%), Japan (15.9%), Estonia (15.8%), Italy (14.6%) and Australia (13.7%) had particularly large proportions of adults who "opted out" of the computer-based assessment, whereas England/Northern Ireland (UK), the Netherlands (both at 4.5%) and Flanders (Belgium) (4.7%) had relatively small proportions of adults who did so.



Box 2.10. Adults who "opted out" of taking the computer-based assessment

Respondents took the assessment component of the Survey of Adult Skills either in a computer-based format on a laptop computer or in a paper-based format. Respondents who indicated in the background questionnaire that they had no prior experience using computers took the assessment in the paper-based format. Respondents who had computer experience first took a simple test of their ability to use the functionality required to undertake the assessment in computer-based form (the ICT core). Those who "failed" the ICT core test were also directed to the paper version of the assessment. Some respondents who had computer experience opted to take the paper version without first completing the ICT core. In total across participating countries, except partner countries, 9.3% of respondents had no prior computer experience, 4.9% of adults failed the ICT core, and 10.2% of adults opted to take the paper-based assessment without first taking the ICT core. Figure "a" in this box summarises the characteristics of adults in each of the four groups: respondents who had no computer experience, those who failed the ICT core, those who "opted out" of taking the computer-based assessment, and those who passed ICT core and took the computer-based assessment.

■ Figure a ■

Adults' range of experience with computers and the computer-based assessment, by socio-demographic profile

	Adults with no computer experience	Adults failed ICT core	Adults who "opted out" of taking the computer-based assessmen	Adults who took the computer-based assessment
Age group (%)	100%	100%	100%	100%
16-24 year-olds	1.4	11.9	5.9	20.7
25-34 year-olds	4.3	18.1	11.8	23.5
35-44 year-olds	10.0	20.3	18.9	23.0
45-54 year-olds	26.8	24.6	27.0	19.1
55-65 year-olds	57.5	25.2	36.5	13.7
Educational attainment (%)	100%	100%	100%	100%
Less than upper secondary	60.2	33.0	34.0	18.3
Upper secondary, post-secondary non-tertiary	35.6	46.7	48.9	45.4
Tertiary	4.2	20.0	17.1	36.2
Occupation level (%)	100%	100%	100%	100%
Elementary occupation	25.6	15.9	14.8	7.2
Semi-skilled blue-collar occupation	46.1	30.3	31.8	17.8
Semi-skilled white-collar occupation	21.4	29.4	30.6	30.1
Skilled occupation	6.9	24.4	22.9	44.9
ICT use in everyday life (%)	a	100%	100%	100%
No engagement in ICT-related practices	a	3.3	4.3	0.5
Almost never	a	38.7	46.1	17.6
Rarely	a	20.4	21.2	20.1
Sometimes	a	13.8	12.4	20.4
Frequently	a	12.8	8.9	20.6
Almost everyday	a	11.0	7.1	20.7
Mean scores (points)				
Literacy mean scores	224	243	262	281
Numeracy mean scores	212	228	248	280

Note: The figures presented in this table are based on the average and the results for each country can be found in the tables mentioned in the source below.

Source: Survey of Adult Skills (PIAAC) (2012). Tables B2.5a, B2.5b, B2.5c, B2.5d, B2.5e and B2.5f in Annex B. The proportion of adults in the total population can be found in Tables B3.3, B3.5, B3.6, B3.11 and B3.14 in Annex B.

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...



Respondents who opted out of the computer-based assessment were more similar in age, level of educational attainment and occupation to the respondents who failed the ICT core test than to those who passed and took the assessment in its computer-based format. Overall, respondents who opted out of taking the computer-based assessment were older than both those who failed and those who passed the ICT core. They had similar levels of education and occupational status as respondents who failed the ICT core, and lower levels of education and lower probabilities of being employed in skilled occupations than those who passed the core test. The opt-out group reported less frequent use of ICTs in everyday life and at work compared to those who failed and those who passed the ICT core test. Among adults who opted out of taking the computer-based assessment, 50.4% reported no or almost no ICT use in everyday life compared to 42.0% of adults who failed the ICT core test and 18.1% of adults who took the computer-based assessment. Adults who opted out had higher mean literacy (262 points) and numeracy (248 points) scores than those who failed the ICT core test (243 points in literacy and 228 points in numeracy), but they had lower scores than adults who passed the ICT core test (281 points in literacy and 280 points in numeracy).

The reasons for which these individuals opted to take the pencil and paper based assessment are unknown.[18] However, information regarding the characteristics of the members of this group and their patterns of ICT usage are available and can be used to infer something about their likely level of ICT skills and/or comfort with using a computer in a test situation. In summary, the evidence suggests that many in the "opt out" group are likely to have relatively low levels of computer skills (see Box 2.10).

WHAT YOUNG ADULTS CAN DO AT DIFFERENT LEVELS OF PROFICIENCY IN PROBLEM SOLVING IN TECHNOLOGY-RICH ENVIRONMENTS

Figure 2.10b presents the proportion of young adults aged 16-24, at the four levels of proficiency (Level 1 through 3 plus below Level 1) on the problem solving in technology-rich environments scale as in the case for the overall population. In all countries, 16-24 year-olds have higher average levels of proficiency in this domain than does the 16-65 year-old population as a whole. They also have lower chances of having no prior computer experience, or failing the ICT core test, or opting to take the paper-based rather than computer-based version of the assessment.

Proficiency at Level 3 (scores equal to or higher than 341 points)

Some 9% of 16-24 year-olds score at Level 3, 3 percentage points more than that for adults aged 16-65. Sweden (11.7%), the Czech Republic (11.7%), Finland (11.5%), the Netherlands (11.4%) and Flanders (Belgium) (11.1%) have 11% or more young adults at this level. In all of the participating countries, the proportion of 16-24 year-olds at Level 3 is larger than that of 16-65 year-olds. The advantage of 16-24 year-olds is particularly marked in Korea (6 percentage points), Flanders (Belgium) (5 percentage points) and the Czech Republic (5 percentage points).

Proficiency at Level 2 (scores from 291 points to less than 341 points)

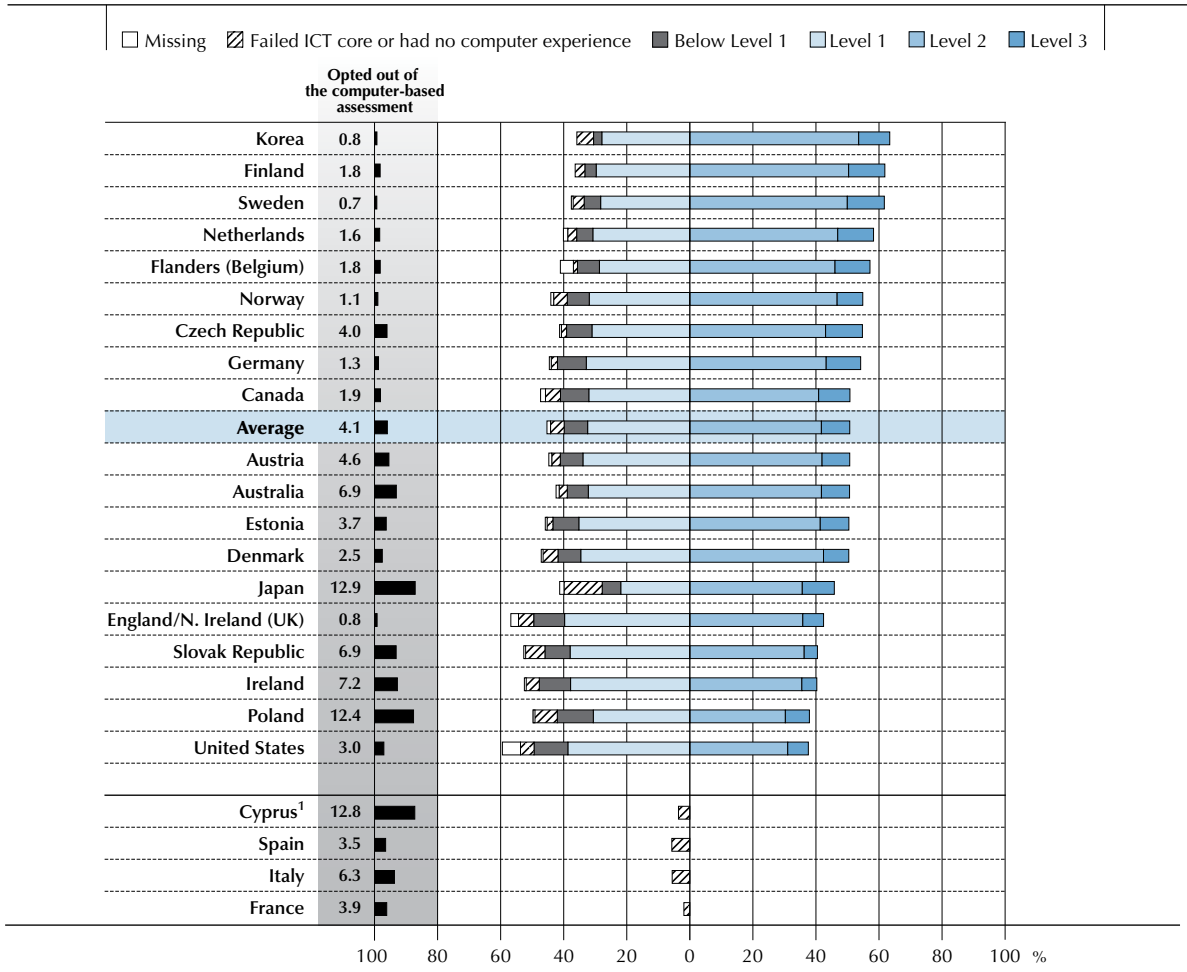
On average, 41.7% of young adults score at Level 2, a proportion that is 14 percentage points larger than that of adults aged 16-65. Korea has the highest proportion of young adults at this level (53.6%), followed by Finland (50.4%) and Sweden (49.9%). By contrast, less than 35% of young adults in Poland (30.3%) and the United States (31.1%) score at this level. In all of the participating countries, the proportion of 16-24 year-olds scoring at Level 2 is greater than that of 16-65 year-olds. The difference in the proportion of young adults who score at this level compared with the overall adult population is widest in Korea (27 percentage points), followed by Estonia (18 percentage points) and Flanders (Belgium) (17 percentage points).

Some 50.7% of young adults are proficient at Level 2 or higher, on average. In other words, just over one in two young adults can successfully complete assessment items such as the *Club membership* item described in Box 2.9. More than 55% of young adults in Korea (63.4%), Finland (61.9%), Sweden (61.7%), the Netherlands (58.3%) and Flanders (Belgium) (57.1%) score at Level 2 or higher. The United States has the smallest proportion of 16-24 year-olds who score at this level or higher (37.6%), followed by Poland (37.9%).

■ Figure 2.10b ■

Proficiency in problem solving in technology-rich environments among young adults

Percentage of 16-24 year-olds scoring at each proficiency level



1. See notes at the end of this chapter.

Notes: Young adults in the missing category were not able to provide enough background information to impute proficiency scores because of language difficulties, or learning or mental disabilities (referred to as literacy-related non-response). The missing category also includes adults who could not complete the assessment of problem solving in technology-rich environments because of technical problems with the computer used for the survey. Cyprus,[1] France, Italy and Spain did not participate in the problem solving in technology-rich environments assessment.

Countries are ranked in descending order of the combined percentage of adults scoring at Levels 2 and 3.

Source: Survey of Adult Skills (PIAAC) (2012), Table A2.10b.

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Proficiency at Level 1 (scores from 241 points to less than 291 points)

Some 32.4% of 16-24 year-olds score at Level 1, a proportion that is 3 percentage points larger than that of 16-65 year-olds who score at this level. England/Northern Ireland (UK) (39.7%), the United States (38.7%) and the Slovak Republic (38.0%) have the largest proportions of young adults scoring at this level. Poland (12 percentage points) and the Slovak Republic (9 percentage points) have the largest differences in the proportion of young adults who score at this level compared with the overall population.

Proficiency below Level 1 (scores below 241 points)

Some 7.5% of young adults score below Level 1, a share that is 5 percentage points smaller than that of 16-65 year-olds who score at this level. Korea (2.6%) and Finland (3.6%) have the smallest proportions of young adults scoring at this level, while Poland (11.4%) and the United States (10.7%) have the largest proportion of 16-24 year-olds who do. In all of the participating countries, the proportion of young adults scoring at this level is smaller than that of 16-65 year-olds.

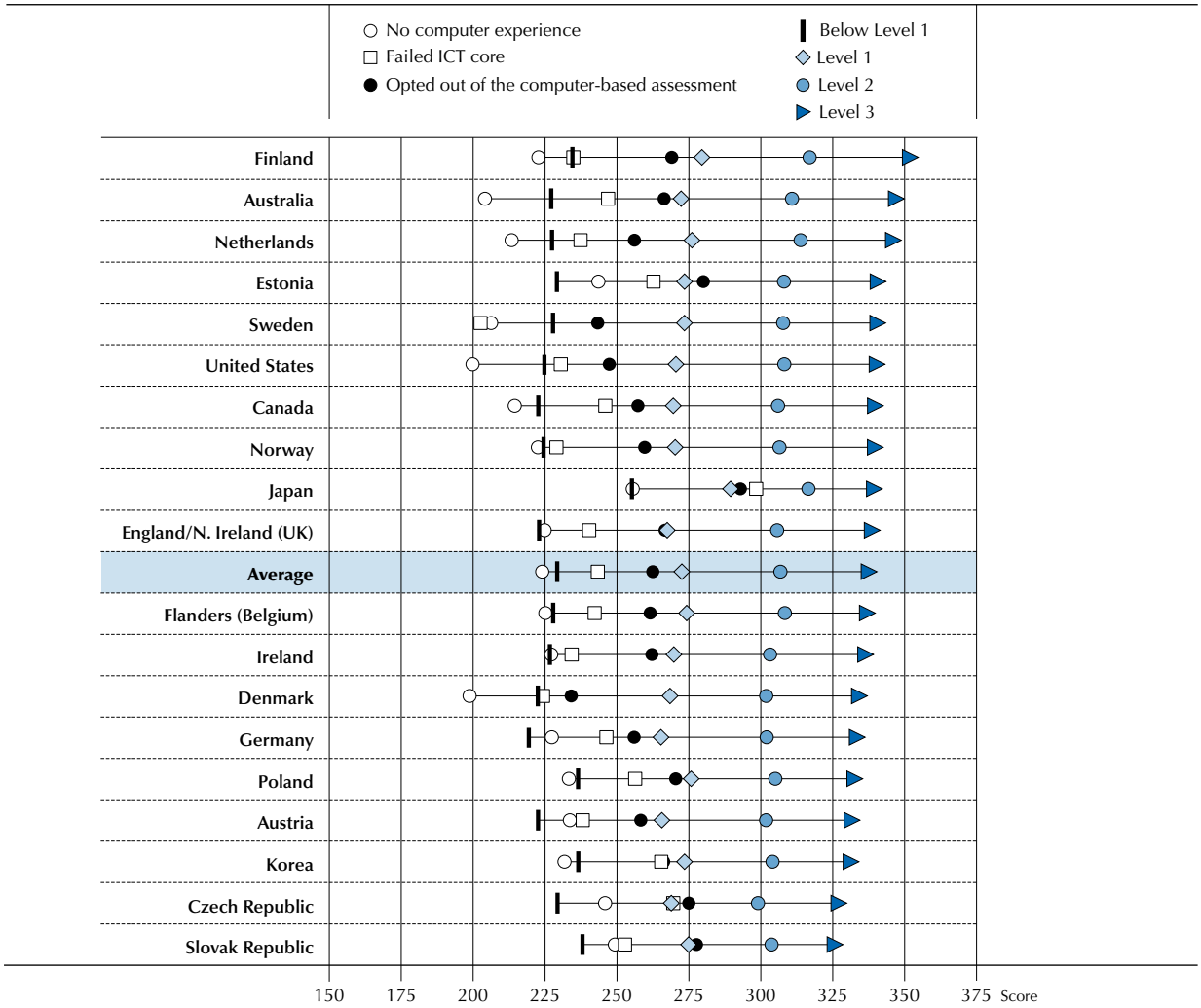
THE RELATIONSHIP BETWEEN PROFICIENCY IN LITERACY/NUMERACY AND PROBLEM SOLVING IN TECHNOLOGY-RICH ENVIRONMENTS

In order to look more closely at the relationship between literacy and problem solving in technology-rich environments, and numeracy and problem solving in technology-rich environments, Figures 2.11 and 2.12 present the mean scores on the literacy and numeracy scales of individuals at the various proficiency levels on the problem solving in technology-rich environments scale, those individuals without computer experience, those who failed the ICT core and those who opted not to take the computer-based assessment. On average, individuals scoring at Level 3 on the problem solving in technology-rich environments scale score at Level 4 on the literacy and the numeracy scales. Those who score at Level 2 on the problem solving in technology-rich environments scale score at Level 3 on the literacy and numeracy scales; and those who score at or below Level 1 on the problem solving in technology-rich environments scale score at the top of Level 2 or at the lower end of Level 2 on the literacy and numeracy scales, on average. The exception is Japan, where those who score at or below Level 1 on the problem solving in technology-rich environments scale score considerably higher in literacy and numeracy than adults in other participating countries who have a similar level of proficiency on problem solving in technology-rich environments scale.

■ Figure 2.11 ■

Relationship between literacy and problem solving in technology-rich environments

Mean literacy proficiency, by proficiency level in problem solving in technology-rich environments



Countries are ranked in descending order of the mean literacy score of adults scoring at Level 3 on the problem solving in technology-rich environments scale.

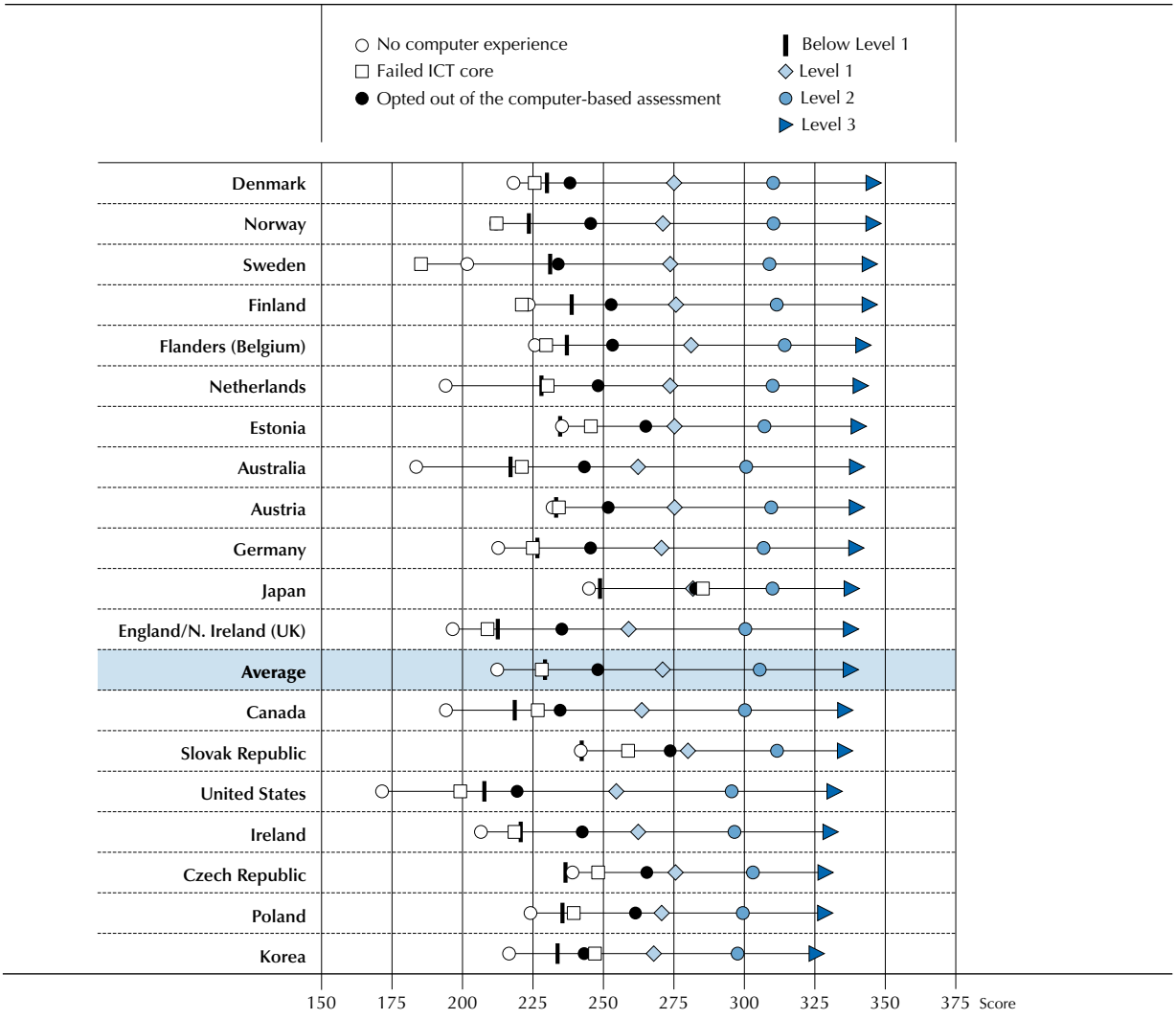
Source: Survey of Adult Skills (PIAAC) (2012), Table A2.11.

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■ Figure 2.12 ■

Relationship between numeracy and problem solving in technology-rich environments

Mean numeracy proficiency, by proficiency level in problem solving in technology-rich environments



Countries are ranked in descending order of the mean numeracy score of adults scoring at Level 3 on the problem-solving in technology-rich environments scale.

Source: Survey of Adult Skills (PIAAC) (2012), Table A2.12.

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The literacy and numeracy proficiency among individuals who opted out of the computer-based assessment is higher than that among individuals who have no computer experience or who failed the ICT core on average. Almost without exception, the proficiency in literacy and numeracy among individuals without computer experience is lower than that among individuals who failed the ICT core. In absolute terms, the literacy and numeracy proficiency of this group is very low, ranging from 200 score points (the mid-point of Level 1) to 256 points (the mid-point of Level 2) in literacy and 171 points (the bottom of Level 1) and 245 points (the mid-point of Level 2) in numeracy. The average literacy and numeracy scores among individuals who failed the ICT core vary more, ranging from around 200 points to 270 points (the top of Level 2) in literacy and to 259 points (the mid-point of Level 2) in numeracy. Japan is, again, the exception: the average literacy score among individuals who failed the ICT core is around 300 points. It is also striking that the individuals without computer experience, who failed ICT core or "opted out" of the computer-based assessment score particularly poorly in numeracy.



The link between proficiency in literacy and numeracy and proficiency in managing information in digital environments raises some interesting issues. High levels of proficiency in literacy and numeracy go hand in hand with high levels of proficiency in problem solving in digital environments. On the other hand, low levels of proficiency in literacy and particularly in numeracy may be significant barriers to using ICT applications effectively to manage information. The fact that adults who fail the ICT core have generally low proficiency in literacy and numeracy suggests that low literacy may hinder the acquisition of basic ICT skills. In addition, even if adults have some computer skills, it is difficult for those with low levels of proficiency in literacy and numeracy to handle many of the information management and information processing tasks that they are likely to encounter in a society where the use of online applications – for shopping, interaction with public authorities and service providers, and accessing information – is common, if not the norm. Given that text-based information occupies a considerable portion of the online world, access to that world should be seen in terms of proficiency in literacy as well as in technology. The digital divide may also thus reflect a literacy divide.

COMPARISON OF THE RESULTS FROM THE SURVEY OF ADULT SKILLS (PIAAC) WITH THOSE OF PREVIOUS SKILLS SURVEYS

The Survey of Adult Skills was designed to provide reliable comparisons with the results of the International Adult Literacy Survey (IALS), which was administered in 21 countries between 1994 and 1998, and the Adult Literacy and Life Skills Survey (ALL), which was administered in 13 countries between 2003 and 2007. In total, 15 countries participating in the Survey of Adult Skills participated in IALS and 6 participated in both IALS and ALL. An overview of the relationship between the Survey of Adult Skills and IALS and ALL is provided in Chapter 5 of the *Reader's Companion* to this report (OECD, 2013).

A comparison of the results in IALS and ALL with those of the Survey of Adult Skills will be published separately. However, some data from previous surveys are examined in Chapter 5 of this report in an analysis of the relationship between proficiency and ageing.

Readers should note that the results from the Survey of Adult Skills cannot be directly compared with the results from IALS and ALL surveys (see OECD/Statistics Canada, 2000 and 2011, OECD/Statistics Canada, 2005). First, for literacy, the Survey of Adult Skills reports results for a single domain, that of *literacy*, which covers the reading of both *prose* and *document* texts as well as digital texts, while IALS and ALL report literacy as two separate domains: *prose literacy* and *document literacy*. Second, even though the concept of *numeracy* has remained largely unchanged between ALL (in which the concept was introduced) and the Survey of Adult Skills, there is significantly more information available from the Survey of Adult Skills for constructing the numeracy scale.

To allow for comparisons of change over time, the results for *prose* and *document literacy* in IALS and ALL have been combined and re-estimated so that that they can be presented on a common scale with those from the Survey of Adult Skills. The results for *numeracy* in ALL have also been re-estimated for the countries that participated in both of the surveys. Comparisons between the results of the Survey of Adult Skills and previous surveys should, therefore, be made only on the basis of the revised data from IALS and ALL.

SUMMARISING PERFORMANCE ACROSS COUNTRIES

Figure 2.13 summarises the proficiency of the adult populations in participating countries in each of the three domains assessed, or in literacy and numeracy only for those countries that did not assess problem solving in technology-rich environments. It provides an overview of the average proficiency in each participating country relative to the average in each domain. In considering literacy and numeracy, it indicates whether the mean score for the population is greater than, equal to, or less than the average across countries. In considering problem solving in technology-rich environments, it shows whether the proportion of the total population performing at Level 2 or 3 on the problem solving in technology-rich environments scale is greater than, equal to, or less than the average.

The adult populations in Finland, the Netherlands, Norway and Sweden have above-average levels of proficiency in all three domains. Of these countries, Finland has the highest average score in literacy and numeracy, while Sweden has the largest proportion of adults scoring at Level 2 or 3 in problem solving in technology-rich environments. Estonia, Flanders (Belgium) and Japan have above-average mean scores in both literacy and numeracy and both Flanders (Belgium) and Japan have around the average proportion of adults scoring at Level 2 or 3 in problem solving in technology-rich



environments. Australia has a mean score statistically significantly above the average in literacy, while Denmark has above-average mean scores in numeracy and they also have statistically significantly larger-than-average proportions of adults scoring at Level 2 or 3 on the problem solving in technology-rich environments scale. Austria, the Czech Republic, Germany and the Slovak Republic have statistically significantly above-average mean scores only in numeracy. Canada has a statistically significantly larger-than-average proportion of adults scoring at Level 2 or 3 in problem solving in technology-rich environments.

■ Figure 2.13 ■

Summary of proficiency in key information-processing skills

Mean proficiency scores of 16-65 year-olds in literacy and numeracy, and the percentage of 16-65 year-olds scoring at Level 2 or 3 in problem solving in technology-rich environments

Significantly **above** the average
Not significantly different from the average
Significantly **below** the average

OECD	Literacy Mean score	Numeracy Mean score	Problem solving in technology-rich environments % at Level 2 or 3
National entities			
Australia	280	268	38
Austria	269	275	32
Canada	273	265	37
Czech Republic	274	276	33
Denmark	271	278	39
Estonia	276	273	28
Finland	288	282	42
France	262	254	m
Germany	270	272	36
Ireland	267	256	25
Italy	250	247	m
Japan	296	288	35
Korea	273	263	30
Netherlands	284	280	42
Norway	278	278	41
Poland	267	260	19
Slovak Republic	274	276	26
Spain	252	246	m
Sweden	279	279	44
United States	270	253	31
Sub-national entities			
Flanders (Belgium)	275	280	35
England/N. Ireland (UK)	272	262	35
Average	**273**	**269**	**34**
Partners			
Cyprus[1]	269	265	m

1. See notes at the end of this chapter.

Notes: Cyprus,[1] France, Italy and Spain did not field the problem solving in technology-rich environments assessment.
Countries are ranked in alphabetical order.
Source: Survey of Adult Skills (PIAAC) (2012), Tables A2.4, A2.8 and A2.10a.
StatLink http://dx.doi.org/10.1787/888932900688

Fourteen of twenty-two countries have mean scores statistically significantly below average in at least one of the domains. Ireland, Poland and the United States have below-average mean scores in all of the domains. Italy and Spain have statistically significantly below-average mean scores in both literacy and numeracy (neither of these countries participated in the problem solving in technology-rich environments assessment). Austria has a below-average mean score in literacy, Canada has a below-average mean score in numeracy, and Korea has a below-average mean score in numeracy and in problem solving in technology-rich environments.



SUMMARY

Being able to read, understand and respond appropriately to numerical and mathematical information are skills that are essential for full social and economic participation. In modern societies, much information and knowledge is stored and transmitted in written form, and many interactions and transactions with others, whether of a personal or official nature, involve texts of some sort, such as letters, memos and forms. Increasingly, accessing, analysing and communicating information takes place through the use of digital devices and applications, such as personal computers, smart phones and the Internet. The capacity to use these devices intelligently to manage information is thus of growing importance in many aspects of modern life.

One striking feature of the results is the extent of convergence between participating countries in terms of the proficiency of adults in literacy, numeracy and problem solving in technology-rich environments despite differences in the composition of the respective populations, the history of educational participation and the starting point and rate of economic growth over the last half-century. Fourteen countries had mean literacy scores within the range of 267 to 276 points, a difference of 9 score points; 16 countries had mean numeracy scores that differed by 20 score points or less.

At the same time, in all participating countries there are significant proportions of the adult population who have relatively poor skills. In all but one country, at least 10% of adults aged 16-65 are proficient at or below Level 1 in the domains of literacy or numeracy. This is a level at which individuals can regularly complete simple reading and numeracy tasks, such as locating information in a short text or performing simple one-step arithmetic operations, but have trouble with extracting information from longer and more complex texts or performing numerical tasks involving several steps and mathematical information represented in different ways.

In addition, there are adults with no or extremely limited ICT skills in all of the participating countries. From around 7% to 27% of the adult population reported having no experience in the use of computers or lacked the most elementary computer skills, such as the ability to use a mouse. In addition, there are also adults who appear to lack confidence in their ability to use computers, primarily because they use them infrequently. Of the adults undertaking the assessment, most were proficient at Level 1, which involves the use of familiar applications to solve problems that involved few steps and explicit criteria, such as sorting e-mails into pre-existing folders. As would be expected, young adults are less likely than their older compatriots to lack computer skills or to have low proficiency in problem solving in technology-rich environments. At the same time, there are several countries in which the proportion of young adults who can effectively solve more complex problems in computer environments is surprisingly low.

Both the existence of a reasonable proportion of adults with no or very limited ICT skills and the fact that, in most countries, a large proportion has low skills in managing information in digital environments suggests that governments may need to rethink the way they conceive and implement some aspects of policies relating to the digital economy, particularly concerning e-government and online access to public services.

Connectivity alone is insufficient to provide real access to online information and services. Access to the digital world is conditional, to some extent, on proficiency in literacy and numeracy. Low levels of proficiency in literacy and numeracy can be significant barriers to using ICT applications effectively to manage information. First, poor literacy may hinder the acquisition of basic ICT skills. Second, even if they have some computer skills, it is difficult for adults with low levels of proficiency in literacy and numeracy to handle many of the information management and information processing tasks encountered in online environments.

In most countries, younger adults have higher proficiency than their older peers in all three of the skills assessed. In several countries, however, the proficiency in literacy and/or numeracy of the youngest cohort is at the same level, or lower, than that of the overall population. Given the typical patterns of the evolution of proficiency over a lifetime (see Chapter 5), the implication for these countries is that the proficiency of their adult population is likely to decline over the next decades unless action is taken to improve the proficiency of the cohorts of young people who will enter adulthood in the next decades. This includes improvements in the teaching of literacy and numeracy in schools and providing older adults with opportunities to develop and maintain their skills as they age.

As is shown in subsequent chapters, low proficiency does not necessarily lead to poor outcomes. Most adults with low proficiency in literacy are employed, for example. However, such adults are at far greater risk than adults with high proficiency of being unemployed or inactive and of earning low wages if they are employed (see Chapter 6). They also report poorer health, lower levels of trust in others, and a sense that they have little impact on the political process (see Chapter 6).



In the context of an ongoing shift towards service industries, particularly involving the analysis and communication of information, and the pervasiveness of ICTs in all aspects of life, individuals with poor levels of proficiency in information-processing skills are likely to find themselves at even greater risk. Low proficiency in these skills will increasingly limit adults' access to many basic services, to better-paying and more-rewarding jobs, and to the possibility of participating in further education and training, which is crucial for developing and maintaining skills (see Chapter 5). At the national level, if large proportions of the adult population have low proficiency in information-processing skills, the introduction and adoption of productivity-improving technologies and work organisation may be hampered; and that, in turn, could stall improvements in living standards.

In addition to highlighting areas of concern for governments, the results of the assessment also identify areas in which countries can learn from each other. There are countries that have been more successful than others in ensuring higher levels of proficiency in literacy and numeracy and in minimising the performance gap between low and high performers. In the area of problem solving in technology-rich environments, for example, the Nordic countries and the Netherlands have been far more successful than other countries in creating an environment in which only small proportions of adults lack experience with computers or have only the most basic computer skills.

Notes

1. Writing skills were not directly assessed in the Survey of Adult Skills, which is mainly due to the difficulty of assessing writing in a reliable and valid way in an international comparative assessment.

2. Four proficiency levels have been defined for the domain of problem solving in technology rich-environments rather than six in the case of literacy and numeracy. This reflects the far smaller number of items that are used in the assessment of problem solving (16 items) and, thus, available to describe the scale, than used in the assessment of literacy (58 items) and numeracy (56 items).

3. The common denomination of the levels (e.g. Level 1, 2 or 3) does not imply any underlying similarity of the factors affecting the difficulty of tasks at any given level in each of the domains. The descriptors for each of the levels in each of the domains reflect the features of the relevant framework and the specific factors determining difficulty in each domain.

4. The division between Level 2 and below and Level 3 and above in literacy and numeracy and Level 2 and above and Level 1 and below in problem solving in technology-rich environments in the figures showing the distribution of the population by proficiency level has been made for ease of presentation. It does not reflect a judgement that Level 3 in literacy and in numeracy or Level 2 in problem solving represents a performance benchmark in any sense.

5. The average difference in scores between a person with n completed years of education and one with n+1 years should not be seen as an estimate of the 'learning gain' associated with an additional year of education. The relationship between proficiency and education is complex. Proficiency in literacy, for example, is not developed only through education. The direction of causality between education and proficiency is also two way. This is discussed in more detail in Chapters 3 and 5.

6. This effectively treats literacy-related non-respondents as having proficiency scores in literacy at the average for the country as a whole.

7. The proficiency in literacy of this group is *unknown*, even if there are reasons to believe that in most cases it will be low. It may also vary considerably between countries. The purpose of the analysis is to show what the effect on country mean scores would be if all members of this group had a score of 85 on the literacy scale when tested in *the test language(s) of their country of residence*. The score of 85 is chosen to illustrate what the impact on country means would be if the literacy-related non-respondents all had *very low* scores. Some 98.7% of total respondents have scores higher than 85 points in literacy.

8. The mean literacy scores of 16-24, 25-34, 35-44, 45-54 and 55-65 year-olds are reported in Figure 3.1 (L).

9. See previous note.

10. See notes regarding Cyprus below.

11. This effectively treats literacy related non-respondents as having proficiency scores in numeracy identical to the average for the country as a whole.

12. The proficiency in numeracy of this group is *unknown*, even if there are reasons to believe that in most cases it will be low, especially when these individuals are assessed in the language(s) of their country of residence. It may also vary considerably between countries. The purpose of the analysis is to show what the effect on country mean scores would be if all members of this group had a score of 85 on the numeracy scale when tested in *the test language(s) of their country of residence*. The score of 85 is chosen to illustrate the impact on country means if the literacy-related non-respondents all had *very low* scores. Some 98.5% of total respondents have scores higher than 85 points in numeracy.

13. Chapters 3 and 5 provide more detailed discussions of the relationship between age and proficiency.

14. See previous note.

15. Standard deviations can also be found in Table A2.3 in Annex A.

16. For this reason, the presentation of results focuses on the proportions of the population by proficiency level rather than the comparison of mean proficiency scores.

17. This may represent an over-estimate of the proportion of the Japanese adult population with very low levels of ICT skills. In particular, the proficiency in literacy and numeracy of these respondents in Japan was far higher compared to that of adults reporting no prior computer use in other countries. At the same time, the majority of those failing the core in Japan reported limited use of ICTs in everyday life.

18. Presumably they regarded themselves as having a low level of ICT skills, or felt more comfortable with or believed that they would perform better on the paper-based version of the assessment than on the computer-based assessment.

Notes regarding Cyprus

Note by Turkey: The information in this document with reference to "Cyprus" relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Turkey recognises the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of the United Nations, Turkey shall preserve its position concerning the "Cyprus issue".

Note by all the European Union Member States of the OECD and the European Union: The Republic of Cyprus is recognised by all members of the United Nations with the exception of Turkey. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus.

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3

The Socio-Demographic Distribution of Key Information-Processing Skills

This chapter analyses the results of the Survey of Adult Skills (PIAAC) to describe how proficiency in literacy, numeracy and problem solving in technology-rich environments is distributed among individuals according to various socio-demographic characteristics, including socio-economic background, educational attainment, immigrant and/or foreign-language background, age, gender and type of occupation. The perspective is also widened to report on countries' average proficiency when considering skills in the context of these variables.



This chapter examines the relationship between proficiency in literacy, numeracy and problem solving in technology-rich environments and a number of important socio-demographic characteristics – age, gender, socio-economic background, educational attainment, immigrant and language background, and type of occupation. To what extent does proficiency vary between men and women, between people of different ages and backgrounds, between adults with different educational qualifications and who work in different types of jobs? Does the strength of these relationships differ between countries? Knowing how proficiency is distributed across different groups in the population within countries, and how these distributions vary between countries, can help policy makers and others determine the strengths and weaknesses of national polices and institutional arrangements related to acquiring information-processing skills, identify groups at risk of poor outcomes and exclusion due to low levels of proficiency in these key skills, and target assistance to them. Such information is relevant not only in helping to identify possible problems but also in indicating where countries can learn from others.

The chapter describes the distribution of proficiency across the socio-demographic groups of interest within and between countries, and provides an overview of the policy interest in the relationship between proficiency in literacy, numeracy and problem solving in technology-rich environments and each of the characteristics examined. Explanations – and implications – of the observed relationships are also discussed.

Among the main findings:

- Educational attainment has a strong positive relationship to proficiency. Adults with tertiary-level qualifications have a 36 score-point advantage on the literacy scale, on average, over adults who have not attained upper secondary education, after other characteristics have been taken into account. A 36 score-point difference is estimated to be the equivalent of around five years of additional education. There are a number of countries in which adults with low levels of educational attainment have average proficiency scores at the bottom end of Level 2 on both the literacy and numeracy scales. The combination of poor initial education and lack of opportunities to improve proficiency has the potential to evolve into a vicious cycle, in which poor proficiency leads to fewer opportunities to further develop proficiency and vice versa.
- Immigrants with a foreign-language background have significantly lower proficiency in literacy, numeracy and problem solving in technology-rich environments than native-born adults, whose first or second language learned as a child was the same as that of the assessment, even after other factors are taken into account. In some countries, the time elapsed since arrival in the receiving country appears to make little difference to the proficiency of immigrants, suggesting either that the incentives to learn the language of the receiving country are not strong or that policies that encourage learning the language of the receiving country are of limited effectiveness.
- While older adults generally have lower proficiency than their younger counterparts, the extent of the gap between generations varies considerably among countries. This is likely to be related to both quality of initial education and the opportunities offered to adults to undertake further training or to engage in practices that help to maintain and develop proficiency over their lifetimes. Governments cannot change the past; however, policies designed to provide high-quality initial education and ongoing opportunities for learning can go some of the way towards ensuring that ageing adults maintain their skills.
- The low levels of proficiency observed among workers in elementary occupations are found in many countries and should be of concern to policy makers and employers. Low levels of proficiency in information-processing skills among workers may hamper the introduction of changes in technologies and organisational structures that can improve productivity. They may also place workers at considerable risk in the event that they lose their jobs or have to assume new or different duties when new technologies, processes and forms of work organisation are introduced.
- The gender gap in proficiency is small. Men have higher scores in numeracy and problem solving in technology-rich environments than women, on average, but the gap is not large and is further reduced when other characteristics are taken into account. Among younger adults, the gender gap in proficiency is negligible.

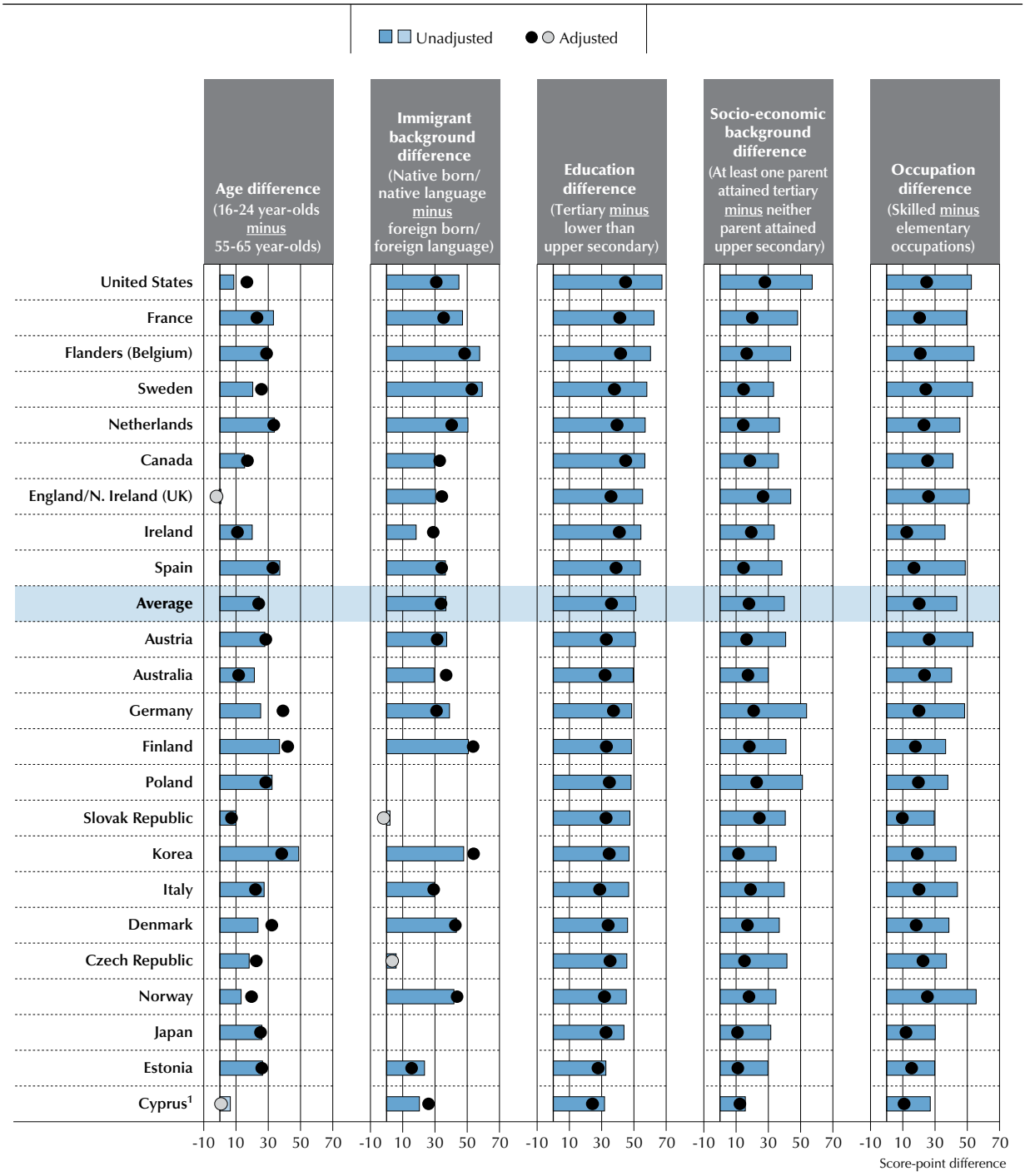
AN OVERVIEW OF SOCIO-DEMOGRAPHIC DIFFERENCES IN PROFICIENCY

The differences in proficiency associated with the socio-demographic characteristics examined are summarised in Figure 3.1(L), both before and after accounting for the impact of other characteristics. Results based on the literacy scale are used as an example, but similar results are found for numeracy, although further analysis is needed regarding results on the problem solving in technology-rich environments scale.[1] Only the proficiency differences between selected contrast groups are highlighted in Figure 3.1(L) to reveal the relative strength of each characteristic examined.

■ Figure 3.1 (L) ■

Synthesis of socio-demographic differences in literacy proficiency

Adjusted and unadjusted difference in literacy scores between contrast categories within various socio-demographic groups



1. See notes at the end of this chapter.

Notes: Statistically significant differences are marked in a darker tone. Estimates based on a sample size less than 30 are not shown (i.e. immigrant background differences in Japan and Poland). Unadjusted differences are the differences between the two means for each contrast category. Adjusted differences are based on a regression model and take account of differences associated with the following variables: age, gender, education, immigration and language background, socio-economic background, and type of occupation. Only the score-point differences between two contrast categories are shown, which is useful for showing the relative significance of each socio-demographic variable vis-a-vis observed score-point differences. For more detailed regression results, including for each category of each variable included in the model, see Table B3.17 (L) in Annex B.

Countries are ranked in ascending order of the unadjusted difference in literacy scores (tertiary minus lower than upper secondary).

Source: Survey of Adult Skills (PIAAC) (2012), Tables A3.1(L), A3.2(L), A3.6(L), A3.9(L), A3.15(L) and A3.19(L).

StatLink http://dx.doi.org/10.1787/888932900821



Before accounting for other characteristics, educational attainment is found to have the strongest relationship to proficiency across countries, followed by occupation, socio-economic background, immigration and language background, age and gender (Figure 3.1 [L]). When other characteristics are accounted for, educational attainment continues to have the strongest relationship to literacy proficiency, followed by immigration and language background, age, occupation, socio-economic background and gender. Gender is not included in Figure 3.1(L) since the differences between men and women are insignificant in most countries (see Table A3.1 [L] in Annex A).

Given the role of formal education, particularly schooling, in developing reading, mathematical and analytical skills, it is not surprising that educational attainment stands out as the strongest socio-demographic characteristic associated with proficiency in literacy and numeracy. On average across countries, adults with some tertiary education score about 36 points higher on the literacy scale than those with lower than upper secondary education, even after accounting for other characteristics. In all countries, the variation in literacy proficiency associated with education is reduced when other socio-demographic characteristics are accounted for. Net differences between high- and low-educated adults range from about 25 to over 40 score points on the literacy scale. The difference is especially large in Canada and the United States (45 points).

Immigration and language background is also strongly associated with proficiency in literacy and numeracy. In countries with large immigrant populations, the advantage of a native-born individual (whose first or second language learned as a child was the same as that of the assessment) over an immigrant (whose first or second language learned as a child was different from the language of assessment) is between 59 score points (Sweden) and 29 score points (Australia) on the literacy scale. After accounting for other characteristics, net differences remain large in many countries.

Proficiency in literacy and numeracy is clearly associated with occupation. In all countries, the variation in literacy proficiency associated with occupation is reduced substantially when other socio-demographic characteristics are accounted for. This is primarily because adults in highly skilled jobs usually have high levels of education. Nevertheless, differences remain even after accounting for other characteristics, which suggests that the nature of work, and what people do as part of their work, may play a role in maintaining and developing information-processing skills. This is considered in greater detail in Chapter 5.

Age is strongly related to proficiency in literacy and numeracy. In most countries, differences in proficiency related to age change little and remain substantial when other socio-demographic characteristics, such as educational attainment, are taken into account. Net differences in literacy proficiency that are related to age are largest in Finland, followed by Germany and Korea.

Adults from socio-economically advantaged backgrounds have higher average proficiency in the three domains assessed in the survey, than those from disadvantaged backgrounds (socio-economic background is proxied by parents' educational attainment). Score differences on the literacy scale related to socio-economic background are largest in Germany, Poland and the United States, while they are smallest in Estonia, Japan and Korea. After accounting for other characteristics, the differences in literacy proficiency associated with socio-economic background are substantially smaller. This is because an individual's educational attainment often mirrors that of his or her parents.

The relationships between proficiency and socio-demographic characteristics are explored in more detail in the remaining sections of this chapter. Age, gender and socio-economic background are discussed first, followed by education, immigration and language background, and type of occupation. Differences in proficiency are reported both before and after accounting for other characteristics. In addition, differences related to particular combinations of characteristics are also considered. Certain combinations of characteristics have an even stronger relationship to proficiency than individual characteristics considered in isolation. In particular, the interaction of low levels of educational attainment, being an immigrant and working in low-skilled occupations with age, gender and socio-economic background is explored, providing an insight into the combinations of characteristics that increase the risk of scoring at lower levels of proficiency in information-processing skills.

DIFFERENCES IN SKILLS PROFICIENCY RELATED TO AGE

Understanding the relationships between age and proficiency in literacy, numeracy and problem solving in technology-rich environments is important for policy makers concerned with lifelong learning, and the capacity of an ageing society and workforce to adapt efficiently to changing technologies and skills demands. To this end, the Survey of Adult Skills (PIAAC) covers an age range extending from the end of compulsory schooling (16 years) to retirement (65 years) at the time they were surveyed, in other words, persons born between 1947 and 1996.



In interpreting the observed differences in proficiency across age groups, it is important to recall that the survey offers a snapshot of the proficiency of adults of different ages at a particular point in time rather than a picture of the proficiency of an age cohort at different points in time. While the observed differences in proficiency by age may reflect age-related cognitive maturation and decline, the strength of formative influences on proficiency, such as those from the education system and the world of work, will vary considerably according to age in most countries. For example, in most of the countries participating in the Survey of Adult Skills (PIAAC), the majority of people born in the 1950s (i.e. aged 53-62) left school without completing upper secondary education, whilst for those born in the 1980s and 1990s completion of upper secondary education became the norm. In addition, the content and organisation of secondary schooling has evolved considerably since the 1960s. Many of the factors that help to explain age-related differences in proficiency, including the quantity and quality of the education and training received, cannot be captured in a single study. Nonetheless, a high-quality and cross-national snapshot of age-related differences in skills proficiency provides information about the influence of important changes in society, such as the expansion of education, demographic shifts and immigration, and on the acquisition, maintenance and potential loss of skills over a lifetime.

The findings show that, in most countries, there is a close relationship between proficiency in the information-processing skills assessed and age. Literacy proficiency, for example, typically peaks among 25-34 year-olds and is lowest among those over 55 (Figure 3.2 [L]). Perhaps unsurprisingly, the gap between the old and the young is particularly marked in the domain of problem solving in technology-rich environments. The fact of having lived from an early age in a world in which information technologies were already part of the landscape is likely to have conferred a considerable advantage to young people compared to their older peers, for whom these technologies represent a novelty they have had to adapt to.

The extent of the gap in proficiency between the young and the old varies considerably among countries. The relationship of proficiency to age may reflect the influence of other characteristics that are associated with both age and proficiency. For example, the United States, which has had high rates of participation in post-secondary education over the entire post-war period, has relatively small differences in proficiency between older and younger adults. Korea, where a larger proportion of young people participated in more education than their older counterparts, has a very large generation gap in proficiency (see Box 3.1).

Box 3.1. **Korea: Age-related differences in skills proficiency**

Korea has been particularly successful in raising the educational attainment rate over a relatively short period of time. In 1970, about 67% of the labour force had a primary education, 26% had a secondary education, and about 6% had a university-level education. In three decades, Korea achieved universal primary and secondary education, and by 2010 Korea had the largest proportion of 25-34 year-olds who had attained at least an upper secondary education among all OECD countries. Some 98% of 25-34 year-olds in Korea have attained an upper secondary education – a 55 percentage-point increase over the proportion of 55-64 year-olds with that level of education. In addition, 65% of 25-34 year-olds in Korea have completed tertiary education – again, the largest proportion of adults in this age group, among all OECD countries, who have completed this level of education. Korea's 15-year-olds are also high performers in the triennial OECD Programme for International Student Assessment (PISA) surveys.

This is partly due to Korea's rapid economic growth and strong emphasis on education since 1962. The economy grew at an annual rate of 7.5% between the mid-1970s and the mid-1980s. The country's emphasis on education and training boosted productivity and further accelerated economic growth, turning the country into a high-tech and export-led economy.

In fact, the age variation in literacy proficiency is largest in Korea. It is also large in Finland and Germany, whilst lowest in England/Northern Ireland (UK), Ireland and the Slovak Republic. In addition to changes in the quantity of education received by younger and older cohorts, changes in the quality of initial education in different countries may also be a factor to consider. Differences in the quality of education received by different age cohorts would be expected to be reflected in their measured proficiency. A proficiency gap between younger and older cohorts, in favour of the young,



would indicate improvements in the quality of initial education over time. This seems to be a plausible explanation for the large gaps in proficiency between the young and old in Finland and Korea. Both countries were relatively less developed in the 1950s and 1960s than many of the other countries that participated in the Survey of Adult Skills (Korea, in particular, underwent rapid economic development during the post-war period) and both countries are high performers in PISA.

By contrast, the relatively small performance gap between the young and the old in Australia and the United States is consistent with evidence that the performance of secondary-school students on standardised tests of literacy and numeracy has changed little in these countries since the 1970s (see Rothman, 2002 for Australia and Perie, Moran and Lutkus, 2005 for the United States). The extent to which the age-related differences in proficiency can be attributed to differences in the quality of education received by different age groups should be further examined.

There are probably other factors at work that account for this gap. One may be the differences among countries in the opportunities available to adults to further develop and maintain their key information-processing skills, either through education and training or in the course of their working lives. Information-processing skills can be lost as well as maintained and enhanced. The relationship between the presence or absence of opportunities to further develop proficiency – whether they are in the education system, at work or in other contexts – and the level of proficiency is likely to be mutually reinforcing. A lack of such opportunities can create age-related inequities and a vicious cycle of exclusion from skills-related development activities, as people grow older. Thus, developing and maintaining skills over a lifetime is likely to depend not only on how well developed adult learning systems are in different countries, but also how work is stratified and organised among different socio-demographic groups. Some of these factors are examined in further detail in Chapter 5.

Accounting for other socio-demographic characteristics has little impact on observed differences in skills proficiency related to age. With few exceptions, the size of the gap in proficiency between 16-24 year-olds and 55-65 year-olds in literacy changes little when gender, educational attainment, type of occupation and socio-economic, immigrant and language background are accounted for. Other practice-related factors that are associated with both age and proficiency, such as the extent of using ICTs, are considered further in Chapter 5.

Proficiency in literacy and numeracy among older and younger age groups

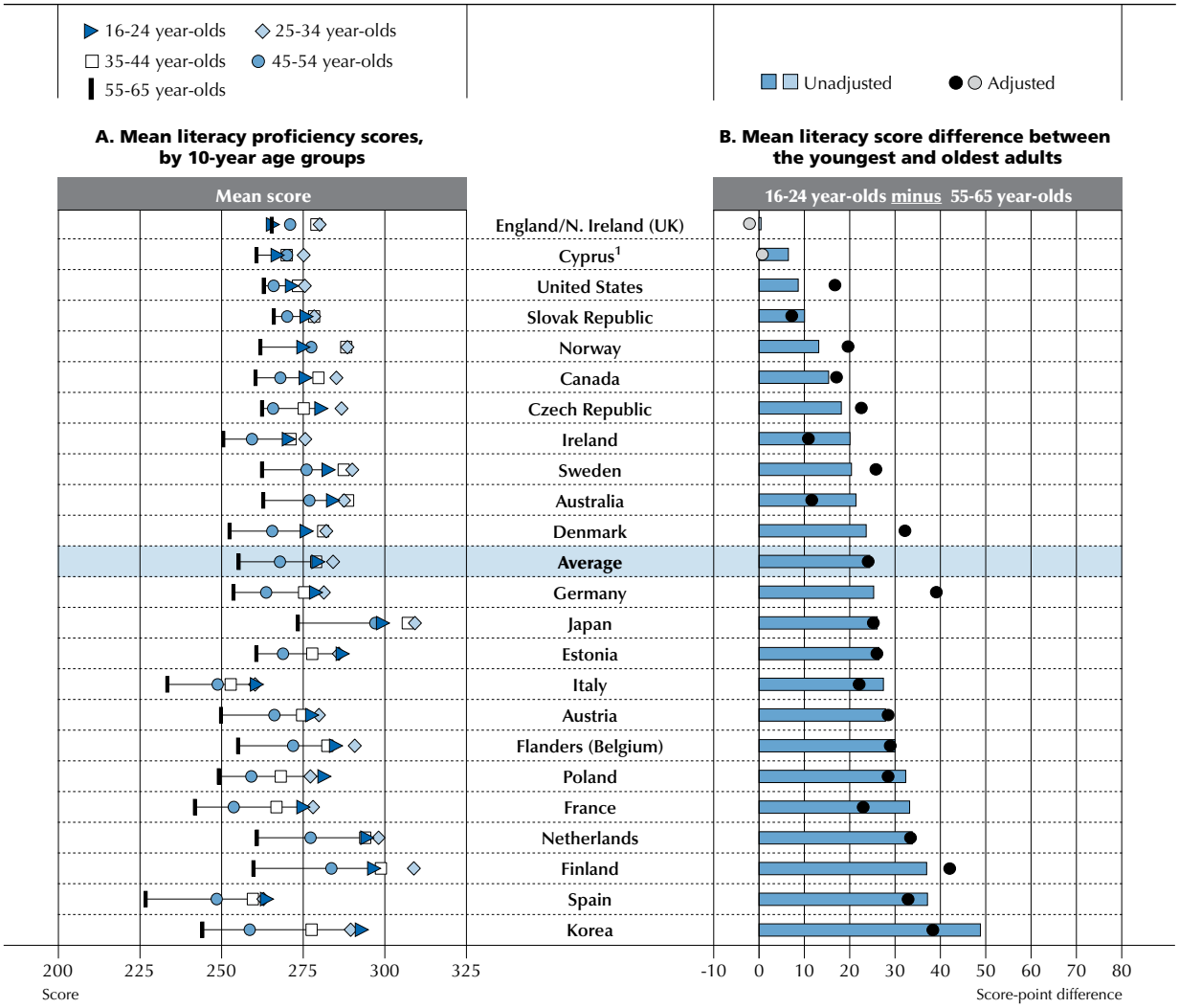
On average across countries, older adults score lower on the literacy scale than any other age group (Figure 3.2 [L]). Only in England/Northern Ireland (UK) do adults aged 55-65 score about the same as 16-24 year-olds. In nearly all cases, adults aged 45-54 follow closely behind, with a higher score, on average, than older adults, but with lower scores than all other age cohorts. The average score among 55-65 year-olds is 255 points (Level 2); among adults aged 45-54 it is 268 points (Level 2). By contrast, the average scores for adults aged 16-24 (280 points), 25-34 (284 points), and 35-44 (279 points) all correspond to Level 3.

There are wide variations in the mean proficiency among older adults across countries, suggesting that the lower average scores in this group are affected not only by the process of biological ageing, but also by differences in education and labour-market structures that can enable adults to develop and maintain their skills as they age. In literacy, older adults score lowest, on average, in Spain (227 points) and Italy (233 points). In Japan, older adults score highly (273 points), on average, in comparison to older adults in all other countries and, in fact, score higher than young people aged 16-24 in England/Northern Ireland (UK), Ireland, Italy, Spain and the United States. In Austria, Denmark, France, Germany, Ireland, Korea and Poland, and especially Italy and Spain, older adults score, on average, below the mean for older adults. Similar results are found for numeracy. However, in most countries the gap between the proficiency of 16-24 year-olds and 55-65 year-olds is smaller in numeracy than in literacy.

Young people aged 16-24 tend to score higher on the literacy scale than adults aged 45-65, but not always higher than adults aged 25-44. One explanation is that adults tend to continue to develop their key information-processing skills beyond the age of 24. Alternatively, it may reflect changes in the quality of the education and training received by the different age groups. Only in Estonia, Korea, Poland and Spain do young people aged 16-24 score higher, on average, than any other age cohort. In Korea, for example, 16-24 year-olds score as high as those aged 25-34, but this might be due to significant improvements in the quality of compulsory schooling in Korea in recent years. In both Finland and Japan, 25-34 year-olds score higher than any other age cohort from any other country. A key distinguishing feature in Japan is that adults aged 35-44 score just as high as 25-34 year-olds.

■ Figure 3.2 (L) ■

Age differences in literacy proficiency



1. See notes at the end of this chapter.

Notes: Statistically significant differences in Panel B are marked in a darker tone. Unadjusted differences are the differences between the two means for each contrast category. Adjusted differences are based on a regression model and take account of differences associated with other factors: gender, education, immigration and language background, socio-economic background, and type of occupation. Only the score-point differences between two contrast categories are shown in Panel B, which is useful for showing the relative significance of age vis-a-vis observed score-point differences. All adults aged 16-65, including the non-employed, are in the analysis. For more detailed regression results, including for each category of each variable included in the model, see Table B3.17 (L) in Annex B.

Countries are ranked in ascending order of the unadjusted difference in literacy scores (16-24 year-olds minus 55-65 year-olds).

Source: Survey of Adult Skills (PIAAC) (2012), Tables A3.1 (L) and A3.2 (L).

StatLink http://dx.doi.org/10.1787/888932900840

Korea shows the largest difference in proficiency – 49 points – between younger and older adults on both the literacy and numeracy scales. Korea is followed by Spain on both the literacy (37-point difference) and numeracy scales (35-point difference), and Finland on the literacy scale (37-point difference). England/Northern Ireland (UK) and the United States show among the smallest differences between the two groups on both the literacy and numeracy scales. This is partly due to the combination of the relatively high average scores of older adults who have comparatively high levels of educational attainment, and the relatively low average scores of younger people.

Even when educational attainment, and socio-economic and immigrant background are accounted for, age continues to have a strong relationship to proficiency. In most countries, the size of the gap in proficiency in literacy between young and old is largely unaffected when accounting for other factors. Exceptions are Australia, Ireland and Korea, where the disadvantage among older adults decreases, and Denmark, Germany and the United States, where it increases.

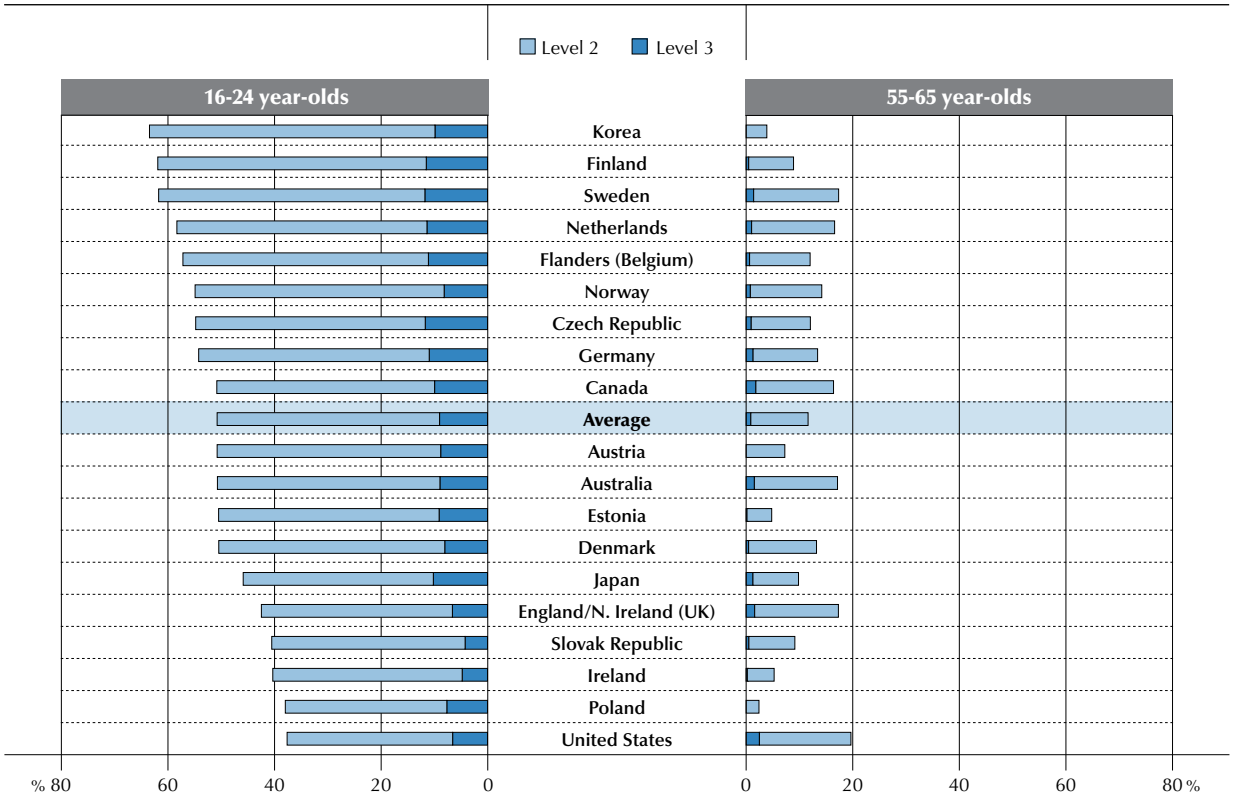
Proficiency in problem solving in technology-rich environments among older and younger age groups

On average across countries, 51% of people aged 16-24 score at Level 2 or higher on the problem solving in technology-rich environments scale (Figure 3.3 [P]). This varies from highs of 63% in Korea and 62% in Finland and Sweden to lows of 38% in Poland and the United States, and 40% in Ireland and the Slovak Republic. The proportion of young people who score at Level 3 is very small, ranging from 4% in the Slovak Republic to 12% in Sweden.

■ Figure 3.3 (P) ■

Problem-solving proficiency among younger and older adults

Percentage of adults aged 16-24 and 55-65 scoring at Level 2 or 3 in problem solving in technology-rich environments



Notes: Percentages on the problem solving in technology-rich environments scale are computed so that the sum of proportions for the following mutually exhaustive categories equals 100%: opted out of the computer-based assessment; no computer experience; failed ICT core test; below Level 1, Level 1, Level 2 and Level 3. For more detailed results for each category, see corresponding table mentioned in the source below.

Countries are ranked in descending order of the combined percentage of adults aged 16-24 scoring at Levels 2 and 3.

Source: Survey of Adult Skills (PIAAC) (2012), Table A3.3 (P).

StatLink http://dx.doi.org/10.1787/888932900859

Very few adults aged 55-65 score at Level 2 or 3 on the problem solving in technology-rich environment scale in any country. The largest proportions of this age group with higher scores are found in the United States, followed closely by England/Northern Ireland (UK), Australia, Sweden, the Netherlands and Canada.

DIFFERENCES IN SKILLS PROFICIENCY RELATED TO GENDER

Many OECD countries have made significant progress over the past few decades in narrowing the gender gap in education and employment. Results from PISA show that 15-year-old girls outperform boys in reading and have higher career aspirations (OECD, 2012a); and more women than men are now enrolled in tertiary education (OECD, 2012b). Despite these gains, inequities persist. Women are far less likely than men to pursue careers in science or technology; and, with few exceptions, women earn less than men with similar levels of education (OECD, 2012a). Data from the Survey of Adult Skills can be analysed to determine whether there are differences in skills proficiency between men and women and, if so, how they are related to differences between the genders in educational attainment and participation in the labour force.



On average, men have higher scores on the numeracy and problem solving in technology-rich environments scales than women. While the gender gap in favour of men is narrower on the literacy scale, in half the countries surveyed, the differences are not statistically significant. The picture is different among younger adults, however. In just under half the countries surveyed, there is no difference between young men and young women in their proficiency in numeracy. Young women and young men are, on average, equally proficient in literacy; and where there are small differences, it is young women who have higher scores (see Box 3.2).

Box 3.2. Gender differences in skills proficiency between younger and older adults

Gender differences in literacy and numeracy tend to be smaller, if they exist at all, in the youngest age group than in the entire population surveyed. In the domain of numeracy, men perform better than women overall, but among young adults gender differences are not statistically significant in about half of the surveyed countries. In the remaining countries, the difference in favour of men persists among young adults, but is generally smaller than that among the entire population. In the domain of literacy, gender differences – mostly in favour of men among the entire population – virtually disappear among young adults. The differences are statistically significant in only two countries (Estonia and Poland) and in both countries they are in favour of women (see Tables B3.1 [L] and B3.1 [N] in Annex B).

Given findings from previous studies, it is not surprising to observe gender-related differences in proficiency in numeracy and problem solving in technology-rich environments. In the Adult Literacy and Life Skills Survey, men had better results in numeracy than women when the entire adult population was considered and when only younger adults were considered. Greater computer use among men (see Box 3.3) probably contributes to gender differences in proficiency in problem-solving in technology-rich environments. More surprising is the near absence of gender-related differences in literacy proficiency among young adults. While PISA results show better reading performance among 15-year-old girls than among boys (e.g. OECD, 2009), the results for 16-24 year-olds show that the gender gap in literacy is narrow, if it exists at all; a difference in favour of women is observed in only a handful of countries.

Box 3.3. Gender differences in computer use

Gender differences in computer use, skills and attitudes have been widely reported over the past decades. But in many respects the gender gap has narrowed, particularly among younger cohorts. For example, a 1989 household survey in the United States found marked gender differences in computer use at home. But in 2003 women were as likely as men to use computers at home and more likely to use computers at work (United States Census Bureau, 2013). A 2005 survey of adults in the European Union found that in a number of activities related to computer use (e.g. having used a mouse to launch programmes, having copied a file), gender differences that can be found among adults aged 16-74 no longer exist or are very small for those aged 16-24 (Eurostat, 2013). Results from the Survey of Adult Skills (PIAAC) reported in Table B3.2 in Annex B confirm that gender differences in ICT use have narrowed, with most differences among youths aged 16-24 insignificant. Yet, gender differences in ICT use persist, on average, among adults aged 16-65. Men are found to use ICT at work significantly more often than women in 15 out of 23 countries participating in the Survey of Adult Skills, and in 9 out of 23 countries when it comes to ICT use outside of work.

Closing the gender gap in educational attainment has been an important step in reducing gender differences in skills, but more can be done. For example, evidence shows that girls and boys tend to absorb, and act on, gender stereotypes about school subjects early on in their schooling (OECD, 2012a). These stereotypes may influence young people's study choices, which, in turn, will determine which skills they will be equipped with when they enter the labour market and which jobs will be suitable for them. Later on, women and men often take very different paths through life. Women are less likely to participate in the labour force; and if they do participate, they are more likely to be employed part-time and less likely to reach the highest rungs of the career ladder (OECD, 2012a).

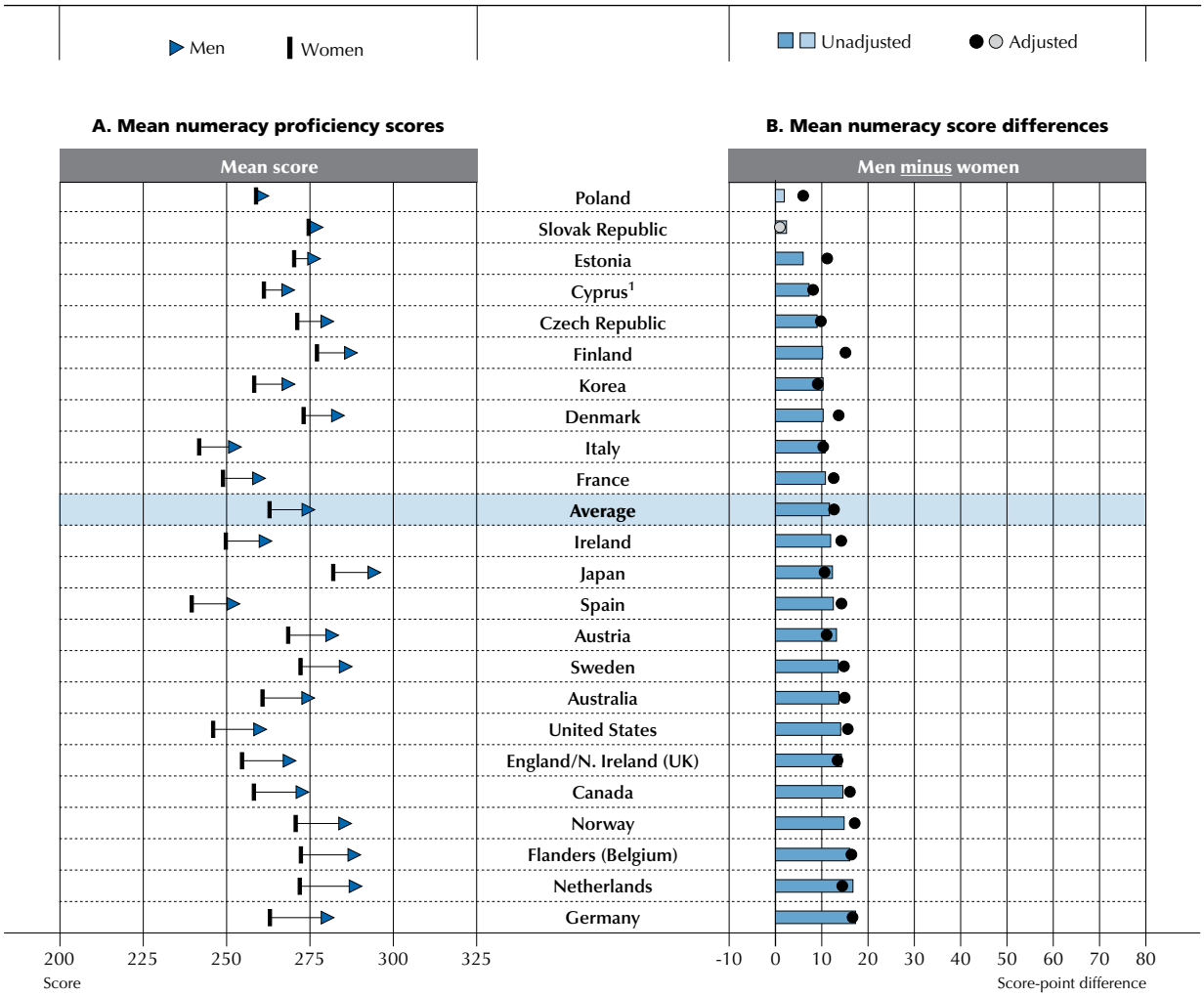
Policies to help eliminate gender differences in skills proficiency should target crucial stages of life. At the level of initial education, for example, policies can encourage the development of curricula and career guidance that are free of gender bias. For working adults, policies can be designed specifically to encourage women to participate in the labour force. These could include providing affordable and high-quality childcare, improving the work-life balance through such measures as flexible working hours, and ensuring that women have access to senior positions (OECD, 2012a).

Proficiency in literacy and numeracy among men and women

On average across countries, the mean score on the numeracy scale is higher for men than for women – by about 13 score points – for all surveyed countries (Figure 3.4 [N]). The difference is statistically significant in all but two countries, Poland and the Slovak Republic. The largest differences are found in Germany (17 points), the Netherlands (17 points) and Flanders (Belgium) (16 points).

■ Figure 3.4 (N) ■

Gender differences in numeracy proficiency



1. See notes at the end of this chapter.

Notes: Statistically significant differences in Panel B are marked in a darker tone. Unadjusted differences are the differences between the two means for each contrast category. Adjusted differences are based on a regression model and take account of differences associated with other factors: age, education, immigration and language background, socio-economic background and type of occupation. For more detailed regression results, see Table B3.17 (N) (available on line) in Annex B.

Countries are ranked in ascending order of the unadjusted difference in numeracy scores (men minus women).

Source: Survey of Adult Skills (PIAAC) (2012), Tables A3.1 (N) (available on line) and A3.4 (N).

StatLink http://dx.doi.org/10.1787/888932900878

Proficiency differences in literacy are more mixed and rather small. On average across countries, there is a 2 score-point difference in favour of men. In ten countries, men have higher mean scores on the literacy scale than women, with the largest differences observed in Korea, the Netherlands, Germany and Flanders (Belgium) (5- to 6-point difference). But in over half of the countries surveyed there is no statistically significant difference between men and women on the literacy scale. In Poland, however, women have higher mean scores than men (6-point difference).

Proficiency in problem solving in technology-rich environments among men and women

In all countries surveyed, a larger proportion of men than women are proficient at Level 2 or 3 on the problem solving in technology-rich environments scale (Figure 3.5 [P]). On average across countries, 36% of men are proficient at Level 2 or 3, compared to 32% of women. The difference in the proportion of men scoring at Level 2 or 3 compared to women is largest in Japan (11 percentage points), Austria, England/Northern Ireland (UK), Germany and the Netherlands (8 percentage points). The smallest differences are found in Australia and Canada (1 percentage point), and Estonia, Finland and the Slovak Republic (2 percentage points).

■ Figure 3.5 (P) ■

Problem-solving proficiency among women and men

Percentage of women and men scoring at Level 2 or 3 in problem solving in technology-rich environments



Notes: Percentages on the problem solving in technology-rich environments scale are computed so that the sum of proportions for the following mutually exhaustive categories equals 100%: opted out of the computer-based assessment; no computer experience; failed ICT core test; below Level 1, Level 1, Level 2 and Level 3. For more detailed results for each category, see corresponding table mentioned in the source below.

Countries are ranked in descending order of the combined percentage of men scoring at Levels 2 and 3.

Source: Survey of Adult Skills (PIAAC) (2012), Table A3.5 (P).

StatLink http://dx.doi.org/10.1787/888932900897

DIFFERENCES IN SKILLS PROFICIENCY RELATED TO SOCIO-ECONOMIC BACKGROUND

Growing up in a family with highly educated parents offers benefits that are compounded over a lifetime, from a good vocabulary to a taste for reading. Parents' educational attainment is closely linked to the socio-economic background of the parents and hence to the socio-economic background in which adults were raised. Socio-economic background is also directly and indirectly related to access to opportunities to develop information-processing skills. Adults from



disadvantaged backgrounds, for example, are at a greater risk of experiencing difficulties at school and in the labour market. Equity of opportunity, which implies fairness, can help to narrow these differences by affirming that personal and social circumstances should not be an obstacle to achieving one's potential. In turn, social mobility is also important for efficiency, as it ensures that individuals' talents do not go to waste simply because their opportunities were limited by their socio-economic circumstances (D'Addio, 2007).

The effect of socio-economic background on education trajectories and the development of literacy and numeracy skills are well-documented. Evidence from PISA reveals an association between socio-economic background and the performance of 15-year-old students in reading, mathematics and science in all participating countries (OECD, 2010). It is also clear that the impact of socio-economic background on the development of key information-processing skills can be reduced through well-designed policies, at least for school-age individuals. The PISA assessment shows that there are large variations among countries in the extent to which socio-economic background influences learning outcomes. Encouragingly, evidence also suggests that equity and excellence in education are not mutually exclusive. In other words, some countries achieve both high average performance and a weak or moderate association between socio-economic background and student performance (OECD, 2010). The Survey of Adults Skills provides the opportunity to examine the relationship between socio-economic background and proficiency in information-processing skills among a far wider age range and, therefore, to understand the extent to which different systems of post-compulsory education and training and adult learning succeed in ensuring equity of learning opportunities for all individuals, regardless of their socio-economic backgrounds.

The Survey of Adult Skills uses parents' educational attainment as a proxy for socio-economic background.[2] Three categories of background are distinguished: neither parent has attained upper secondary education; at least one parent has attained upper secondary education; and at least one parent has attained tertiary education. Measuring socio-economic background in this way offers insights into intergenerational social mobility: changes in social status across generations as opposed to changes during an individual's lifetime. The stronger the association between socio-economic background and skills proficiency, the lower is the level of intergenerational social mobility.

The pattern that emerges from the Survey of Adult Skills is clear and in line with the findings of previous surveys (e.g. the International Adult Literacy Survey and the Adult Literacy Life Skills Survey): adults from socio-economically advantaged backgrounds have higher scores on average than those from disadvantaged backgrounds. The strength of the association between skills proficiency and socio-economic background varies widely across countries and, within countries, between different age groups. In some countries, the relationship between parents' education and skills proficiency seems to have changed over time, which might reflect differences in compensatory mechanisms later in life. In Korea and the United States, for example, the relationship between socio-economic background and skills proficiency is much weaker among younger adults than among older adults, which may signal greater social mobility among young people (see Figures 3.8a [L] and 3.8b [L]). In other countries the opposite is true. This may reflect changes in educational attainment among those from different socio-economic backgrounds or changes in the quality of education. Improvements in attainment and/or the quality of education for those from disadvantaged backgrounds may weaken the relationship between socio-economic background and skills proficiency among younger adults. But such improvements may also occur when the relationship between socio-economic background and skills proficiency remains unchanged or becomes stronger. This may happen, for example, if those from advantaged backgrounds also benefit from improvements in attainment and/or in the quality of education.

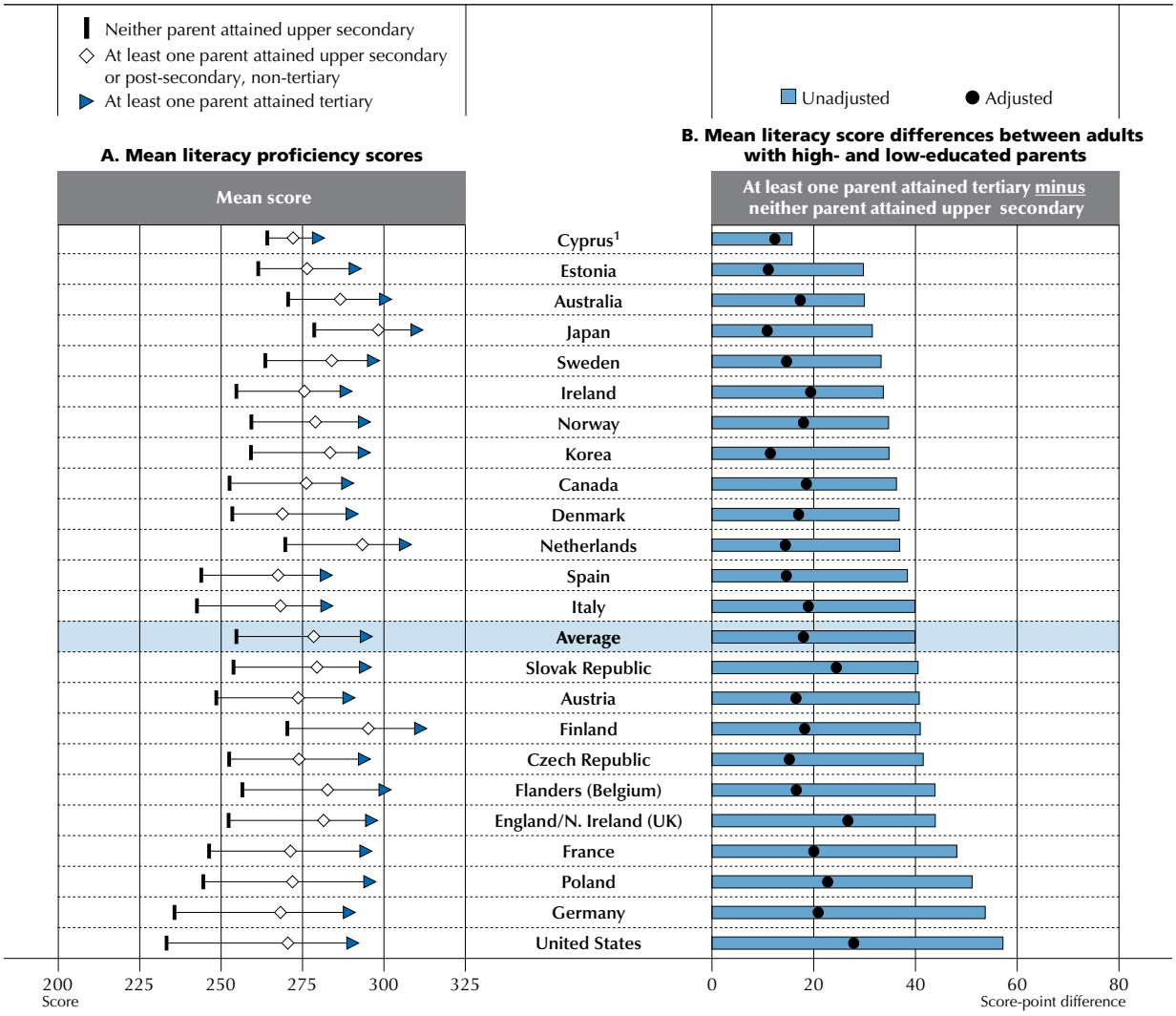
Breaking the cycle of disadvantage across generations and enhancing social mobility is a key policy challenge. Compulsory education should do as much as possible to ensure that school-leavers have the skills necessary to be successful in modern societies. At later stages, policies should ensure that there are opportunities to catch up. These may include, for example, specific adult learning courses or developmental education options as part of post-secondary education. It is essential to identify adults who require support and provide them with learning opportunities tailored to their needs.

Proficiency scores in literacy and numeracy among adults from socio-economically disadvantaged and advantaged backgrounds

On average across countries, adults with at least one parent who had attained tertiary education achieve the highest mean score (295 points) on the literacy scale, followed by those with at least one parent who had attained upper secondary education (278 points). Those with neither parent having attained upper secondary education tend, on average, to score lowest (255 points) (Figure 3.6 [L]).

■ Figure 3.6 (L) ■

Differences in literacy proficiency, by socio-economic background



1. See notes at the end of this chapter.

Notes: All differences in Panel B are statistically significant. Unadjusted differences are the differences between the two means for each contrast category. Adjusted differences are based on a regression model and take account of differences associated with other factors: age, gender, education, immigration and language background, and type of occupation. Only the score-point differences between two contrast categories are shown in Panel B, which is useful for showing the relative significance of socio-economic background vis-a-vis observed score-point differences. For more detailed regression results, including for each category of each variable included in the model, see Table B3.17 (L) in Annex B.

Countries are ranked in ascending order of the unadjusted difference in literacy scores (at least one parent attained tertiary minus neither parent attained upper secondary).

Source: Survey of Adult Skills (PIAAC) (2012), Tables A3.1 (L) and A3.6 (L).

StatLink http://dx.doi.org/10.1787/888932900916

The largest difference in both literacy and numeracy proficiency between adults with at least one parent who had high levels of educational attainment (i.e. from socio-economically advantaged backgrounds) and those with both parents who had low levels of educational attainment (i.e. from socio-economically disadvantaged backgrounds) is observed in the United States and Germany (57 and 54 points, respectively). These are also the countries with the lowest average literacy score among adults with neither parent having attained upper secondary education. In contrast, Australia, Estonia, Japan and Sweden show the smallest difference (28-33 points) between these two groups of adults. These countries also feature relatively higher scores among adults with neither parent having completed upper secondary education.

After accounting for the influence of other socio-demographic characteristics (age, gender, educational attainment, immigrant and language background and type of occupation), the size of the difference in proficiency scores between adults with a parent who had completed tertiary education and those with parents who had not completed

upper secondary education is reduced by around half. Among OECD countries that participated in the survey, the gap in favour of adults with a tertiary-educated parent falls from around 40 to 18 score points.

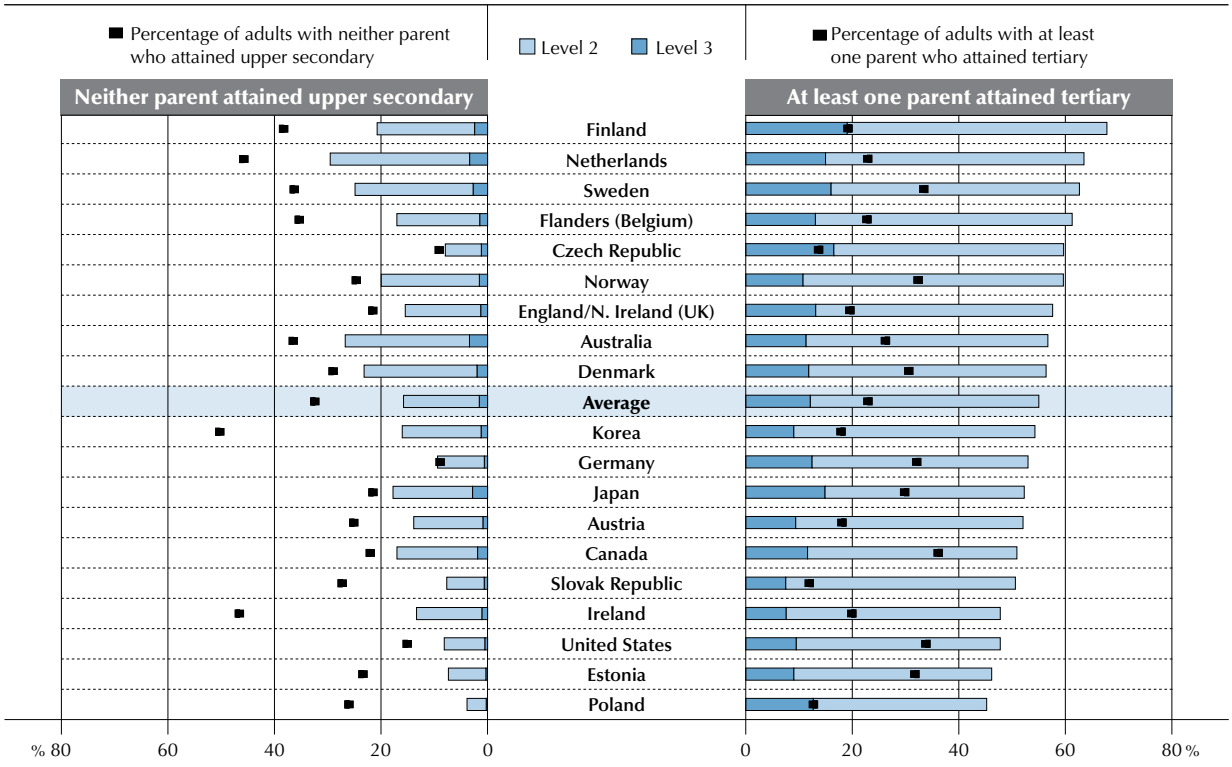
Proficiency levels in problem solving in technology-rich environments among adults from socio-economically disadvantaged and advantaged backgrounds

A small proportion of adults from disadvantaged backgrounds are proficient at Level 2 or 3 on the problem solving in technology-rich environments scale (Figure 3.7 [P]). The average is 16%, with proportions ranging from lows of about 3% to 8% in Estonia, the Czech Republic, Poland, the Slovak Republic and the United States, and, to highs of about 25% to 30% in Australia, the Netherlands and Sweden. On average across countries, 55% of adults from advantaged backgrounds score at Level 2 or 3. The lowest proportions (around 45% to 48%) are found in Estonia, Ireland, Poland and the United States. The highest proportions are found in the Netherlands, Sweden (both 63%) and Finland (68%).

■ Figure 3.7 (P) ■

Problem-solving proficiency among adults with low- and high-educated parents

Percentage of adults with low- and high-educated parents who score at Level 2 or 3 in problem solving in technology-rich environments



Notes: Percentages on the problem solving in technology-rich environments scale are computed so that the sum of proportions for the following mutually exhaustive categories equals 100%: opted out of the computer-based assessment; no computer experience; failed ICT core test; below Level 1, Level 1, Level 2 and Level 3. For more detailed results for each category, see corresponding tables mentioned in the source below.

Countries are ranked in descending order of the combined percentage of adults who score at Level 2 or 3 and at least one of whose parents attained tertiary education.

Source: Survey of Adult Skills (PIAAC) (2012), Tables A3.7 (P) and B3.5 in Annex B.

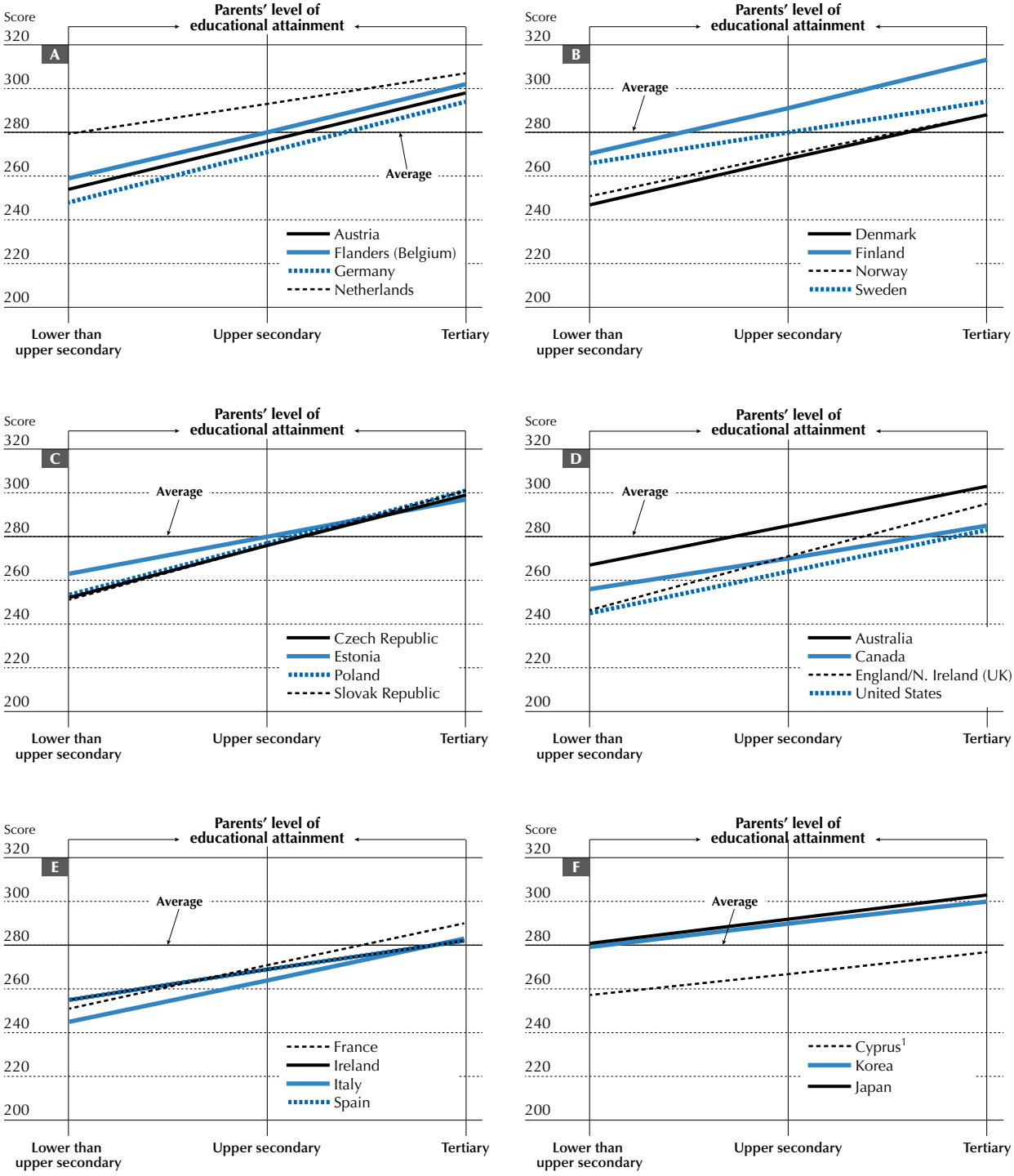
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On average across countries, about 12% of adults from socio-economically advantaged backgrounds are proficient at Level 3 on the problem-solving in technology-rich environments scale. The Czech Republic, Finland and Sweden feature the highest proportions (over 15%), followed by Japan, the Netherlands, England/Northern Ireland (UK) and Flanders (Belgium). In contrast, in Austria, Estonia, Ireland, Korea, the Slovak Republic and the United States, about 7% to 9% of adults from advantaged backgrounds are proficient at Level 3. Among adults from disadvantaged backgrounds the proportions are even smaller. On average, less than 2% of this group attains proficiency Level 3; only in Australia, Finland, Japan, the Netherlands and Sweden is the proportion higher than 2% but still below 4%.

■ Figure 3.8a (L) ■

Relationship between literacy proficiency and socio-economic background among young adults

Socio-economic gradient, 16-24 year-olds



1. See notes at the end of this chapter.

Notes: The average represents the average score of 16-24 year-olds in the OECD countries participating in the survey. The socio-economic gradient is based on the trend line connecting mean scores for each level of parents' educational attainment.

Countries in Panel A-D are grouped according to regional or language considerations with the remainder grouped in Panel E-F.

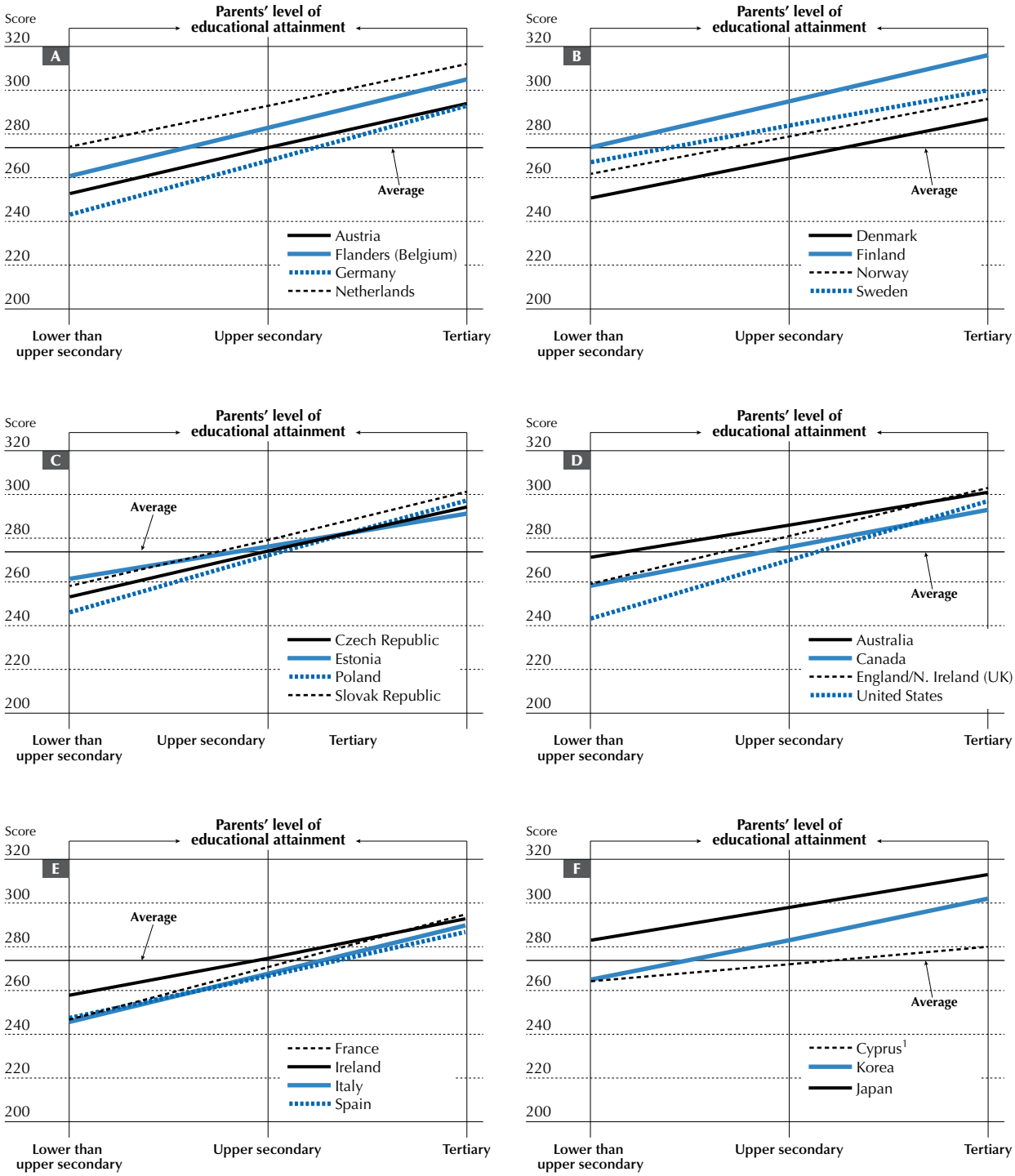
Source: Survey of Adult Skills (PIAAC) (2012), Table A3.8 (L).

StatLink http://dx.doi.org/10.1787/888932900954

■ Figure 3.8b (L) ■

Relationship between literacy proficiency and socio-economic background among adults

Socio-economic gradient, 16-65 year-olds



1. See notes at the end of this chapter.

Notes: The average represents the average score of OECD countries participating in the survey. The socio-economic gradient is based on the trend line connecting mean scores for each level of parents' educational attainment.

Countries in Panel A-D are grouped according to regional or language considerations with the remainder grouped in Panel E-F.

Source: Survey of Adult Skills (PIAAC) (2012), Table A3.8 (L).

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The relationship between socio-economic background and skills proficiency, by age

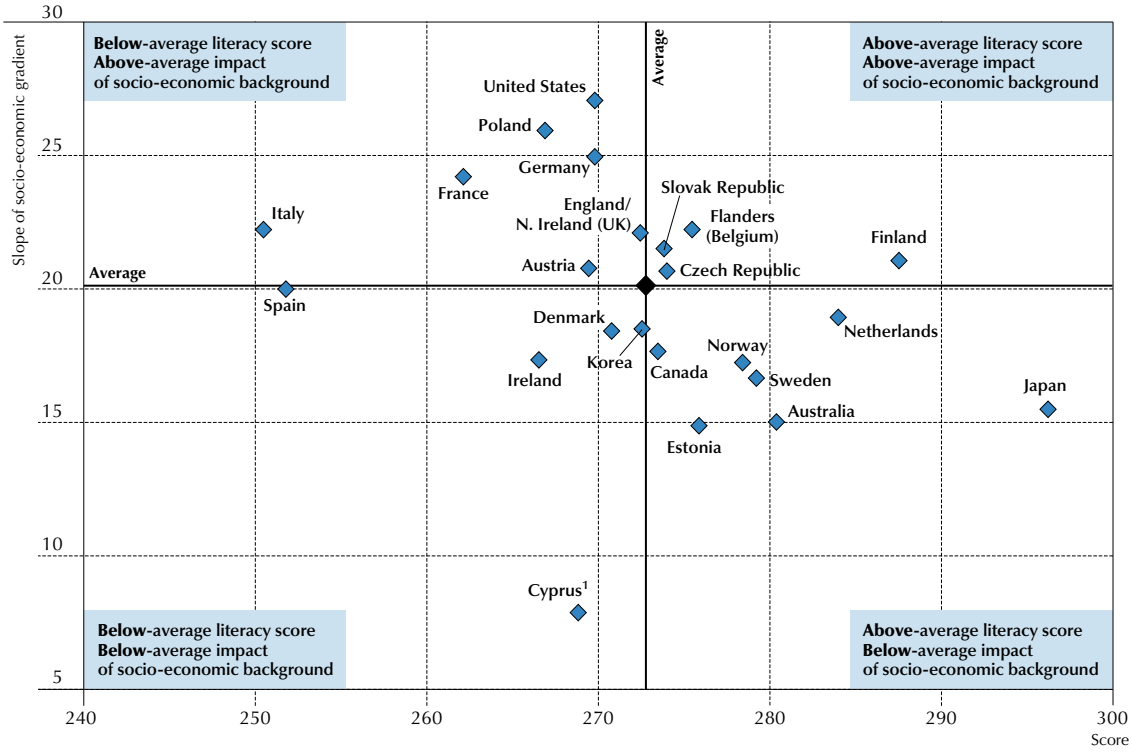
Countries with the weakest association between socio-economic background and literacy proficiency (also known as the socio-economic gradient) among young people include Ireland, Japan, Korea, the Netherlands, Spain and Sweden. The association is strongest in the Czech Republic, England/Northern Ireland (UK), Germany, Poland and the Slovak Republic (Figure 3.8a [L]). Among the broader population of 16-65 year-olds, this relationship is the weakest in Australia, Estonia, Ireland, Japan, Norway and Sweden; it is strongest in England/Northern Ireland (UK), Flanders (Belgium), Germany, Italy, Poland and the United States (Figure 3.8b [L]).

On average across countries, the slope of the socio-economic gradient is steeper (i.e. the relationship between socio-economic background and proficiency is stronger) for the adult population as a whole than for young people. The United States, for example, has the steepest gradient among 16-65 year-olds, but is close to the average among 16-24 year-olds. Korea also has a much weaker association between socio-economic background and skills proficiency among young people than among all adults. While among 16-65 year-olds in Korea the slope of the socio-economic gradient is close to the average, among young people, Korea has the second flattest gradient of all countries surveyed. In contrast, in the Czech Republic, Denmark, England/Northern Ireland (UK), Estonia and the Slovak Republic, the socio-economic gradient is steeper among young people than among the overall adult population.

■ Figure 3.8c (L) ■

Relationship between literacy proficiency and impact of socio-economic background on proficiency

Mean literacy score and slope of the socio-economic gradient, 16-65 year-olds



1. See notes at the end of this chapter.

Notes: The averages represent the average scores of OECD countries participating in the survey. The slope of socio-economic gradient represents the score-point difference associated with one unit increase in parents' level of educational attainment.

Source: Survey of Adult Skills (PIAAC) (2012), Tables A2.4 and A3.8 (L).

StatLink http://dx.doi.org/10.1787/888932900992

Social mobility and literacy proficiency

Is there a link between the strength of the relationship between socio-economic background and skills proficiency and the skills proficiency of the adult population? (Figure 3.8c [L]). Seven countries, including Australia, Japan and the Netherlands, combine above-average literacy scores with a socio-economic gradient that is flatter than the average,



and six countries, including Germany, Poland and the United States, show below-average literacy scores and a steeper-than-average socio-economic gradient. In contrast, in another group of countries, the relationship appears to be reversed. The Czech Republic, Finland, Flanders (Belgium) and the Slovak Republic have above-average literacy scores while also having a steeper-than-average socio-economic gradient, while some countries, including Denmark, Ireland and Korea, combine below-average literacy scores with a flatter-than-average socio-economic gradient.

DIFFERENCES IN SKILLS PROFICIENCY RELATED TO EDUCATIONAL QUALIFICATIONS

Formal education and training is one of the main mechanisms through which proficiency in literacy, numeracy and problem solving is developed and maintained. One of the explicit goals of the school systems in the countries that participated in the Survey of Adult Skills is to ensure that students leave compulsory education with adequate literacy and numeracy skills and with the ability to use information and communication technologies; and this continues to be a goal at higher levels of education too. Most countries have national testing programmes in place to assess progress towards this goal (OECD, 2013). The OECD Programme for International Student Assessment (PISA) underscores the importance of these skills as it includes reading and mathematical literacy among the domains in which it tests 15-year-olds every three years.

In addition to having a direct relationship with skills, the level and type of formal learning completed, and the qualifications earned, are indirectly related to individuals' proficiency in information-processing skills: they determine access to the jobs and further education and training that could help individuals maintain and develop their skills. The education system is also a place where characteristics, attitudes and practices that facilitate lifelong learning, such as an interest in reading or positive attitudes towards learning, are developed.

The formal education system is not the only setting in which the skills assessed in the Survey of Adult Skills are developed. Learning occurs in a range of other settings, including the family, the workplace and through self-directed individual activity. Moreover, the skills developed in formal education can depreciate if they are not used. The longer the period during which a person has been out of education, the weaker the direct relationship between his or her formal education and proficiency, and the greater the role of other factors that may affect proficiency, such as the work or social environment. In other words, a 55-year-old's experience in formal education is likely to have less of a direct influence on his or her proficiency than that of a 26-year-old. In addition, the quality of education may have changed over time. Even within the same country, individuals with apparently the same qualifications or level of education may have had very different experiences in school. The content and quality of the secondary education delivered in the 1960s may be quite different than that delivered in the early 2000s.

The relationship between educational attainment and proficiency in information-processing skills is complex. Individuals with greater proficiency are more likely to participate in higher levels of education, for example, and to get better jobs with possibly more opportunities to develop these skills. The role of education in fostering information-processing skills either directly or indirectly is discussed in more detail in Chapter 5. In this section, the focus is on observed differences among adults who have not attained upper secondary education, those who have attained upper secondary education, and adults who have attained tertiary education.

As expected, there is a close positive relationship between educational attainment and proficiency in information-processing skills. Beyond that, two other findings stand out. First, differences in skills proficiency related to educational attainment vary considerably among countries. The gap in average proficiency between adults with tertiary education and those who have not attained upper secondary education is considerably larger in some countries than in others. The United States stands out as having a particularly large gap between these two groups in both literacy and numeracy proficiency. Among possible reasons for the differences in the size of the proficiency gaps between adults with high and low levels of educational attainment are differences in the quality of schooling, the nature of adult-learning systems, and differences in patterns of participation in education. Other things being equal, the average proficiency of adults who have not attained secondary education would be expected to decline as the size of this group shrinks relative to the total population.

Second, the proficiency of adults who have the same level of educational attainment varies substantially among countries. In fact, in a few countries, the average proficiency of adults who have completed secondary education exceeds that of tertiary graduates. However, caution is advised in attributing these differences to variations in the quality of education among countries; they may also reflect differences in the abilities of the adults at a given level of education. It would be expected that the graduates of a highly selective higher-education system would have greater proficiency, in general, than

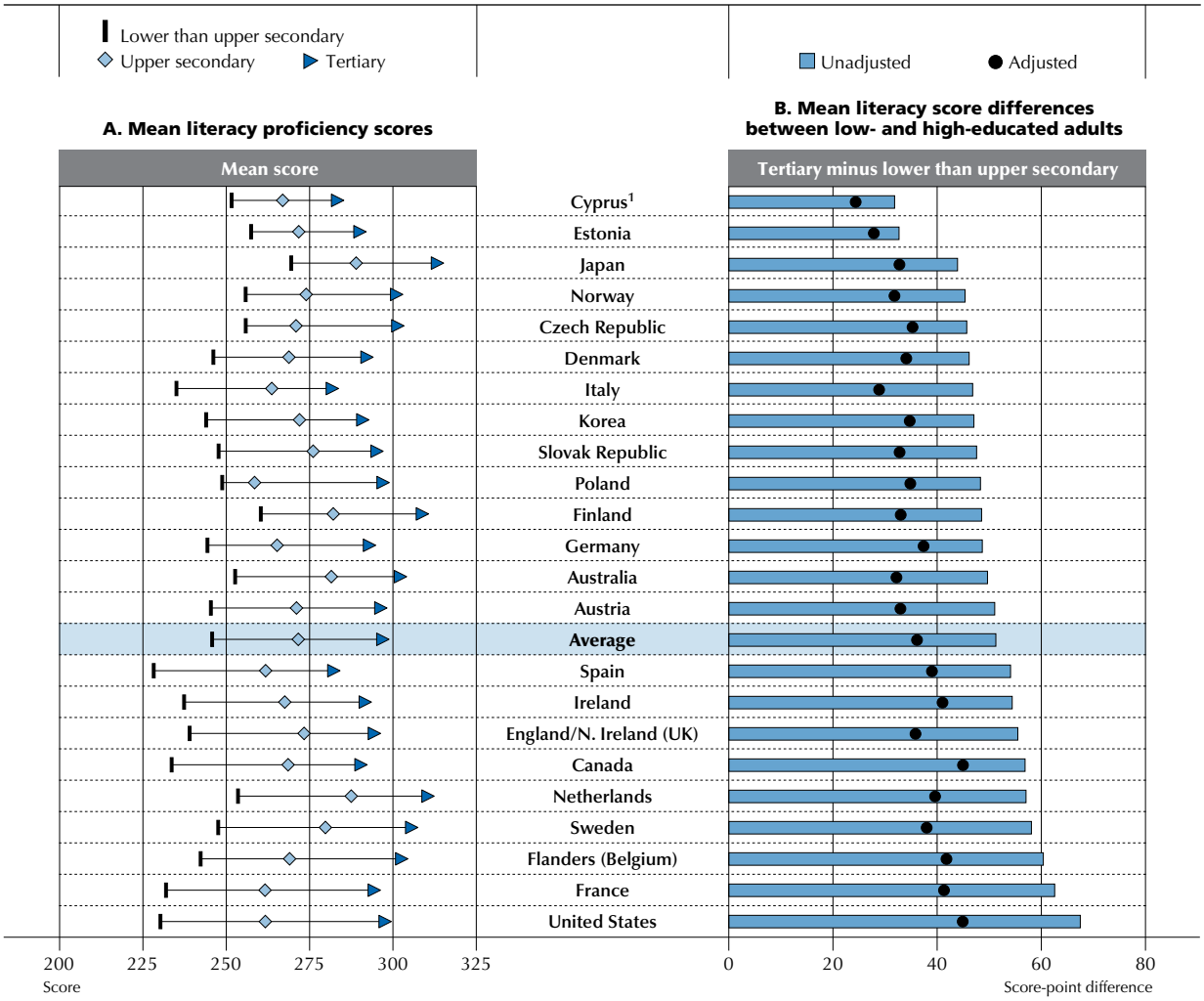


those who graduated from a comprehensive system offering wide access. Similarly, differences among countries may reflect variations in the opportunities for, and the effectiveness of, ongoing skills development and use after "initial" education is completed, as the skills assessed can be acquired outside of formal education and can also be lost over time.

Accounting for the effects of other socio-demographic characteristics, such as age, reduces the strength of the relationship between educational attainment and proficiency in all countries. However, the relationship remains strong, with between 25 and 45 score points separating the average literacy scores of adults with tertiary-level attainment and those with lower than upper secondary attainment, depending on the country. Interestingly, the adjusted differences in literacy proficiency between low- and high-educated adults do not vary greatly among countries. In other words, the gain in proficiency associated with having a tertiary qualification compared to having lower than upper secondary attainment is of similar magnitude irrespective of the differences in the structure and development of the different education and training systems.

■ Figure 3.9 (L) ■

Differences in literacy proficiency, by educational attainment



1. See notes at the end of this chapter.

Notes: All differences in Panel B are statistically significant. Unadjusted differences are the differences between the two means for each contrast category. Adjusted differences are based on a regression model and take account of differences associated with other factors: age, gender, immigration and language background, socio-economic background, and type of occupation. Only the score-point differences between two contrast categories are shown in Panel B, which is useful for showing the relative significance of educational attainment vis-a-vis observed score-point differences. For more detailed regression results, including for each category of each variable included in the model, see Table B3.17 (L) in Annex B. Lower than upper seconday includes ISCED 1, 2 and 3C short. Upper secondary education includes ISCED 3A, 3B, 3C long and 4. Tertiary includes ISCED 5A, 5B and 6. Where possible, foreign qualifications are included as per their closest correspondance to the respective national education systems.

Countries are ranked in ascending order of the unadjusted differences in literacy scores (tertiary minus lower than upper secondary).

Source: Survey of Adult Skills (PIAAC) (2012), Tables A3.1 (L) and A3.9 (L).

StatLink http://dx.doi.org/10.1787/888932901011



Proficiency in literacy and numeracy among low- and high-educated adults

As expected, adults who have not attained upper secondary education (hereafter, "low-educated" adults) score lower, on average, on the literacy scale than adults who have; and the latter group, in turn, scores lower, on average, than adults who have attained tertiary education (hereafter "high-educated" adults) (Figure 3.9 [L]). The mean score for adults who have not attained upper secondary education is 246 points (Level 2), whereas it is 272 points (near Level 3) for upper secondary graduates and 297 points (Level 3) for adults who have attained a tertiary level of education. On average across countries, about 24% of adults have not attained upper secondary education; but this proportion ranges from a low of about 14% in the United States to a high of about 53% in Italy (see Table B3.6 in Annex B).

Countries differ widely in average literacy proficiency by level of educational attainment. Low-educated adults score lowest, on average, on the literacy scale in Canada, France, Italy, Spain and the United States. In Japan, low-educated adults score very high (269 points), on average, in comparison with all other countries – higher, on average, in fact, than upper secondary graduates in France, Poland and the United States. Otherwise, low-educated adults in the Czech Republic, Estonia, Finland, the Netherlands and Norway score comparatively high, on average, and well above the mean for low-educated adults.

The largest differences in skills proficiency between adults with low levels of education and those with high levels of education are found in the United States: in literacy, 67 score points separate the two groups; in numeracy, the difference is 83 score points. The United States is followed by France on both the literacy (63-point difference) and numeracy (79-point difference) scales. Estonia shows among the smallest differences on both the literacy (33-point difference) and numeracy (42-point difference) scales. This is partly due to the comparatively high average score among adults with less than upper secondary education in Estonia and the comparatively low average score among adults with tertiary education.

In addition to the observed relationship between proficiency in literacy and numeracy and educational attainment, Figure 3.9 (L) shows the difference in proficiency between adults with tertiary attainment and those with lower than upper secondary attainment after accounting for other socio-demographic characteristics. While net differences are smaller in all countries compared to unadjusted differences, they remain large – between 25 and 45 score points, depending on the country.

Proficiency in problem solving in technology-rich environments among low- and high-educated adults

On average across countries, 52% of tertiary-educated adults score at Level 2 or higher on the problem solving in technology-rich environments scale (Figure 3.10 [P]). This varies from highs of 64% in the Netherlands and 62% in Sweden to lows of 36% in Estonia and 38% in Poland. Sweden, the Netherlands and the Czech Republic have the largest proportion of tertiary graduates who score at Level 3 on this scale.

Only 19% of low-educated adults score at Level 2 or higher, on average, across countries. This varies from lows of 7% to 10% in England/Northern Ireland (UK) and Ireland to highs of 26% to 28% in the Czech Republic, Finland and Germany. Overall, only about 2% of adults who have not attained upper secondary education score at Level 3 on the problem solving in technology-rich environments scale.

Cumulative disadvantage in key information-processing skills for low-educated adults

Adults who have not attained upper secondary education have a very high risk of scoring at Level 2 or below on the literacy and numeracy scales. The following section examines whether educational attainment interacts with age, gender and socio-economic background in its relationship with skills proficiency.

Low-educated and inactive youth

While younger adults generally score better than older adults on measures of key information-processing skills, there are certain groups of youth who fare particularly poorly.

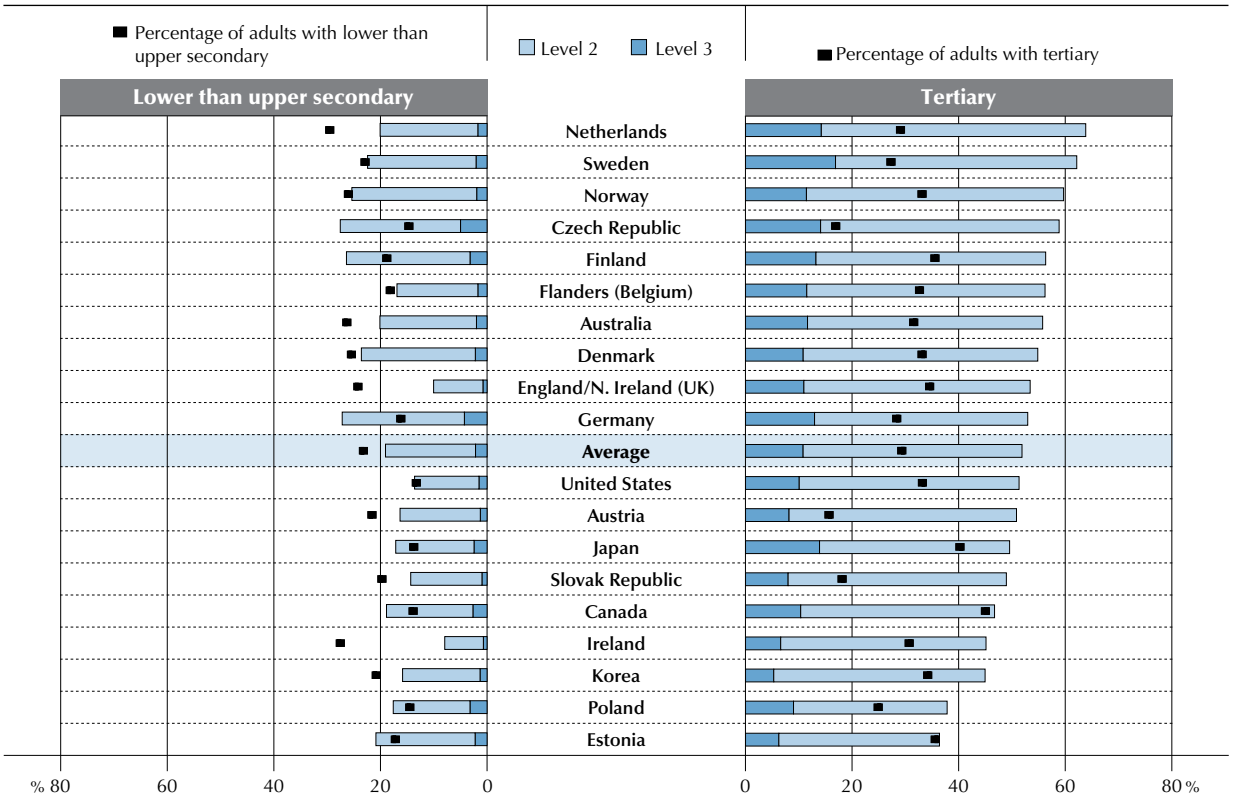
Being neither in employment nor in education and training may have a negative effect on skills development. The results show that this group of young people has, on average across countries, nearly three times the odds of scoring at Level 2 or below on the literacy scale compared to young people who remain in education (Figure 3.11 [L]; and see Box 3.4 for an explanation of odds ratio analysis). The increased odds that inactive young people will score at Level 2 or below ranges from six times higher in Canada to two times higher in Estonia. In a number of countries, however, young people are not found to have higher odds of scoring at lower levels of proficiency, although this may be due to small sample sizes.

The average proportion of inactive youths, across countries, is about 5% but ranges from as high as 12% in the Slovak Republic to as low as 1% in the Netherlands (see Table B3.7 in Annex B).

■ Figure 3.10 (P) ■

Problem-solving proficiency, by educational attainment

Percentage of low- and high-educated adults scoring at Level 2 or 3 in problem solving in technology-rich environments



Notes: Percentages on the problem solving in technology-rich environments scale are computed so that the sum of proportions for the following mutually exhaustive categories equals 100%: opted out of the computer-based assessment; no computer experience; failed ICT core test; below Level 1, Level 1, Level 2 and Level 3. For more detailed results for each category, see corresponding tables mentioned in the source below. Lower than upper seconday includes ISCED 1, 2 and 3C short. Upper secondary education includes ISCED 3A, 3B, 3C long and 4. Tertiary includes ISCED 5A, 5B and 6. Where possible, foreign qualifications are included as per their closest correspondance to the respective national education systems.

Countries are ranked in descending order of the combined percentage of adults with tertiary attainment scoring at Levels 2 and 3.

Source: Survey of Adult Skills (PIAAC) (2012), Tables A3.10 (P) and B3.6 in Annex B.

StatLink http://dx.doi.org/10.1787/888932901030

Box 3.4. **Using odds ratios**

Odds ratios reflect the relative likelihood of an event occurring for a particular group relative to a reference group. An odds ratio of 1 represents equal chances of an event occurring for a particular group vis-à-vis the reference group. Coefficients with a value below 1 indicate that there is less chance of an event occurring for a particular group compared to the reference group, and coefficients greater than 1 represent greater chances.

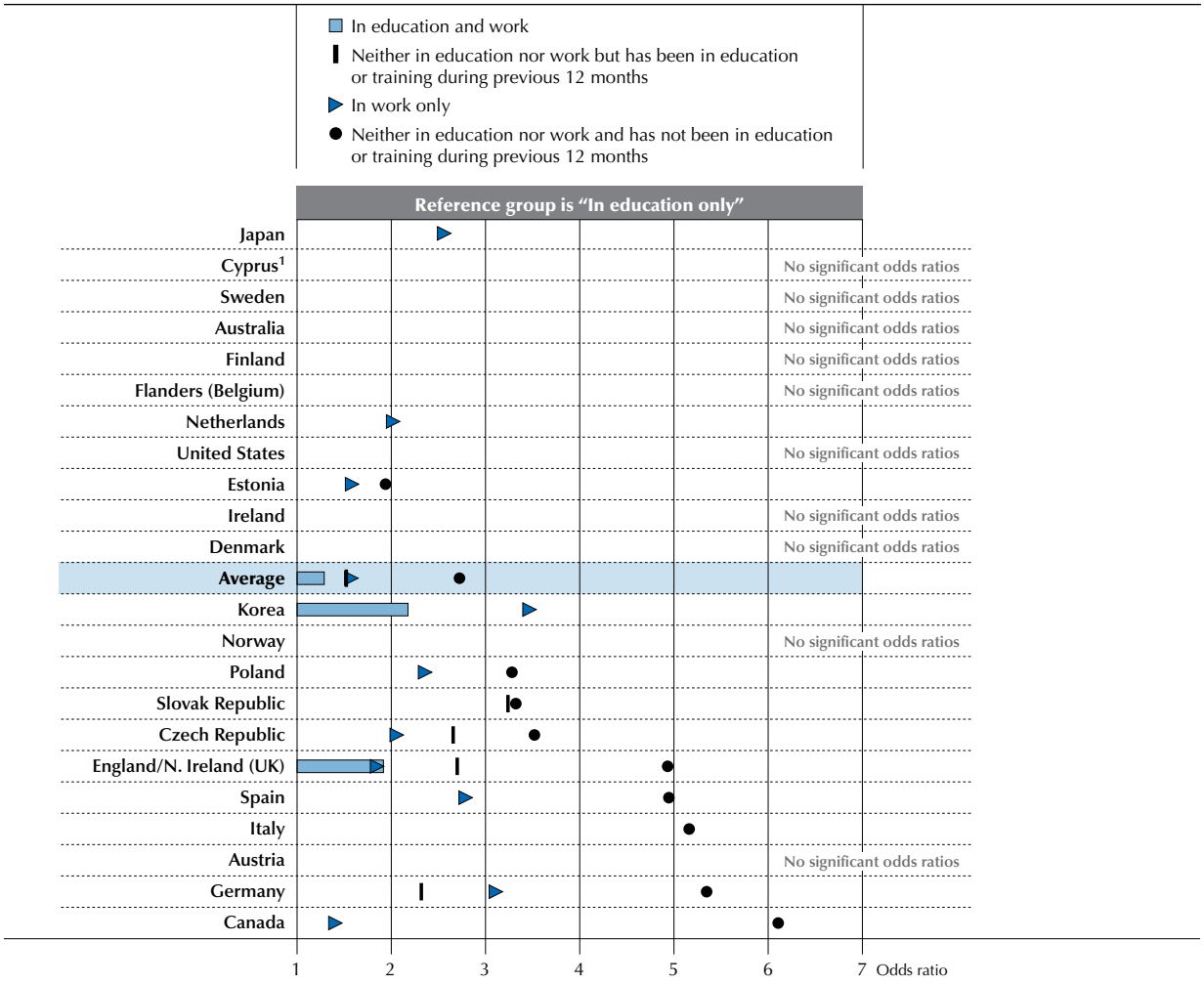
Remaining active in work but not in education does not necessarily translate into a greater likelihood of attaining higher proficiency. Young people aged 16-24 who are in work and not in education in the Czech Republic, Germany, Japan, Korea, the Netherlands, Poland and Spain show a marked likelihood of displaying lower proficiency compared to those who remain in education. The results suggest that for some of these countries, gaining access to jobs at an early age, especially low-skilled jobs, might translate into very limited opportunities for young people to develop their information-processing skills beyond very low levels of functionality. Youth who mix education with work also show an increased likelihood, on average, of scoring at lower levels of proficiency. This is particularly the case in

England/Northern Ireland (UK) and Korea. By contrast, in some countries, young people who remain active in work but who are not in education do not necessarily show a greater likelihood of having lower scores on the literacy scale compared to those who remain in education, although this may be due to small sample sizes, per country, for these groups since the average odds across countries is significant.

■ Figure 3.11 (L) ■

Likelihood of lower literacy proficiency among young adults

Adjusted odds ratios of 16-24 year-olds scoring at or below proficiency Level 2 on the literacy scale, by education and work status



1. See notes at the end of this chapter.

Notes: Estimates based on a sample size less than 30 or are not statistically different from the reference group are not shown. For more detailed results, see corresponding table mentioned in the source below. Odds ratios are adjusted for age, gender, type of occupation, immigrant status, language and socio-economic background.

Countries are ranked in ascending order of the odds ratios of youths scoring at or below proficiency Level 2 when they are neither in education nor work, and not recently in education/training.

Source: Survey of Adult Skills (PIAAC) (2012), Table A3.11 (L).

StatLink http://dx.doi.org/10.1787/888932901049

Low-educated adults from socio-economically disadvantaged backgrounds

Adults who have low levels of education and whose parents also had low levels of education have, on average across countries, nearly five times the odds of scoring at lower levels of proficiency on the literacy scale than adults whose parents had higher levels of education (Figure 3.12 [L]). These increased odds vary from highs of over ten times higher in the United States and at or near eight times higher in Canada and England/Northern Ireland (UK), to lows of about three times in Estonia and Finland. These are the adults who are the least likely to participate in any

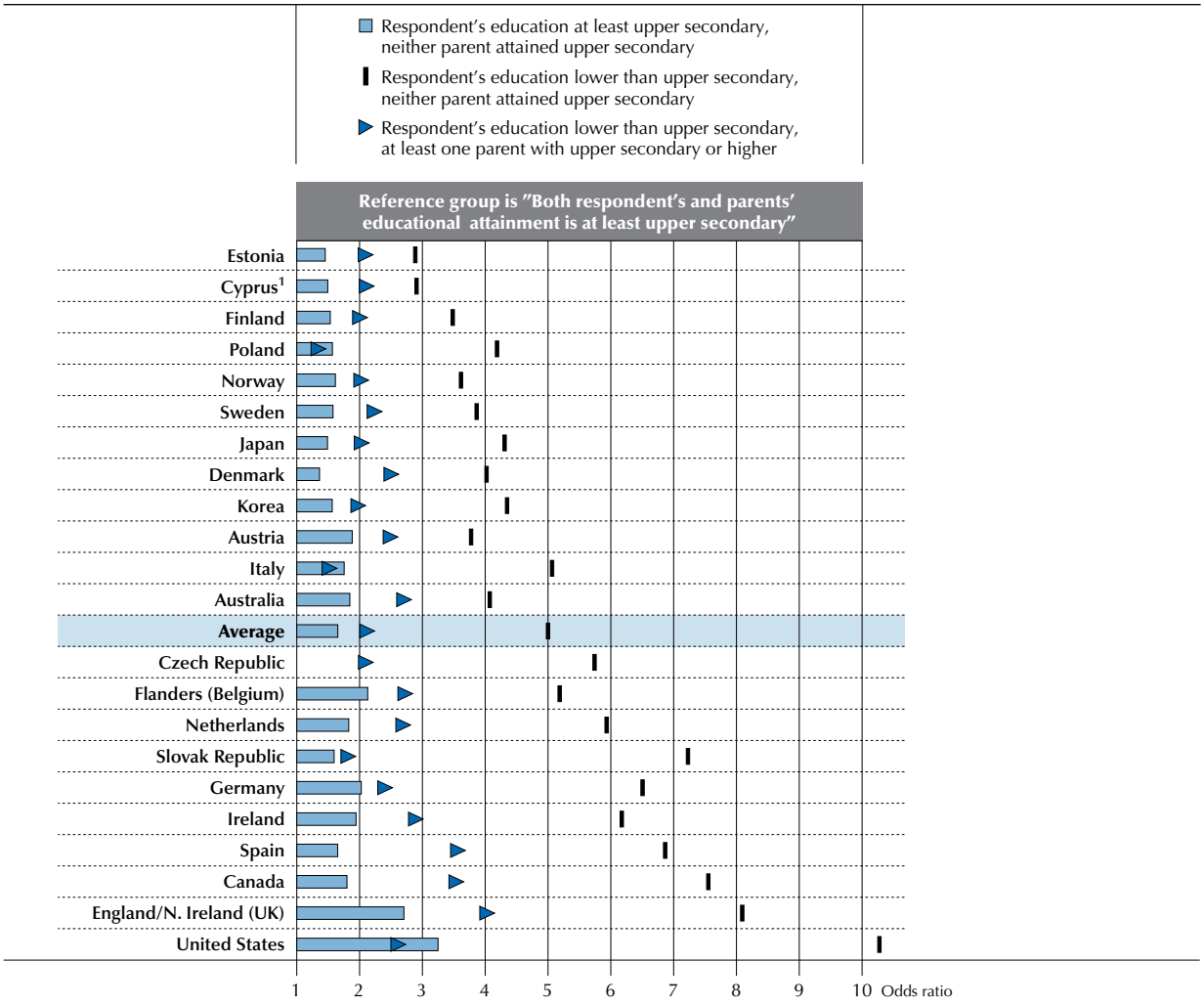


form of adult education and training, or to engage in practices conducive to productive learning (see Desjardins, Rubenson and Milana, 2006). On average across countries, there are about 13% of adults who have low levels of education and whose parents also had low levels of education; but this proportion ranges from a low of about 3% in the Czech Republic to a high of about 45% in Italy (see Table B3.8 in Annex B).

■ Figure 3.12 (L) ■

Likelihood of lower literacy proficiency among low-educated adults

Adjusted odds ratio of scoring at or below Level 2 in literacy, by respondent's and parents' level of education



1. See notes at the end of this chapter.

Notes: Estimates based on a sample size less than 30 or are not statistically different from the reference group are not shown. For more detailed results, see corresponding table mentioned in the source below. Odds ratios are adjusted for age, gender, type of occupation, and immigrant and language background.
Countries are ranked in ascending order of the odds ratios of respondents scoring at or below proficiency Level 2 when their and their parents' educational attainment is lower than upper secondary.

Source: Survey of Adult Skills (PIAAC) (2012), Table A3.12 (L).

StatLink http://dx.doi.org/10.1787/888932901068

Coming from a more advantaged socio-economic background significantly mitigates the consequences of not attaining upper secondary education, even if these individuals still have more than twice the odds of scoring at lower levels of proficiency on the literacy scale than adults from the same background that completed upper secondary. These increased odds range from a high of four times higher in England/Northern Ireland (UK) and over three times higher in Canada and Spain, but remain well below the odds ratio associated with having both low levels of education and a disadvantaged background found in nearly all countries.

Even if they have completed at least upper secondary education, adults from a disadvantaged background still have about two times the odds of scoring at lower levels of proficiency on the literacy scale compared to adults who both completed at least upper secondary education and who come from a more advantaged background. This is particularly the case in the United States and England/Northern Ireland (UK), where the former group has about three times the odds of having lower scores on the literacy scale as the latter group.

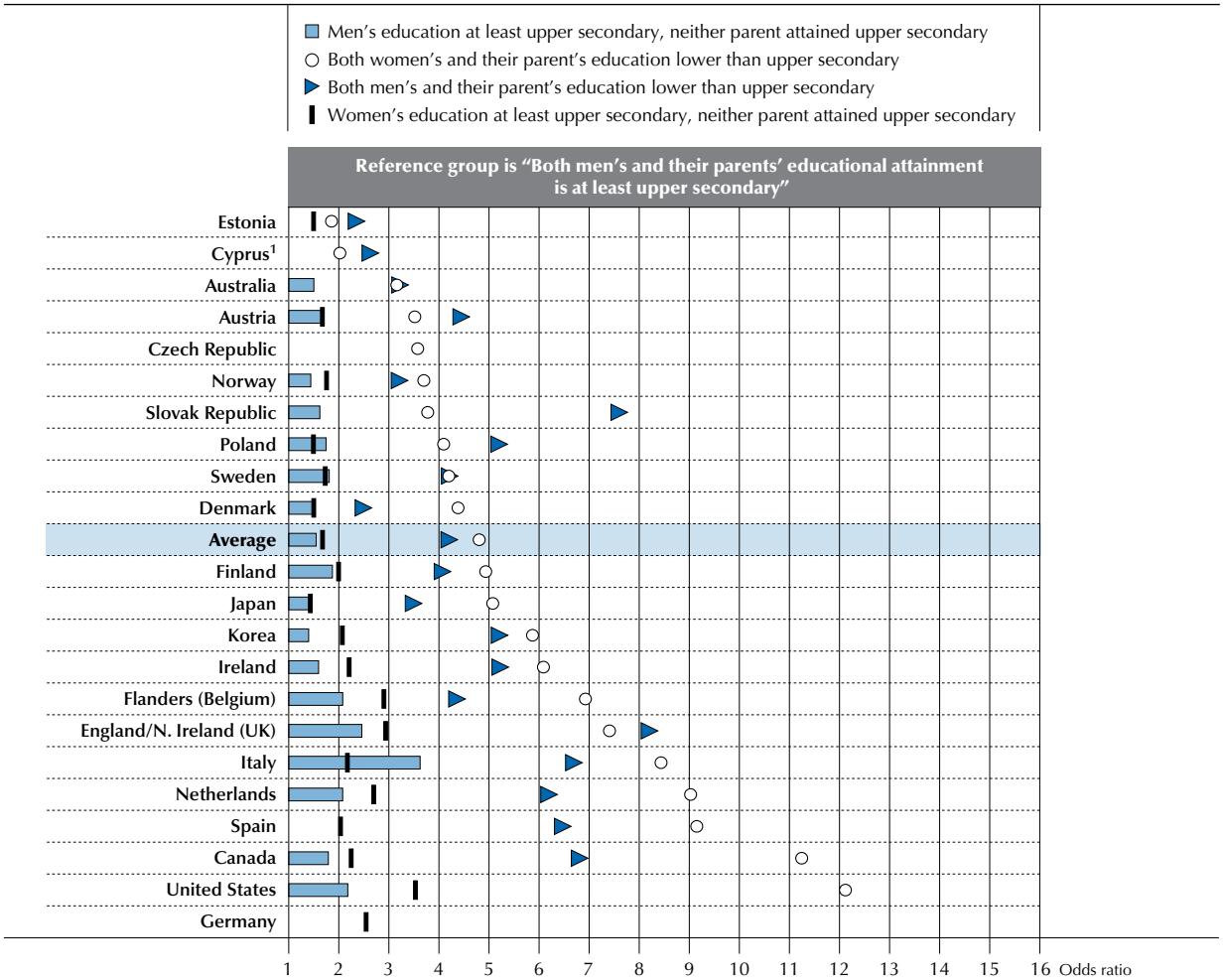
Gender differences among low-educated adults from socio-economically disadvantaged backgrounds

On average across countries, older low-educated women from disadvantaged backgrounds face a slightly higher risk of scoring at lower levels of proficiency on the literacy scale than older men with the same profile (Figure 3.13 [L]). On average, women with this profile have nearly five times the odds of scoring at lower levels of proficiency in literacy, while men with the same profile have a slightly lower risk, closer to four times, when compared with men who have attained at least upper secondary education and who have a more advantaged background. This pattern holds in about half of the participating countries and is particularly evident in Canada, Flanders (Belgium), Italy, the Netherlands, and Spain.

■ Figure 3.13 (L) ■

Likelihood of lower literacy proficiency among older women and men

Adjusted odds ratios of women and men aged 45-65 scoring at or below proficiency Level 2 on the literacy scale, by respondent's and parents' educational attainment



1. See notes at the end of this chapter.

Notes: Estimates based on a sample size less than 30 or are not statistically different from the reference group are not shown. For more detailed results, see corresponding table mentioned in the source below. Odds ratios are adjusted for age, type of occupation, and immigrant and language background.
Countries are ranked in ascending order of the odds ratios of women scoring at or below proficiency Level 2 when their and their parents' educational attainment is lower than upper secondary.

Source: Survey of Adult Skills (PIAAC) (2012), Table A3.13 (L).

StatLink http://dx.doi.org/10.1787/888932901087



In England/Northern Ireland (UK), Poland and the Slovak Republic, the pattern is reversed: men from disadvantaged backgrounds face a greater risk of scoring at lower levels of proficiency. That these patterns vary by country might be related to gender differences in labour force participation, occupational segregation and migrant profiles.

DIFFERENCES IN SKILLS PROFICIENCY RELATED TO COUNTRY OF ORIGIN AND LANGUAGE

Migration has changed the demographic profile of most OECD countries. In 13 of the countries that participated in the Survey of Adult Skills, immigrants now represent at least 10% of the total population. Foreign-born populations have also been growing rapidly in some countries. In Norway, for example, the population of immigrants almost doubled from 6.8% to 11.6% of the total population between 2000 and 2010 (OECD, 2012c, Table A4). Immigrant populations vary considerably from country to country, depending on national migration policies, the immigrants' countries of origin, and the mix of different categories of immigrants, such as whether they arrived to work, as part of a family-reunification policy, or through free movement among countries; they may even be undocumented, which poses an enormous challenge for policy making.

Many OECD countries are now grappling with the challenges that migration raises, including how to strike a balance between labour and other forms of migration, how to manage inflows, and how to ensure that immigrants are integrated into society. The recent global economic crisis has prompted many countries to review aspects of their immigration policies, often with the aim of reducing inflows and/or imposing greater selectivity. At the same time, fostering integration remains a top priority. A common trend is to emphasise labour market integration and strengthen educational programmes, particularly language training. This often involves recognising foreign skills and qualifications to increase immigrants' participation in the labour market (OECD, 2012c, pp. 120-21).

The Survey of Adult Skills is an important source of information for policy makers interested in migration. In particular, it provides a range of information regarding the family and linguistic backgrounds of immigrants, their qualifications and skills, and their participation in the labour market. What chances do immigrants have in the host country? How skilled are immigrants at processing information in the local language? How do the skills of immigrants compare to those of native-born populations? As a first step towards addressing some of these issues in more detail, this section highlights observed differences in skills proficiency between native- and foreign-born adults, and between adults whose first or second language learned as a child is the same as the language in which the assessment was taken and those for whom it was not. Adults whose country and language of origin is different from the country of assessment are used as a proxy for foreign-language immigrants.[3] While a more comprehensive definition of immigrants might include adults who are the children of foreign-language immigrants but who were born in the country of assessment, results for this latter group are reported only briefly in this chapter and require further analysis.

Immigrants settling into a host country without key information-processing skills – in the language of the host country – face significant obstacles to integrating economically and socially into host countries. Indeed, the findings of the Survey of Adult Skills confirm that foreign-language immigrants have a clear disadvantage when it comes to having the information-processing skills needed to succeed in their host countries. The fact that immigrants, particularly those from foreign-language backgrounds, have low proficiency in the language of the assessment does not imply that they have poor proficiency in their mother tongue. In addition, in many non-English-speaking countries, there are often labour markets for highly skilled professionals (e.g. academia, business services) in which English is the language of professional communication. At the lower end of the skills spectrum, it is also possible that there are labour markets in which individuals can operate principally in their mother tongue.

The fact that foreign-language immigrants have lower proficiency in literacy, numeracy and problem solving in technology-rich environments in the language or languages of the receiving country than native-born adults is hardly surprising. The challenge for policy makers is to design policies and programmes that ensure that foreign-language immigrants either have an adequate knowledge of the language of the host country on entry to the country or can develop that knowledge effectively after entry. Several countries with points-based labour-migration schemes, such as Australia and Canada, give considerable weight to proficiency in their national languages. However, such requirements are neither possible in all countries nor necessarily desirable for all categories of immigrants. Greater selectivity, by emphasising language proficiency, may help to improve immigrants' proficiency. However, several countries face the compound challenge of having an immigrant population with very low average proficiency and large differences in proficiency between foreign-language migrants and native-born adults.

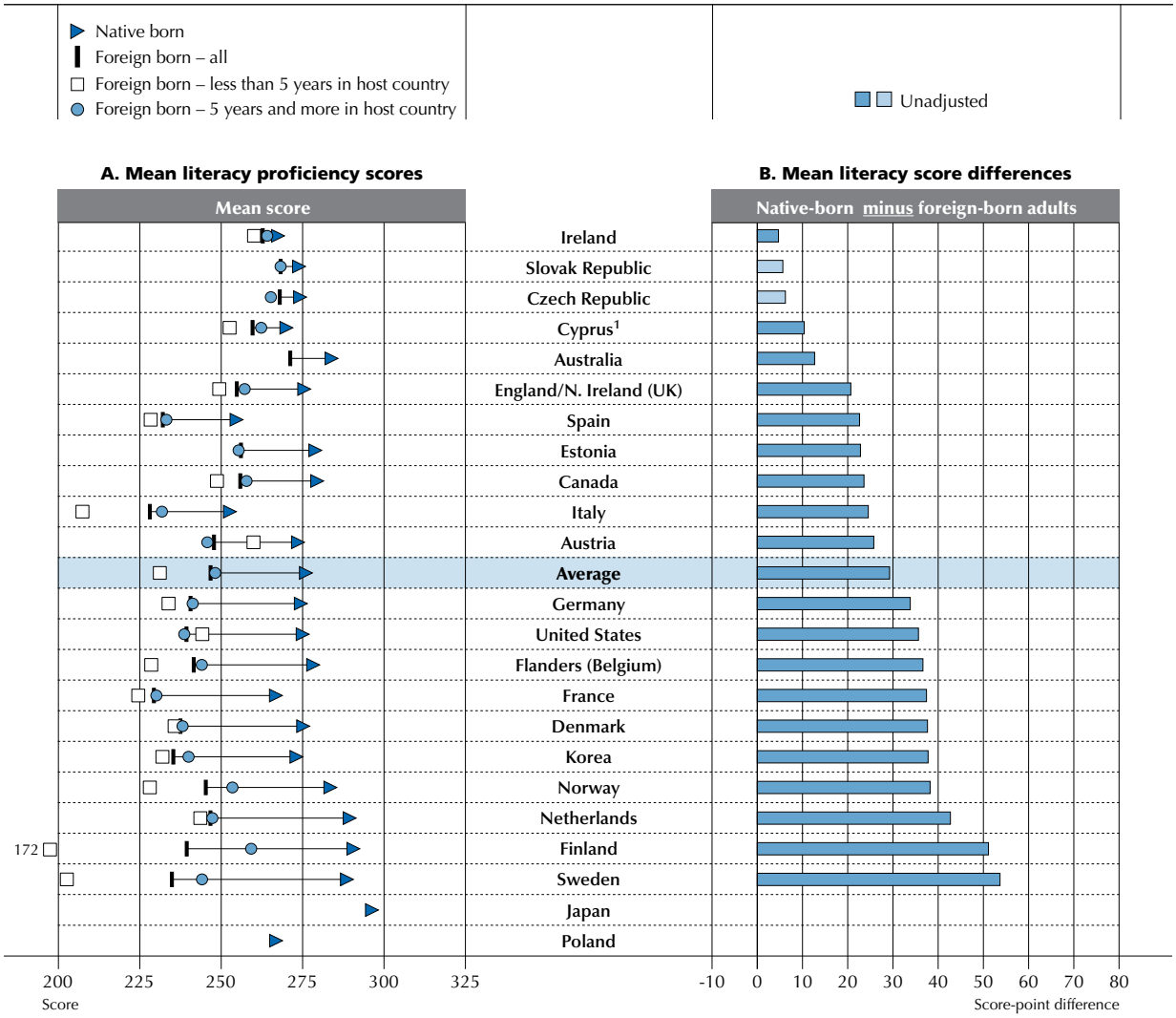
Proficiency in literacy among native- and foreign-born adults

On average across countries, foreign-born adults score lower than native-born adults on the literacy scale (Figure 3.14 [L]). Results are similar on the numeracy scale. The mean score for foreign-born adults is 247 points (Level 2) on the literacy scale, whereas for native-born adults it is 276 points (Level 3). But there is wide variation in the scores of foreign-born adults across countries. The mean proficiency of foreign-born adults is lowest in Italy (228 points), France (229 points), Spain (232 points), Sweden (235 points) and Korea (235 points). It is highest in Australia (271 points), Estonia (256 points) and Canada (256 points).

In most countries, the length of time that persons born abroad have been living in the host country makes a significant difference. This can be because integration into a new society takes time, because immigration policies change over the years, and/or because of changes in the number, countries-of-origin and original language of immigrants.

■ Figure 3.14 (L) ■

Differences in literacy proficiency scores between native- and foreign-born adults



1. See notes at the end of this chapter.

Notes: Statistically significant differences in Panel B are marked in a darker tone. Estimates based on a sample size less than 30 are not shown in Panels A and B. The differences between the two categories are unadjusted. No adjusted differences are provided for foreign-born and native-born adults since the adjusted model (see Table A3.1 [L]) is based on a variable combining immigrant background as well as language background. See Table A3.15 (L) for adjusted differences between foreign-born and foreign-language adults compared to native-born and native-language adults.

Countries are ranked in ascending order of difference in literacy scores (native-born minus foreign-born adults).

Source: Survey of Adult Skills (PIAAC) (2012), Table A3.14 (L).

StatLink http://dx.doi.org/10.1787/888932901106



In most cases, adults who have lived less than five years in the host country score significantly lower than those who have lived in the host country for more than five years. Recent immigrants to Finland, Italy and Sweden score very low: at or near the bottom of Level 1, on average; but those who are more established within those countries have significantly higher scores. Difficulty in learning languages that are less common may play a role, but so may the availability and support for effective language courses that are designed for immigrants.

Across countries, the average difference in score between native- and foreign-born adults is about 29 points on the literacy scale. Differences across countries vary substantially. The largest differences in literacy proficiency are found in Sweden (54-point difference) and Finland (51-point difference), which appear to be a consequence of very low average scores among recent immigrants. The Netherlands (43-point difference) and Norway (38-point difference) follow. Denmark, Flanders (Belgium), Germany, Korea and the United States also show above-average differences in scores. Two countries with a comparatively low proportion of foreign-born adults – namely the Czech Republic and the Slovak Republic – show among the smallest score differences. Ireland also shows a small difference in scores, but this country has one of the highest proportions of foreign-born adults – although well over half of them reported that their native language is the same as or similar to the language of assessment in Ireland.

Proficiency in literacy among foreign-language immigrants

Differences in proficiency can also stem from adults' familiarity with, and ease in using, the language most widely used in society. Not all immigrants use a different language in their host country; more importantly, there are many native-born adults who either are second-generation immigrants or belong to a language minority, making it necessary to take into consideration their language background as well.

Not surprisingly, the survey reveals that the negative relationship between skills and foreign-language background is stronger than that between skills and foreign-born background (Figure 3.15 [L]). On average across countries, foreign-born adults who report having a native language, other than the language of assessment (i.e. foreign-language immigrants), score low on the literacy scale (240 points). On average across countries, about 7% of adults are foreign-born and did not learn the language of assessment as children; but this proportion ranges from very low in Japan and Poland to a high of about 17% in Canada (see Table B3.11 in Annex B). In contrast, native-born adults who report having a native language other than the language of assessment (i.e. second-generation immigrants or persons belonging to a language minority) score higher (264 points) than foreign-language immigrants, and closer to the average score of native-born adults who learned the language of assessment as a first or second language as a child (276 points). On average, about 2% of adults are included in this group, but 5% of adults in Canada and the Slovak Republic belong to this group. Depending on the country, native-born adults, who learned a foreign or minority language as a child, may be children of immigrants (i.e. second-generation immigrants) or children of parents from established but not necessarily recognised minority communities. The fact that they are native-born, and that most have probably lived in the country since birth, gives them a significant advantage over foreign-language immigrants.

Proficiency in problem solving in technology-rich environments among foreign-language immigrants

On average across countries, about 7% of adult populations are foreign-language immigrants (Figure 3.16 [P]). Of this group, about 18% score at Level 2 or higher and 82% score at or below Level 1, or did not show any proficiency either because they opted out of the computer based assessment, had no computer experience or failed the ICT core.[4]

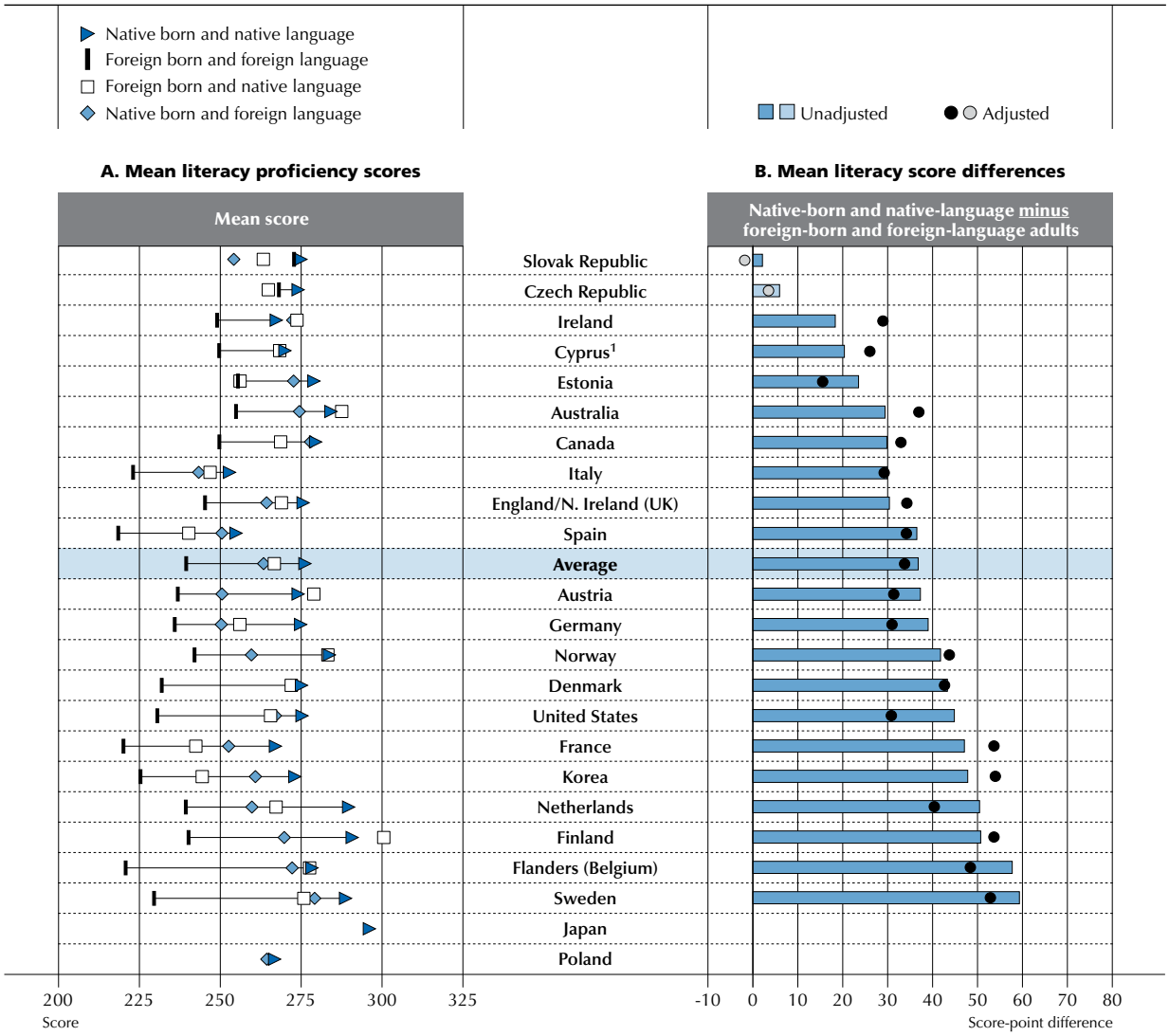
Among countries in which foreign-language immigrants exceed 10% of the population, Australia (25%), Canada (24%) and Norway (22%) feature among the largest proportions of foreign-language immigrants who score at Level 2 or higher.

In contrast, the United States (12%), Germany (13%) and Austria (14%) feature among the smallest proportions of foreign-language immigrants who score at Level 2 or higher. Denmark (18%) and Sweden (18%) also feature below-average proportions of foreign-language immigrants at Level 2 or higher.

In most countries, accounting for the influence of other characteristics has a relatively small impact on the size of the gap in proficiency between foreign-language migrants and their native-born counterparts. In most cases, net differences are smaller among the native-born. However, accounting for other factors increases the relative disadvantage of foreign-language immigrants, particularly in Australia and Ireland.

■ Figure 3.15 (L) ■

Differences in literacy proficiency scores, by immigrant and language background



1. See notes at the end of this chapter.

Notes: Statistically significant differences in Panel B are marked in a darker tone. Estimates based on a sample size less than 30 are not shown in Panels A and B. Unadjusted differences are the differences between the two means for each contrast category. Adjusted differences are based on a regression model and take account of differences associated with all of the following variables: age, gender, education, socio-economic background, and type of occupation. Only the score-point differences between two contrast categories are shown in Panel B, which is useful for showing the relative significance of an immigrant background vis-a-vis observed score-point differences. For more detailed regression results, including for each category of each variable included in the model, see Table B3.17 (L) in Annex B. Native language refers to whether the first or second language learned as a child is the same as the language of assessment, and not whether the language has official status. Foreign language refers to whether the first or second language learned as a child is not the same as the language of assessment. Thus in some cases, foreign language might refer to minority languages in which the assessment was not administered.

Countries are ranked in ascending order of the unadjusted difference in literacy scores (native-born and native-language minus foreign-born and foreign-language adults).

Source: Survey of Adult Skills (PIAAC) (2012), Tables A3.1 (L) and A3.15 (L).

StatLink http://dx.doi.org/10.1787/888932901125

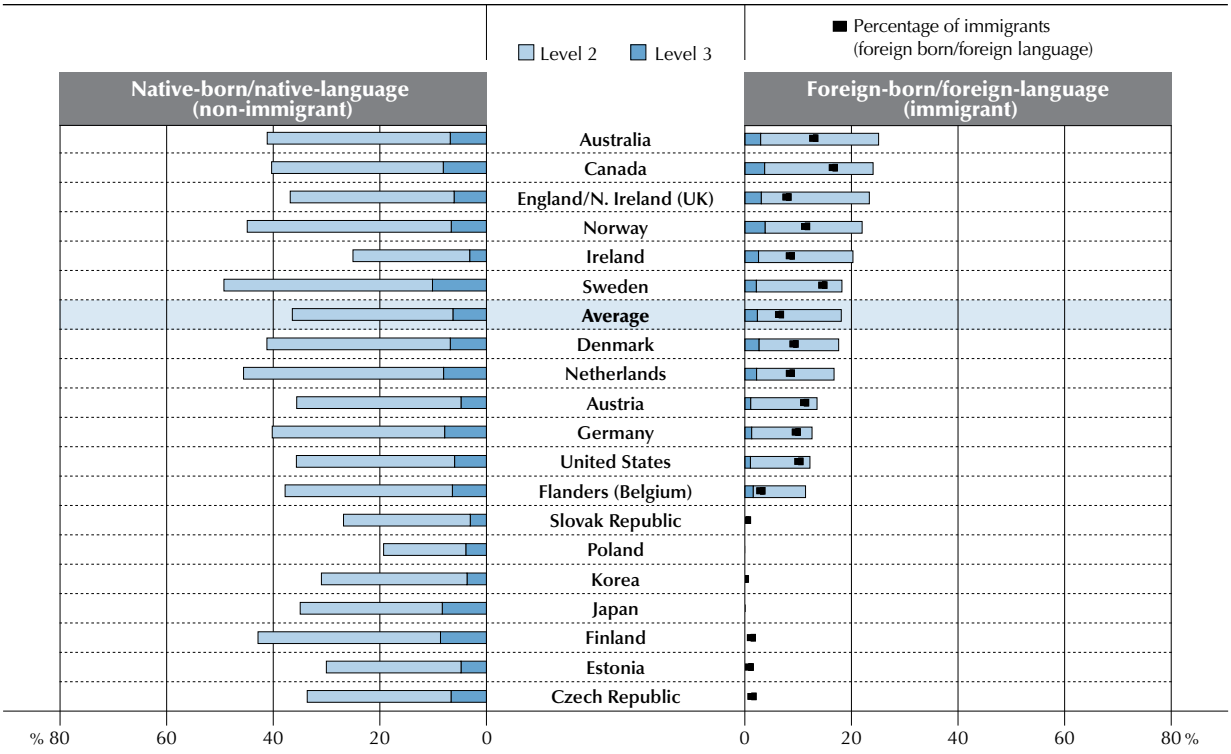
Cumulative disadvantage in key information-processing skills for foreign-language immigrants

Results presented in Figures 3.14 (L) and 3.15 (L) confirm that foreign-born and foreign-language adults have a clear disadvantage when it comes to having the key information-processing skills needed to succeed in daily life and in work situations involving the host country's language. Specifically, results show that foreign-language immigrants are more likely than non-immigrants to display lower proficiency.

■ Figure 3.16 (P) ■

Problem-solving proficiency among foreign-language immigrants and non-immigrants

Percentage of foreign-born/foreign-language (immigrants) and native-born/native-language (non-immigrants) adults scoring at Level 2 or 3 in problem solving in technology-rich environments



Notes: Estimates based on low sample sizes are not shown. Percentages on the problem solving in technology-rich environments scale are computed so that the sum of proportions for the following mutually exhaustive categories equals 100%: opted out of computer-based assessment; no computer experience; failed ICT core test; below Level 1, Level 1, Level 2 and Level 3. For more detailed results for each category, see corresponding tables mentioned in the source below. Native language refers to whether the first or second language learned as a child is the same as the language of assessment, and not whether the language has official status. Foreign language refers to whether the first or second language learned as a child is not the same as the language of assessment. Thus in some cases, foreign language might refer to minority languages in which the assessment was not administered.

Countries are ranked in descending order of the combined percentage of foreign-born/-language (immigrant) adults scoring at Levels 2 and 3.

Source: Survey of Adult Skills (PIAAC) (2012), Tables A3.16 (P) and B3.11 in Annex B.

StatLink http://dx.doi.org/10.1787/888932901144

Foreign-language immigrants with socio-economically disadvantaged backgrounds

The problem is exacerbated for foreign-language immigrants (those who are foreign-born and did not learn the language of assessment as a child) who come from socio-economically disadvantaged backgrounds. Survey results show that, on average across countries, non-immigrants from disadvantaged backgrounds have about 1.5 times the odds of scoring at Level 2 or below on the literacy scale compared to non-immigrants from advantaged backgrounds (Figure 3.17a [L]). By comparison, a foreign-language immigrant from a disadvantaged background has nearly seven times the odds of scoring at that level compared to a non-immigrant from a more advantaged background. On average across countries, about 40% of foreign-language immigrants come from a socio-economically disadvantaged background; but this ranges from a very low proportion in countries with few immigrants to as high as 60% in Spain (see Table B3.12 in Annex B). Even if from more advantaged backgrounds, foreign-language immigrants still have higher odds of scoring at Level 2 than non-immigrants from disadvantaged backgrounds when compared to non-immigrants from advantaged backgrounds.

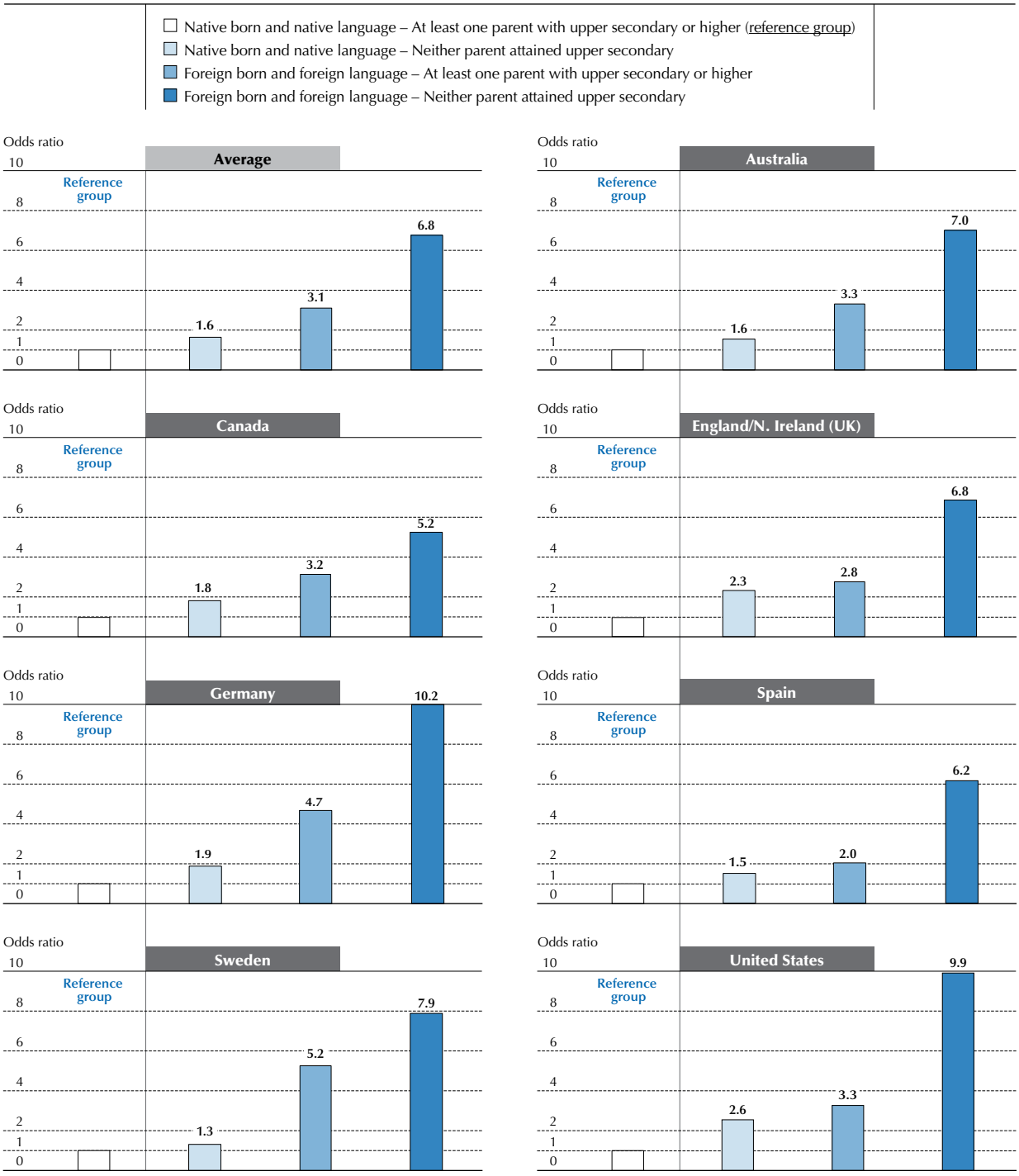
Country-by-country results for selected countries that participated in the survey and that have among the highest proportions of foreign-born adults reveal a similar pattern. Foreign-language immigrants from more advantaged backgrounds tend to be much less likely than immigrants from socio-economically disadvantaged backgrounds to have lower proficiency scores, but are more likely to score at lower levels than non-immigrants from disadvantaged backgrounds. This shows that even if they come from well-educated families, foreign-language immigrants often have limited chances to develop their information-processing skills in the local language.



■ Figure 3.17a (L) ■

Likelihood of lower literacy proficiency among foreign-born and foreign-language adults

Adjusted odds ratios of scoring at or below Level 2 in literacy, by immigrant, language and socio-economic background



1. See notes at the end of this chapter.

Notes: For more detailed results, see corresponding table mentioned in the source below. Odds ratios are adjusted for age, gender, education and type of occupation. Native language refers to whether the first or second language learned as a child is the same as the language of assessment, and not whether the language has official status. Foreign language refers to whether the first or second language learned as a child is not the same as the language of assessment. Thus in some cases, foreign language might refer to minority languages in which the assessment was not administered.

Only a sample of countries with a relatively high proportion of foreign-language immigrants are shown as an example. For the full set of countries, consult Figures 3.17b (L) and 3.17c (L) in the web package.

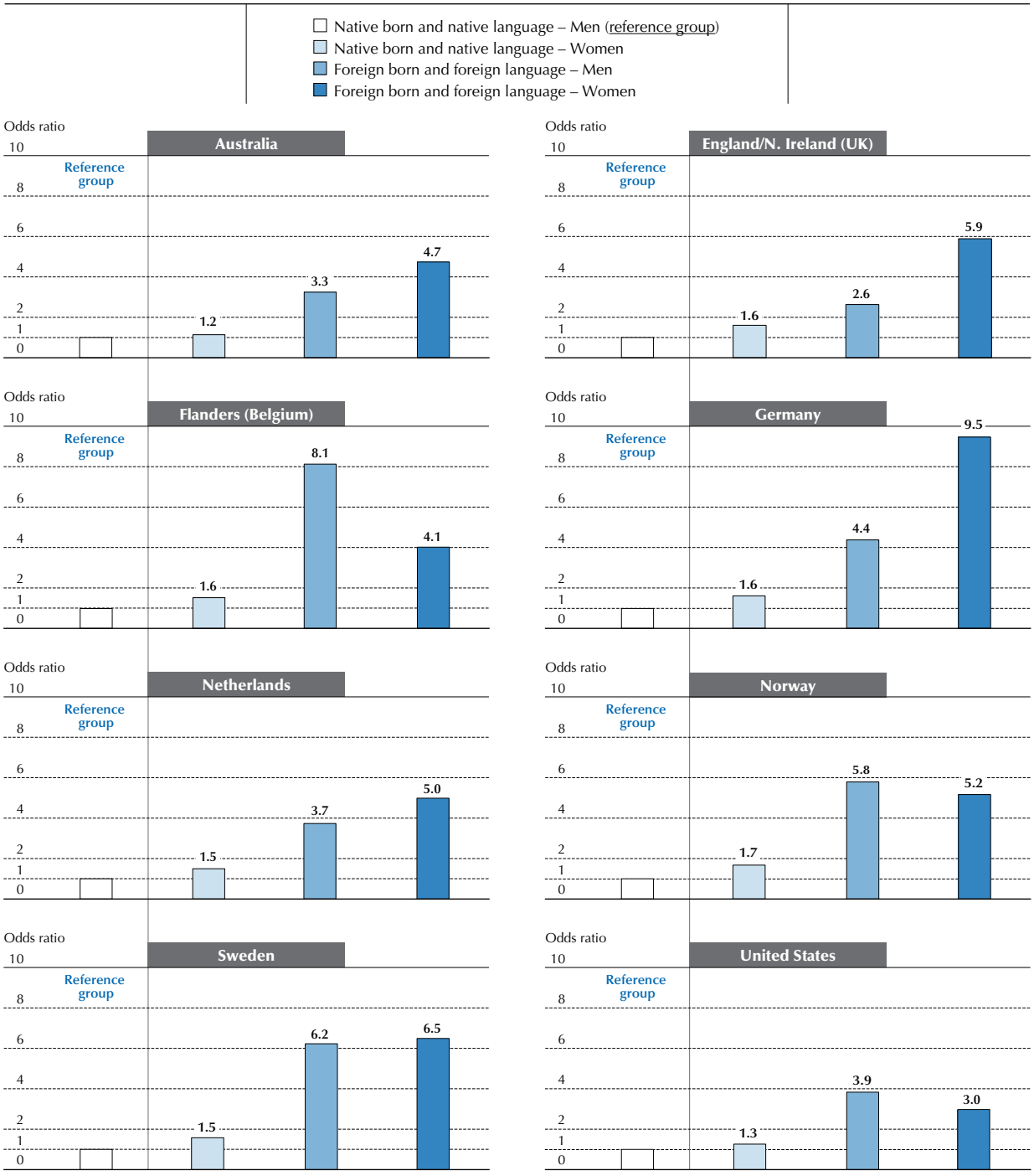
Source: Survey of Adult Skills (PIAAC) (2012), Table A3.17 (L).

StatLink http://dx.doi.org/10.1787/888932901163

■ Figure 3.18a (P) ■

Likelihood of lower problem-solving proficiency among foreign-born and foreign-language women

Adjusted odds ratios of scoring at or below Level 1, or receiving no score, in problem solving in technology-rich environments, by immigrant and language background, and gender



1. See notes at the end of this chapter.

Notes: For more detailed results, see corresponding table mentioned in the source below. Odds ratios are adjusted for age, education, socio-economic background, and type of occupation. Native language refers to whether the first or second language learned as a child is the same as the language of assessment, and not whether the language has official status. Foreign language refers to whether the first or second language learned as a child is not the same as the language of assessment. Thus in some cases, foreign language might refer to minority languages in which the assessment was not administered.

Only a sample of countries with a relatively high proportion of foreign-language immigrants are shown as an example. For the full set of countries, consult Figures 3.18b (P) and 3.18c (P) in the web package.

Source: Survey of Adult Skills (PIAAC) (2012), Table A3.18 (P).

StatLink http://dx.doi.org/10.1787/888932901182



Gender differences among foreign-language immigrants

Among the general adult population, gender differences in key information-processing skills are small, especially after accounting for educational qualifications. Survey results, presented in Tables A3.4 (L, N) in Annex A, confirm this. Distinguishing between immigrant and non-immigrant background reveals large differences, however. On average across countries, immigrant women who did not learn the language of assessment as children have about four times the odds of displaying no proficiency[4] or of scoring at or below Level 1 on the problem-solving scale compared to non-immigrant men (Figure 3.18a [P]). Immigrant men who did not learn the language of assessment as children are also more likely to display no proficiency or score at or below Level 1, but are less likely to do so than immigrant women with a similar language profile, on average. This pattern is particularly evident in Germany, is observed in Australia and England/Northern Ireland (UK), and is present, but weak, in the Netherlands and Sweden. In Flanders (Belgium), Norway and the United States, however, the situation is reversed: immigrant men are found to be more likely to display low or no proficiency on the problem solving in technology-rich environments scale compared to immigrant women who have a foreign-language background.

DIFFERENCES IN SKILLS PROFICIENCY RELATED TO OCCUPATION

In modern economies, a wide range of occupations, including traditional manual labour, requires the use of information-processing skills such as literacy, numeracy and problem solving in technology-rich environments. For example, car mechanics often use computers for diagnostics, and manufacturing processes rely heavily on computer numerical control (CNC) machines and require workers to be able to operate and programme them. Nevertheless, there are still many reasons why variations in skills proficiency are expected across occupations. Proficiency in the skills measured by the Survey of Adult Skills determines, to a greater or lesser extent, an individual's occupation. For example, adults aspiring to skilled occupations (e.g. engineer, dental assistant) typically need to have good literacy and numeracy skills to obtain their job and adequately perform the tasks involved. Conversely, low-skilled occupations (e.g. cleaner, mining labourer) do not necessarily require particularly high levels of proficiency in these skills. In addition, adults holding jobs in skilled occupations also tend to have higher educational attainment, which, in turn, is also associated with skills proficiency. At the same time, a person's job also influences how their skills evolve over their lifetime. Skilled occupations tend to provide more opportunities for using, thus maintaining and developing, literacy, numeracy and problem-solving skills. Conversely, adults in low-skilled occupations face a higher risk of losing those skills for lack of use. The Survey of Adult Skills provides insights into these complex relationships.

This section examines the differences in skills proficiency among adults who work in low- and high-skilled occupations. The extent of skills use in the workplace is discussed in Chapter 4, while the role of work in developing and maintaining information-processing skills over a lifetime is discussed in Chapter 5. The analysis distinguishes among skilled, semi-skilled and low-skilled occupations as follows: skilled occupations (e.g. legislators, senior officials and managers; professionals; technicians and associate professionals); semi-skilled white-collar occupations (e.g. clerks; service workers and shop and market sales workers); semi-skilled blue-collar occupations (e.g. skilled agricultural and fishery workers; craft and related trades workers; plant and machine operators and assemblers); and elementary occupations (e.g. labourers).

Differences in skills proficiency are clearly associated with differences in occupations, although in a small number of countries the mean score of semi-skilled blue-collar workers is the same as or lower than that of workers in elementary occupations. In some countries, adults in all occupational categories have relatively high scores. In the domain of literacy, for example, Finland and Japan clearly stand out in this respect.

At the broadest level, the findings confirm expectations. In a competitive labour market, it would be expected that adults with higher proficiency are allocated to more skilled jobs. This would also be true if there were an element of sorting on the basis of qualifications, as individuals with higher qualifications tend to have high levels of proficiency. At the same time, the aggregate picture may hide some level of mismatch between skills and job requirements. This is investigated in more depth in Chapter 4.

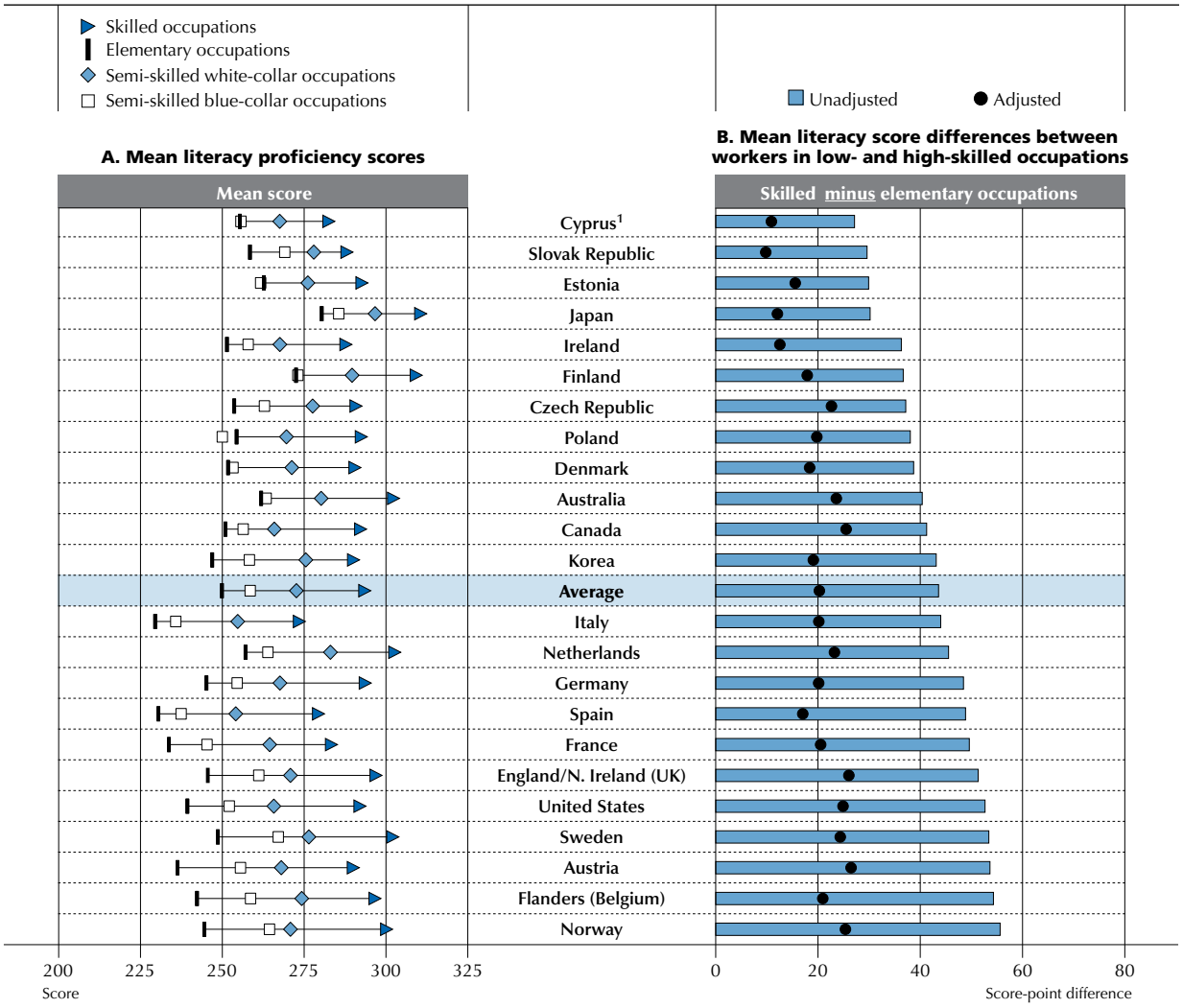
The particularly low levels of proficiency observed among workers in elementary occupations in a number of countries should be a cause for concern. Low levels of proficiency in information-processing skills may hamper the introduction of technological and organisational changes that could increase productivity, such as greater use of information technologies. In addition, lower proficiency in information-processing skills will place many of these workers at considerable risk in the event that they lose their jobs or have to assume new or different duties when new technologies, processes and work organisations are introduced (see Chapter 1).

Proficiency scores in literacy and numeracy among adults in low- and high-skilled occupations

Proficiency in information-processing skills is strongly associated with occupation. In all countries, adults in skilled occupations score higher, on average, than those in elementary occupations, in both literacy (Figure 3.19 [L]) and numeracy. In some countries, adults in all occupational categories have relatively high scores. The difference in literacy proficiency between adults in skilled and elementary occupations is largest in Norway (56 points), followed by Flanders (Belgium) and Austria (both 54 points), Sweden and the United States (both 53 points). The smallest difference can be observed in Estonia, Japan and the Slovak Republic (all 30 points). On average across countries, about 8% of adults are in elementary occupations; but this proportion ranges from a low of about 4% in Norway to a high of about 13% in Spain (see Table B3.14 in Annex B).

■ Figure 3.19 (L) ■

Occupation differences in literacy proficiency



1. See notes at the end of this chapter.

Notes: All differences in Panel B are statistically significant. Unadjusted differences are the differences between the two means for each contrast category. Adjusted differences are based on a regression model and take account of differences associated with all of the following variables: age, gender, education, immigration, language and socio-economic background. Only the score-point differences between two contrast categories are shown in Panel B, which is useful for showing the relative significance of occupation vis-a-vis observed score-point differences. For more detailed regression results, including for each category of each variable included in the model, see Table B3.17 (L) in Annex B. Includes adults aged 16-65 who worked during the previous five years. Skilled occupations include: legislators, senior officials and managers; professionals; technicians and associate professionals. Semi-skilled white-collar occupations include: clerks; service workers and shop and market sales workers. Semi-skilled blue-collar occupations include: skilled agricultural and fishery workers; craft and related trades workers; plant and machine operators and assemblers.

Countries are ranked in ascending order of the unadjusted difference in literacy scores (skilled minus elementary occupations).

Source: Survey of Adult Skills (PIAAC) (2012), Tables A3.1 (L) and A3.19 (L).

StatLink http://dx.doi.org/10.1787/888932901201



Using a more fine-grained classification of occupations reveals the following pattern: adults in skilled occupations score highest, followed by those in semi-skilled white-collar occupations, those in semi-skilled blue-collar occupations, and those in elementary occupations. However, in Denmark, Estonia, Finland and Poland, the mean score of adults in elementary occupations is close to or higher than that of adults in semi-skilled blue-collar occupations. In contrast, Austria, Flanders (Belgium) and Norway show the large score differences between these two groups in favour of adults working in semi-skilled blue-collar occupations.

On average across countries, adults in skilled occupations score higher on the literacy and numeracy scales than adults in semi-skilled white-collar occupations. Literacy proficiency differences are largest in Canada, England/Northern Ireland (UK), Norway and the United States. Japan stands out as a country with small score differences between occupational categories. It also features the highest mean score for all occupational categories.

After accounting for other socio-demographic factors, the magnitude of the difference in proficiency scores between adults working in skilled occupations and those working in elementary occupations is reduced by around one half. In other words, a large part of the difference in proficiency observed between adults in skilled occupations and those in elementary occupations is related to factors other than occupation – e.g. educational attainment or immigrant background. On average across countries, the gap in favour of adults working in skilled occupations falls from around 44 to 20 score points.

Proficiency in problem solving in technology-rich environments among adults in low- and high-skilled occupations

As expected, the proportion of adults scoring at Level 2 or 3 on the problem solving in technology-rich environments scale is higher among those in skilled occupations than among adults in elementary occupations (Figure 3.20 [P]). On average across countries, 50% of adults in skilled occupations score at Level 2 or 3, while 20% of adults in elementary occupations attain those levels of proficiency.

The share of adults in skilled occupations who score at Level 2 or 3 is largest in Sweden (61%), Norway and Finland (both 58%), and is smallest in Poland (33%), the Slovak Republic (39%) and Ireland (41%). For adults in elementary occupations the picture is similar: Finland (33%), Denmark (28%) and Sweden (28%) show the largest proportions of adults at Level 2 or 3, while the smallest proportions are observed in Austria (12%), Ireland (14%) and Flanders (Belgium) (14%). Only a small proportion of adults have Level 3 proficiency. Across countries, an average of 10% of adults in skilled occupations score at Level 3, with proportions ranging from about 5%-6% in Ireland, Korea and the Slovak Republic, to about 14%-16% in Finland, Japan and Sweden. Among adults working in elementary occupations, less than 3% of them score at Level 3, on average across countries, while in England/Northern Ireland (UK), Norway and the Slovak Republic, the proportion is close to one.

Cumulative disadvantage in key information-processing skills for adults in low- and semi-skilled occupations

Low- and semi-skilled workers and low- and semi-skilled occupations are a source of concern among policy makers, as economic growth and competitiveness are becoming increasingly dependent on the supply of, and demand for, higher levels of skills. Nearly all employment projections predict growing prospects for those with high levels of skills and declining prospects for those without sufficient skills.

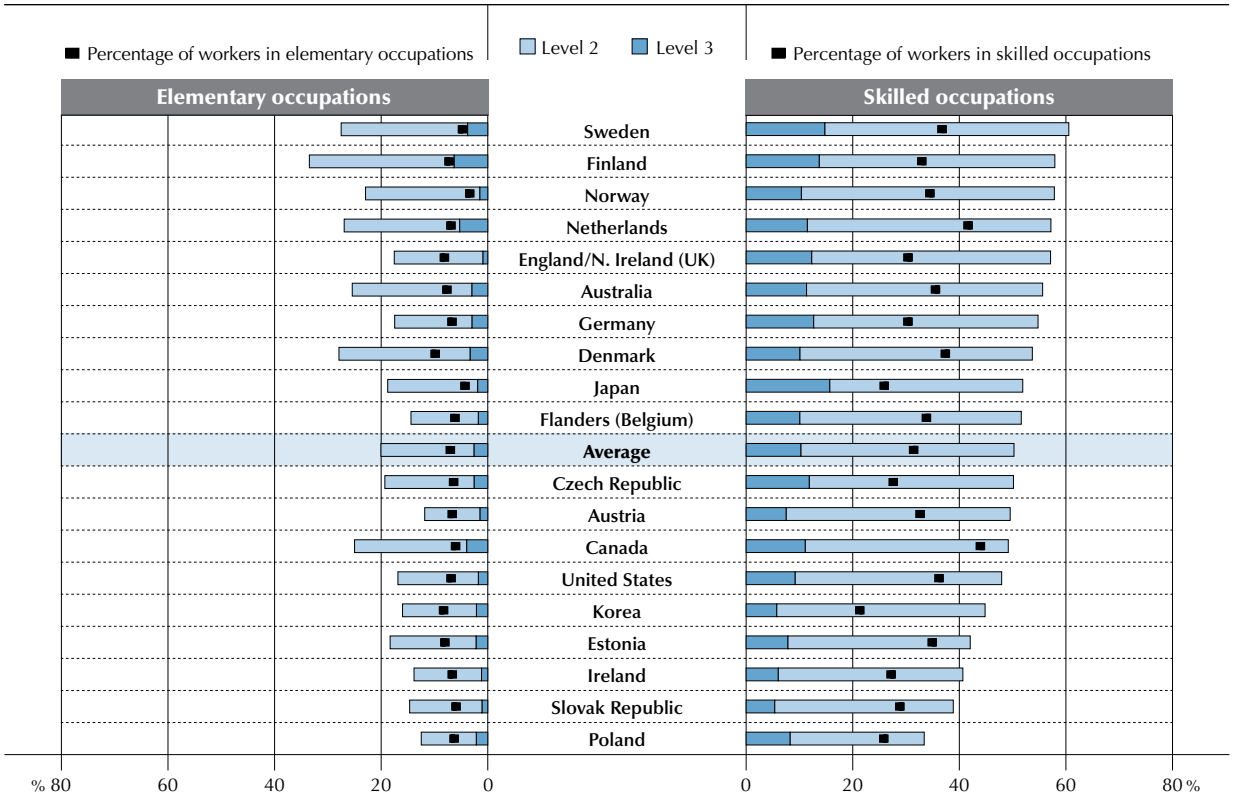
Adults in low- and semi-skilled occupations who have low levels of education

Not all adults in low-skilled occupations have low levels of education or score at lower levels of proficiency in the skills directly assessed in the Survey of Adult Skills (see Chapter 4 for a discussion of skills mismatch). However, workers in low- and semi-skilled occupations who have not completed upper secondary education face a high risk of scoring at lower levels of proficiency in key information-processing skills – skills that are believed to be growing in importance not only for the economy but for all society (see Chapter 1). The proportion of workers with this latter profile ranges from about 8% in the Czech Republic and Japan to about 30%-32% in Italy and Spain (see Table B3.15 in Annex B). On average across countries, these workers have over six times the odds of scoring at lower levels of proficiency on the literacy scale than workers in skilled occupations who completed upper secondary education (Figure 3.21 [L]). The increased odds for this group vary from highs of 10 times higher in Canada, over eight times higher in the United States, and nearly eight times higher in Germany, to lows of just over four times higher in other OECD countries.

■ Figure 3.20 (P) ■

Problem-solving proficiency among workers in skilled and elementary occupations

Percentage of workers in skilled and elementary occupations who score at Level 2 or 3 in problem solving in technology-rich environments



Notes: Percentages on the problem solving in technology-rich environments scale are computed so that the sum of proportions for the following mutually exhaustive categories equals 100%: opted out of the computer-based assessment; no computer experience; failed ICT core test; below Level 1, Level 1, Level 2 and Level 3. For more detailed results for each category, see corresponding tables mentioned in the source below. Includes adults aged 16-65 who worked during the previous five years. Skilled occupations include: legislators, senior officials and managers; professionals; technicians and associate professionals.

Countries are ranked in descending order of the combined percentage of adults who worked during the previous five years in skilled occupations scoring at Level 2 and 3.

Source: Survey of Adult Skills (PIAAC) (2012), Tables A3.20 (P) and B3.14 in Annex B.

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Workers in the same low- and semi-skilled occupations but who have completed upper secondary education also face a high risk, but not as high. These workers have about 2.5 times the odds of scoring at lower levels of proficiency on the literacy scale than workers in skilled occupations who also completed upper secondary education. The increased odds for this group are near or over three times higher in Canada, Flanders (Belgium), Germany, Norway, Sweden and the United States, indicating that an upper secondary education is not enough to secure proficiency at Level 3 or higher on the literacy scale. Adults need continuous opportunities to maintain and develop the literacy skills they may have acquired during school, including as part of their everyday work tasks.

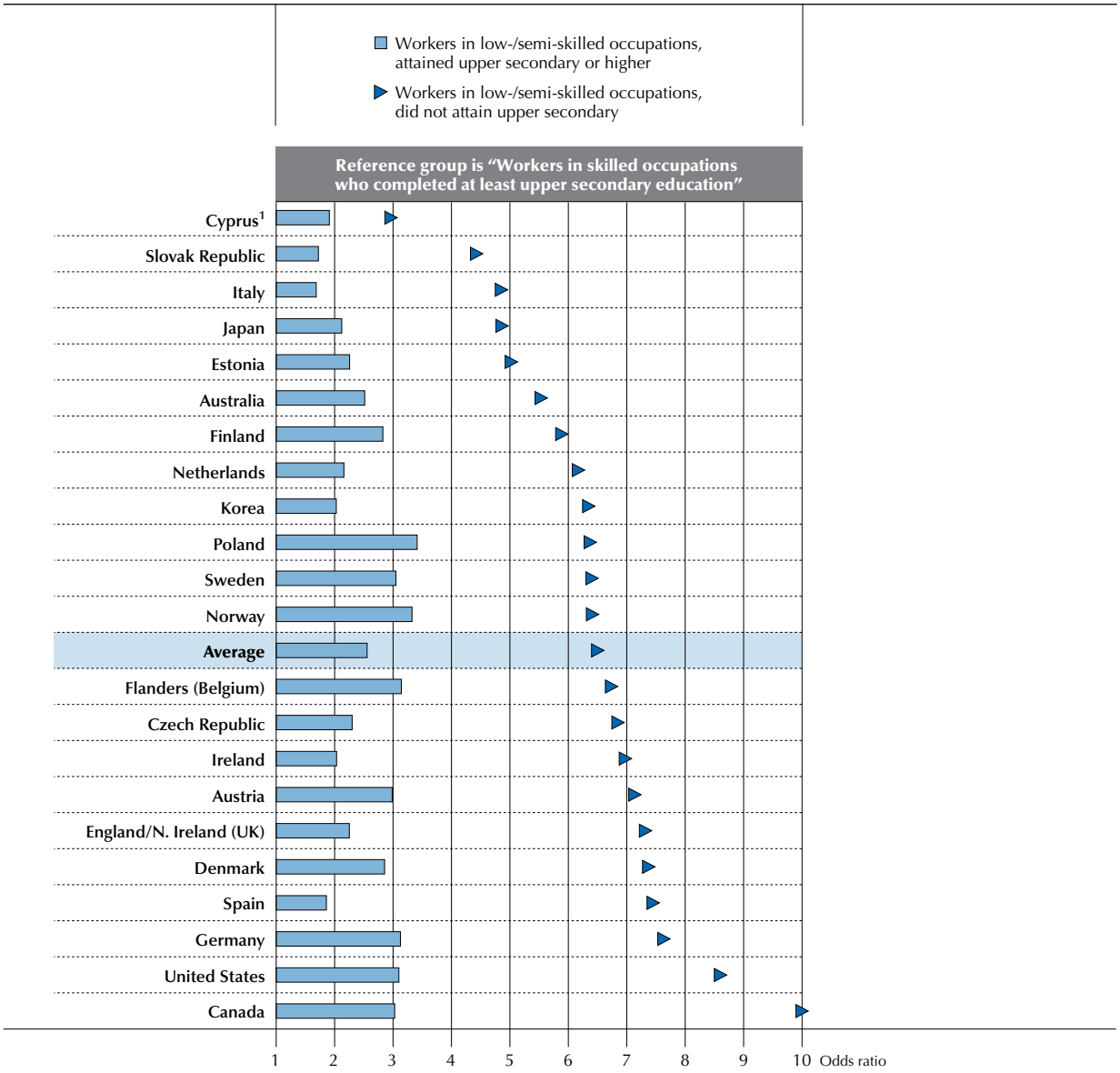
Older men and women in low- and semi-skilled occupations

Older workers in general are at a higher risk of scoring at lower levels of proficiency in key information-processing skills; but there is a clear distinction between older workers in skilled occupations and those in low- and semi-skilled occupations (i.e. workers in traditional low-skilled services and goods manufacturing). Older men and women aged 45-65 in low- and semi-skilled occupations have, on average, over eight times the odds of displaying no proficiency[4] or of scoring at or below Level 1 on the problem solving in technology-rich environments scale than adults the same age who work in skilled occupations (Figure 3.22 [P]). The increased odds for the former group compared to the reference group range between 10 and 14 times higher in Austria, Denmark, Estonia, Finland, Germany, Korea and Sweden.

■ Figure 3.21 (L) ■

Likelihood of lower literacy proficiency among adults in low-/semi-skilled occupations

Adjusted odds ratios of scoring at or below Level 2 in literacy, by educational attainment and type of occupation



1. See notes at the end of this chapter.

Notes: Estimates based on a sample size less than 30 or are not statistically different from the reference group are not shown. For more detailed results, see corresponding table mentioned in the source below. Odds ratios are adjusted for age, gender, and socio-economic, immigrant and language background. Includes adults aged 16-65 who worked during the previous five years. Skilled occupations include: legislators, senior officials and managers; professional; technicians and associate professionals. Low-/semi-skilled occupations include: clerks; service workers and shop and market sales workers; skilled agricultural and fishery workers; craft and related trades workers; plant and machine operators and assemblers; elementary occupations.

Countries are ranked in ascending order of the odds ratios of workers scoring at or below proficiency Level 2 when they are in low/semi-skilled occupations and did not complete upper secondary education.

Source: Survey of Adult Skills (PIAAC) (2012), Table A3.21 (L).

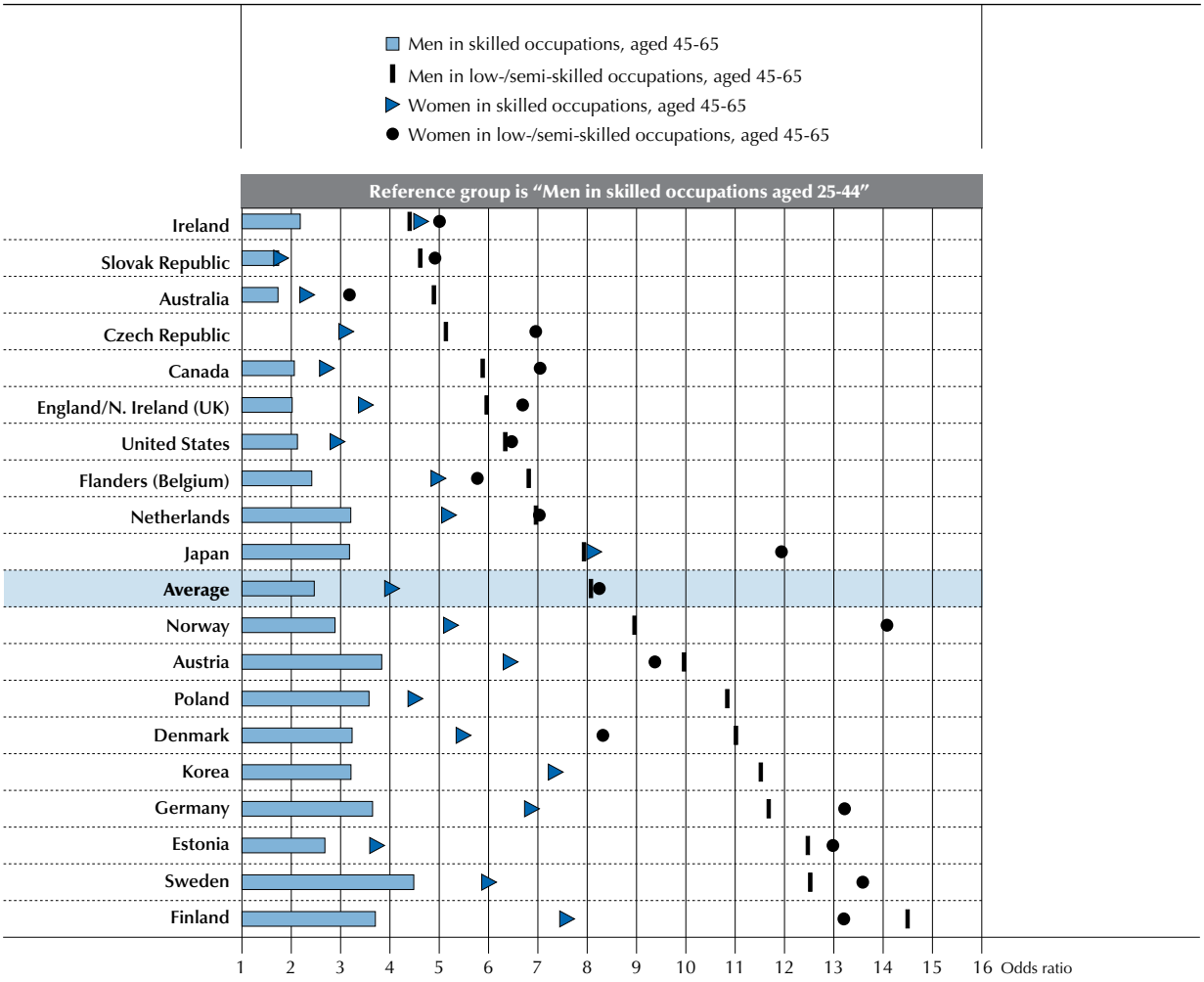
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Even if employed in skilled occupations, older women are more likely to have lower scores on the problem solving in technology-rich environments scale than men with the same profile. On average across countries, these women have about four times the odds of scoring at lower levels of proficiency than younger workers in skilled occupations; in Finland, Germany, Japan and Korea, the odds are around seven times higher or more.

■ Figure 3.22 (P) ■

Likelihood of lower problem-solving proficiency among older adults in low-/semi-skilled occupations

Adjusted odds ratios of scoring at or below Level 1, or receiving no score, in problem solving in technology-rich environments, by age, gender and type of occupation



Notes: Estimates based on a sample size less than 30 or are not statistically different from the reference group are not shown. For more detailed results, see corresponding table mentioned in the source below. Odds ratios are adjusted for education, and socio-economic, immigrant and language background. Includes adults aged 16-65 who worked during the previous five years. Skilled occupations include: legislators, senior officials and managers; professional; technicians and associate professionals. Low-/semi-skilled occupations include: clerks; service workers and shop and market sales workers; skilled agricultural and fishery workers; craft and related trades workers; plant and machine operators and assemblers; elementary occupations.
Countries are ranked in ascending order of the odds ratios of men aged 45-65 scoring at or below proficiency Level 2 when they are in low-/semi-skilled occupations.

Source: Survey of Adult Skills (PIAAC) (2012), Table A3.22 (P).

StatLink http://dx.doi.org/10.1787/888932901258

SUMMARY

Educational attainment has a strong positive relationship to proficiency. Adults with tertiary-level qualifications have a 36 score-point advantage on the literacy scale, on average, over adults who have completed less than a full secondary education, after other characteristics have been taken into account. This is both expected and desired. Adults who have completed tertiary education will have spent longer in education and received higher levels of instruction than their less-qualified peers. Due to the processes of selection through which access to higher levels of education is determined, adults with higher levels of qualifications are also likely to be those who generally have greater ability and interest in and motivation for study. In addition, completing higher levels of education often provides access to jobs that involve higher levels of further learning and information-processing tasks.



The issue for policy makers is not so much the gap between the proficiency level of highly qualified adults and that of adults with few qualifications as the evidence that adults with low levels of education perform very poorly in some countries. There are a number of countries (Canada, England/Northern Ireland [UK], Ireland, Italy, Spain and the United States) in which adults with low levels of educational attainment have average proficiency scores at the bottom end of Level 2 on the literacy and numeracy scales. The risk is that a combination of poor initial education and lack of opportunities to further develop proficiency becomes a vicious cycle, in which poor proficiency leads to fewer opportunities and vice versa.

Being an immigrant with a foreign-language background is associated with significantly poorer proficiency in literacy, numeracy and problem solving in technology-rich environments than being a native-born whose first or second language learned as a child was the same as the language of assessment, even when other factors are taken into account. Again, this is not surprising. However in some countries, the time since arrival appears to make little difference to proficiency, suggesting either that the incentives to learn the language of the host country are not strong, or that policies encouraging learning the language of that country are not particularly effective. Foreign-language immigrants who have low levels of education are particularly at risk: when low educational attainment is combined with poor proficiency in the language of the country of residence, integration into the labour market and society becomes even more difficult.

While older adults generally have lower proficiency than their younger counterparts, the extent of the gap between generations varies considerably among countries. This suggests that differences in proficiency related to age are a function of many factors in addition to biology. These include the quality of the initial education and the opportunities to undertake further training or to engage in practices that help to maintain and develop proficiency over a lifetime. Governments cannot change the past; however, policies designed to provide high-quality initial education and ongoing opportunities for learning can go part of the way towards ensuring that the older adults of the future maintain their skills.

The children of parents with low levels of education have lower proficiency than those whose parents have higher levels of education, after taking other factors into account. This mirrors the findings of other adult literacy surveys and studies of students, such as PISA. Initial, compulsory education should do as much as possible to ensure that school-leavers have the skills necessary to be successful in modern societies.

As expected, differences in skills proficiency are associated with occupation. Other things being equal, workers in skilled occupations have higher proficiency than those in elementary occupations. In a competitive labour market, adults with higher proficiency should be allocated to more skilled jobs. This would also be true if there were an element of sorting on the basis of qualifications, as individuals with higher qualifications tend to have higher levels of proficiency.

Nevertheless, policy makers in a number of countries should be concerned about the particularly low levels of proficiency observed among workers in elementary occupations. Low levels of proficiency in information-processing skills among workers may hamper the introduction of changes in technologies and organisational structures that can improve productivity. Low proficiency in information-processing skills may also place workers at considerable risk in the event that they lose their jobs or have to take on new or different duties when new technologies, processes and forms of work organisation are introduced. Enterprises and governments, then, should invest in workplace-based literacy and numeracy programmes, and in training more generally, and develop forms of work organisation that allow all workers to engage, to a greater or lesser degree, in text-processing tasks.

There is little variation between men and women in proficiency, although men show a small advantage in all three domains. On average, men have higher scores in numeracy and problem solving in technology-rich environments than women, but the gap is not large and is further reduced when other characteristics are taken into account. In literacy, the gap in favour of men is narrower. In half the countries surveyed, there is no difference between young men and young women in their proficiency in numeracy, and they are equally proficient in literacy, with young women slightly more proficient in some cases.



Notes

1. A thematic report is planned for 2014 to provide additional detailed analyses of results on the problem solving in technology-rich environments scale.

2. Information on the occupation of parents was collected in some countries. Thus, in the analysis of the full sample, socio-economic background is proxied by parental education only. Socio-economic background is a difficult concept to measure. While there is much socio-economic background information that is not captured in the Survey of Adult Skills (e.g. income, wealth, and occupation of parents), parents' educational background is one of the most important proxies for socio-economic background since education is an important predictor of income, wealth and occupation.

3. For the purposes of the analysis presented in this report, native language refers to whether the first or second language learned as a child is the same as the language of assessment, and not whether the language has official status. Foreign language refers to whether the first or second language learned as a child is not the same as the language of assessment. Thus in some cases, foreign language might refer to minority languages in which the assessment was not administered.

4. Adults who opted out of the computer based assessment, had no computer experience or who failed the ICT core test did not receive a proficiency score on the problem solving in technology-rich environments scale.

Notes regarding Cyprus

Note by Turkey: The information in this document with reference to "Cyprus" relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Turkey recognises the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of the United Nations, Turkey shall preserve its position concerning the "Cyprus issue".

Note by all the European Union Member States of the OECD and the European Union: The Republic of Cyprus is recognised by all members of the United Nations with the exception of Turkey. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus.

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4

How Skills Are Used in the Workplace

This chapter discusses how information-processing and generic skills are used in the workplace, as measured by the Survey of Adult Skills (PIAAC). It examines the use of these skills across countries and by job and socio-demographic characteristics. It also sheds light on the extent of "mismatch" between the qualifications held by workers or their skills proficiency and the qualifications or skills required in their workplace. Qualification and skills mismatch are then compared, and their effect on wages and the use of skills at work is assessed.



Skills form the bedrock of every country's economy. They are not only linked to aggregate economic performance but also to each individual's success in the labour market. However, having skills is not enough; to achieve growth, both for a country and for an individual, skills must be put to productive use at work. The Survey of Adult Skills (PIAAC) measures both adults' proficiency in key information-processing skills, as described in previous chapters, and how those skills are used in the workplace. It also assesses the use of a variety of generic competencies at work. This chapter presents an analysis of how both information-processing and generic skills are used in the workplace. Among the findings:

- The use of skills in the workplace influences a number of labour market phenomena, including productivity and the gap in wages between temporary and permanent workers.
- Skills-use indicators are only mildly correlated with measures of skills proficiency. In fact, the distributions of skills use for workers at different levels of proficiency overlap substantially. As a result, it is not uncommon that more proficient workers use their skills at work less intensively than less proficient workers do.
- The distribution of workers across occupations is found to be the single most important factor shaping the distribution of skills use. For instance, differences across qualification levels and contract type are explained in large part by differences in the occupations that workers hold.
- Workers tend to use information-processing skills together, often in association with influencing skills. Above-median use of reading, writing, influence and sometimes problem-solving skills at work are jointly observed for at least one-fifth of workers in ten participating countries; in another six countries, ICT, numeracy and reading, and sometimes writing, skills are used in a bundle.
- Mismatches between skills proficiency and the use of skills in the workplace are pervasive, affecting just over one in seven workers. Over-skilled workers – those with higher skills than required by their jobs – tend to under-use their skills, resulting in a "waste" of human capital, while under-skilled workers – those with lower skills than required by their jobs – have to work harder to accomplish their tasks, which could lead to stress and lower job satisfaction, with negative consequences for productivity. Young people are particularly affected by over-skilling, as the incidence of over-skilling generally diminishes with age. In addition, over-skilling has a relatively small negative effect on wages. This suggests either that most employers succeed in identifying their employees' real skills, irrespective of their formal qualifications, and adapt job content accordingly or that wages are negotiated based on skills other than literacy, numeracy and problem solving in technology-rich environments and how those skills are used at work.
- On average across countries, about 21% of workers report that they are over-qualified – that they have higher qualifications than required by their jobs – and 13% report that they are under-qualified for their jobs – that they have lower qualifications than required by their jobs. Over-qualification is particularly common among foreign-born workers and those employed in small establishments, in part-time jobs or on fixed-term contracts. Over-qualification has a significant impact on wages, even after adjusting for proficiency, which, in turn, implies adverse effects on workers' productivity. However, some instances of this kind of mismatch occur when workers have lower skills proficiency than would be expected at their qualification level, either because they performed poorly in initial education or because their skills have depreciated over time. By contrast, under-qualified workers are likely to have the skills required at work, but not the qualifications to show for them.
- While workers with a given level of qualification would be better off if they worked in jobs that better matched their qualifications, this does not imply that either these workers or the economy as a whole would be better off if they had a *lower* level of educational qualification. Qualifications and skills in excess of those *required at work* are still valued in the labour market. On average, a tertiary graduate who holds a job requiring only an upper secondary qualification will earn *less* than if he or she were in a job requiring a tertiary qualification, but *more* than an upper secondary graduate in a job requiring upper secondary qualifications.

USING SKILLS IN THE WORKPLACE

The Survey of Adult Skills (PIAAC) includes detailed questions about the frequency with which respondents perform specific tasks in their jobs. Based on this information, the survey measures the use of a wide range of skills, including both information-processing skills, which are also measured in the direct assessment, and generic skills, for which only self-reported use at work is available.



Given the large amount of information collected in the skills-use section of the questionnaire, it is helpful to construct indices that group together tasks associated with the use of similar skills. Twelve indicators were created (Table 4.1), five of which refer to *information-processing skills* (reading,[1] writing, numeracy, ICT skills and problem solving); the remaining seven correspond to *general skills* (task discretion, learning at work, influencing skills, co-operative skills, self-organising skills, gross physical skills and dexterity).[2]

Table 4.1
Indicators of skills use at work

	Indicator	Group of tasks
Information-processing skills	**Reading**	Reading documents (directions, instructions, letters, memos, e-mails, articles, books, manuals, bills, invoices, diagrams, maps)
	Writing	Writing documents (letters, memos, e-mails, articles, reports, forms)
	Numeracy	Calculating prices, costs or budgets; use of fractions, decimals or percentages; use of calculators; preparing graphs or tables; algebra or formulas; use of advanced math or statistics (calculus, trigonometry, regressions)
	ICT skills	Using e-mail, Internet, spreadsheets, word processors, programming languages; conducting transactions on line; participating in online discussions (conferences, chats)
	Problem solving	Facing complex problems (at least 30 minutes of thinking to find a solution)
Other generic skills	**Task discretion**	Choosing or changing the sequence of job tasks, the speed of work, working hours; choosing how to do the job
	Learning at work	Learning new things from supervisors or co-workers; learning-by-doing; keeping up-to-date with new products or services
	Influencing skills	Instructing, teaching or training people; making speeches or presentations; selling products or services; advising people; planning others' activities; persuading or influencing others; negotiating.
	Co-operative skills	Co-operating or collaborating with co-workers
	Self-organising skills	Organising one's time
	Dexterity	Using skill or accuracy with one's hands or fingers
	Physical skills (gross)	Working physically for a long period

Box 4.1. How to interpret skills-use variables

A number of skills-use variables are taken directly from questions asked in the background questionnaire of the Survey of Adult Skills (PIAAC):

- Problem-solving skills: How often are you usually confronted with more complex problems that take at least 30 minutes to find a good solution?
- Co-operative skills: What proportion of your time do you usually spend co-operating or collaborating with co-workers?
- Self-organising skills: How often does your job usually involve organising your own time?
- Physical skills: How often does your job usually involve working physically for a long period?
- Dexterity: How often does your job usually involve using skill or accuracy with your hands or fingers?

For these skills-use variables numerical comparisons between the use of different skills are possible: a value of 0 indicates that the skill is never used; a value of 1 indicates that it is used less than once a month; a value of 2 indicates that it is used less than once a week but at least once a month; a value of 3 indicates that it is used at least once a week but not every day; and a value of 4 indicates that it is used every day.

All other variables described in Table 4.1 have been derived based on more than one question from the background questionnaire using IRT, a statistical method described in more detail in the *Reader's Companion* to this report. These variables have been transformed so that they have a mean of 2 and a standard deviation of 1 across the pooled sample of all participating countries, thus allowing meaningful comparisons across countries. While this transformation implies that the levels of use cannot be easily compared across skill types, such comparisons would be conceptually difficult to make anyway. For example, is using ICT skills every day equivalent to using learning skills every day in terms of how intensively ICT and learning skills are used at work?



Table 4.1 lists the items of the section of the questionnaire on skills use at work that are associated with each of the 12 skills-use indicators. For example, the reading and writing indices are derived from a large set of questions concerning the frequency with which several types of documents (directions, instructions, memos, e-mails, articles, manuals, books, invoices, bills and forms) are read or written during one's regular work activity. Higher values of the indices correspond to more intense levels of use of the individual's ability to read or write (see Box 4.1 on how to interpret skills-use scales).

Levels of skills use in the workplace

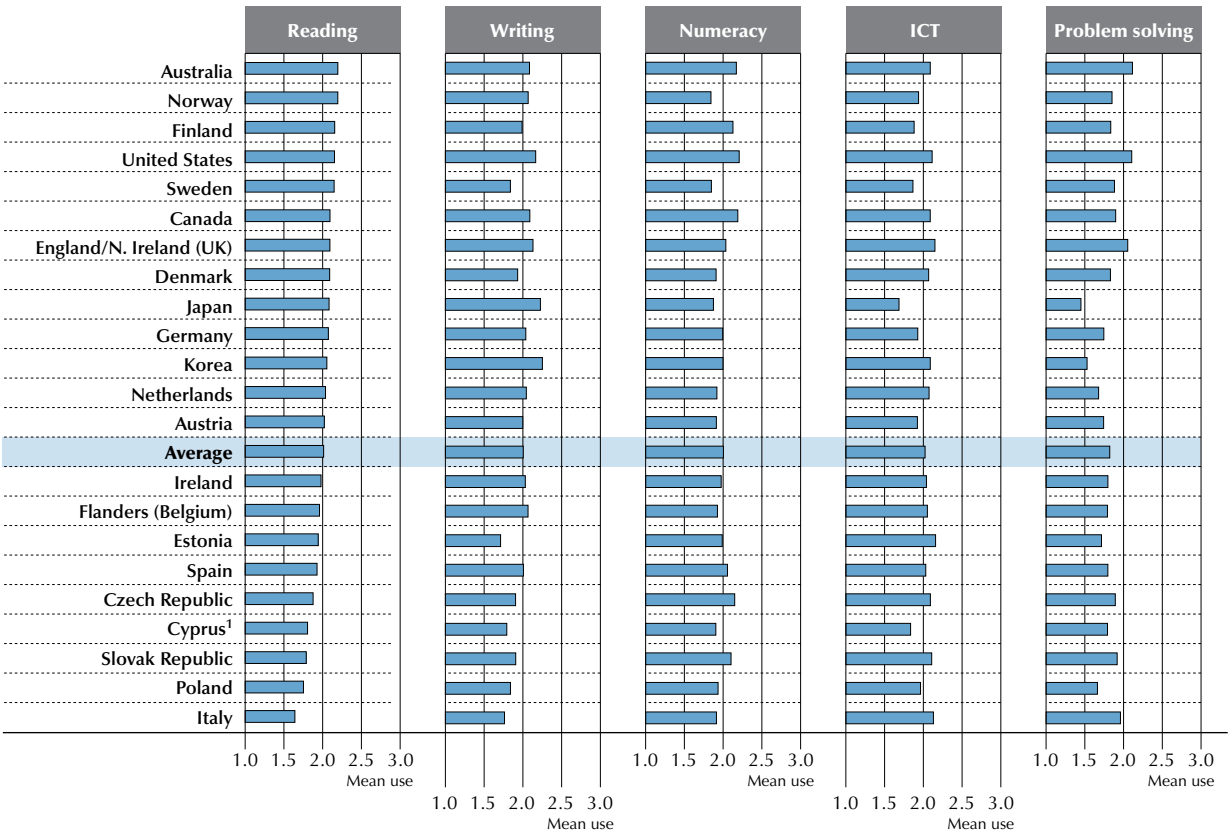
Countries that make the most frequent use of the skills of their workforce

Reading skills are reported to be used at work most frequently in Australia and Norway, writing skills are used most frequently in Japan and Korea, and numeracy skills are most frequently used in Canada and the United States (Figure 4.1). England/Northern Ireland (UK) and Estonia are the two countries where ICT skills are used the most at work while problem-solving skills are more frequently used in Australia and the United States. These results show surprisingly little connection between the rankings of countries in the average use of each foundation skill at work, emphasising the importance of measuring these skills separately. Australia and the United States are the two countries that rank most consistently near the top of the distribution in all the skills domains measured, but it is more difficult to identify any pattern among the poorest performers.[3]

A similar analysis is conducted for the seven indicators of generic skills (Figure 4.2). As with the use of information-processing skills, the rankings of countries, according to the use of generic skills, vary substantially – even more than for information-processing skills.

■ Figure 4.1 ■

Average use of information-processing skills at work



1. See notes at the end of this chapter.

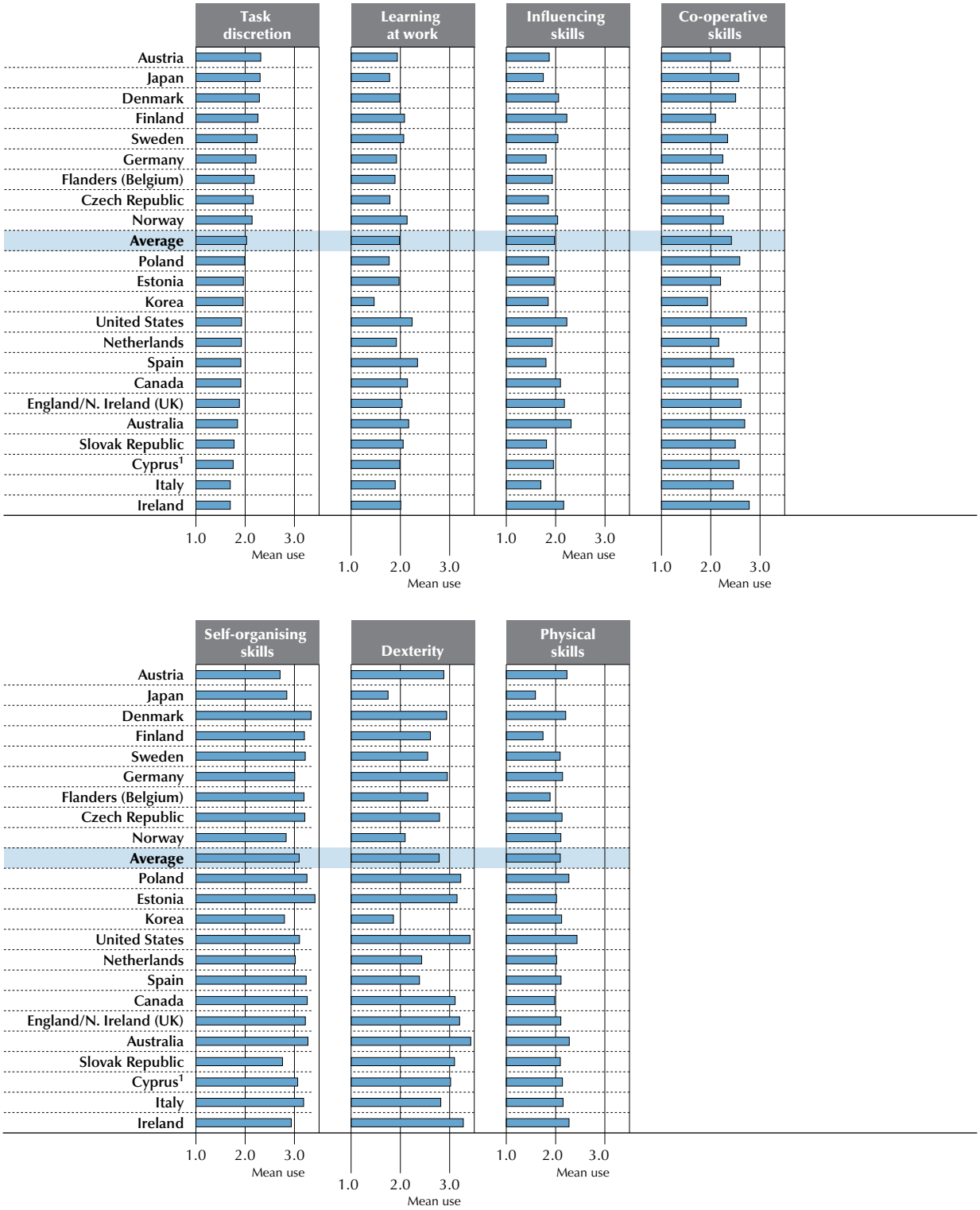
Notes: Skills-use indicators are standardised to have a mean of 2 and a standard deviation of 1 across the entire survey sample.
Countries are ranked in descending order of the average use of reading skills at work.

Source: Survey of Adults Skills (PIAAC) (2012), Table A4.1.

StatLink http://dx.doi.org/10.1787/888932901277

■ Figure 4.2 ■

Average use of generic skills at work



1. See notes at the end of this chapter.

Notes: Skills-use indicators are standardised to have a mean of 2 and a standard deviation of 1 across the entire survey sample.

Countries are ranked in descending order of the average use of task discretion at work.

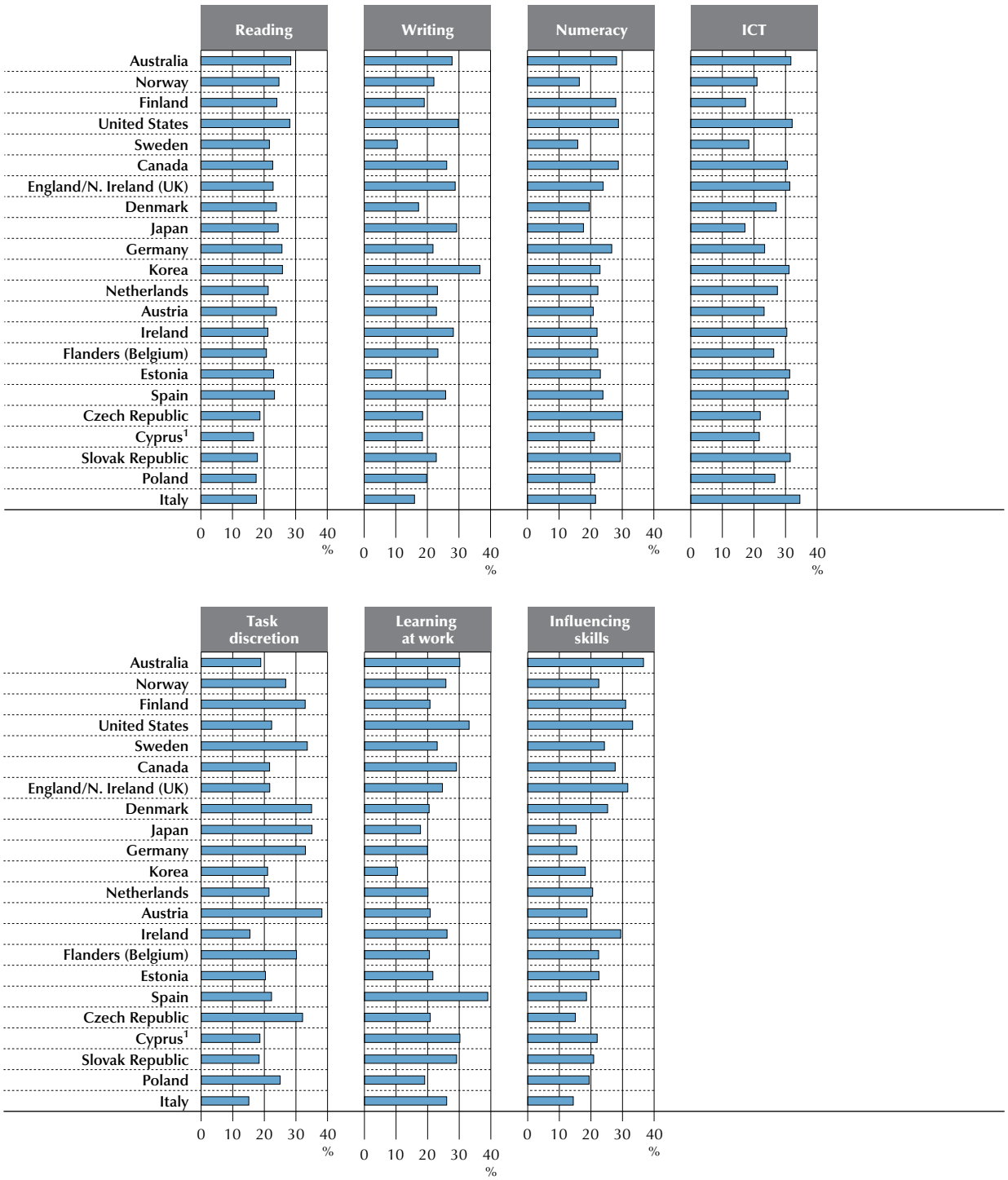
Source: Survey of Adults Skills (PIAAC) (2012), Table A4.2.

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■ Figure 4.3 [1/2] ■

High use of skills at work

A. Percentage of workers in the top 25% of the distribution of the use of skills at work



1. See notes at the end of this chapter.

Notes: The 75th percentile of the overall distribution of skills usage is 2.59 for reading, 2.75 for writing, 2.62 for numeracy, 2.54 for ICT, 2.35 for task discretion, 2.53 for learning at work, 2.54 for influencing skills.

Countries are ranked in descending order of the average use of reading at work (see Figure 4.1).

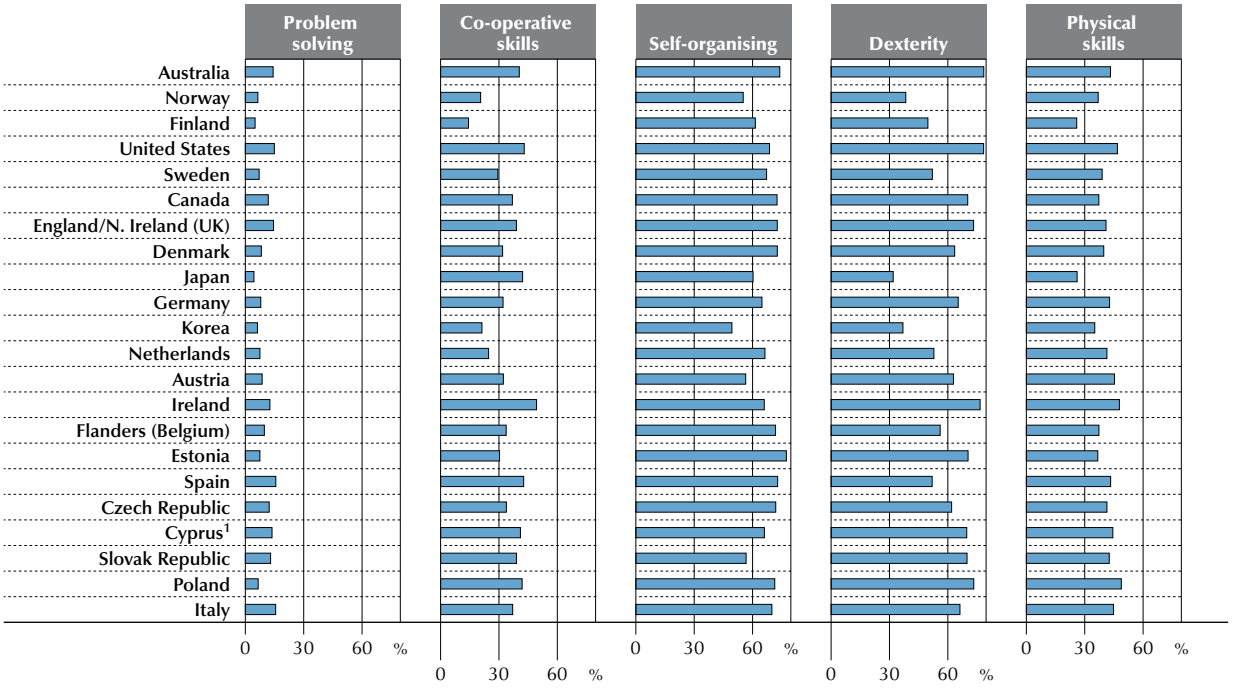
Source: Survey of Adults Skills (PIAAC) (2012), Table A4.3.

StatLink http://dx.doi.org/10.1787/888932901315

■ Figure 4.3 [2/2] ■

High use of skills at work

B. Percentage of workers using the skills shown everyday



1. See notes at the end of this chapter.

Notes: The 75th percentile of the overall distribution of skills usage is 2.59 for reading, 2.75 for writing, 2.62 for numeracy, 2.54 for ICT, 2.35 for task discretion, 2.53 for learning at work, 2.54 for influencing skills.

Countries are ranked in descending order of the average use of reading at work (see Figure 4.1).

Source: Survey of Adults Skills (PIAAC) (2012), Table A4.3.

StatLink http://dx.doi.org/10.1787/888932901315

Another way of looking at skills use at work is by focusing on the proportion of workers who use their skills the most frequently (Figure 4.3).[4] While these findings are similar to those that emerged when looking at *average* skills use, there are some exceptions. For instance, the use of reading skills in Sweden is above average, while the country has a relatively small proportion of jobs that require a high use of reading skills. The opposite is true in Spain, where the use of reading skills is well below average, while the country has a relatively large share of workers who use their reading skills frequently.

Skills used in concert in the workplace

Many of the skills described above are used in concert at work. Cluster analysis suggests that, in ten participating countries, reading, writing, influence skills and, sometimes, problem-solving skills are used together at work. In these countries, at least one in five workers uses these skills at work with above-average frequency (Table 4.2). In another seven countries, ICT, numeracy, reading and, sometimes, writing skills are correlated, with between 17% and 24% of workers using these skills together at work with above-median frequency.[5] Overall, the results of the cluster analysis show that while information-processing skills tend to be used together, generic skills are not. The only exception are influencing skills, which tend to be associated with reading, writing and problem-solving skills. Interestingly, an above-median use of ICT skills is most often associated with an above-median use of numeracy and reading skills.

The extent of skills use at work and productivity

In theory, countries where skills are used more intensively in the workplace also enjoy greater productivity, although the strength of the link depends on a number of factors, such as the capital stock, the quality of production technologies, and



the efficiency of matching workers to jobs. Analysis of results shows that the use of reading skills at work correlates most strongly with a standard indicator of labour productivity, namely output per hour worked. Obviously, productivity may also be affected by the use of many other skills or by the nature of the work environment. As a result, the link between reading at work and productivity may reflect the fact that reading is associated with these other skills and/or with capital-intensity in the workplace.

Table 4.2
Skills used jointly at work

	Percentage of workers with high-use of multiple skills[1]	Skills-use clusters
Australia	18.6	Influencing, Reading, Writing, Problem Solving
England/N. Ireland (UK)	18.2	Influencing, Reading, Writing, Problem Solving
Ireland	18.0	Influencing, Reading, Writing, Problem Solving
Austria	24.5	Influencing, Reading, Writing
Denmark	21.7	Influencing, Reading, Writing
Finland	21.9	Influencing, Reading, Writing
Germany	19.5	Influencing, Reading, Writing
Italy	23.8	Influencing, Reading, Writing
Netherlands	23.1	Influencing, Reading, Writing
Norway	21.4	Influencing, Reading, Writing
Czech Republic	17.2	ICT, Numeracy, Reading, Writing
Korea	18.2	ICT, Numeracy, Reading, Writing
Sweden	18.8	ICT, Numeracy, Reading, Writing
Flanders (Belgium)	23.6	ICT, Numeracy, Reading
Japan	25.1	ICT, Numeracy, Reading
Canada	22.3	ICT, Reading, Writing
Estonia	24.2	ICT, Reading, Writing
Cyprus[2]	32.7	Influencing, Reading
Spain	33.0	Influencing, Reading
Slovak Republic	25.0	ICT, Problem Solving, Reading
United States	32.6	ICT, Reading
Poland[3]	-	-

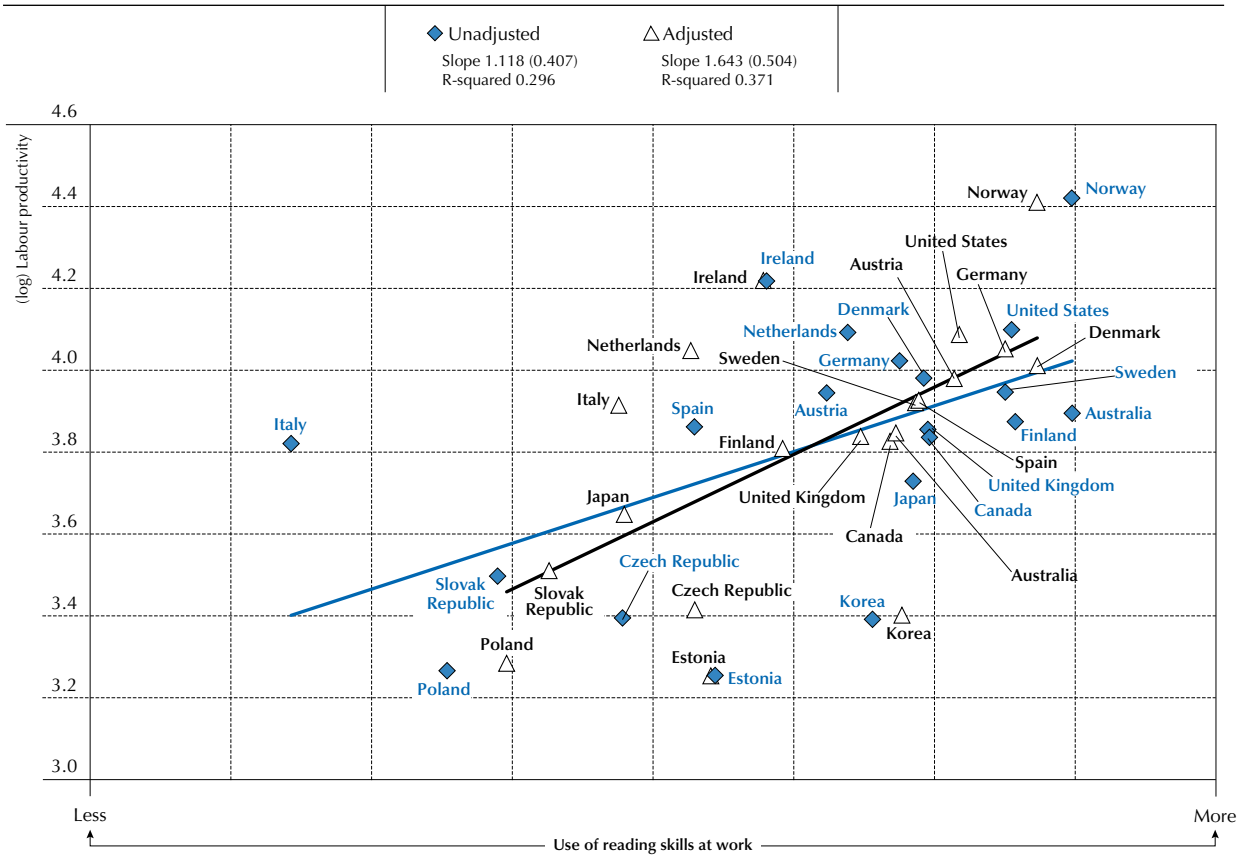
1. High use of skills is defined as above the median of the within-country distribution of the indicator of skills use.
2. See notes at the end of this chapter
3. No skills use cluster is identified for Poland.

Despite these caveats, labour productivity and the use of reading skills are positively and statistically significantly correlated across participating countries. Differences in the average use of reading skills explain around 30% of the variation in labour productivity across countries (Figure 4.4). In other words, how skills are used at work can affect productivity. One possible explanation for this is that skills use simply reflects workers' proficiency in those skills. If so, the link between the use of reading skills at work and productivity could actually reflect a relationship between literacy proficiency and productivity.[6] But this is not what the data show. The positive link between labour productivity and reading at work remains strong and statistically significant even after adjusting for average proficiency scores in literacy and numeracy.[7] If anything, once these adjustments are made, the average use of reading skills explains more (37%) of the variation in labour productivity across countries.[8] Put simply, the way skills are used at work is important, in itself, in explaining differences in labour productivity over and above the effect of proficiency.

These results emphasise the importance of putting skills to productive use, beyond having a skilled workforce (Hanushek and Woessmann, 2008). Too often workers are not employed in the jobs that make the best use of their skills. This issue will be discussed at greater length below, in the section on mismatch.

■ Figure 4.4 ■

Labour productivity and the use of reading skills at work



Notes: The bold lines are the best linear predictions. Labour productivity is equal to the GDP per hour worked, in USD current prices (Source: OECD.Stat). Adjusted estimates are based on OLS regression including controls for literacy and numeracy proficiency scores. Standard errors in parentheses.

Source: Survey of Adults Skills (PIAAC) (2012), Table A4.4.

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The distribution of skills use according to workers' and jobs' characteristics

Skills use at work and gender

With only a few country exceptions, men use information-processing skills at work more frequently than women, on average (Figure 4.5). This is always the case for problem-solving skills; whereas for reading, writing, ICT and numeracy skills, a small group of countries, often including Poland and the Slovak Republic, shows greater use of these skills among women than among men.

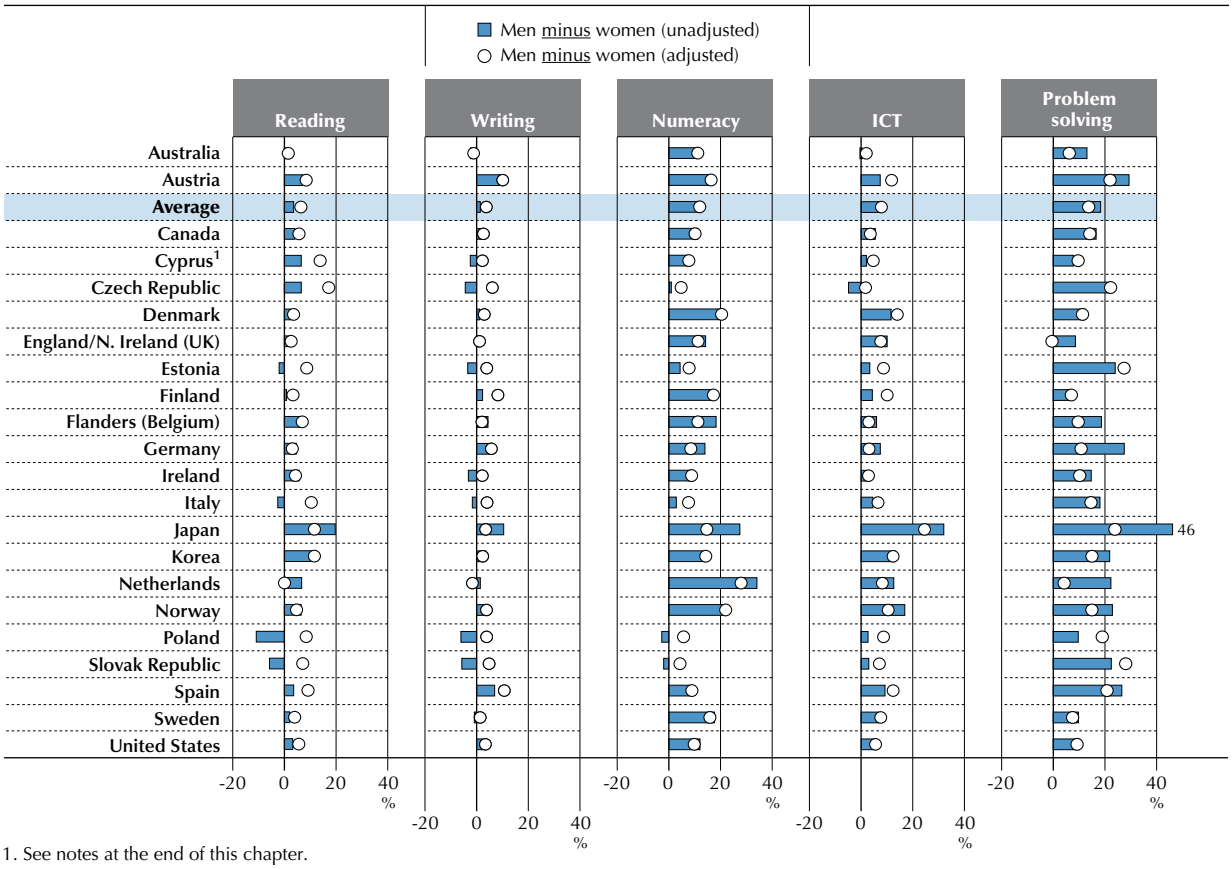
Differences in skills use between men and women may be the result of gender discrimination but may also be explained by differences in skills proficiency (in numeracy and literacy) and/or in the nature of the job (part-time versus full-time, and occupation). For instance, if literacy and numeracy skills were used less frequently in part-time jobs than in full-time jobs, this may explain part of the difference in skills use between genders, as women are more likely to work part-time than men. This reasoning could apply to occupations as well, with women more likely to be found in low-level jobs that presumably require less intensive use of skills.[9] Indeed, when these factors are taken into account (the *adjusted* values in the figure), differences in skills use by gender are smaller.[10] The results confirm that gender differences in the use of information-processing skills are partly due to the fact that men appear to be slightly more proficient and that they are more commonly employed in full-time jobs, where skills are used more intensively.[11] However, this is not the case when adjusting for occupation: when the type of job held is taken into account, the differences in how men and women use their skills at work are larger. This is somewhat surprising, given that the concentration of women in low-paying occupations is often considered one of the key determinants of gender

discrimination and the gender gap in wages (Blau and Kahn, 2000 and 2003; Goldin, 1986; OECD, 2012). One possible explanation is that, while women tend to be concentrated in certain occupations, they use their skills more intensively than do the relatively few men who are employed in similar jobs.

■ Figure 4.5 ■

Use of information-processing skills at work, by gender

Adjusted and unadjusted gender differences in the mean use of skills, percentage of the average use of skills by women



1. See notes at the end of this chapter.

Notes: Adjusted estimates are based on OLS regressions including controls for literacy and numeracy proficiency scores, hours worked, and occupation dummies (ISCO 1 digit).

Countries are listed in alphabetical order.

Source: Survey of Adults Skills (PIAAC) (2012), Tables A4.5a and A4.5b.

StatLink http://dx.doi.org/10.1787/888932901353

A similar but somewhat more varied picture emerges when considering generic skills (Figure 4.6). Men tend to use some skills, such as task discretion and, particularly, (gross) physical skills, at work more than women; but only small differences are observed for other generic skills and take different signs across countries. The influence of other factors, such as proficiency, part-time or full-time work, and occupation on gender differences in the use of generic skills varies considerably across the skills considered and across countries. Such heterogeneity is, for the most part, due to the different roles played by proficiency and part-time work across types of skills, while adjusting for the distribution of male and female workers across occupation increases differences in the use of generic skills in most countries and for most skill domains, with the notable exception of dexterity.

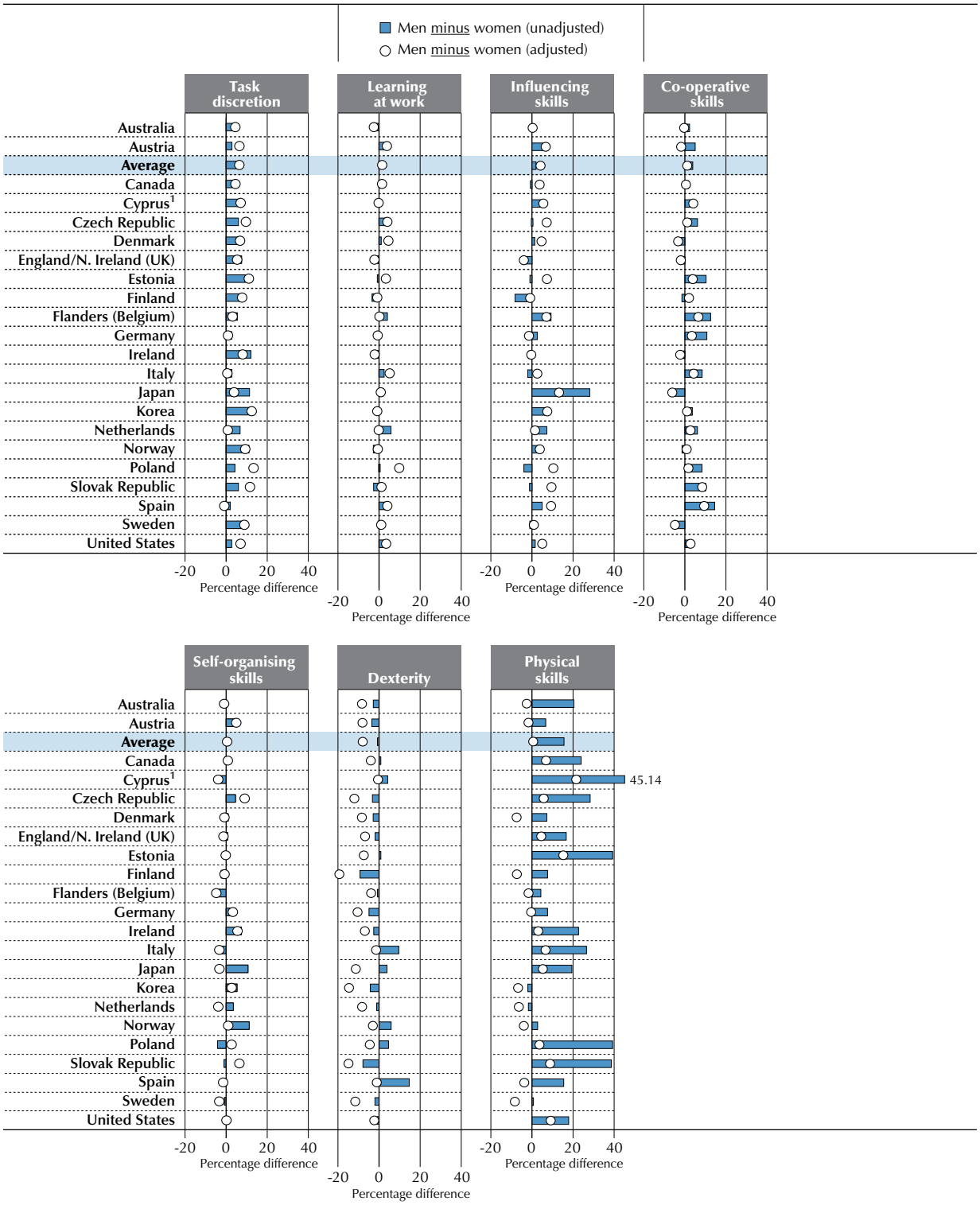
The use of problem-solving skills at work explains about half of the gender gap in wages. Despite the extensive literature on wage differences between genders (see OECD, 2012 for a review), little is known about the extent to which the use of skills at work explains such differences. An analysis of survey results finds that about 49% of the cross-country differences in the gender gap in wages can be predicted by differences in the use of problem-solving skills at work (Figure 4.7). This relationship is statistically significant but disappears after gender differences in a number of other factors, namely proficiency in literacy and numeracy skills, educational qualifications, occupation, and industry of the jobs, are taken into account.



■ Figure 4.6 ■

Use of generic skills at work, by gender

Adjusted and unadjusted gender differences in the mean use of skills, percentage of the average use of skills by women



1. See notes at the end of this chapter.

Notes: Adjusted estimates are based on OLS regressions including controls for literacy and numeracy proficiency scores, hours worked, and occupation dummies (ISCO 1 digit).

Countries are listed in alphabetical order.

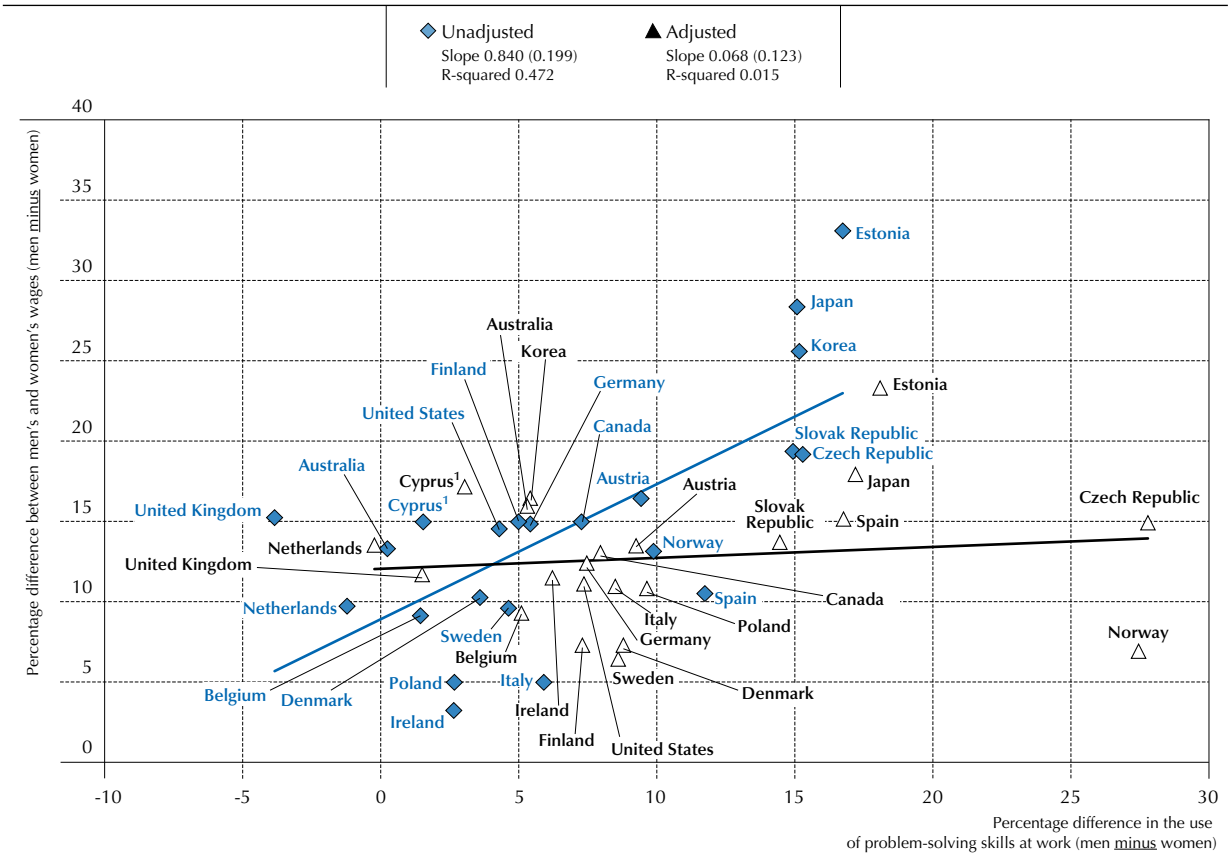
Source: Survey of Adults Skills (PIAAC) (2012), Tables A4.6a and A4.6b.

StatLink http://dx.doi.org/10.1787/888932901372

These findings suggest that detailed understanding of skills use at work can help to identify the roots of the gender gap in pay. As a consequence, policies that aim to improve the match between the skills in the labour supply and those in demand may also affect the gender gap in wages (Black and Spitz-Oener, 2010).

■ Figure 4.7 ■

Gender gap in wages and in the use of problem-solving skills at work



1. See notes at the end of this chapter.

Notes: The gender gap in wages is computed as the percentage difference between men's and women's average hourly wages, including bonuses. The wage distribution was trimmed to eliminate the 1st and 99th percentiles. Adjusted estimates are based on OLS regressions including controls for average literacy and numeracy scores, dummies for highest qualification (4), occupations (9) and industry (10). The bold lines are the best linear predictions. The sample includes only full-time employees. Standard errors in parentheses.

Source: Survey of Adults Skills (PIAAC) (2012), Table A4.7.

StatLink http://dx.doi.org/10.1787/888932901391

Skills use at work and age

On average, workers aged 16-24 and those aged 55-65 use information-processing skills at work less than do workers of prime age, i.e. aged 25-54 (Figure 4.8; Figure 4.9 shows use of generic skills). This finding can be interpreted in several ways. For instance, it is possible that older workers move into less demanding positions prior to retirement. Alternatively, skills use may decline as skills proficiency does: skills accumulated in the initial stages of one's career may depreciate over time due to a lack of investment in training and lifelong learning activities (see Chapter 3).[12] The latter explanation is likely to be more important for generic skills than information-processing skills, which are less likely to be acquired on the job or outside school.

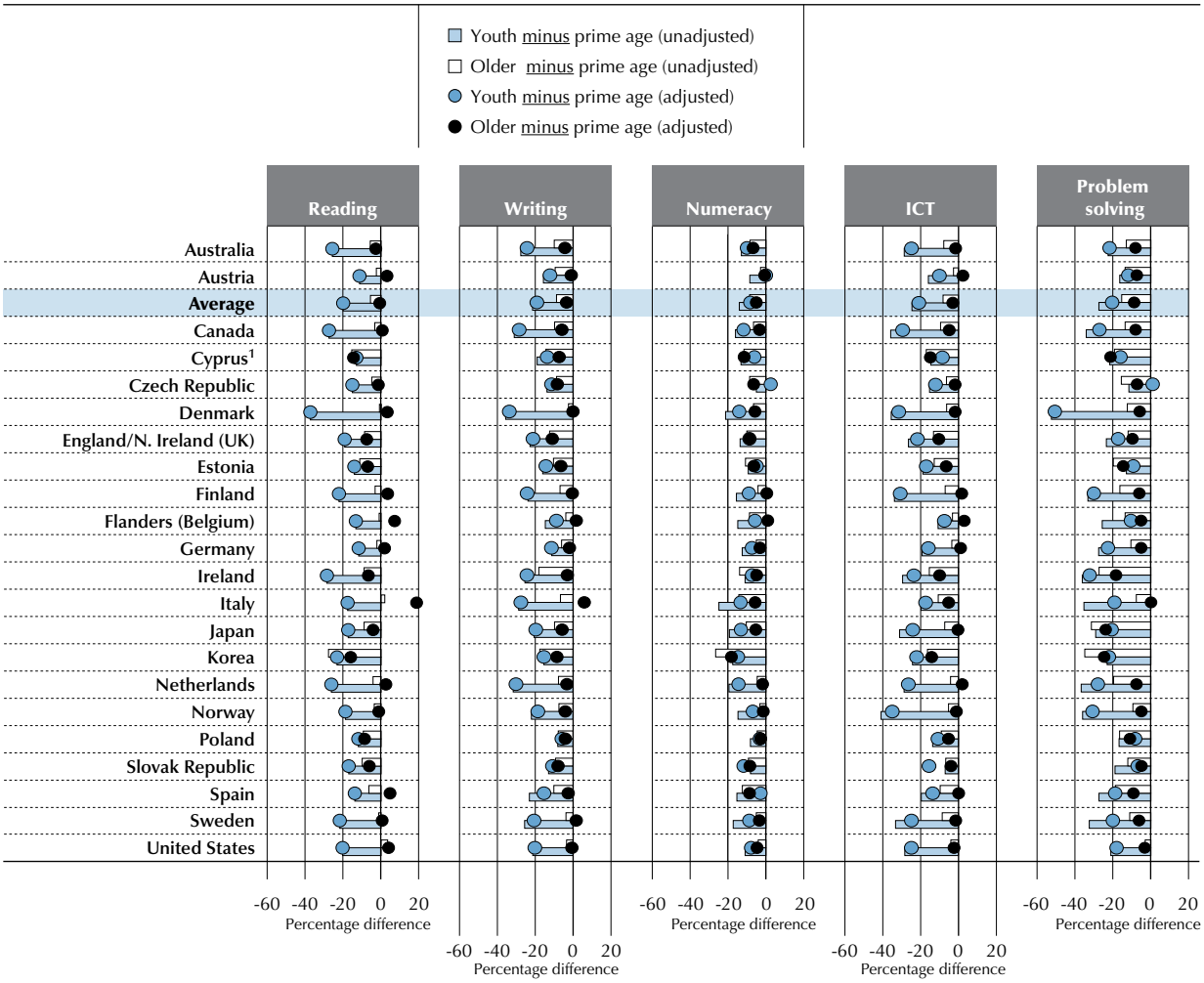
Interestingly, differences in proficiency levels and in contract types (permanent versus temporary) seem to be substantially more important in explaining the variation in skills use between prime-age and older workers than between prime-age workers and young workers; and proficiency has the strongest effect.[13] Moreover, the difference in skills use is generally larger between younger and prime-age workers than between older and prime-age workers,

suggesting that people accumulate skills relatively quickly during the early years of their careers and lose them relatively slowly during the later years. In countries with ageing populations, this may be interpreted as a positive finding, as keeping older people at work may not lower average productivity as much as it is sometimes feared (Feyrer, 2007; Friedberg, 2003; Kotlikoff and Gokhale, 1992).

■ Figure 4.8 ■

Use of information-processing skills at work, by age group

Adjusted and unadjusted age differences in the mean use of skills, percentage of the average use of skills by prime-age workers



1. See notes at the end of this chapter.

Notes: Adjusted estimates are based on OLS regressions including controls for literacy and numeracy proficiency scores and contract type. Youth are 16-25 years old, prime age 26-54 and older workers 55-65.

Countries are listed in alphabetical order.

Source: Survey of Adults Skills (PIAAC) (2012), Tables A4.8a and A4.8b.

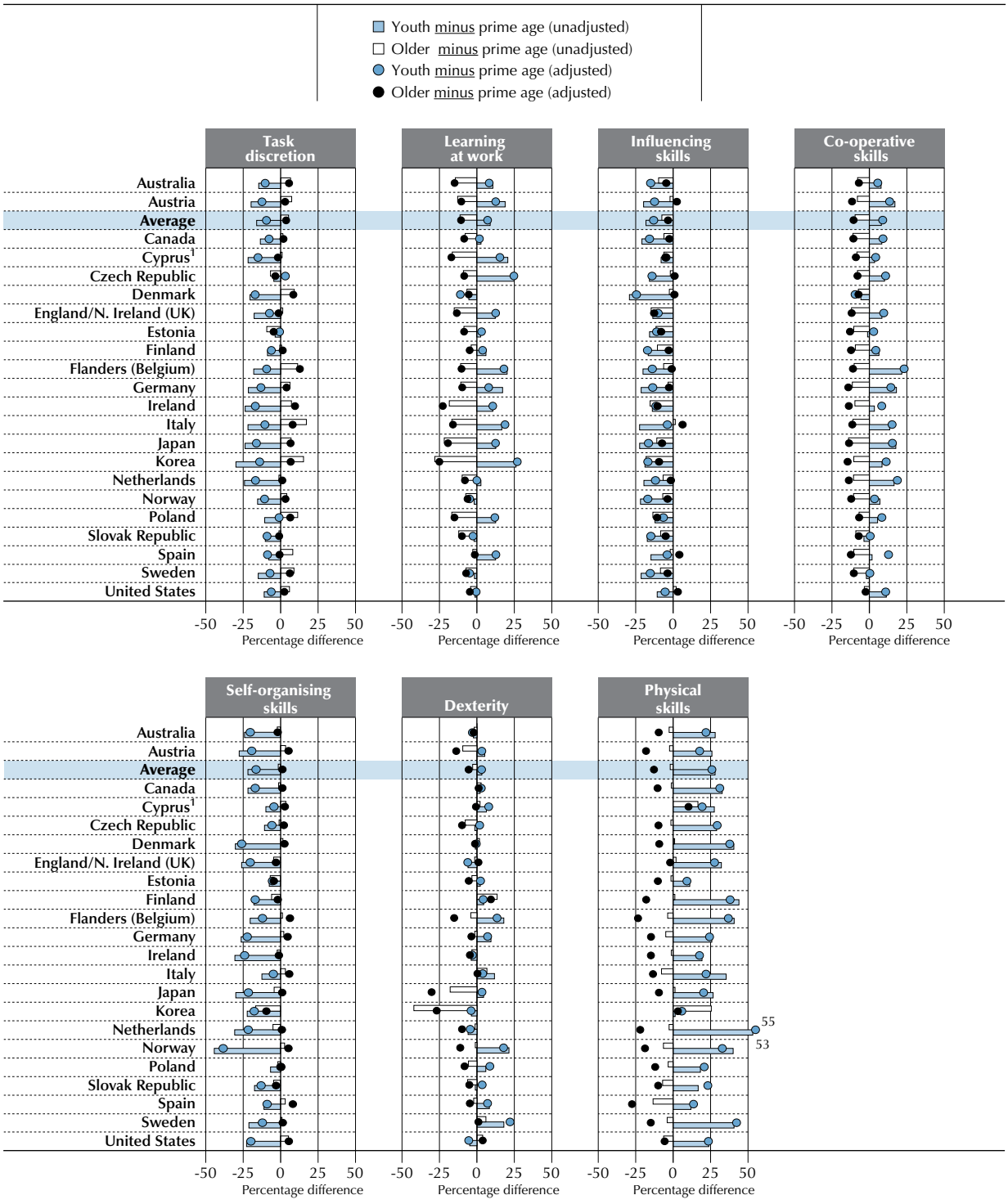
StatLink http://dx.doi.org/10.1787/888932901410

Contrary to the conventional wisdom that young people are more intense users of information and communication technologies, the average index of ICT use among youth is lower than that among prime-age workers in all participating countries. However, the picture is different for home use of ICT. Workers aged 16-24 use ICT consistently more at home than in the office, whereas the opposite is true among prime-age (25-54 year-old) and older (55-65 year-old) workers (Figure 4.10).[14] Of course, some of the computer activities in which young adults engage at home (videogames, Internet browsing, chatting) may not be the same as those required on the job. Nevertheless, it would be useful to explore further the extent to which young people's ICT skills are being underused in the labour market.

■ Figure 4.9 ■

Use of generic skills at work, by age group

Adjusted and unadjusted age differences in the mean use of skills, percentage of the average use of skills by prime-age workers



1. See notes at the end of this chapter.

Notes: Adjusted estimates are based on OLS regressions including controls for literacy and numeracy proficiency scores and contract type. Youth are 16-24 years old, prime age 25-54 and older workers 55-65.

Countries are listed in alphabetical order.

Source: Survey of Adults Skills (PIAAC) (2012), Tables A4.9a and A4.9b.

StatLink http://dx.doi.org/10.1787/888932901429

■ Figure 4.10 ■

Mean ICT use at work and at home, by age group



1. See notes at the end of this chapter.
Notes: The sample includes only workers.
Source: Survey of Adults Skills (PIAAC) (2012), Table A4.10.
StatLink http://dx.doi.org/10.1787/888932901448

Skills use at work and formal education

Although skills are developed in a variety of settings and evolve with age, formal education remains the primary source of learning, and it seems natural to expect greater use of skills among better-educated individuals.

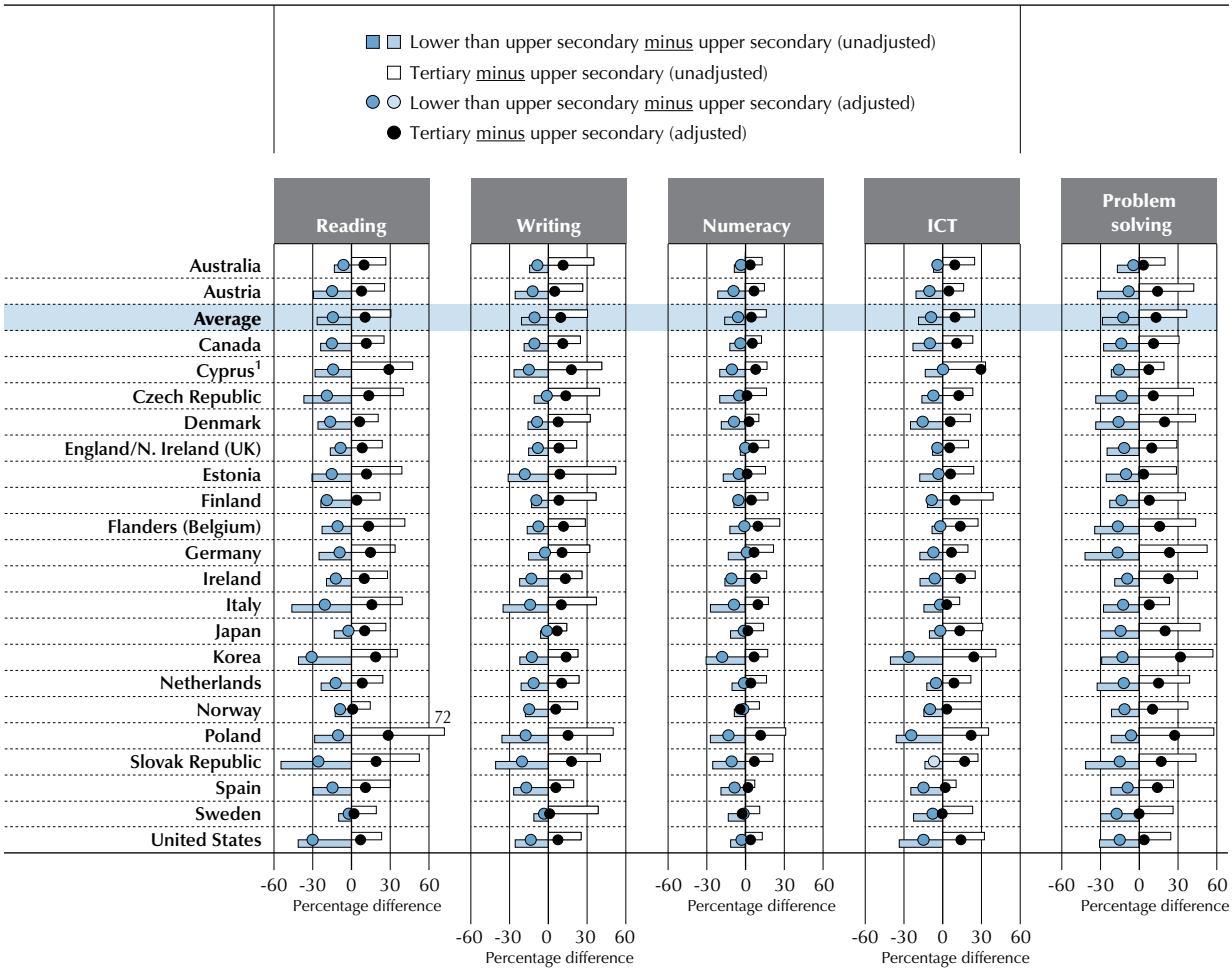
For this analysis, only three groups of workers are considered: those who have less than upper secondary education, those who have completed upper secondary education, and those who have completed tertiary education.[15] With very few exceptions, the results show that workers with higher educational qualifications also use their skills more intensively in their jobs (Figures 4.11 and 4.12). The only obvious exceptions are dexterity and gross physical skills. Beyond this general trend, there are no patterns common to all skills and all countries, especially as concerns the ranking of countries across the different skills domains.

Not surprisingly, differences in skills proficiency and in the distribution of workers across occupations explain most of the variations in skills use among people with different educational qualifications. However, it is the jobs that people hold – as reflected by their occupations – rather than their competency in literacy and numeracy that have the greatest impact on skills use.

■ Figure 4.11 ■

Use of information-processing skills at work, by educational attainment

Adjusted and unadjusted differences in the mean use of skills by educational attainment, percentage of the average use of skills by adults with upper secondary education



1. See notes at the end of this chapter.

Notes: Adjusted estimates are based on OLS regressions including controls for literacy and numeracy proficiency scores and occupation dummies (ISCO 1 digit). Estimates based on a sample size less than 30 are shown in lighter tones.

Countries are listed in alphabetical order.

Source: Survey of Adults Skills (PIAAC) (2012), Tables A4.11a and A4.11b.

StatLink http://dx.doi.org/10.1787/888932901467

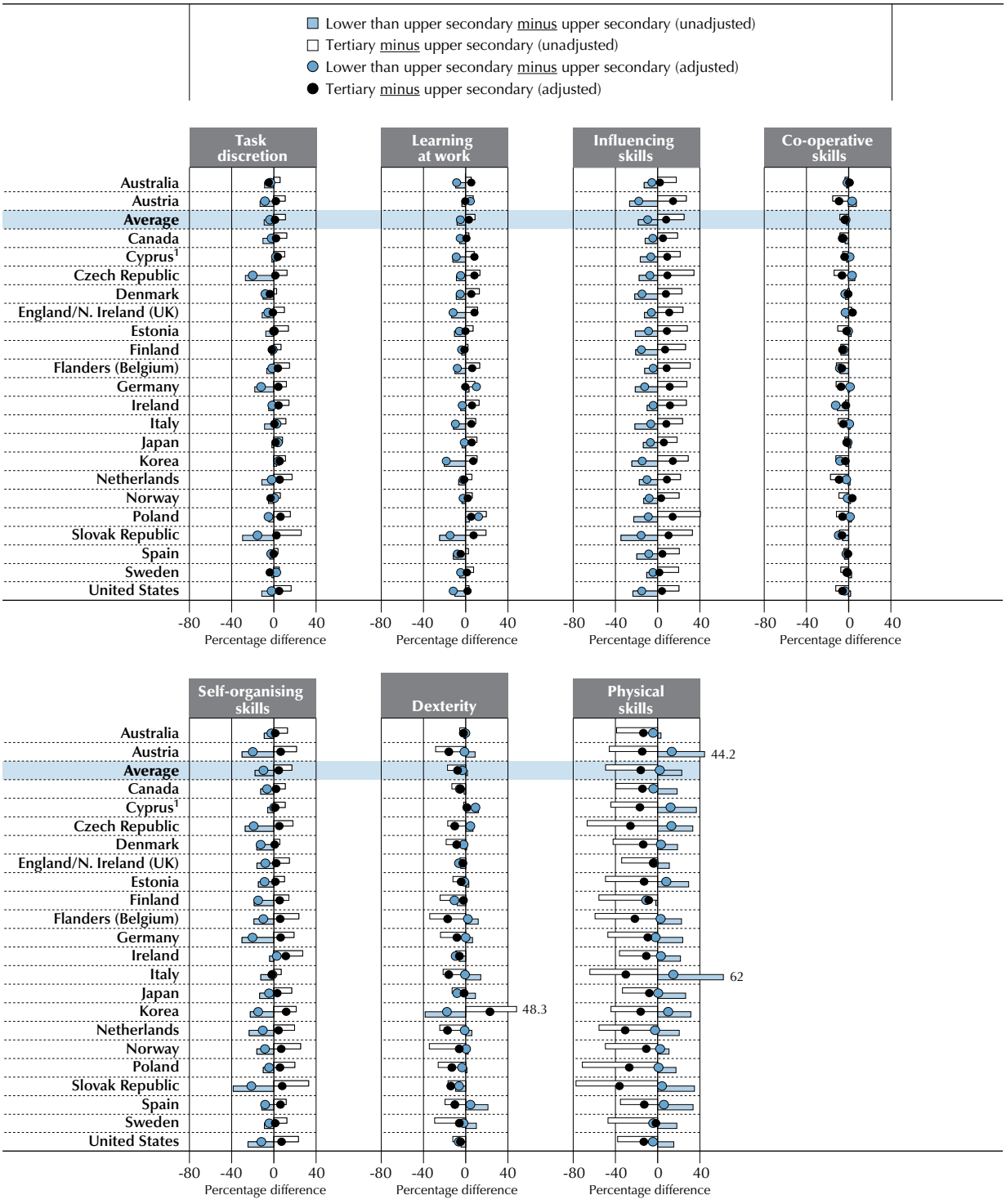
These results have implications for a number of hotly debated issues in labour market policy, particularly regarding the sources and evolution of wage inequality (Card and Lemieux, 2001; Katz and Murphy, 1992; Juhn, Murphy and Pierce, 1993; Lemieux, 2006). One such issue is the college premium in wages, i.e. the average wage advantage of tertiary graduates compared to other employed individuals. The Survey of Adult Skills (PIAAC) allows for an investigation of how this phenomenon correlates with the use of reading skills and task discretion, the two (information-processing and generic) skills that appear to be linked most strongly with it.

The link between skills use and the premium earned by tertiary graduates compared to their less-educated counterparts is primarily due to differences in proficiency and in the type of jobs graduates hold. Across countries, the correlation between the tertiary wage premium and the average difference in the use of reading skills at work is statistically significant; and differences in skills use predict 26% of the variation in the wage premium (Figure 4.13). However, this correlation is almost entirely due to differences in skills proficiency and in the type of jobs and industries in which graduates and non-graduates work. This is also true for the link between the use of task discretion and the tertiary wage premium.

■ Figure 4.12 ■

Use of generic skills at work, by educational attainment

Adjusted and unadjusted differences in the mean use of skills by educational attainment, percentage of the average use of skills by adults with upper secondary education



1. See notes at the end of this chapter.

Notes: Adjusted estimates are based on OLS regressions including controls for literacy and numeracy proficiency scores and occupation dummies (ISCO 1 digit).

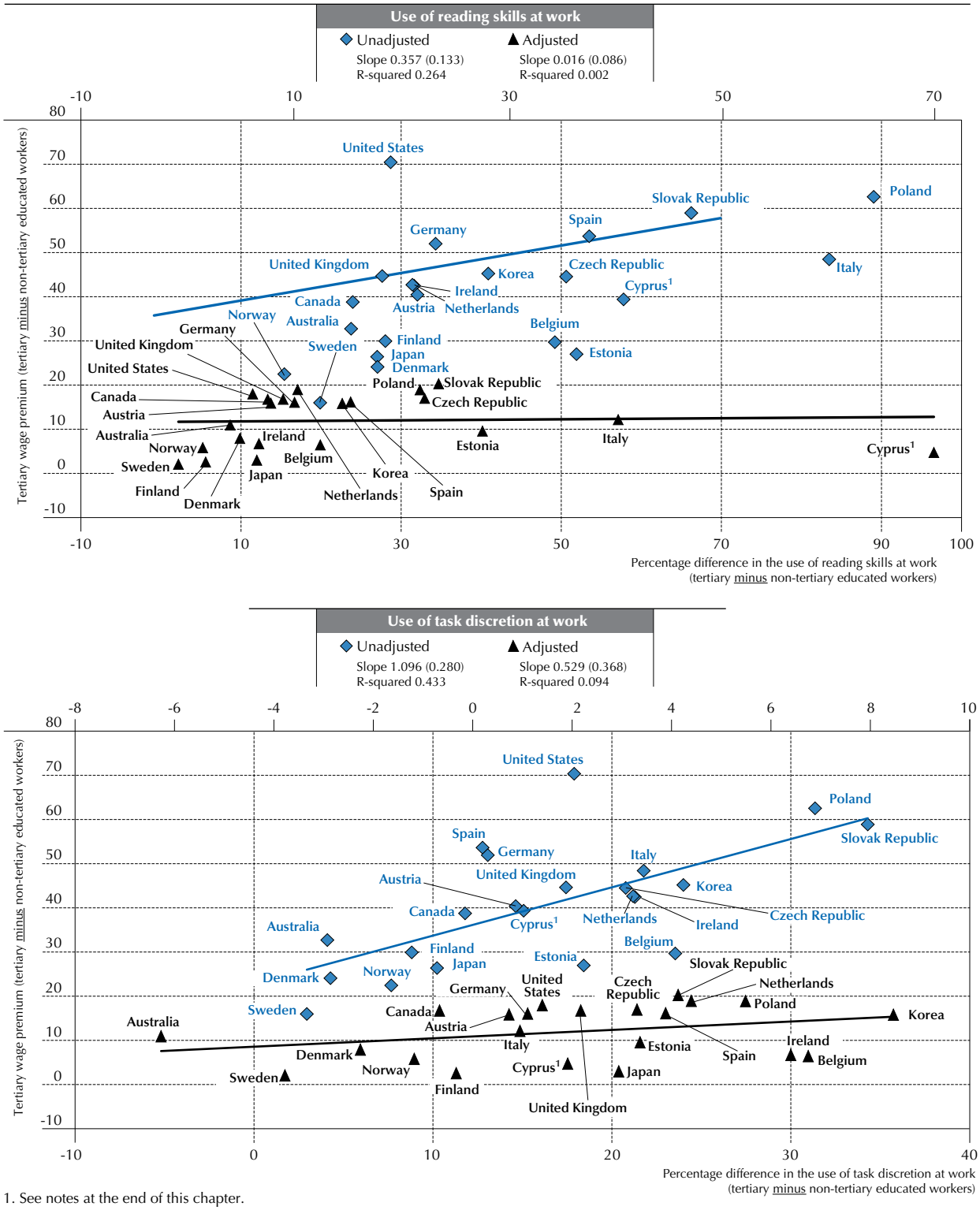
Countries are listed in alphabetical order.

Source: Survey of Adults Skills (PIAAC) (2012), Tables A4.12a and A4.12b.

StatLink http://dx.doi.org/10.1787/888932901486

■ Figure 4.13 ■

The tertiary premium and the use of reading skills and task discretion at work



1. See notes at the end of this chapter.

Notes: The bottom axes correspond to the unadjusted series and the top axes to the adjusted series.

The tertiary wage premium is computed as the percentage difference between the average hourly wages, including bonuses, of tertiary-educated (ISCED 5 or more) and less-educated (from less than ISCED 1 to ISCED 4) workers. The wage distribution was trimmed to eliminate the 1st and 99th percentiles. Adjusted estimates are based on OLS regressions including controls for average literacy and numeracy proficiency scores, dummies for occupations (9) and industry (10). The bold lines are the best linear predictions. The sample includes full-time employees only. Standard errors in parentheses.

Source: Survey of Adults Skills (PIAAC) (2012), Table A4.13.

StatLink http://dx.doi.org/10.1787/888932901505

Skills use at work and type of work contract

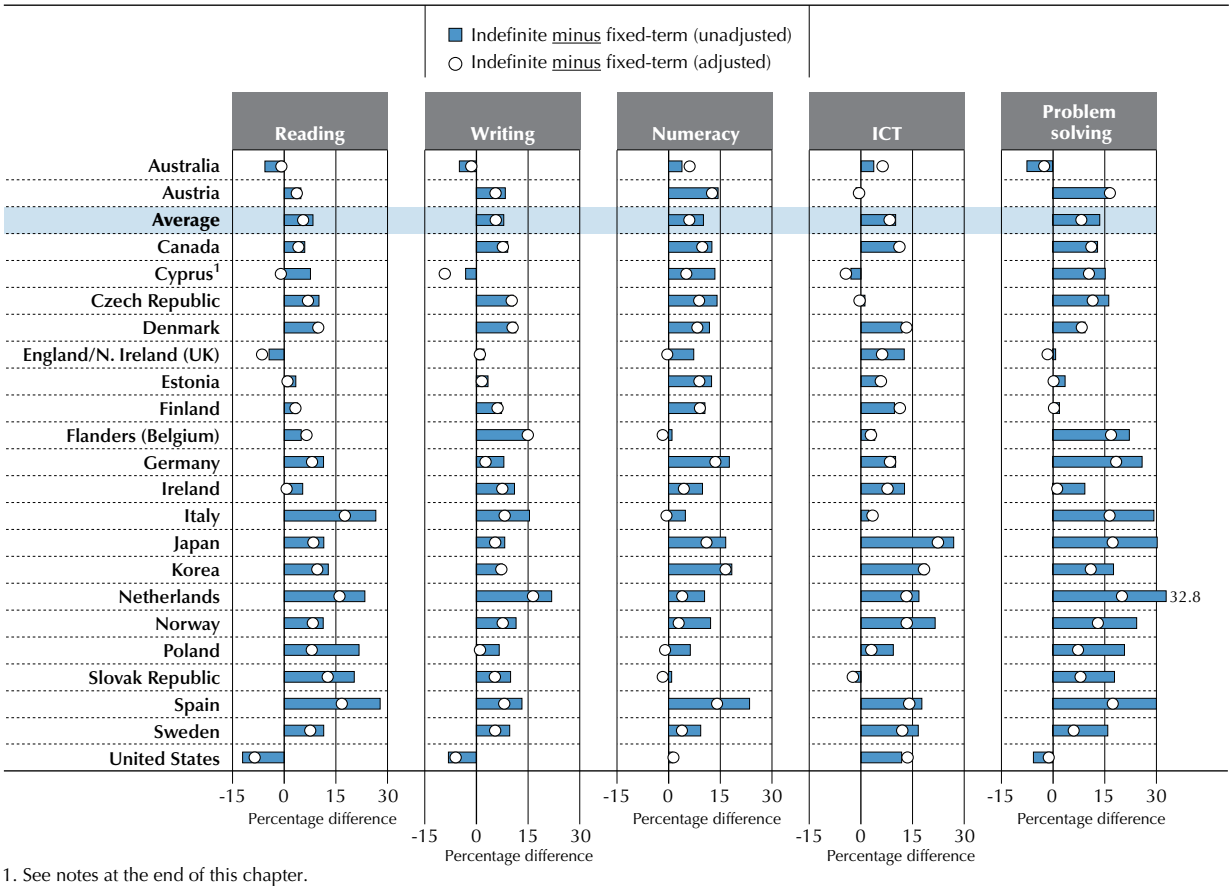
Data on skills use may also help inform the debate on another important labour-market issue: the use of temporary contracts that has become pervasive in several OECD countries in recent years. When combined with low rates of transition to permanent contracts and the fact that a disproportionate share of workers on temporary contracts are young people, greater use of these contracts could have adverse effects on both individual workers and the economy as a whole. For example, it has been extensively documented that workers on temporary contracts receive less training from their employers (Autor, 2001; OECD, 2006) and have fewer opportunities to accumulate job-specific skills, thus potentially reducing their opportunities for career development and jeopardising the growth of labour productivity among the younger generations. Understanding the differences in the tasks performed and the skills used by workers on temporary and permanent contracts is crucial for designing appropriate policies to address this problem.

With very few exceptions, workers on fixed-term contracts use their information-processing skills less intensively than their colleagues in permanent employment (Figure 4.14).[16] Interestingly, Anglo-Saxon countries, and the United States in particular, stand out with a distinct pattern in which temporary workers use their information-processing skills either more than (reading, writing and problem solving) or similarly to (numeracy) workers on indefinite contracts. This could partly be because of the limited employment protection provided, regardless of the type of job, especially in the United States, where the distinction between temporary and permanent contracts is much more blurred, and where fixed-term contracts refer to a much more distinctive, and relatively uncommon, form of contract, than they do in other countries.[17]

■ Figure 4.14 ■

Use of information-processing skills at work, by type of contract

Adjusted and unadjusted differences in the mean use of skills between types of contracts, percentage of the average use of skills by employees with a fixed-term contract



1. See notes at the end of this chapter.

Notes: The sample includes only employees. Adjusted estimates are based on OLS regressions including controls for literacy and numeracy proficiency scores and occupation dummies (ISCO 1 digit).

Countries are listed in alphabetical order.

Source: Survey of Adults Skills (PIAAC) (2012), Tables A4.14a and A4.14b.

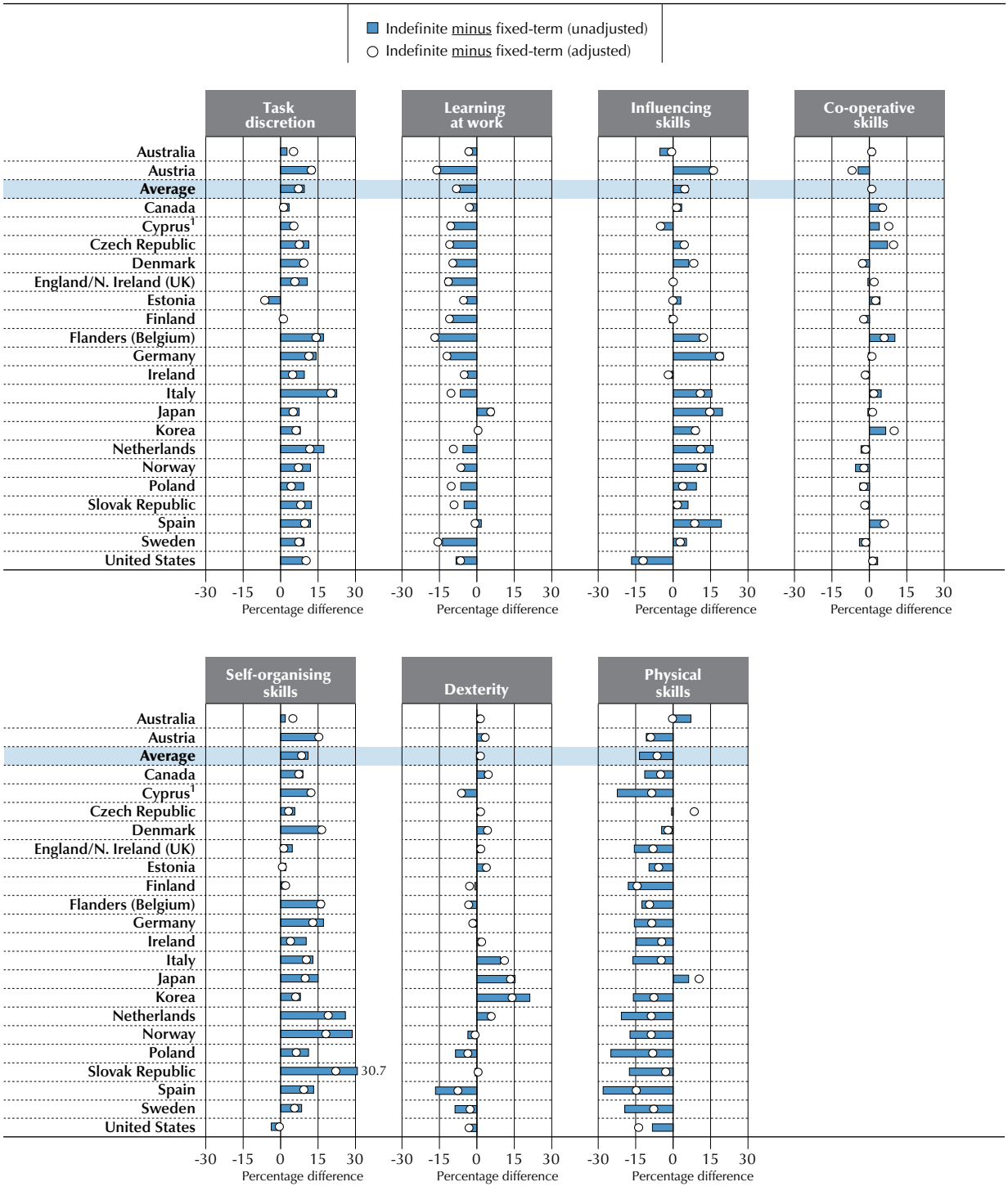
StatLink http://dx.doi.org/10.1787/888932901524



■ Figure 4.15 ■

Use of generic skills at work, by type of contract

Adjusted and unadjusted differences in the mean use of skills between types of contracts, percentage of the average use of skills by employees with a fixed-term contract



1. See notes at the end of this chapter.

Notes: The sample includes only employees. Adjusted estimates are based on OLS regressions including controls for literacy and numeracy proficiency scores and occupation dummies (ISCO 1 digit).

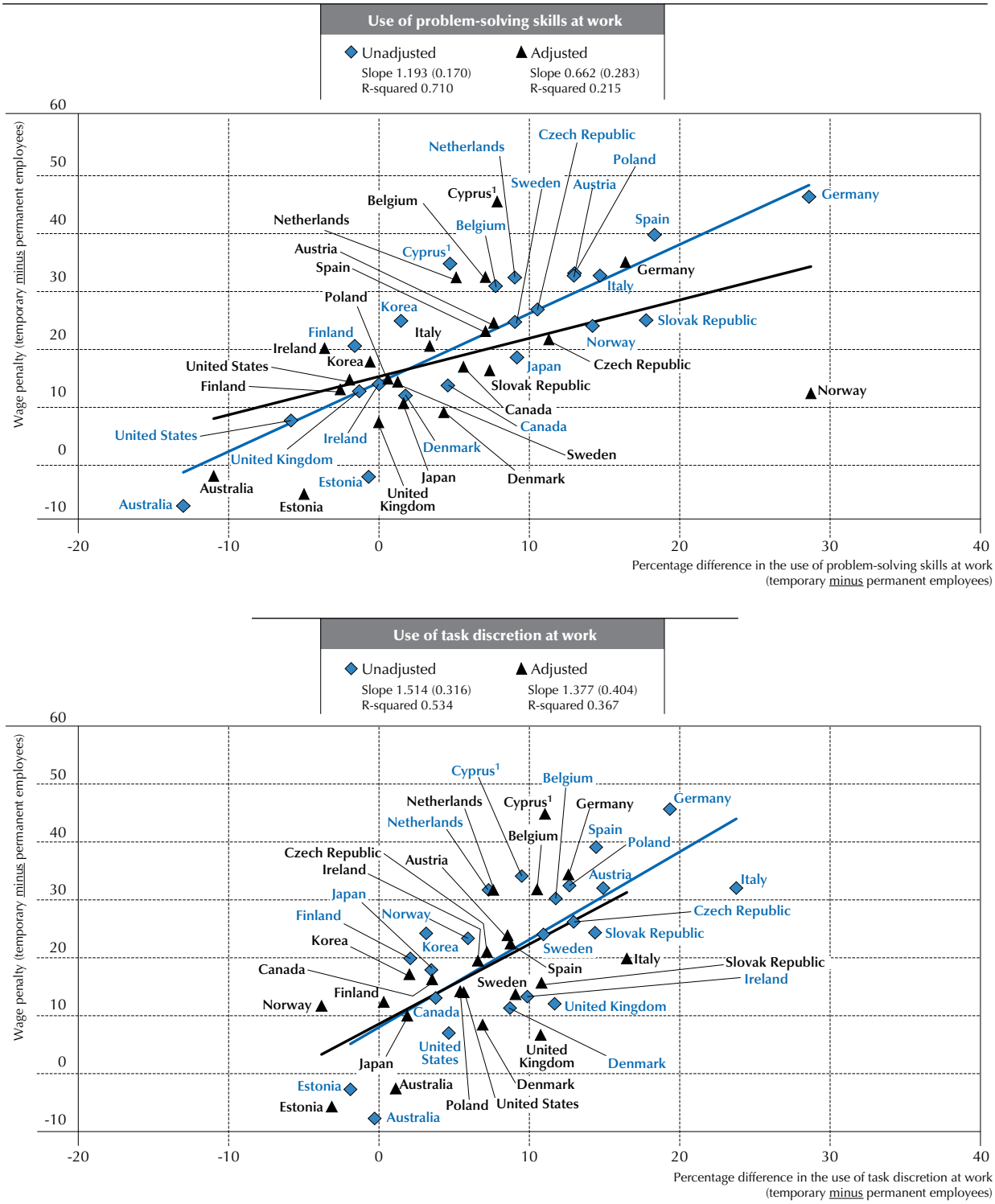
Countries are listed in alphabetical order.

Source: Survey of Adults Skills (PIAAC) (2012), Tables A4.15a and A4.15b.

StatLink http://dx.doi.org/10.1787/888932901543

■ Figure 4.16 ■

The wage penalty for temporary contracts and the use of problem-solving skills and task discretion at work



1. See notes at the end of this chapter.

Notes: The wage penalty for temporary contracts is computed as the percentage difference between the average hourly wages (including bonuses) of temporary and permanent workers. The wage distribution was trimmed to eliminate the 1st and 99th percentiles. Adjusted estimates are based on OLS regressions including controls for average literacy and numeracy scores, dummies for highest qualification (4), occupations (9) and industry (10). The bold lines are the best linear predictions. The sample includes only full-time employees. Standard errors in parentheses.

Source: Survey of Adults Skills (PIAAC) (2012), Table A4.16.

StatLink http://dx.doi.org/10.1787/888932901562

Among generic skills, task discretion, influencing and self-organising skills are more intensively used by workers on indefinite contracts than by workers on fixed-term contracts (Figure 4.15), possibly because such skills are associated with managerial jobs that are often held by experienced workers. Temporary employees, however, appear to be more engaged in learning and in activities requiring gross physical effort. The result on learning at work suggests that, despite the fact that temporary workers are less frequently involved in formal employer-sponsored training, as the Survey of Adult Skills confirms, they nevertheless appear to be learning at work more frequently and intensively than their co-workers in permanent employment. This is partly due to the fact that temporary jobs are often held by young workers, who, being less experienced, learn more on the job.

Analysis of the results re-affirms the idea that temporary contracts are normally associated with jobs where information-processing and other productive generic skills are used less intensively than they are in jobs associated with permanent contracts.[18] This interpretation of the results is consistent with the fact that differences in skills use remain broadly unchanged when comparing workers at similar levels of proficiency who are employed in similar occupations. While sorting across occupations is relatively more important in defining differences in skills use, suggesting that temporary employment is particularly common in certain occupations, even when comparing workers within the same occupations, notable differences in skills use remain.

Close to 70% of the wage differential between temporary and permanent workers can be explained by differences in the use of problem-solving skills at work. Data analysis shows that differences in the use of skills correlate strongly with the average wage penalty associated with temporary contracts compared to permanent contracts (Figure 4.16). Of the five information processing skills that are reviewed in the Survey of Adult Skills, problem solving appears to have a strong power to predict differences in pay between temporary and permanent contracts. This suggests that the type of tasks carried out by workers hired under different contractual arrangements vary substantially. Moreover, this relationship remains statistically significant even after accounting for skills proficiency, education, industry and occupation. The right panel of Figure 4.16 shows a very similar pattern with regard to task discretion, the one generic skill that is most strongly correlated with pay differences.

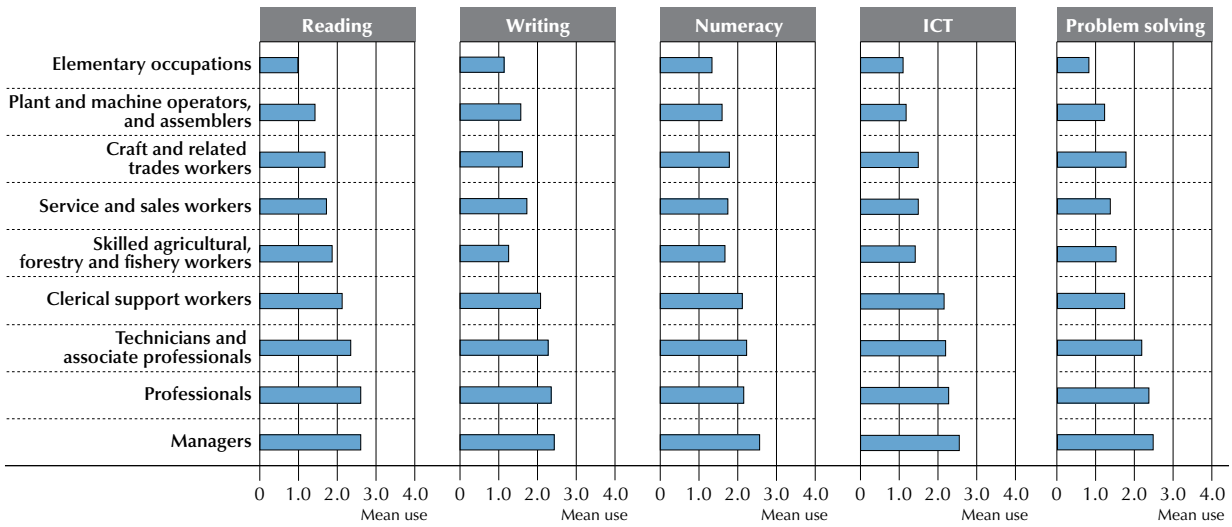
Skills use at work across occupations, industries and firm size

A common theme emerging from the analysis of data is the importance of how workers are distributed across occupations and what that means for skills use (Figure 4.17 and 4.18). Only the average use of skills across countries is shown in the figures, as the high number of occupational categories would make the presentation of results by country too cumbersome.

■ Figure 4.17 ■

Use of information-processing skills at work, by occupation

Average use of information-processing skills, by ISCO-1-digit occupation, in the OECD countries participating in the Survey of Adult Skills (PIAAC)



Occupations are ranked in ascending order of the average use of reading skills at work.

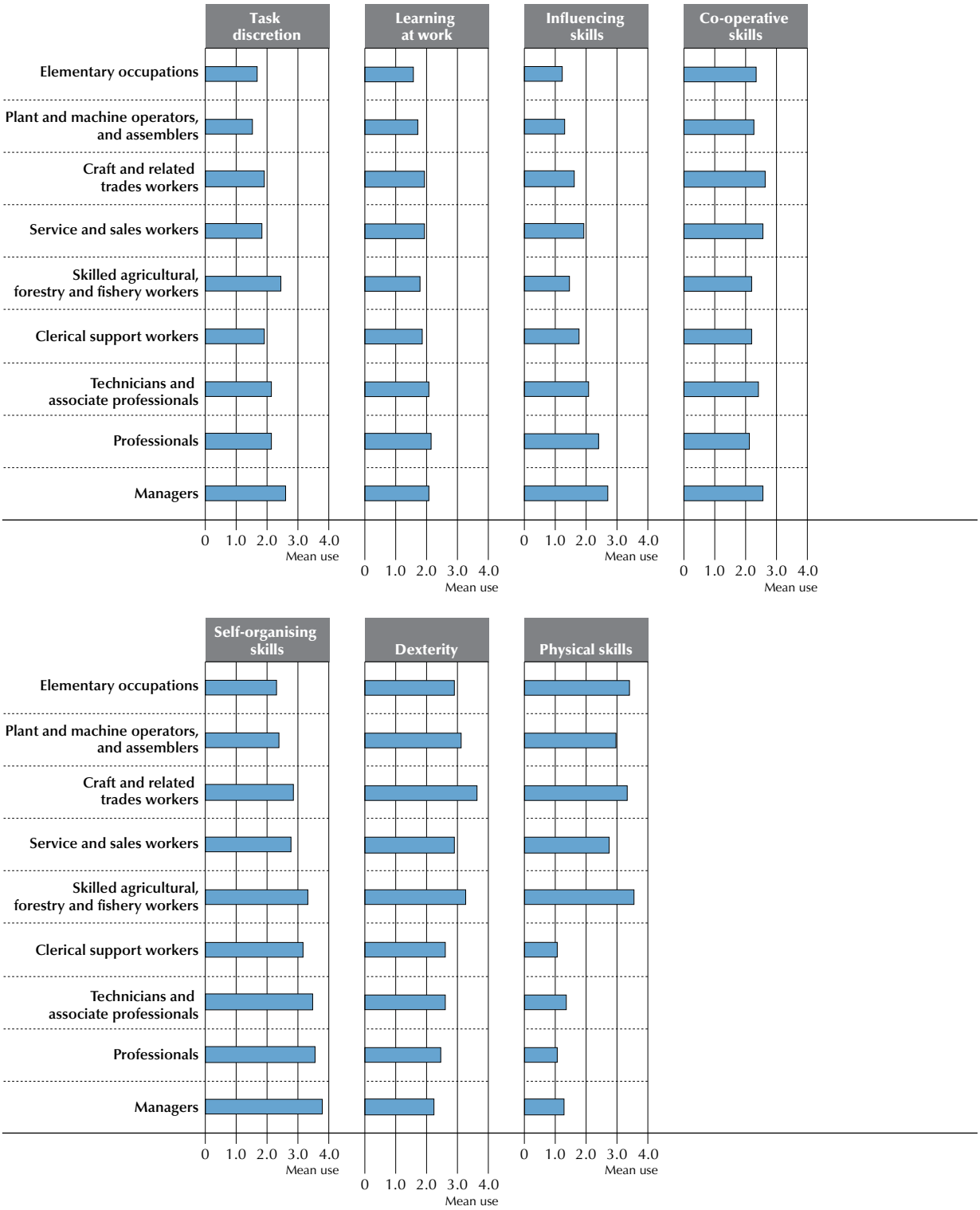
Source: Survey of Adults Skills (PIAAC) (2012), Table A4.17.

StatLink http://dx.doi.org/10.1787/888932901581

■ Figure 4.18 ■

Use of generic skills at work, by occupation

Average use of generic skills, by ISCO-1-digit occupation, in the OECD countries participating in the Survey of Adult Skills (PIAAC)



Occupations are ranked in ascending order of the average use of reading skills at work.

Source: Survey of Adults Skills (PIAAC) (2012), Table A4.18.

StatLink http://dx.doi.org/10.1787/888932901600

As expected, the use of information-processing skills increases substantially from elementary occupations up to professionals and managers (Figure 4.17). The magnitude of the difference between skills use in elementary and managerial occupations ranges from 1.2 to 1.7 of a standard deviation – substantially larger than the variation across any of the other personal or job characteristics that have been analysed earlier in this chapter. This supports the notion that the process by which workers are allocated to jobs shapes the distribution of skills use at work. It also suggests that the measures of skills use derived from the Survey of Adult Skills can also be reliably interpreted as measures of skills requirements at work.[19]

The picture for generic skills is more nuanced (Figure 4.18). The degree of variation is still large, particularly for gross physical skills, but the pattern across occupations is not as consistent as occupations move from elementary jobs to professionals and managers. While there is a similar pattern for task discretion, learning, influencing and self-organising skills, it is harder to identify any consistency among the other generic skills. Co-operation at work seems to be a skill that is used pervasively in all types of jobs.

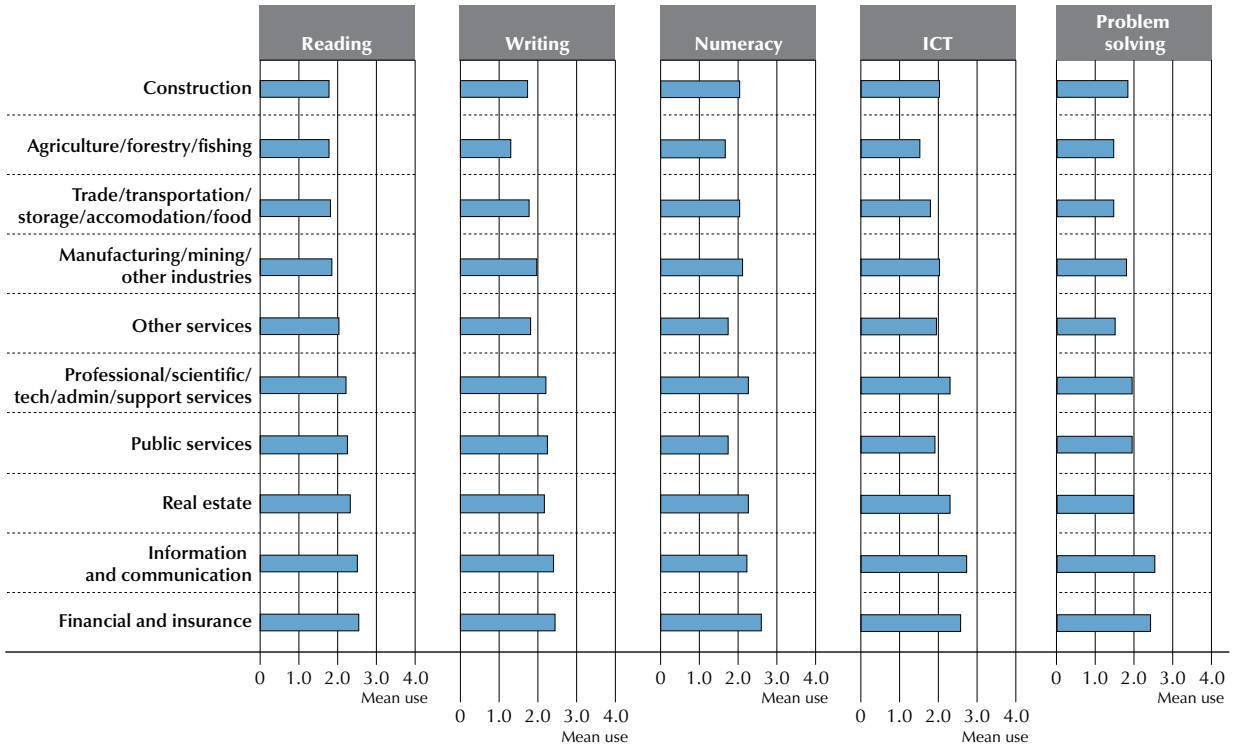
Since the broad occupational categories considered above do not fully capture differences in the types of jobs that workers perform, it is also useful to examine how the use of foundation and generic skills varies by industry (Figures 4.19 and 4.20). As with the analysis by occupations, only average results across countries are reported, as the presentation of country-by-country and industry-by-industry estimates would make it more difficult to identify patterns.

Information-processing skills are most frequently used in the finance and insurance and information and communication sectors and least used in the agriculture, other services and trade and transport sectors (Figure 4.19). The differences across sectors are large, but not as large as across occupations. The differences between the industries with the lowest and the highest levels of use range between 0.7 and 1.3 of a standard deviation, depending on the type of skill.

■ Figure 4.19 ■

Use of information-processing skills at work, by industry

Average use of information-processing skills, by SNA/ISIC industry, in the OECD countries participating in the Survey of Adult Skills (PIAAC)

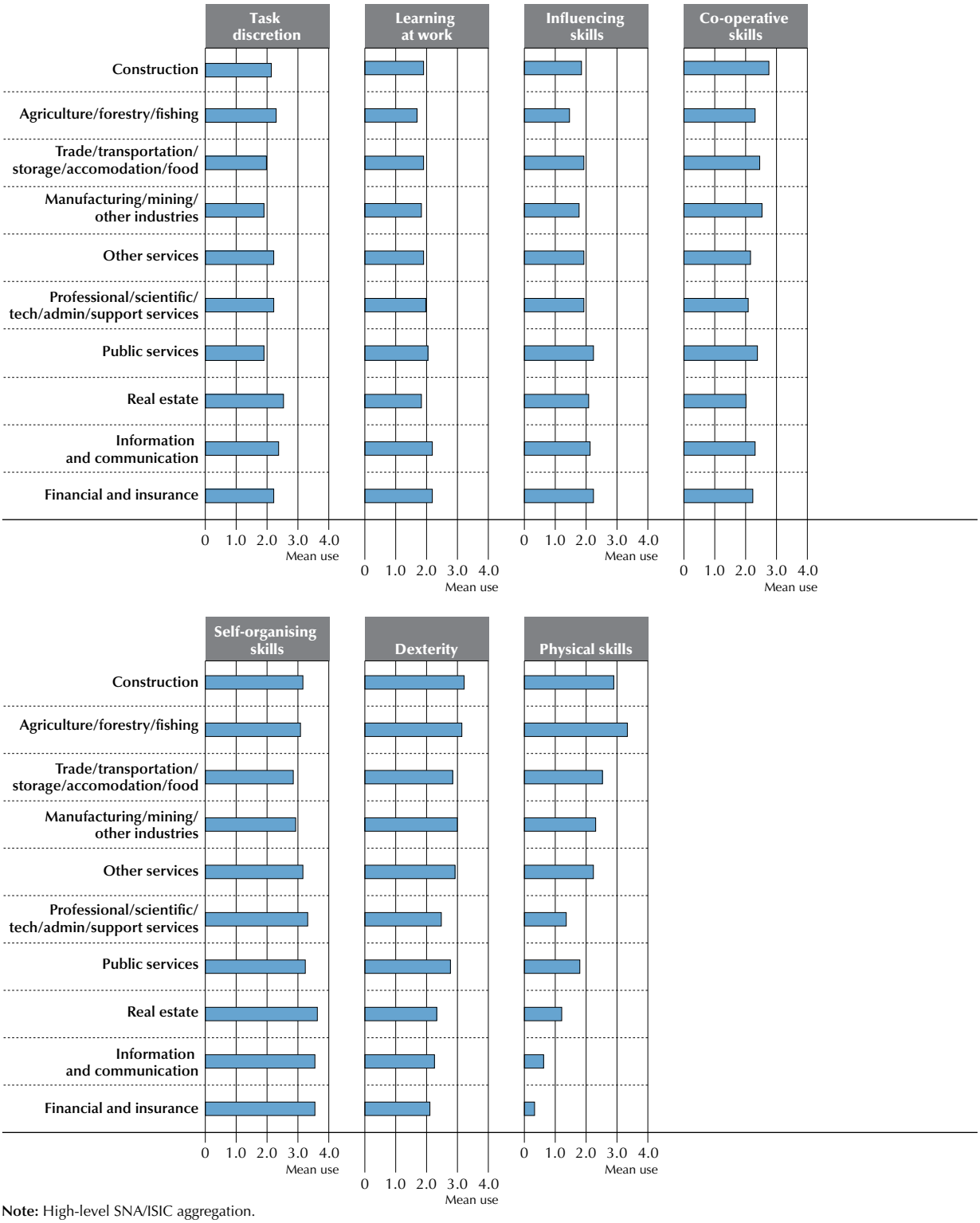


Note: High-level SNA/ISIC aggregation.
Industries are ranked in ascending order of the average use of reading skills at work.
Source: Survey of Adults Skills (PIAAC) (2012), Table A4.19.
StatLink http://dx.doi.org/10.1787/888932901619

■ Figure 4.20 ■

Use of generic skills at work, by industry

Average use of generic skills, by SNA/ISIC industry, in the OECD countries participating in the Survey of Adult Skills (PIAAC)



Note: High-level SNA/ISIC aggregation.
Industries are ranked in ascending order of the average use of reading skills at work.
Source: Survey of Adults Skills (PIAAC) (2012), Table A4.20.
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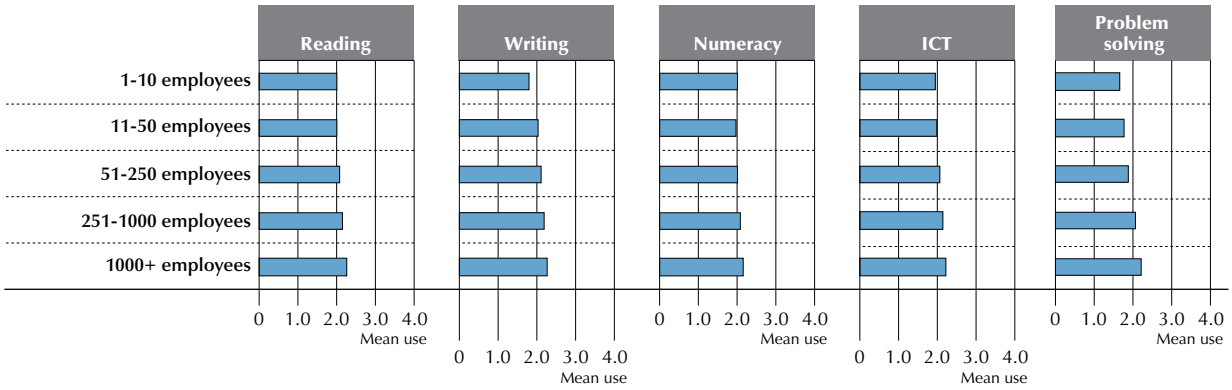
For generic skills, it is harder to identify similarities (Figure 4.20). Learning at work and influencing skills follow a pattern that is similar to most information processing skills. However, self-organising skills are used quite evenly across sectors. Also, workers in sectors with limited use of information processing skills – notably agriculture but also construction – use task discretion at work as much as workers in the finance and insurance sector. The magnitude of the differences between sectors in the use of generic skills, however, is more limited than for the use of information processing skills, with the exception of physical skills, where the difference between the average use in agriculture and finance is very large.

Another factor that determines how workers use their skills is the size of the establishment. It could be expected that workers employed in small establishments use their skills quite differently than do those employed in large establishments, even within the same occupational group and the same industrial sector. Consistent with evidence that large firms employ more skilled workers and adopt more sophisticated production technologies (Brown and Medoff, 1989; Gibson and Stillman, 2009), the use of information-processing skills increases with establishment size across all the domains. The magnitude of the differences ranges between 0.2 and 0.5 of a standard deviation (Figure 4.21).

■ Figure 4.21 ■

Use of information-processing skills at work, by establishment size

Average use of information-processing skills, by establishment size, in the OECD countries participating in the Survey of Adult Skills (PIAAC)



Source: Survey of Adults Skills (PIAAC) (2012), Table A4.21.
StatLink http://dx.doi.org/10.1787/888932901657

Dexterity and physical skills are more commonly used in small establishments (Figure 4.22). A similar but less-pronounced pattern is observed for task discretion, while the reverse is true for co-operation at work. The use of learning, influencing and self-organising skills does not seem to vary much across establishments of different sizes.

What the results indicate

Two themes emerge from the analysis. First, skills-use indicators correlate only weakly with measures of skills proficiency. For example, proficiency in literacy explains only about 6% of the individual variation in the use of reading skills at work across all participating countries, and similar results are found for proficiency in and use of numeracy skills. In fact, across all participating countries, the distributions of skills use among workers with different levels of proficiency overlap substantially (Figure 4.23). While the median use of both literacy and numeracy skills increases consistently as levels of proficiency increase, it is not uncommon, for example, that more proficient workers use their skills at work less intensively than less proficient workers do.

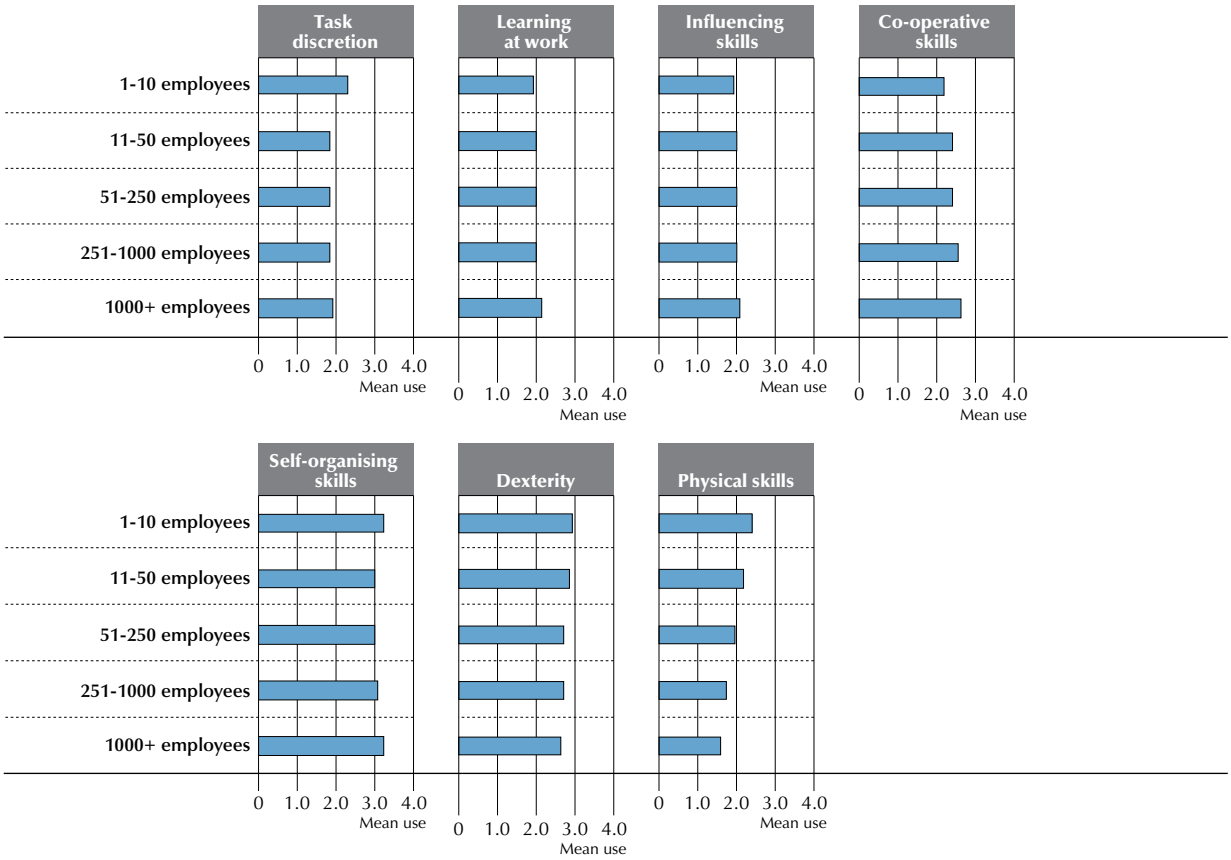
Second, in all the countries covered in the Survey of Adult Skills, the type of jobs held by workers is the single most important factor determining how individuals use their skills at work. As shown in Figures 4.17 and 4.18, differences in skills use across standard occupational categories are larger that the differences between any of the other individual and job characteristics that are considered in this chapter, such as gender, age, education or the type of employment contract.

The implications of these two findings are complex, as the same tasks can be carried out at different levels of complexity. In general, however, the findings imply that improving the efficiency with which workers are allocated to jobs can improve the extent of skills use at work, and thus improve overall productivity and boost economic growth.

■ Figure 4.22 ■

Use of generic skills at work, by establishment size

Average use of generic skills, by establishment size, in the OECD countries participating in the Survey of Adult Skills (PIAAC)



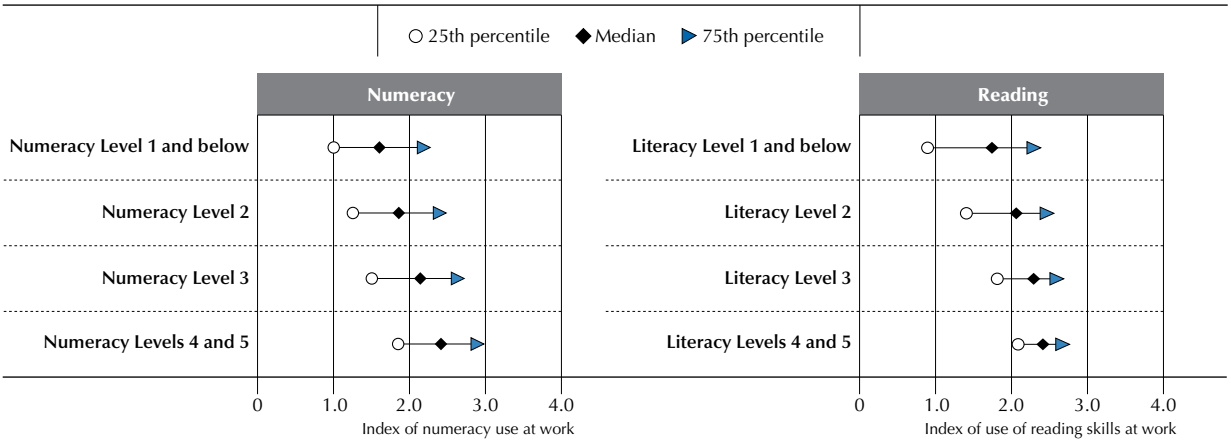
Source: Survey of Adults Skills (PIAAC) (2012), Table A4.22.

StatLink http://dx.doi.org/10.1787/888932901676

■ Figure 4.23 ■

Skills use at work, by proficiency level

Median, 25th and 75th percentiles of the distribution of skills use, by level of proficiency



Notes: Employees only.

Source: Survey of Adults Skills (PIAAC) (2012), Table A4.23.

StatLink http://dx.doi.org/10.1787/888932901695

THE LEVEL OF EDUCATION REQUIRED FOR THE JOB

In addition to measuring the use of skills, the Survey of Adult Skills also questions respondents about the level of education that would be required to get their jobs. This is an important piece of information that is useful for describing the industrial structure of the economy. It is also used to measure "qualification mismatch", or the phenomenon by which workers are often employed in jobs that require a lower or higher level of education than they have (Leuven and Oosterbeek, 2011; Quintini, 2011a and 2011b).

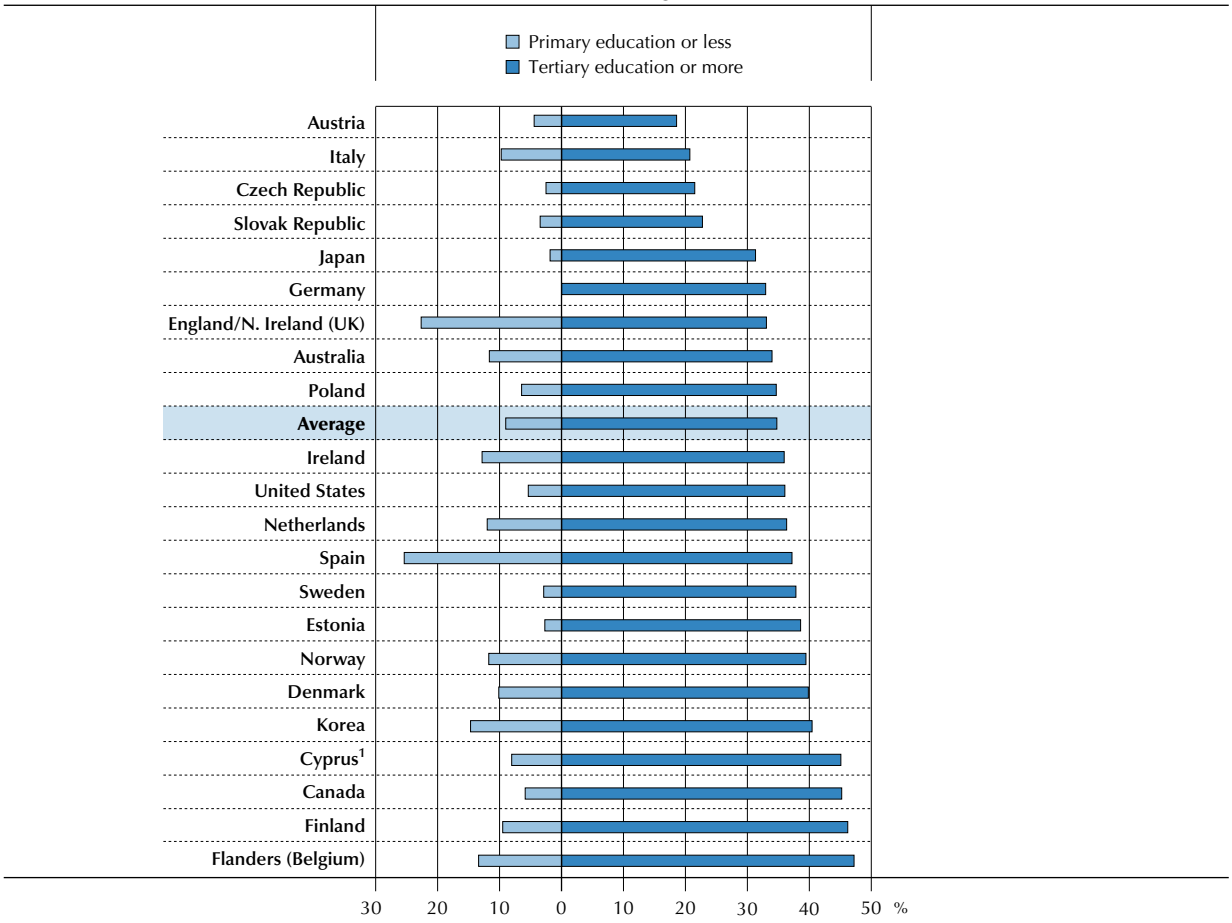
Across all participating countries, 9% of existing jobs are characterised as having low educational requirements (primary education or none), whereas almost 35% require tertiary qualifications (Figure 4.24).

In many countries, the fewer the jobs requiring low levels of education, the more the jobs requiring high levels of education. However, this is not always true. In Spain and England/Northern Ireland (UK), the distribution of jobs by educational requirements is highly polarised: there are many jobs with low educational requirements and many with high educational requirements (Autor et al., 2006; Goos and Manning, 2007; Goos et al. 2009; Wilson and Homenidou, 2012). By contrast, in Austria, Italy, the Czech Republic and the Slovak Republic, jobs characterised by medium-level educational requirements seem to be most prevalent.

■ Figure 4.24 ■

Workers in high-skilled and unskilled jobs

Percentage of workers in jobs requiring primary education (ISCED-1) or less and in jobs requiring tertiary education (ISCED-5 or higher)



1. See notes at the end of this chapter.

Note: Required education is the qualification the worker deems necessary to get his/her job today.

Countries are ranked in ascending order of the percentage of workers in jobs requiring tertiary education.

Source: Survey of Adults Skills (PIAAC) (2012), Table A4.24.

StatLink http://dx.doi.org/10.1787/888932901714



These results are based on self-reported information provided by workers and therefore may not reflect the employers' views nor the actual outcomes of the recruitment process (Green and James, 2003). Moreover, the survey specifically asks about the qualifications required to obtain the job at the time of the interview, which may not necessarily be the same as the requirements demanded of the respondents when they were hired. Despite these caveats, these results illustrate both the demand for workers with post-secondary education and the level of complexity of jobs, as perceived by currently employed workers.

The differences across countries in job requirements could be due to at least two different phenomena. First, the more technologically advanced countries are also likely to be those where jobs require more knowledge and where different hiring strategies may be used for different jobs. Second, in some countries, job requirements might not necessarily be linked to task complexity. To the extent that employers use educational qualifications to sort out the best candidates for the job (Spence, 1973), rising levels of educational attainment in the population would force recruiters to raise hiring standards, even if the jobs are not necessarily more complex.

EXPLORING MISMATCH BETWEEN WORKERS' SKILLS AND JOB REQUIREMENTS

Ensuring a good match between the skills acquired in education and on the job and those required in the labour market is essential if countries want to make the most of their investments in human capital and promote strong and inclusive growth. A mismatch between the two has potentially significant economic implications. At the individual level, it affects job satisfaction and wages. At the firm level, it increases the rate of turnover and may reduce productivity.[20] At the macro-economic level, it increases unemployment and reduces GDP growth through the waste of human capital and/or a reduction in productivity. That said, some mismatch is inevitable. Requirements regarding skills and qualifications are never fixed. The task content of jobs changes over time in response to technological and organisational change, the demands of customers, and in response to the evolution of the supply of labour. Young people leaving education and people moving from unemployment into employment, for example, may take jobs that do not necessarily fully match their qualifications and skills. Thus, for a number of reasons, some workers are likely to be employed in jobs for which they are too qualified and others may be in jobs, at least temporarily, for which they lack adequate schooling.

Mismatch, understood as a poor fit between an individual worker's qualifications or skills and those demanded or required by his or her job, needs to be distinguished from aggregate balances or imbalances in the supply of and demand for different types of qualifications and skills in the labour market, such as skill shortages or the over- or under-supply of people with different educational qualifications or skills. Although these two phenomena are distinct, they are, nevertheless, related. Imbalances (e.g. shortages or over-supply of individuals with particular qualifications or skills) are likely to have an effect on the incidence and type of mismatches observed at the individual level. But that relationship is not automatic: a balance between the supply of and demand for workers at a given qualification level does not guarantee that individual workers will be matched to jobs that require the level of education they have attained. A high level of mismatch at the individual level does not imply any particular level of imbalance between aggregate supply and demand.

The discussion of qualification and skills mismatch that follows focuses on the question of mismatch at the individual level, that is, on the outcomes of allocating individuals to jobs and adapting job tasks to workers' skills. It does not address the extent of the balance or imbalance in the supply of and demand for individuals with particular educational qualifications or skills. From this perspective, any evidence of mismatch between workers' qualifications and skills and those required by their jobs should be interpreted primarily as suggesting that there are economic benefits (and benefits in terms of the well-being of workers) to be gained from better management of human resources, including practices that involve hiring workers, designing jobs and providing training, apart from action concerning the adjustment of supply and demand in the aggregate. The evidence should not be interpreted as indicating the existence of too many highly qualified or highly skilled workers in the economy as a whole.

Constructing better indicators of mismatch using the Survey of Adult Skills (PIAAC)

The Survey of Adult Skills provides a rare opportunity to measure more precisely both qualification and skills mismatch. Qualification mismatch is determined based on a comparison of a worker's qualification level – expressed as the International Standard Classification of Education (ISCED) level corresponding to his or her highest educational qualification – and what is thought to be the required qualification level for his or her occupation code – the International Standard Classification of Occupations (ISCO) code attached to the job he or she holds. Because ISCED levels do not accurately reflect skills – not even those acquired in initial education – and ISCO codes do not accurately describe jobs,



the resulting measure does not precisely describe how a worker's skills set matches the skills needed to carry out his or her tasks at work. Skills mismatch, however, refers more precisely to a worker's actual skills and to the skills needed in his or her specific job.

Despite these important differences, the two measures of mismatch overlap to some extent, in the same way as education and skills do. Some researchers use the term *genuine mismatch* to indicate when a worker is both over-qualified and over-skilled (or both under-qualified and under-skilled) for his or her job. The term *apparent qualification mismatch*[21] is used to refer to workers who are over-qualified/under-qualified but not over-skilled/under-skilled, i.e. there is a discrepancy between their skills and their qualifications and/or a discrepancy between the skills and the qualification requirements of their specific jobs.

Although qualifications are an imperfect proxy for skills, qualification mismatch should not be simply dismissed as a "bad" measure of skills mismatch. First, by uncovering the causes of *apparent* qualification mismatch, for example when there is a mismatch between the skills learned in school and those required in the labour market, the areas requiring policy intervention are revealed. Second, workers have many different skills, ranging from information-processing skills, to occupation-/sector-specific knowledge and abilities, to generic skills. As a result, any concept of mismatch based on individual skills offers only a partial view of the match between a worker and his or her job. Qualifications reflect several different skills, including both information-processing and job-specific competencies, and could complement narrower, though more precise, skills measures. In addition, skills use depends, at least partly, on the effort that workers decide to put into their jobs, making it difficult to define precise skills requirements; qualification requirements are easier to define.

Thus, several measures of qualification and skills mismatch can be derived using the data available from the Survey of Adult Skills on qualifications, skills requirements and skills use (Table 4.3).

Deriving measures of qualification mismatch

The key way of determining the extent of qualification mismatch is to measure the level of education required at work.[22] The most frequently used measure is the modal qualification of workers in each occupation and country. However, this measure combines current and past qualification requirements as it reflects the qualifications of people who were hired at different times.

Table 4.3
Glossary of key terms

	Mismatch concept	Measure used in this chapter
Qualification mismatch	**Over-qualification**	A worker is classified as over-qualified when the difference between his or her qualification level and the qualification level required in his or her job is positive.
	Under-qualification	A worker is classified as under-qualified when the difference between his or her qualification level and the qualification level required in his or her job is negative.
	Required qualification	Based on respondents' answers to the question "If applying today, what would be the usual qualifications, if any, that someone would need to get this type of job?"
Skills mismatch in literacy, numeracy or problem solving	**Over-skilling in literacy, numeracy or problem solving**	When a worker's proficiency is above the maximum required by his or her job.
	Under-skilling in literacy, numeracy or problem solving	When a worker's proficiency is below the minimum required by his or her job.
	Skill requirements	The minimum and maximum skill levels required correspond to the minimum and maximum observed proficiency of workers who answer negatively to the questions: "Do you feel that you have the skills to cope with more demanding duties than those you are required to perform in your current job?"; and "Do you feel that you need further training in order to cope well with your present duties?"

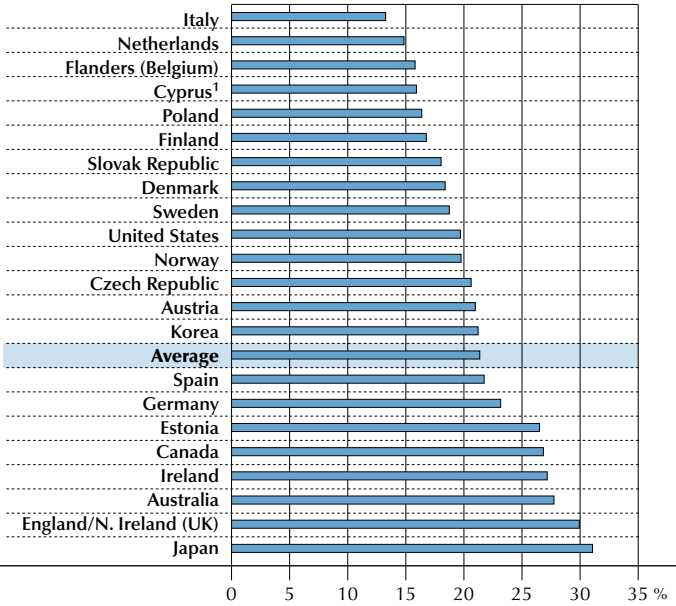
The Survey of Adult Skills, however, asks workers to report the qualification they consider necessary to get their job today. The comparison between workers' qualifications and this self-reported requirement shows that, on average, 21% of workers are over-qualified while about 13% are under-qualified (Figures 4.25a and 4.25b). The incidence of qualification mismatch varies significantly across countries: the share of over-qualified workers ranges from less than 15% in Italy and the Netherlands to 30% or more in Japan and England/Northern Ireland (UK); while the incidence of under-qualification varies between less than 10% in the Slovak Republic, the Czech Republic, Japan, Poland and Spain to just over 20% in Italy and Sweden.[23]



■ Figure 4.25a ■

Incidence of over-qualification

Percentage of workers whose highest qualification is higher than the qualification they deem necessary to get their job today



1. See notes at the end of this chapter.

Countries are ranked in ascending order of the share of over-qualified workers.

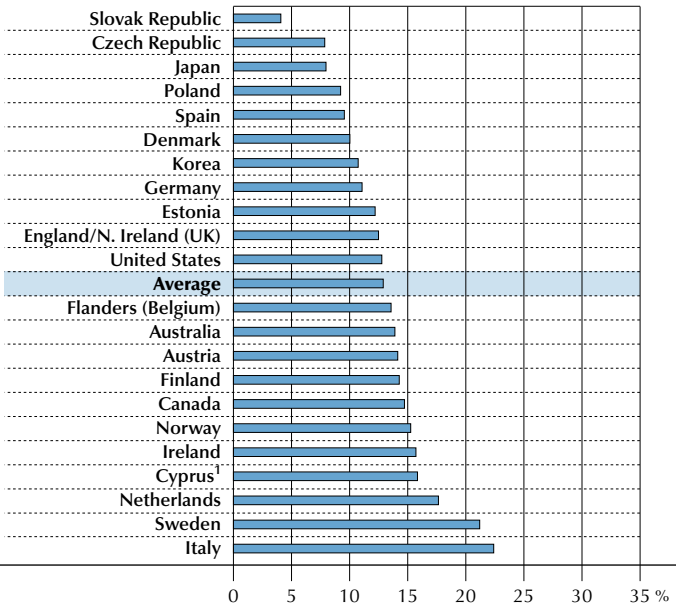
Source: Survey of Adults Skills (PIAAC) (2012), Table A4.25.

StatLink http://dx.doi.org/10.1787/888932901733

■ Figure 4.25b ■

Incidence of under-qualification

Percentage of workers whose highest qualification is lower than the qualification they deem necessary to get their job today



1. See notes at the end of this chapter.

Countries are ranked in ascending order of the share of under-qualified workers.

Source: Survey of Adults Skills (PIAAC) (2012), Table A4.25.

StatLink http://dx.doi.org/10.1787/888932901752

Mismatch in literacy

The measures of skills mismatch that have been used in previous research all suffer from various problems, most of which are related to the difficulty of measuring the skill requirements of jobs from surveys of employees. A novel approach to measuring skills mismatch in literacy (or numeracy) is now possible thanks to the wealth of information provided by the Survey of Adult Skills.

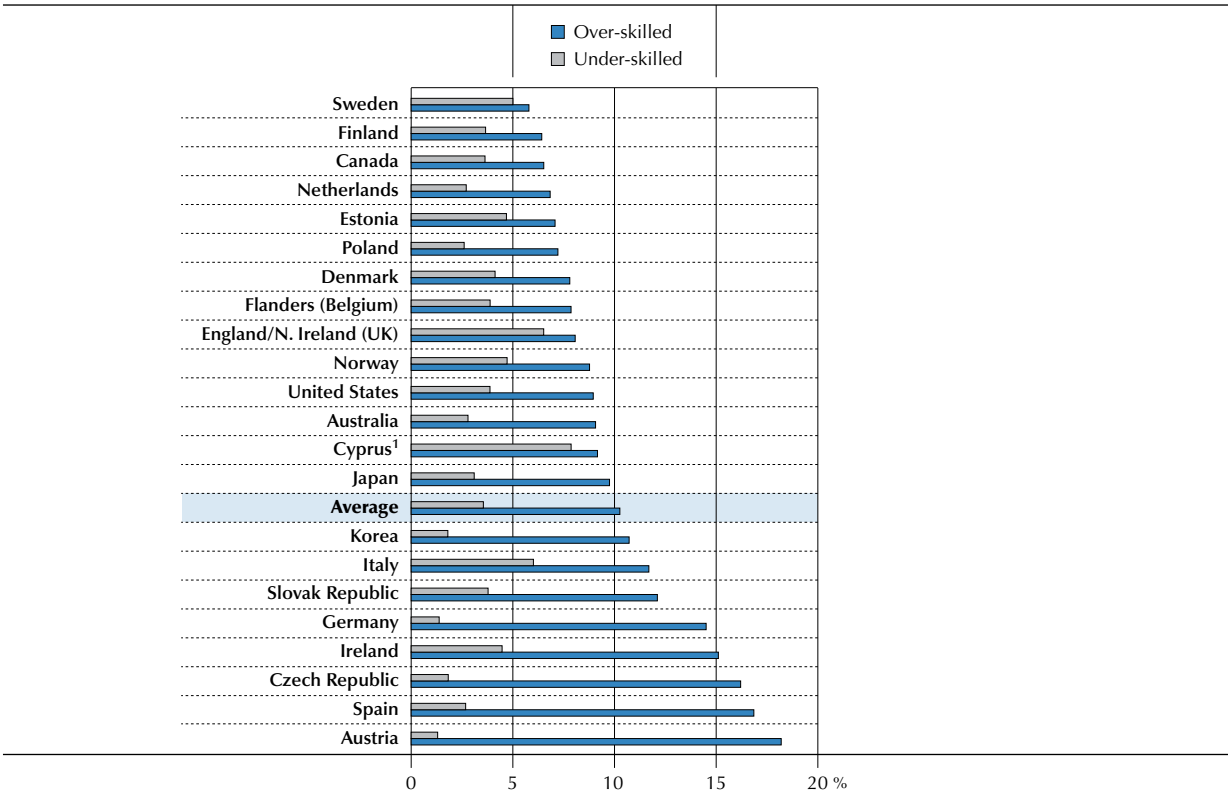
The survey asked workers whether they feel they "have the skills to cope with more demanding duties than those they are required to perform in their current job" and whether they feel they "need further training in order to cope well with their present duties". To compute the OECD measure of skills mismatch, workers are classified as well-matched in a domain if their proficiency score in that domain is between the minimum and maximum score observed among workers who answered "no" to both questions in the same occupation and country.[24] Workers are over-skilled in a domain if their score is higher than the maximum score of self-reported well-matched workers, and they are under-skilled in a domain if their score is lower than the minimum score of self-reported well-matched workers.

The OECD measure of skills mismatch is an improvement over existing indicators as it is more robust to reporting bias, such as over-confidence, and it does not impose the strong assumptions needed when directly comparing skills proficiency and skills use.[25] However, this approach does not measure all forms of skills mismatch; rather, it focuses on mismatch in the proficiency domains assessed by the Survey of Adult Skills, leaving out mismatch related to job-specific skills or that involving generic skills. (A detailed discussion of the survey's measure of skills mismatch, its advantages and disadvantages as well as its underlying theoretical framework is presented in Fichen and Pellizzari [2013]).

■ Figure 4.25c ■

OECD measure of skills mismatch in literacy

Percentage of over- and under-skilled workers



1. See notes at the end of this chapter.

Notes: Over-skilled workers are those whose proficiency score is higher than that corresponding to the 95th percentile of self-reported well-matched workers – i.e. workers who neither feel they have the skills to perform a more demanding job nor feel the need of further training in order to be able to perform their current jobs satisfactorily – in their country and occupation. Under-skilled workers are those whose proficiency score is lower than that corresponding to the 5th percentile of self-reported well-matched workers in their country and occupation.

Countries are ranked in ascending order of the percentage of workers over-skilled in literacy.

Source: Survey of Adults Skills (PIAAC) (2012), Table A4.25.

StatLink http://dx.doi.org/10.1787/888932901771

On average among the countries participating in the Survey of Adult Skills, about 11% of workers are over-skilled in literacy while about 4% are under-skilled in this proficiency domain (Figure 4.25c). Austria, the Czech Republic and Spain show the highest incidence of over-skilling in literacy, while Canada, Finland and Sweden are at the low end of the scale. On the other hand, the highest incidence of under-skilling in literacy is observed in Italy and Sweden, while the lowest is found in Austria and Germany.

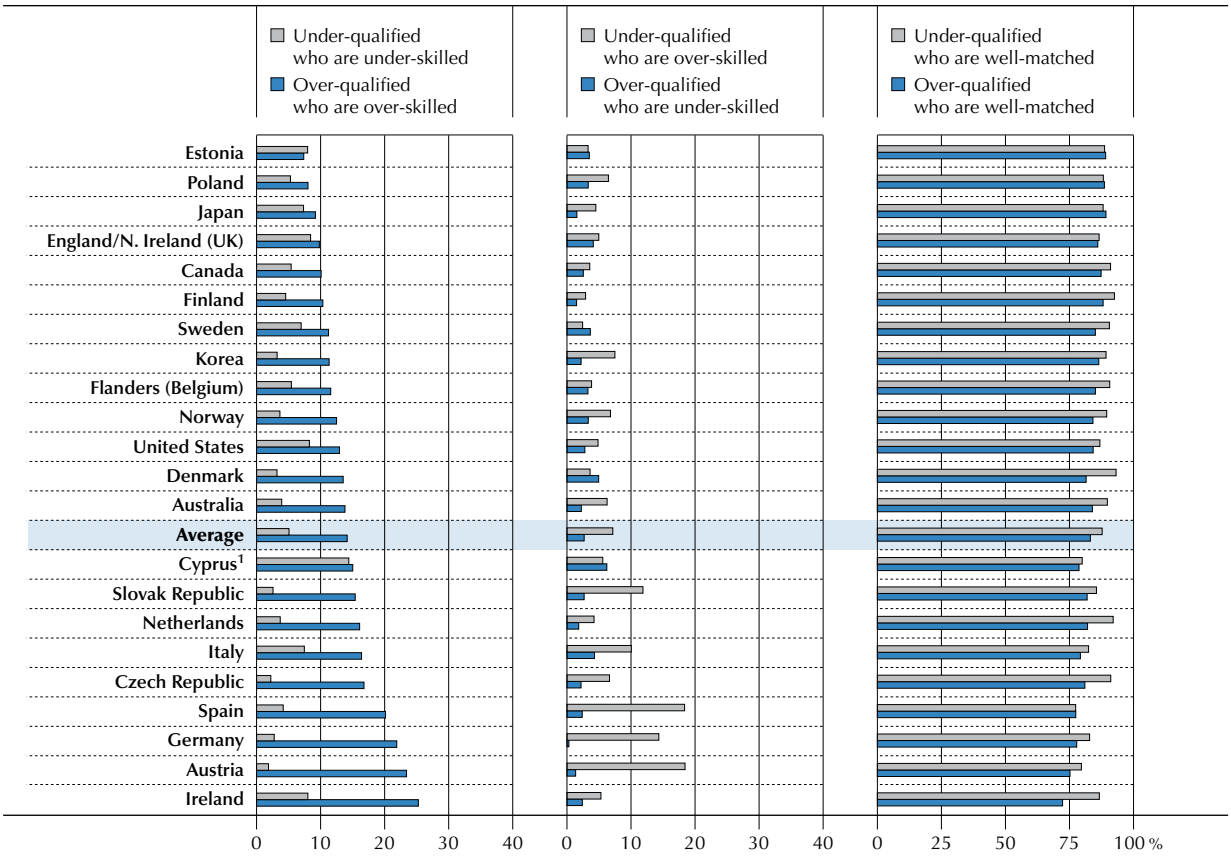
Interaction between skills and qualification mismatch

There is little overlap between qualification mismatch and skills mismatch in literacy.[26] On average, 14% of over-qualified workers are also over-skilled, based on the OECD measure of skills mismatch in literacy (Figure 4.26). This varies between 25% in Ireland to just 7% in Estonia. Overall, only a subset of over-qualified workers has literacy skills that exceed those required for their jobs. This confirms that qualifications are an imperfect proxy for skills, and also suggests that over-qualification may reflect the under-use of skills other than literacy.

■ Figure 4.26 ■

Overlap between qualification- and skills-mismatch measures

Percentage of qualification-mismatched who are in each literacy mismatch status



1. See notes at the end of this chapter.

Notes: Over- and under-qualification are defined relative to the qualification needed to get the job, as reported by the respondents. Literacy mismatch is defined according to the OECD measure.

Countries are ranked in ascending order of the percentage of over-qualified workers who are over-skilled in literacy.

Source: Survey of Adults Skills (PIAAC) (2012), Table A4.26.

StatLink http://dx.doi.org/10.1787/888932901790

Under-qualification and under-skilling in literacy also appear to be two distinct phenomena, with very little (on average, just 5%) overlap. This suggests that under-qualified workers actually have the literacy skills required to carry out their jobs, but do not have the corresponding qualifications. This hypothesis is supported by the fact that, in several countries, a relatively large share of under-qualified workers is actually over-skilled: just under one in five under-qualified workers in Austria and Spain. For these workers, under-qualification could be due to what is known as "qualification inflation",

when having a larger number of graduates in the labour force inflates qualification requirements, or to the fact that workers have acquired the necessary skills and knowledge on the job, but these skills are not certified by an official educational qualification.

How mismatch interacts with proficiency and other individual and job characteristics

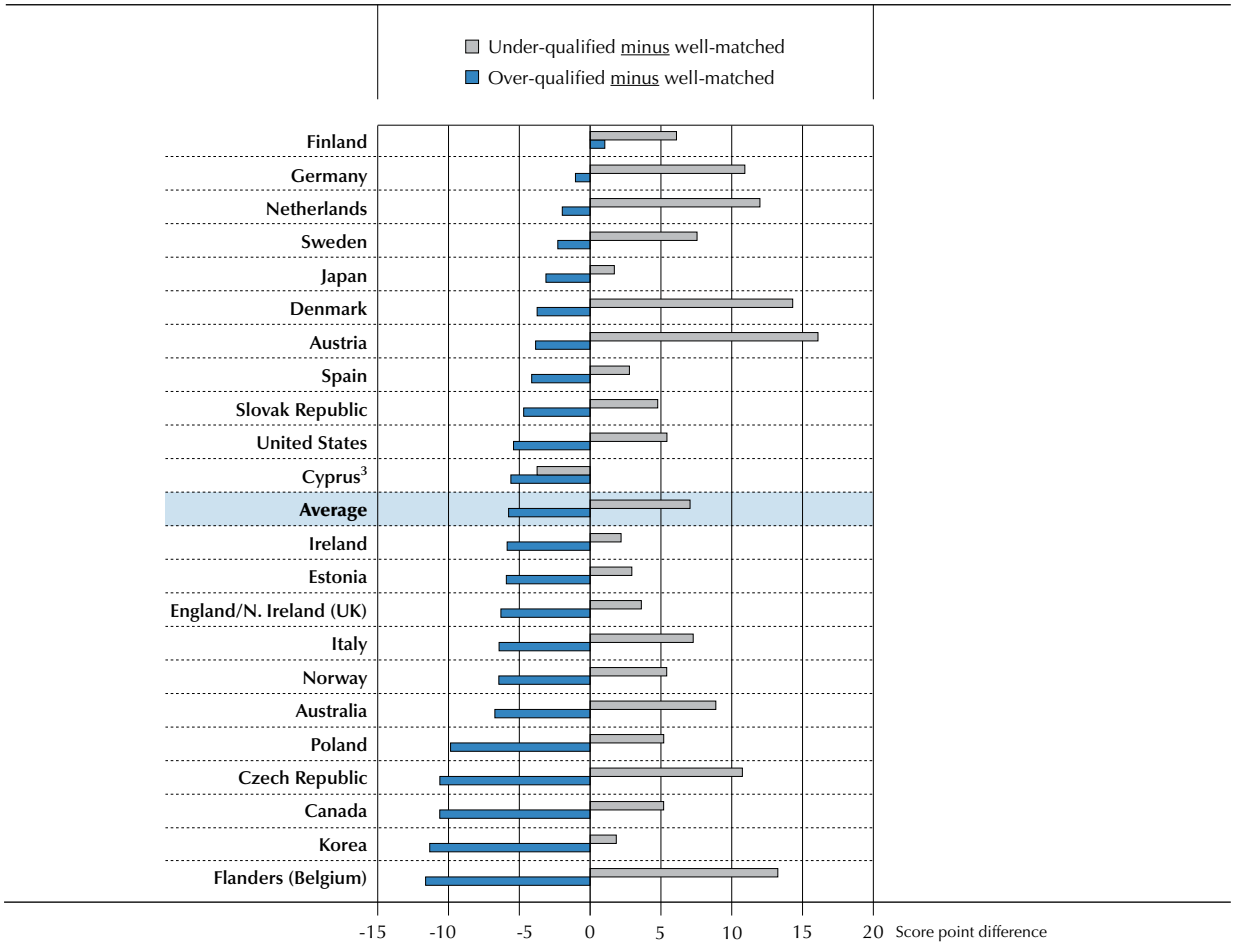
Qualification mismatch and proficiency

Several studies show that there are significant differences in skills proficiency among workers with the same qualifications. In the context of qualification mismatch, the best-skilled individuals in a given qualification category may get jobs that require higher formal qualifications while the least-skilled will only be able to get jobs requiring lower formal qualifications. Hence, individuals in the former group will appear as under-qualified, despite having the skills required for their jobs, while those in the latter group will appear as over-qualified, even though they lack some of the key skills needed to get and do a job with higher qualification requirements.[27]

■ Figure 4.27 (L) ■

Literacy proficiency scores among over- and under-qualified workers

Difference in literacy scores between over-qualified[1] and well-matched workers and between under-qualified and well-matched workers, adjusted by socio-demographic characteristics[2]



1. Over- and under-qualification are defined relative to the qualification needed to get the job, as reported by the respondents.
2. The scores presented in the figure are adjusted for years of education, gender, age and foreign-born status.
3. See notes at the end of this chapter.

Countries are ranked in decending order of the difference in literacy score between over-qualified and well-matched workers (over-qualified minus well-matched).

Source: Survey of Adults Skills (PIAAC) (2012), Table A4.27 (L).

StatLink http://dx.doi.org/10.1787/888932901809



On average, under-qualified individuals score higher in literacy proficiency than their well-matched counterparts (Figure 4.27 [L]), while over-qualified workers have lower scores than their well-matched peers.[28, 29] This *supports the theory that differences in proficiency within qualification levels could explain some qualification mismatch*. And the differences in average scores are not negligible: each year of schooling corresponds to around seven points on the literacy proficiency scale.

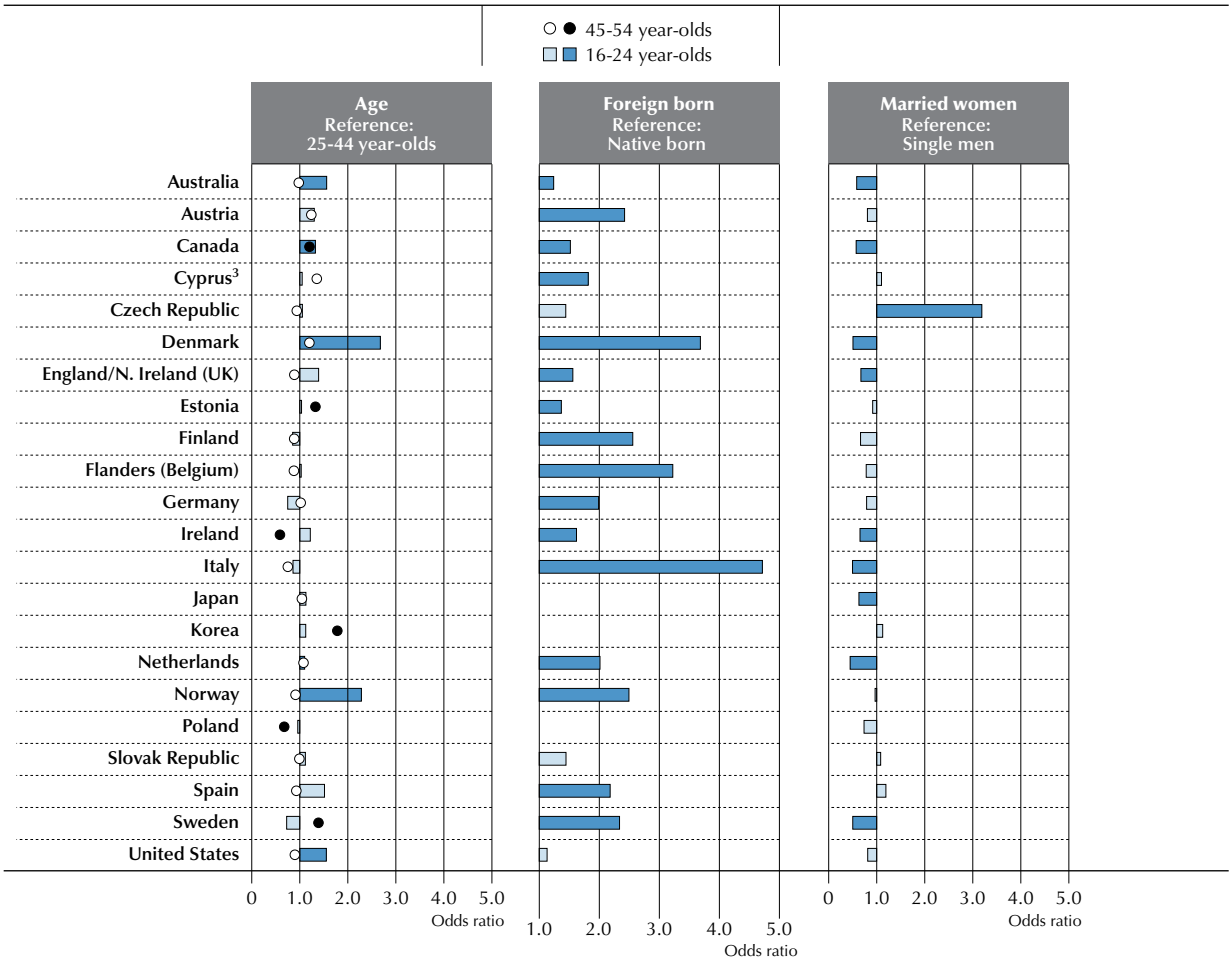
Socio-demographic and job characteristics and mismatch

Individual and job characteristics may influence the likelihood of qualification mismatch too. For example, it may take young people, as new entrants to the labour market, some time to sort themselves into well-matched jobs. Or, some workers may choose to accept a job for which they are over-qualified. This can happen when workers wish to remain close to their families or better reconcile work and family life and accept part-time jobs. An analysis of the impact of socio-demographic characteristics on qualification mismatch shows clearly that foreign-born workers are more likely to be over-qualified than their native counterparts (Figure 4.28a). This could be because qualifications acquired outside the host country are not recognised, and so highly-qualified migrants are relegated to working in low-skilled jobs.

■ Figure 4.28a ■

Over-qualification, by socio-demographic characteristics

Adjusted odds ratios showing the likelihood of over-qualification[1], by socio-demographic characteristics[2]



1. Over-qualification is defined relative to the qualification needed to get the job, as reported by the respondents.

2. From logit regressions including controls for years of education, age, gender and marital status, foreign-born status, establishment size, contract type, hours worked. Statistically (at the 10% level) significant values are shown in darker tones. Estimates based on a sample size less than 30 (odds ratio of foreign born with respect to native born for Japan, Korea and Poland) are not shown.

3. See notes at the end of this chapter.

Countries are listed in alphabetical order.

Source: Survey of Adults Skills (PIAAC) (2012), Table A4.28.

StatLink http://dx.doi.org/10.1787/888932901828

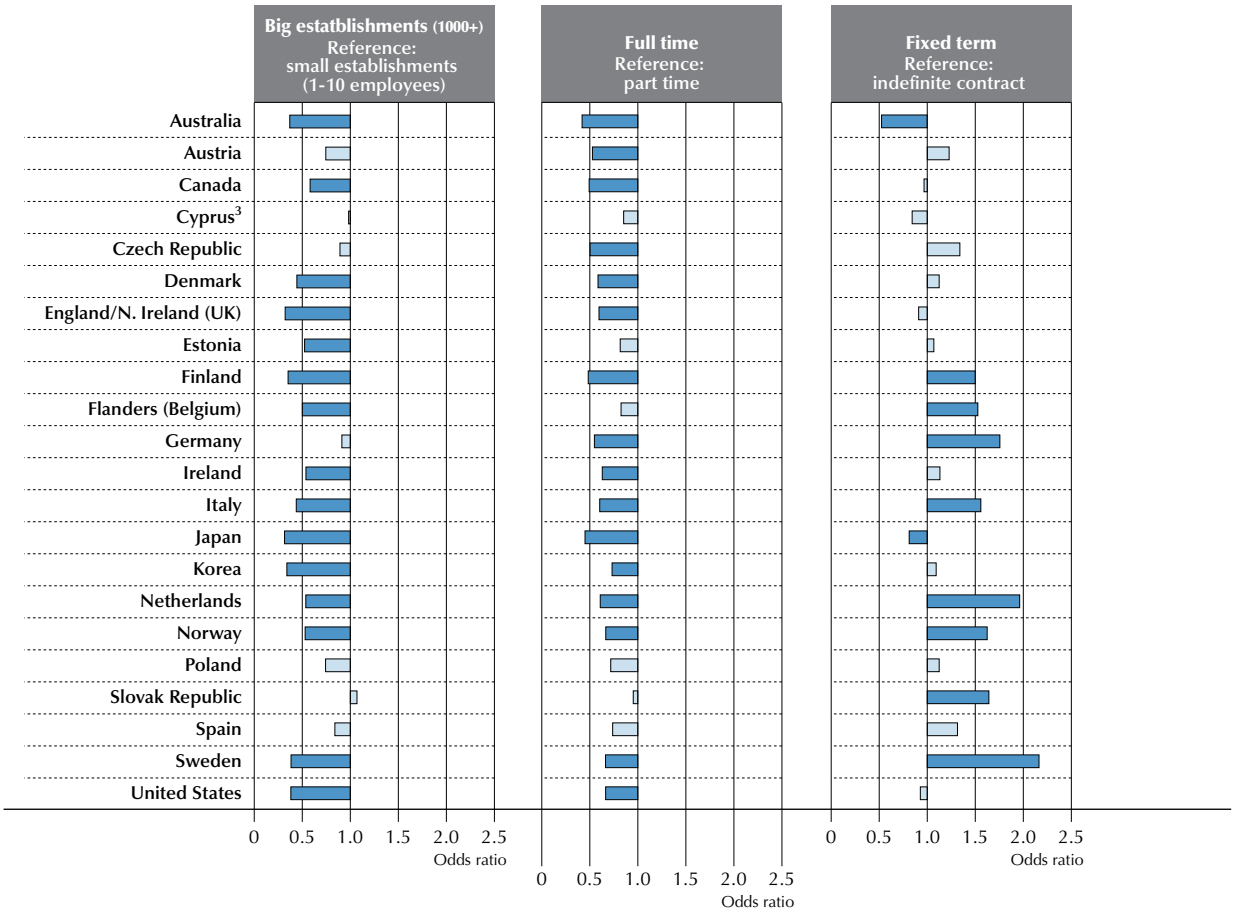
In addition, 16-24 year-olds are more likely to be over-qualified than prime age workers (aged 25-44) although by little and the relationship is often not statistically significant. And, contrary to the assumption that women are more likely to be over-qualified because of family constraints, once socio-demographic and job characteristics are controlled for, married women (and single women, though this is not shown in Figure 4.28a) are less likely to be over-qualified than their single male counterparts, with the only exceptions found in the Czech Republic.[30]

An analysis of results also finds that working for a large firm reduces the likelihood of over-qualification in most countries, as does working full-time (Figure 4.28b). One possible explanation for this is that firm size is a proxy for the quality of human-resource policies, with larger firms being better at screening candidates and at understanding how over-qualification may affect satisfaction at work and, ultimately, productivity. Large firms also have larger internal labour markets through which workers can be transferred to better matches inside the firm. Part-time jobs may have lower skills content, but they attract qualified workers because they are more compatible with personal/family life. Fixed-term contract jobs could be expected to have lower qualification requirements than permanent jobs, but they often attract tertiary-educated workers who cannot find a permanent position. This hypothesis is supported by the data in most countries.

■ Figure 4.28b ■

Over-qualification, by job characteristics

Adjusted odds ratios showing the likelihood of over-qualification,[1] by job characteristics[2]



1. Over-qualification is defined relative to the qualification needed to get the job, as reported by the respondents.
2. From logit regressions including controls for years of education, age, gender and marital status, foreign-born status, establishment size, contract type, hours worked. Statistically (at the 10% level) significant values are shown in darker tones.
3. See notes at the end of this chapter.
Countries are listed in alphabetical order.
Source: Survey of Adults Skills (PIAAC) (2012), Table A4.28.
StatLink http://dx.doi.org/10.1787/888932901847

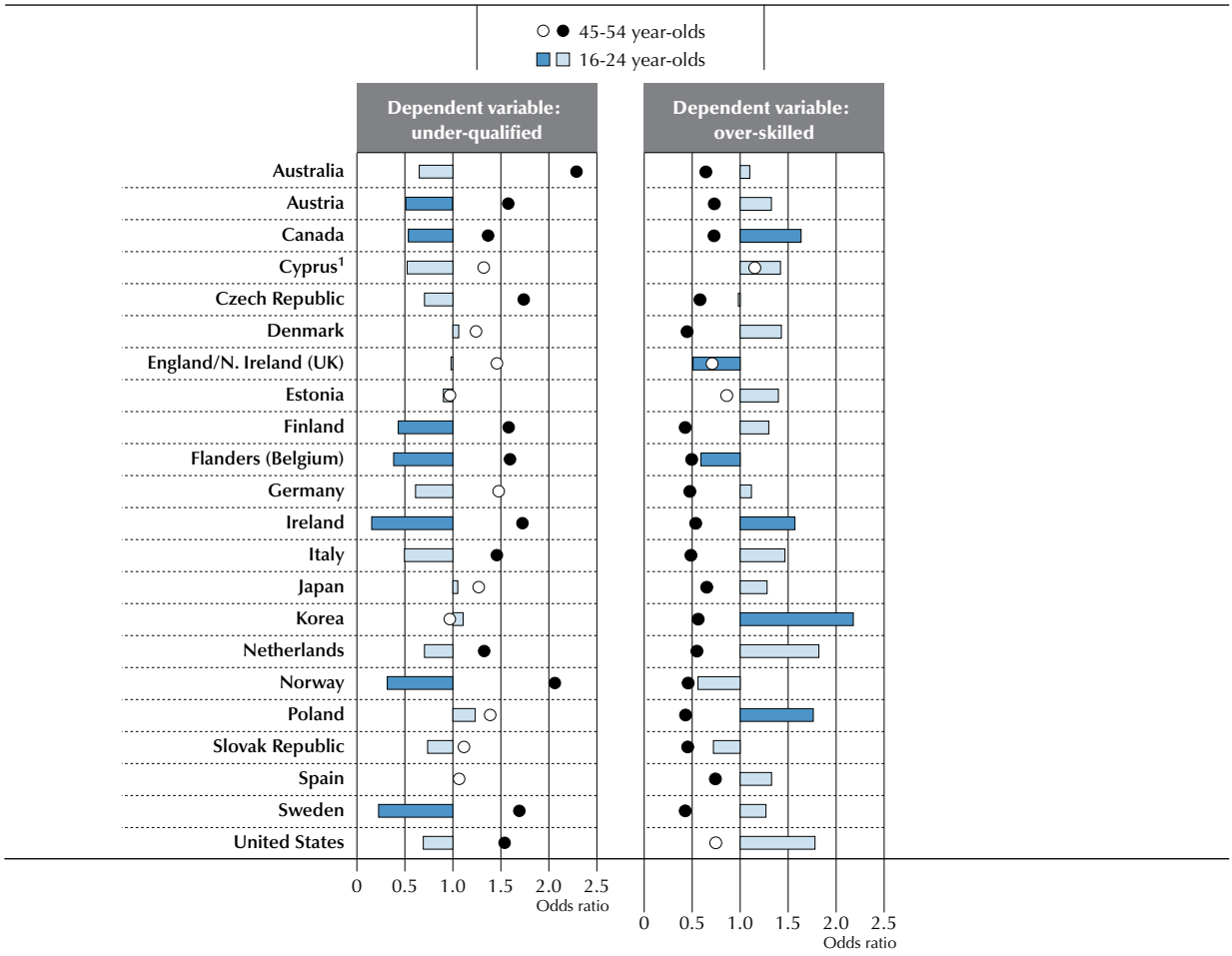


No statistically significant patterns emerge across countries for under-qualification or skills mismatch, with the only exception of the association with age. The likelihood of over-skilling declines with age (Figure 4.29). Also, older workers are more likely to be under-qualified than prime-age workers with the same skills and qualifications – a result that is statistically significant in about a third of the countries that participated in the Survey of Adult Skills. This finding lends some support to the hypothesis that under-qualified workers may be well matched to their jobs in terms of their skills but lack the qualifications that would formally certify those skills.

■ Figure 4.29 ■

Under-qualification and over-skilling, by age

Adjusted odds ratios showing the likelihoods of being under-qualified[1] or over-skilled, by age group (reference: 25-44 year-olds)[2]



1. Under-qualification is defined relative to the qualification needed to get the job, as reported by the respondents.

2. From logit regressions including controls for years of education, age, gender and marital status, foreign-born status, establishment size, contract type and hours worked. Statistically (at the 10% level) significant values are shown in darker tones. Estimates based on a sample size less than 30 (odds ratio of 16-24 year-olds with respect to 25-44 year-olds for Spain) are not shown.

3. See notes at the end of this chapter.

Countries are listed in alphabetical order.

Source: Survey of Adults Skills (PIAAC) (2012), Table A4.29.

StatLink http://dx.doi.org/10.1787/888932901866

The effect of mismatch on the use of skills and wages

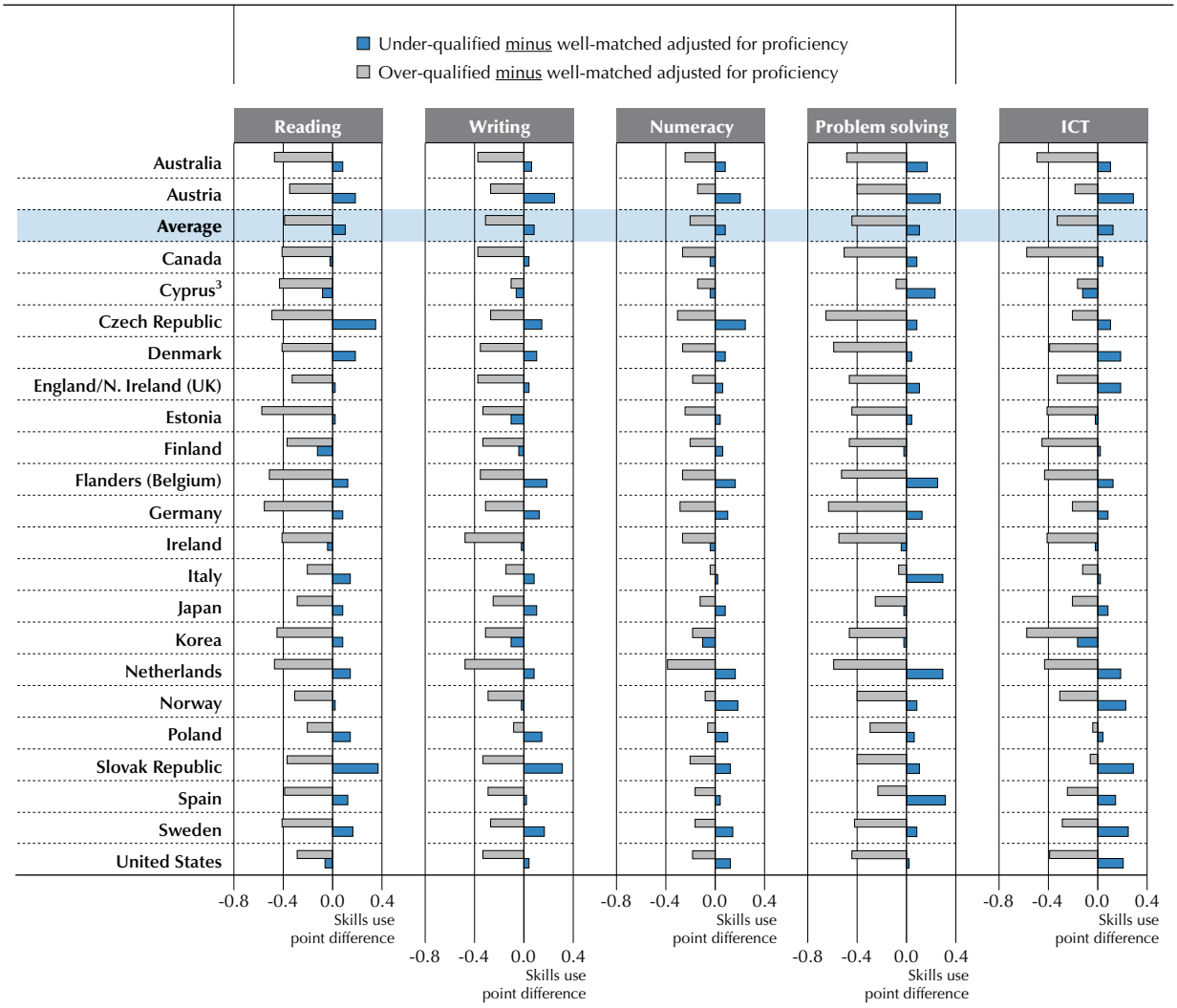
Analysis of data from the Survey of Adult Skills confirms that workers who are over-qualified and over-skilled in literacy use their skills less than their well-matched counterparts with the same level of proficiency (Figures 4.30 and 4.31). The inverse is true for those who are under-skilled in literacy. Workers in the latter group probably have to exert extra effort at work, given their levels of skills, and that can have a negative impact on job satisfaction.

Overall, numeracy skills appear to be better used at work, while problem-solving skills appear to be most often and most extensively ill-used. Across countries and skills, the largest "waste" of human capital resulting from over-qualification in information-processing skills is observed in Canada, Ireland, Flanders (Belgium) and the Netherlands (Figure 4.30). By contrast, over-skilling has more negative consequences for the use of skills in Australia, the Netherlands and the United States (Figure 4.31).

■ Figure 4.30 ■

Skills use and qualification mismatch

Difference in the use of information-processing skills between under/over-qualified[1] and well-matched workers, adjusted for literacy and numeracy proficiency scores[2]



1. Over- and under-qualification are defined relative to the qualification needed to get the job, as reported by the respondents.
2. OLS regressions including literacy and numeracy proficiency scores as controls.
3. See notes at the end of this chapter.

Countries are listed in alphabetical order.

Source: Survey of Adults Skills (PIAAC) (2012), Table A4.30.

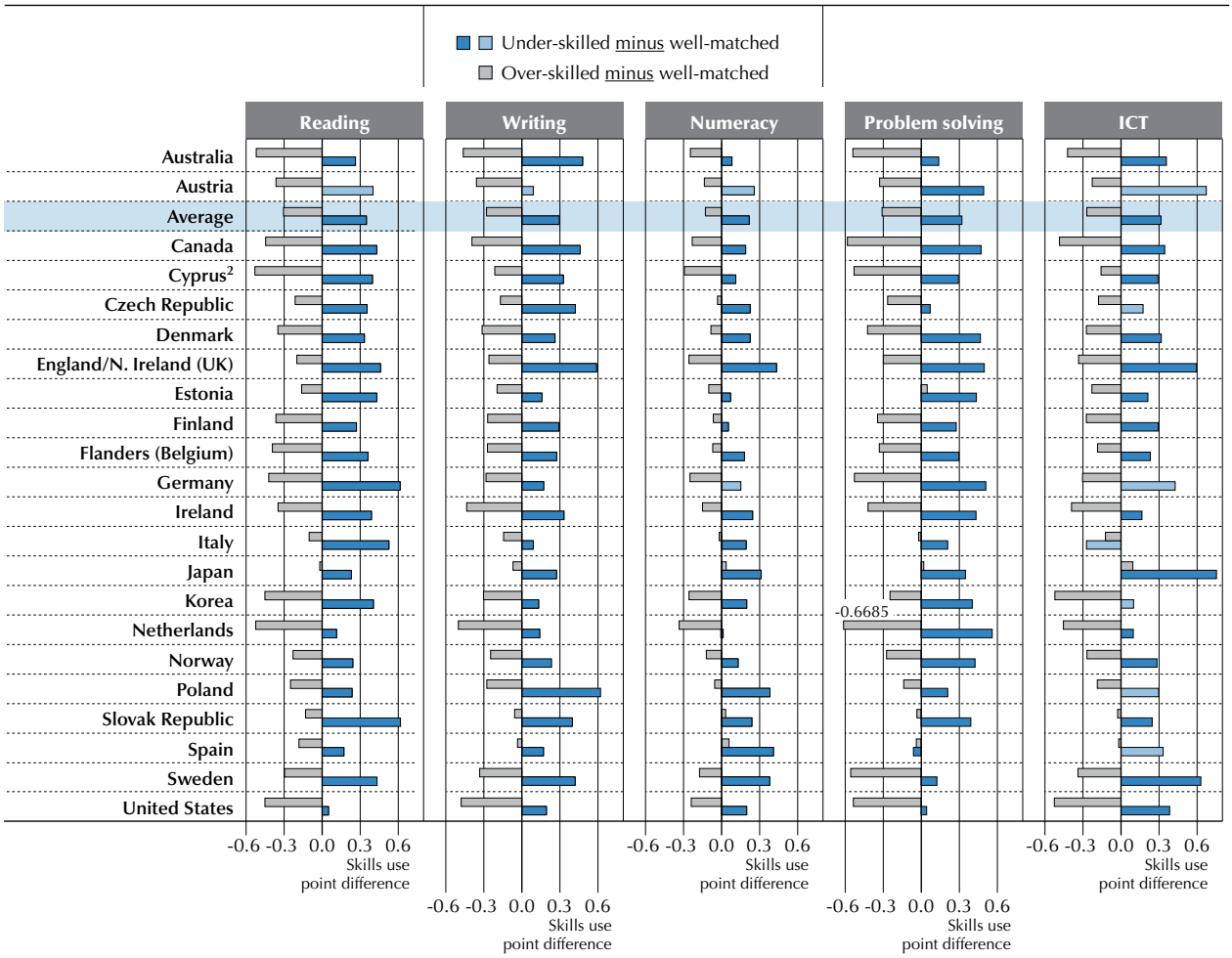
StatLink http://dx.doi.org/10.1787/888932901885

Over-qualification has a stronger negative effect on real hourly wages than over-skilling, when workers are compared with equally-qualified and equally-proficient well-matched counterparts (Figure 4.32a). On average, across countries, over-qualified workers earn about 13% less than well-matched workers with the same qualification and proficiency levels. The largest differences – at or exceeding 18% – are observed in Estonia, Korea, Poland and the United States. These results remain unchanged when controls for skills mismatch are removed.

■ Figure 4.31 ■

Skills use and skills mismatch

Difference in the use of information-processing skills between workers under/over-skilled in literacy and well-matched workers, adjusted by literacy and numeracy proficiency scores[1]



1. OLS regressions including literacy and numeracy proficiency scores as controls. Estimates based on a sample size less than 30 are shown in lighter tones.
2. See notes at the end of this chapter.
Countries are listed in alphabetical order.
Source: Survey of Adults Skills (PIAAC) (2012), Table A4.31.
StatLink http://dx.doi.org/10.1787/888932901904

The effect of over-skilling on wages is small and often not statistically significant, and remains so even when the controls for qualification mismatch are removed. The largest and statistically significant differences are observed in Poland and the United States, where over-skilled workers earn about 10% less than their equally skilled, well-matched counterparts. In both countries, this relatively large negative effect is in addition to the sizeable adverse effect of over-qualification on wages.

Both under-skilling and under-qualification are associated with higher wages compared to the wages of workers who are well-matched and equally qualified and skilled, although the effect of under-skilling is usually not statistically significant and is negative in Ireland (Figure 4.32b).

This evidence should not be interpreted as suggesting that having qualifications in excess of those required at work is not valued at all on the labour market. On average across countries, over-qualified workers earn about 4% more than well-matched workers in similar jobs. In other words, a tertiary graduate who holds a job requiring only an upper secondary qualification will earn *less* than if he were in a job requiring a tertiary qualification, but *more* than an upper secondary graduate in a job requiring upper secondary qualifications. Similarly, on average, an under-qualified individual earns

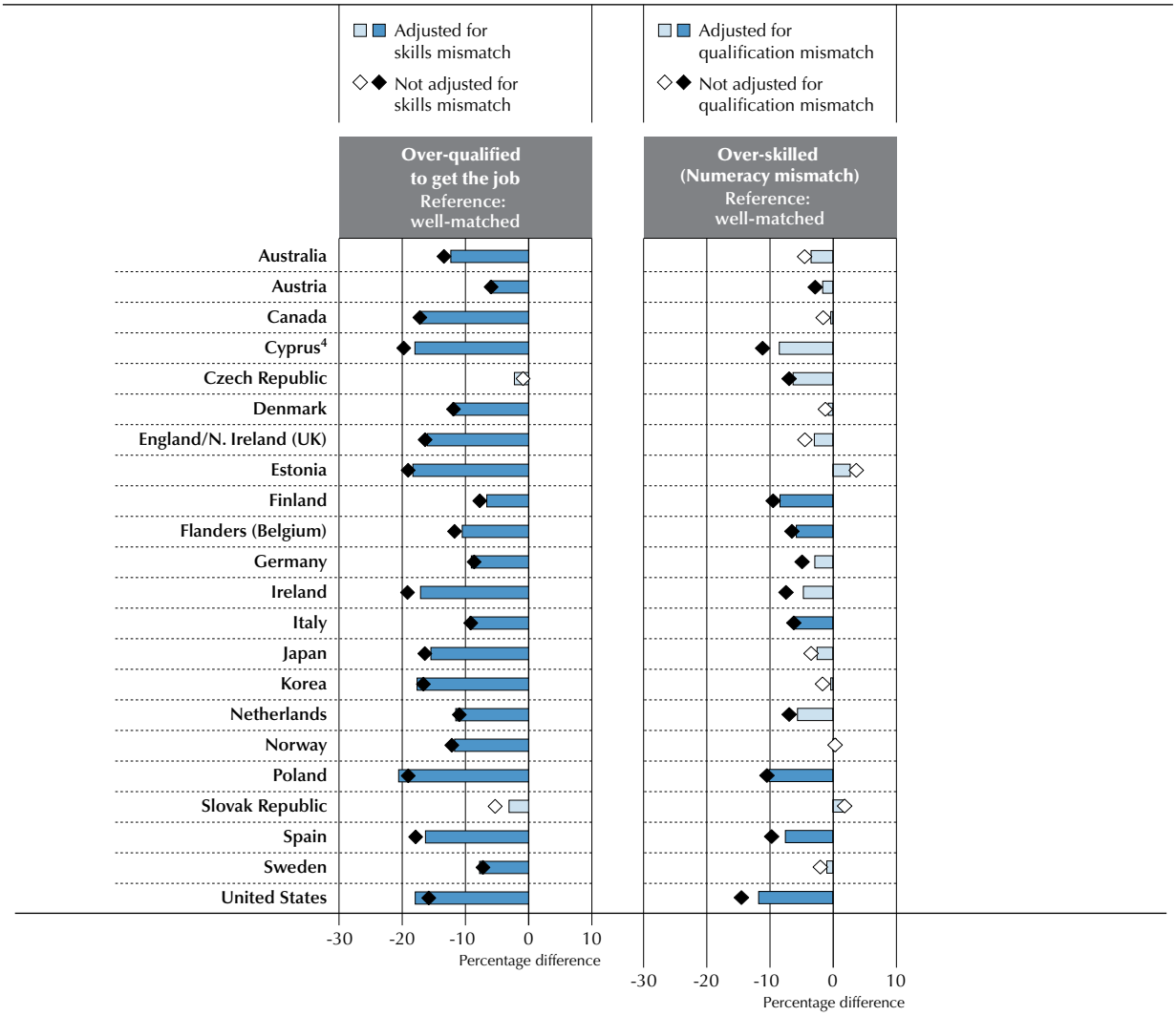
about 17% *less* than workers who are well-matched in similar jobs. Hence, an upper secondary graduate in a job requiring tertiary qualifications will earn *more* than an upper secondary graduate in a job requiring upper secondary qualifications but *less* than a tertiary graduate in a job requiring tertiary qualifications.

Qualification mismatch and skills mismatch may both have distinct effects on wages, even after adjusting for both qualification level and proficiency scores, because jobs with similar qualification requirements may have different skill requirements. This may happen because employers can evaluate qualifications but they cannot measure skills directly. In addition, the kinds of mismatch in skills captured by the two indicators are different: the survey's indicators of skills mismatch are based on numeracy, literacy and problem solving, while skills mismatch captured by qualification-based indicators may be interpreted as more general and may be based, for example, on the level of job-specific skills.

■ Figure 4.32a ■

Effect of over-qualification and over-skilling on wages

Percentage difference[1] in wages[2] between over-qualified[3]/skilled and well-matched employees



1. From OLS regressions including controls for years of education, age groups, gender, marital status, working experience, tenure, foreign-born status, establishment size, contract type, hours worked, public sector dummy, proficiency in numeracy and use of skills at work. The sample includes only employees. Statistically (at the 10% level) significant values are shown in darker tones.
2. Hourly wages. The wage distribution was trimmed to eliminate the 1st and 99th percentiles.
3. Over-qualification is defined relative to the qualification needed to get the job, as reported by the respondents.
4. See notes at the end of this chapter.

Countries are listed in alphabetical order.

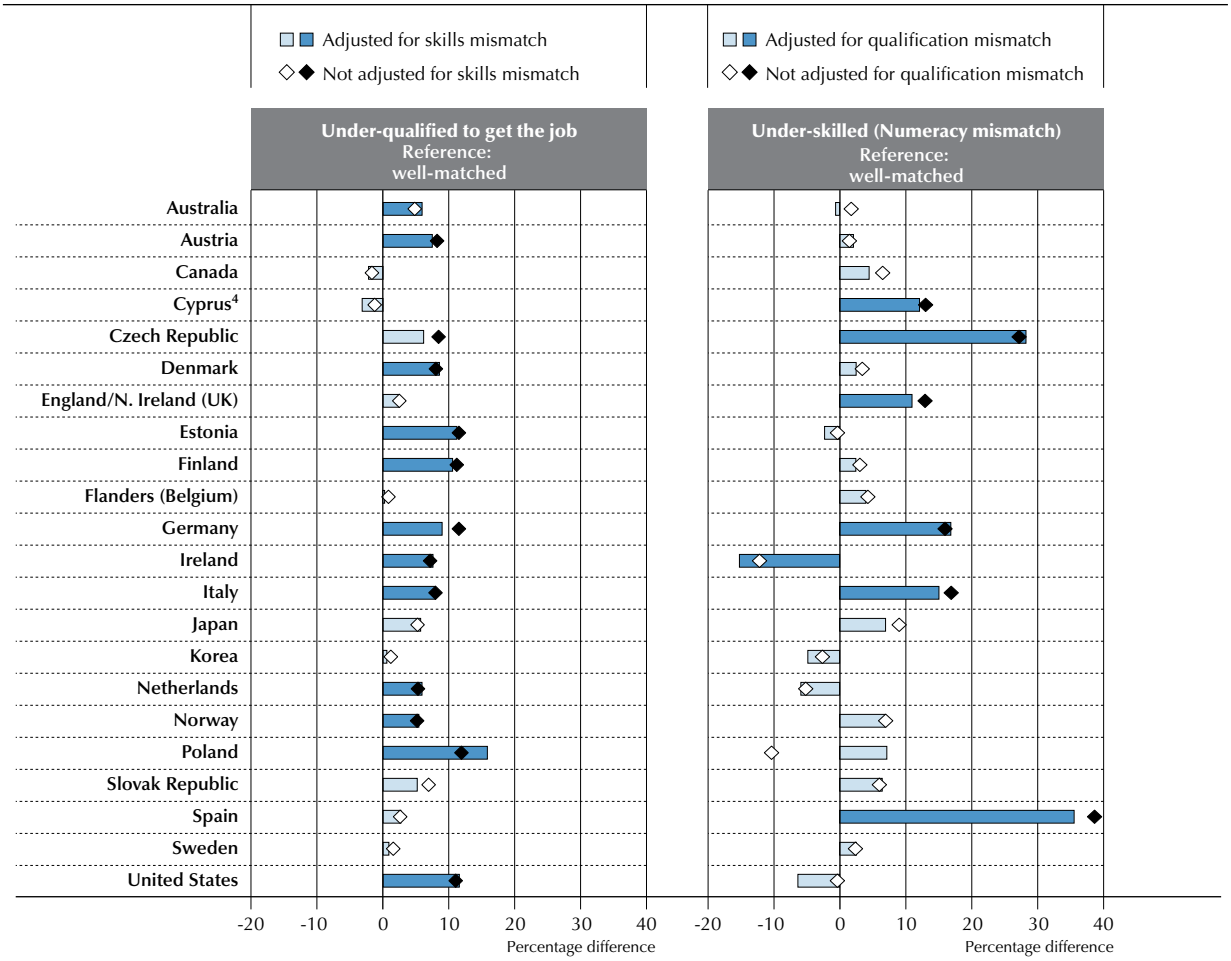
Source: Survey of Adults Skills (PIAAC) (2012), Tables A4.32a, A4.32b and A4.32c.

StatLink http://dx.doi.org/10.1787/888932901923

■ Figure 4.32b ■

Effect of under-qualification and under-skilling on wages

Percentage difference[a] in wages[b] between under-qualified[c]/skilled and well-matched employees



1. From OLS regressions including controls for years of education, age groups, gender, marital status, working experience, tenure, foreign-born status, establishment size, contract type, hours worked, public sector dummy, proficiency in numeracy and use of skills at work. The sample includes only employees. Statistically (at the 10% level) significant values are shown in darker tones.
2. Hourly wages. The wage distribution was trimmed to eliminate the 1st and 99th percentiles.
3. Under-qualification is defined relative to the qualification needed to get the job, as reported by the respondents.
4. See notes at the end of this chapter.

Countries are listed in alphabetical order.

Source: Survey of Adults Skills (PIAAC) (2012), Tables A4.32a, A4.32b and A4.32c.

StatLink http://dx.doi.org/10.1787/888932901942

SUMMARY

Analysis of results from the Survey of Adult Skills shows that the use of skills in the workplace influences a number of labour market phenomena, including productivity and the wage gap between temporary and permanent workers. The distribution of workers across occupations is found to be the single most important factor shaping the distribution of skills use. In addition, skills-use indicators are found to correlate only weakly with measures of skills proficiency, with the distributions of skills use among workers at different levels of proficiency overlapping substantially. As a result, it is not uncommon that more proficient workers use their skills at work less intensively than less proficient workers do. This latter finding points to the existence of significant mismatch between skills and their use at work, particularly for some socio-demographic groups. Data show that over-qualification is particularly common among foreign-born workers and those employed in small establishments, in part-time jobs or on fixed-term contracts. Over-qualification has a significant impact on wages, even after adjusting for proficiency. It also implies a "waste" of human capital, since over-qualified workers tend to under-use their skills. However, part of this type of mismatch is due to the fact that some workers have



lower skills proficiency than would be expected at their qualification level, either because they performed poorly in initial education or because their skills have depreciated over time. By contrast, under-qualified workers are likely to have the skills required at work, but not the qualifications to show for them. Mismatches in skills proficiency have a weaker impact on wages than qualification mismatch. This suggests either that labour market mismatch may be more often related to job-specific or generic skills than to those measured in the three domains covered by the survey; and/or that employers succeed in identifying their employees' real skills, irrespective of their formal qualifications, and adapt job content accordingly.

Notes

1. Although there is some parallel between the skills included in the direct assessment exercise – literacy, numeracy and problem solving in technology-rich environments – and the use of reading, numeracy, problem solving and ICT at work (and at home), there are important differences. The skills use variables are derived by aggregating background questions on tasks carried out at work (or at home). For instance, these questions cover both reading and writing at work but two separate indices are created to maintain, to the extent possible, consistency with the direct assessment module which only tests reading skills in the literacy module. Similarly, the use of problem solving and ICT skills at work are not to be confused with the assessment of proficiency in problem solving in technology-rich environments. Finally, it should be kept in mind that even when there is a parallel between skills use and skills proficiency concepts – notably between reading use and literacy proficiency and between numeracy use and proficiency – there is no correspondence between the questions concerning the tasks performed at work (or at home) and those asked in the direct assessment modules. These issues should be kept in mind when comparing skills proficiency to skills use.

2. The labels *information-processing* and *generic skills* serve a mere presentational purpose and should not be over-interpreted.

3. It should be borne in mind that these data are self-reported by respondents, and that cross-country variations may be partly due to cultural differences in response behaviours.

4. Specifically, the figure shows the fraction of workers whose indices of skills use lay in the top 25% of the overall distribution of each skills-use index. The top 25% threshold is chosen to get a sense of how many people use each skill most intensively at work. It is computed using all the observations in the Survey of Adult Skills (PIAAC), i.e. pooling all the countries together using the appropriate sampling weights.

5. No cluster of skills use is identified for Poland.

6. Only proficiency in literacy and numeracy is considered in this analysis, as the average score in the problem-solving section of the assessment does not take into account the relatively large and variable proportion of respondents who did not take that part of the assessment, either because they refused to or because they could not use a personal computer.

7. The adjustment is based on multivariate regression analysis. First, both labour productivity and the average use of reading at work are separately regressed on average proficiency scores in literacy and numeracy, i.e. they are adjusted to control for the effect of literacy and numeracy proficiency. Then, the residuals of such two regressions are, in turn, regressed on one another. The adjusted results displayed in Figure 4.4 come from such a regression. This is a rather standard econometric procedure, commonly known as *partitioned regression*.

8. In fact, the average levels of proficiency in literacy and numeracy are only weakly correlated with productivity: in a simple linear regression, they jointly capture less than 2% of the cross-country variation.

9. For instance, women may sort themselves into jobs that require less investment in human capital during the period of childrearing.



10. The adjusted differences are produced from the individual data by running one OLS regression for each country and for each skill, with skill-use indicators as dependent variables, a gender dummy as the main independent variable of interest, and adding skills proficiency scores, a dummy for part-time jobs and occupational dummies (ISCO 1 digit). The estimated coefficient on the gender dummy can be directly interpreted as the adjusted difference in skills use between men and women. The same procedure is used for the other figures in this section, appropriately changing the dependent variables and the control set.

11. Differences in the use of skills between part-time and full-time workers should be interpreted with caution, as they may simply relate to the fact that part-time workers are less often at work than full-time workers.

12. In the absence of panel data, this interpretation cannot be tested against the alternative possibility that there is a trend towards less-intensive use of certain skills over time. However, given the evolution of technology and labour demand towards more skill-intensive work, as discussed in Chapter 1, this latter explanation does not seem particularly plausible.

13. Further adjusting for occupation and industry does not change the main findings.

14. The populations over which the averages of the skills-use indicators are taken are the same for both ICT use at home and ICT use at work in all countries.

15. Less than upper secondary = ISCED 0, 1, 2 and 3C short; completed upper secondary education = ISCED 3A, 3B, 3C long or 4A, B, C; tertiary education = ISCED 5A, B or 6.

16. Self-employed workers are excluded from these calculations.

17. In the Survey of Adult Skills (PIAAC), approximately 12% of the employees report being employed under a fixed-term contract.

18. However, there are likely to be significant differences in the characteristics of temporary employment across countries as well as in the characteristics of temporary jobs under different types of contracts – e.g. temporary-work agency contracts compared to fixed-term contracts.

19. See also Green and James (2003) for evidence of a high correlation between employees' and employers' views of skills requirements at work, suggesting that self-reported information on skills use provided by employees is a good proxy for the skills required at work.

20. Evidence on the link between mismatch and productivity is mixed. Because of the difficulty of measuring the relationship directly, studies infer the consequences of mismatch on productivity either by relying on human capital theory, equating wages to productivity, or by studying the effect of mismatch on job satisfaction. Using these approaches, most studies conclude that mismatch has a negative impact on productivity. However, some researchers have cast doubts on these findings. Notably, Kampelman and Rycx (2012) find evidence of a positive link between mismatch and productivity which they attribute to positive effects associated with a pool of higher skills, as more educated individuals can positively shape not only the nature of their own job tasks but also those of their colleagues.

21. Most often, this term is employed with reference to apparent over-qualification. See for example, Chevalier (2003).

22. While this is complicated by the fact that some jobs may not have an obvious requirement in terms of qualifications or workers may not be fully aware of it, survey experts have found that both workers and employers tend to find it easier to define jobs in terms of required qualifications than in terms of individual skills.

23. Because Figures 4.25 and 4.26 are based on workers' views of what qualification is required to get their job the results may be affected by respondent's bias – i.e. the tendency to over- or under- value the content of one's work – or by qualification inflation – i.e. whereby employers raise minimum job requirements as a result of an increase in the number of tertiary-qualified candidates without upgrading job content. The latter would tend to reduce the incidence of over-qualification when the self-reported measure is used, while the former may bias the results in either direction.

24. To limit the potential impact of outliers on these measurements, the 5th and the 95th percentiles instead of the actual minimum and maximum are used for computing skill mismatch.

25. The comparison of skills proficiency and skills use rests on the assumption that the two can be measured on the same scale, an assumption that is very difficult to defend for concepts that are so clearly distinct theoretically and that cannot be represented along the same metrics. In addition, the measures of skills proficiency and skills use are based on structurally different pieces of information: indicators of skills use normally exploit survey questions about the frequency (and/or the importance) with which specific tasks are carried out in the respondents' work activities, whereas skills proficiency is measured through information-processing tests. See the *Reader's Companion* to this report (OECD, 2013) for more details.

26. Similar results are obtained when using skills mismatch in numeracy.

27. These differences in skills proficiency within a qualification level are not necessarily related to performance in initial education. Some graduates may lack the generic skills, such as communication, team-work and negotiation skills, that the education system can foster, but that are better learned in the workplace. In addition, some workers may have the skills expected of their qualification level at graduation, but these skills may atrophy or become obsolete over time, particularly if they are not used or upgraded.

28. These personal characteristics are likely to influence both the level of proficiency and the likelihood of mismatch.



29. Similar results are obtained when using scores in numeracy or problem solving in technology-rich environments.

30. This is consistent with the mixed results, found in other studies, concerning the role played by gender and family status in explaining qualification mismatch (Quintini, 2011a). Husbands tend to optimise their job search, while their wives' job search is considered – by both the husband and the wife – to be of secondary importance. Also, some researchers have argued that women with children may be more likely to be over-qualified because of the constraints on job choice imposed by child-rearing. However, there is no empirical evidence to support these claims.

Notes regarding Cyprus

Note by Turkey: The information in this document with reference to "Cyprus" relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Turkey recognises the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of the United Nations, Turkey shall preserve its position concerning the "Cyprus issue".

Note by all the European Union Member States of the OECD and the European Union: The Republic of Cyprus is recognised by all members of the United Nations with the exception of Turkey. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus.

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5

Developing and Maintaining Key Information-Processing Skills

This chapter examines the processes and practices that help to develop and maintain skills – and the factors that can lead to a loss of skills. It discusses the impact of age, educational attainment and participation in adult learning activities on proficiency in literacy, numeracy and problem-solving skills, as measured by the Survey of Adult Skills (PIAAC), and how engagement in relevant activities outside of work has an even stronger relationship with proficiency in the skills assessed than engagement in the corresponding activities at work.



An individual's measured proficiency in literacy, numeracy and problem solving in technology-rich environments represents the cumulative outcome of a range of factors, including the volume, quality and timing of participation in education, work history, engagement in various practices, such as regular reading or use of ICTs, and the effects of biological maturation and age-related cognitive development and decline. This chapter explores the information available from the Survey of Adult Skills (PIAAC) regarding the processes and practices through which proficiency is developed and maintained and the factors that lead to its decline. In so doing, the chapter deepens the analysis of the relationships between age and educational attainment and proficiency undertaken in Chapter 3. The relationship between participation in adult education and training and proficiency is also explored, as are the relationships between literacy- and numeracy-related practices and ICT use and proficiency.

Among the main findings:

- Proficiency in literacy, numeracy and problem solving in technology-rich environments is closely related to age in all countries, reaching a peak at around 30 years of age and then declining steadily, with the oldest age groups displaying lower levels of proficiency than the youngest. The gain in proficiency observed for each additional year of age for adults between 16 and 30 reflects the fact that, in most countries, significant proportions of young people continue in education or training until their mid- to late 20s. The decline in proficiency associated with increasing age is related both to differences in the amount and quality of the opportunities that individuals have had to develop and maintain proficiency (particularly, but not exclusively, through formal education and training) over their lifetimes and to the effects of biological ageing.
- The level of education and training completed has a close relationship to proficiency. In all countries, individuals with tertiary qualifications have higher levels of proficiency than those with upper secondary qualifications who, in turn, have higher proficiency than those who have not attained upper secondary education. At the same qualification level, proficiency varies considerably between countries.
- There is a clear relationship between the extent of participation in organised adult learning and the average level of key information-processing skills in a given country. The large variation among countries at similar levels of economic development suggests major differences in learning cultures, learning opportunities at work, and adult-education structures.
- What adults do, both at work and outside work, is closely related to proficiency. Adults who engage more often in literacy- and numeracy-related activities and use ICTs more (both at work and outside of work) have higher proficiency in literacy, numeracy and problem solving in technology-rich environments. Engagement in relevant activities outside of work has an even stronger relationship with the skills assessed than engagement in the corresponding activities at work.

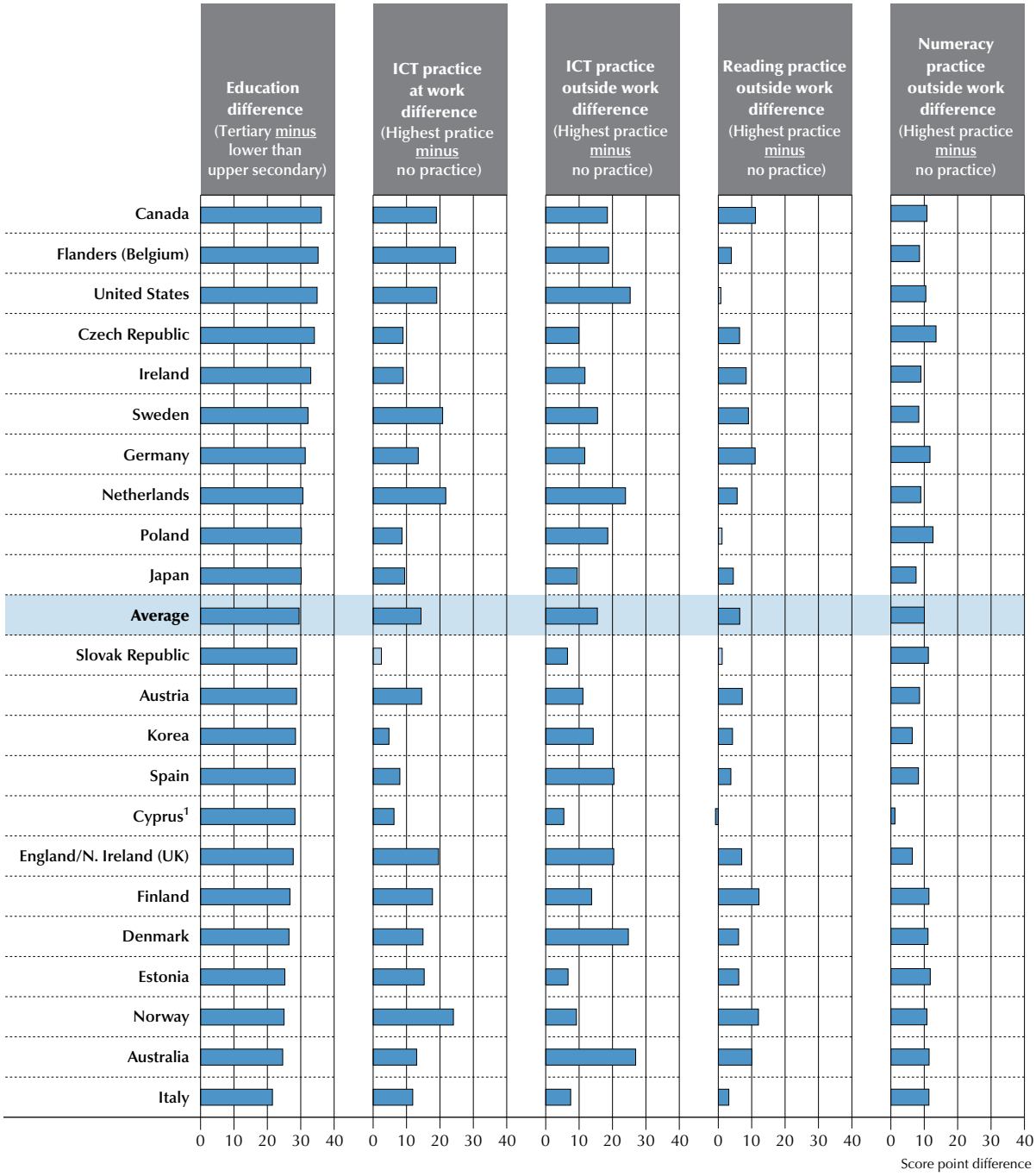
The relationship among proficiency in information-processing skills and participation in education and training (initial and ongoing) and engagement in activities such as reading and writing, use of numeracy and the use of ICTs is two-way. Participation in education is expected to develop information-processing skills. Individuals with higher levels of such skills are also expected to be more likely to participate in higher levels of education. Similarly, while reading often is likely to aid in developing and maintaining reading skills, having better reading skills is also likely to result in greater enjoyment of reading and, thus, in reading more frequently. The challenge to policy makers and other stakeholders, including employers and social partners, is ensuring that individuals with low proficiency do not become caught in a vicious cycle in which low proficiency and limited opportunities to maintain and develop proficiency become mutually reinforcing.

The findings confirm the importance of ensuring that all young people leave secondary school with well-developed skills in literacy, numeracy and the use of ICTs so that they can access, analyse and communicate information. For adults who left initial education with low proficiency, the availability of adult learning programmes tailored to their needs is essential. Beyond instruction, the opportunity to engage in relevant practices over the long term is also important both for developing proficiency and preventing its loss. Within the workplace, for example, redesigning work tasks to maximise engagement in activities that require the use of literacy, numeracy and ICT skills should be considered in conjunction with providing training. Overall, some countries have been better than others in establishing systems that combine high-quality initial education with opportunities and incentives for the entire population to continue to develop proficiency in information-processing skills after the completion of initial education and training, whether outside work or at the workplace.

■ Figure 5.1 (L) ■

Synthesis of practice-oriented differences in literacy proficiency

Adjusted differences in literacy scores by educational attainment levels and practice-oriented factors



1. See notes at the end of this chapter.

Notes: Statistically significant differences are marked in a darker tone. Differences are adjusted for all other variables and their categories included in the model: age, gender, education, immigration and language background, socio-economic background, adult education participation, and ICT, reading and numeracy practice at and outside work. Only the contrast differences between lowest and highest levels of education and four other practice-oriented factors associated with the largest average score-point differences are shown in this chart. For more detailed model results for each category of each variable included in the model, see Table B5.3 (L) in Annex B.

Countries are ranked in descending order of the difference in literacy scores between tertiary and lower than upper secondary educational attainment.

Source: Survey of Adult Skills (PIAAC) (2012), Table A5.1(L).

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OVERVIEW OF EDUCATION AND TRAINING AND PRACTICE-ORIENTED FACTORS LINKED TO DEVELOPING AND MAINTAINING PROFICIENCY

A summary of the relationships among past and present participation in education, the practice of skills and proficiency in literacy is presented in Figure 5.1 (L). The factors presented are among those with the strongest relationship to proficiency. Similar relationships are found concerning proficiency in numeracy, although further analyses are needed regarding the results on the problem-solving in technology-rich environments scale.[1] The net differences in the average scores of individuals who fall into contrasting categories of the factors in question (e.g. individuals with tertiary-level qualifications compared to those with lower-than-upper secondary attainment) are presented for the following variables: educational attainment, level of engagement in ICT practices at and outside work, and the level of engagement in literacy and numeracy practice outside work. In each case, the adjusted differences in scores account for the differences associated with age, immigration and language background, as well as other relevant education and practice-related factors.

Educational attainment and ICT use, both at work and at home, are found to have the strongest relationship to proficiency in literacy. As is discussed in Chapter 3, educational attainment has a strong relationship with both literacy and numeracy proficiency after accounting for other factors. While taking into account practice-related factors in addition to background characteristics reduces the strength of the relationship, adults with higher-than-upper secondary attainment score, on average across countries, nearly 30 points higher in literacy than those with lower-than-upper secondary attainment when background characteristics and engagement in relevant practices are taken into account.

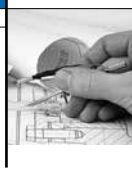
A striking finding is the strong relationship between the frequent use of ICTs at and outside work and proficiency in literacy. Across countries, the average proficiency gap between adults who frequently engage in ICT-related practices *at work* and those who never do is about 15 score points. The average score-point advantage on the literacy scale for adults who frequently use ICTs *outside work* compared those who never do is just over 15 score points. Regardless of the level of education, engaging more frequently with ICTs is strongly related to literacy proficiency, on average. The strength of the relationship varies between countries. In England/Northern Ireland (UK), Flanders (Belgium), the Netherlands, Norway, Sweden and the United States, frequent engagement in ICT practices at work is associated with approximately a 20-point advantage on the literacy scale over those who never use ICTs at work. In contrast, the advantage for frequent users is around 10 points or less in the Czech Republic, Ireland, Korea, Poland, the Slovak Republic and Spain. Similar results are found for numeracy.

Adults who read frequently and frequently engage in numeracy-related activities outside work have higher scores on the literacy scale (6 and 10 points), on average, than their counterparts who rarely engage in such activities. Interestingly, reading and ICT use are closely linked. If the use of ICTs is removed from the analysis, the strength of the association between literacy proficiency and reading in and outside work increases significantly.

Participation in adult education and training is found to have a positive, but not particularly strong, relationship to proficiency when educational attainment and practice-oriented factors are taken into account (see Table A5.1 [L]). This is partly due to the fact that educational attainment and participation in adult education and training are closely correlated. It is well documented that adults with higher levels of education are much more likely to participate in adult education and training than adults with lower levels of education (e.g. Desjardins and Rubenson, 2013).

AGE, AGEING AND PROFICIENCY

As noted in Chapter 3, there is an overall negative relationship between age and proficiency in information-processing skills. Given the demographic changes occurring in most OECD countries, it is important to understand the underlying reasons for the observed differences in performance. Many OECD countries have experienced steep drops in fertility combined with a continued increase in longevity and increased rates of labour force participation among adults over 55. As a result, the average age of the workforce is rising.[2] As the proportion of young people in the labour force shrinks, additions to the stock of skills available to the labour market become more dependent on up-skilling and/or re-skilling the existing workforce. This is why it is important to gain a better understanding of the causes and consequences of skills gain and loss over a lifetime.



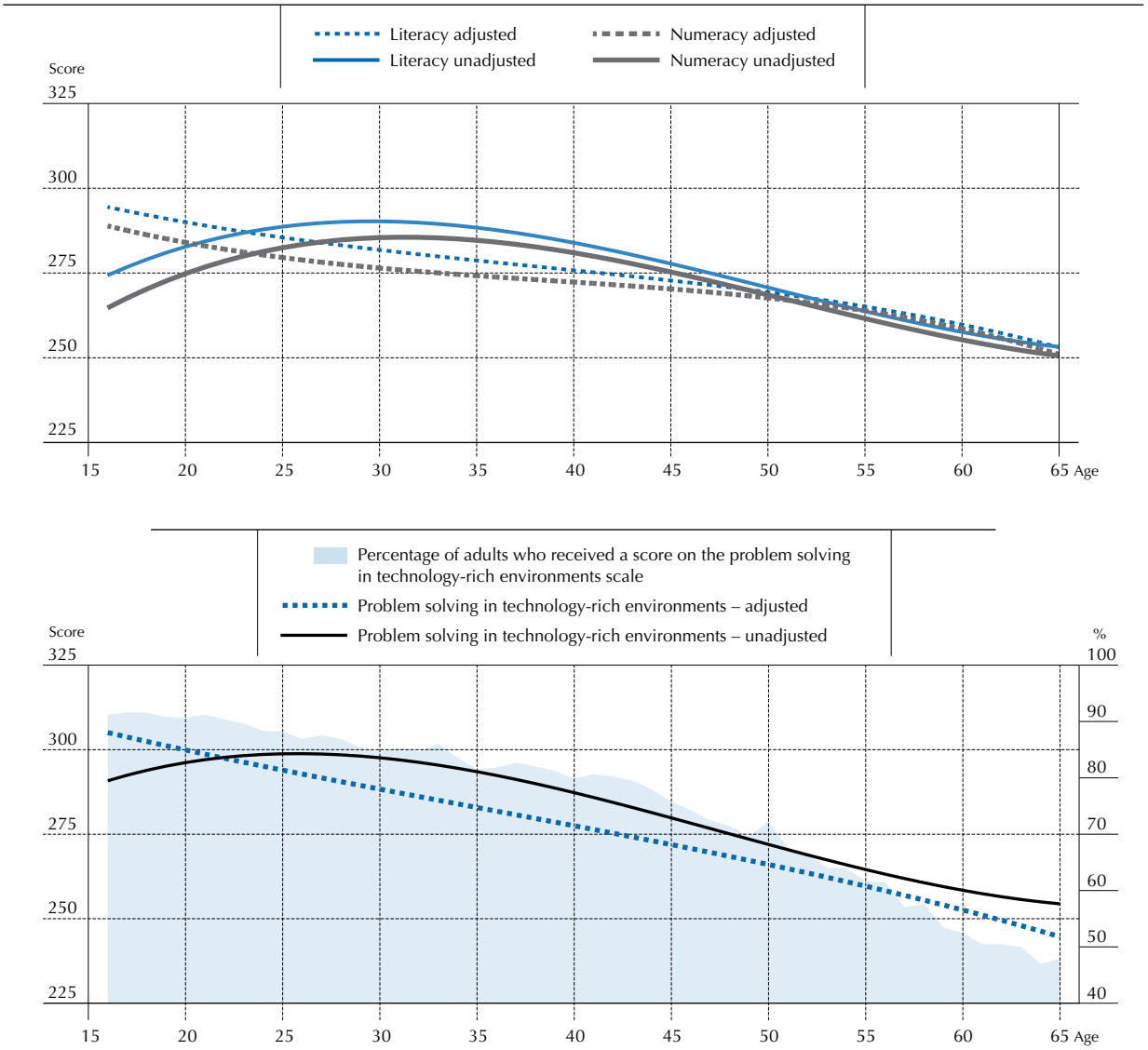
Observed age differences

Figure 5.2a shows the relationship between the skills measured and age, before and after accounting for educational qualifications and language background. The unadjusted results show an inverted U-shape relationship between proficiency and age for all three measured skills. Proficiency reaches a peak at around 30 years of age and then declines steadily, with the oldest age groups displaying lower levels of proficiency than the youngest. Once educational qualifications are taken into account, proficiency declines consistently with increasing age. Figures 5.2b (L) and 5.2c (L) show the same analysis on the literacy scale for individual countries. The age-skills profiles presented exclude foreign-born adults, since inflows of migrants constitute a major compositional change to the population base.

■ Figure 5.2a ■

Relationship between skills proficiency and age

Average trend scores by age, adjusted for educational attainment and language background, foreign-born adults excluded



Notes: A cubic specification of the trend curves is found to be most accurate in reflecting the distribution of scores by age in most countries. Unadjusted and adjusted results account for cross-country differences in average scores by age cohort. Adjusted results also account for educational attainment and language background differences. The reference group for which the adjusted curves are drawn is adults who have attained upper secondary education and whose first or second language learned as a child is the same as the language of the assesment. Foreign-born adults are excluded from the analysis. See corresponding tables mentioned in the source below for regression parameters and significance estimates.

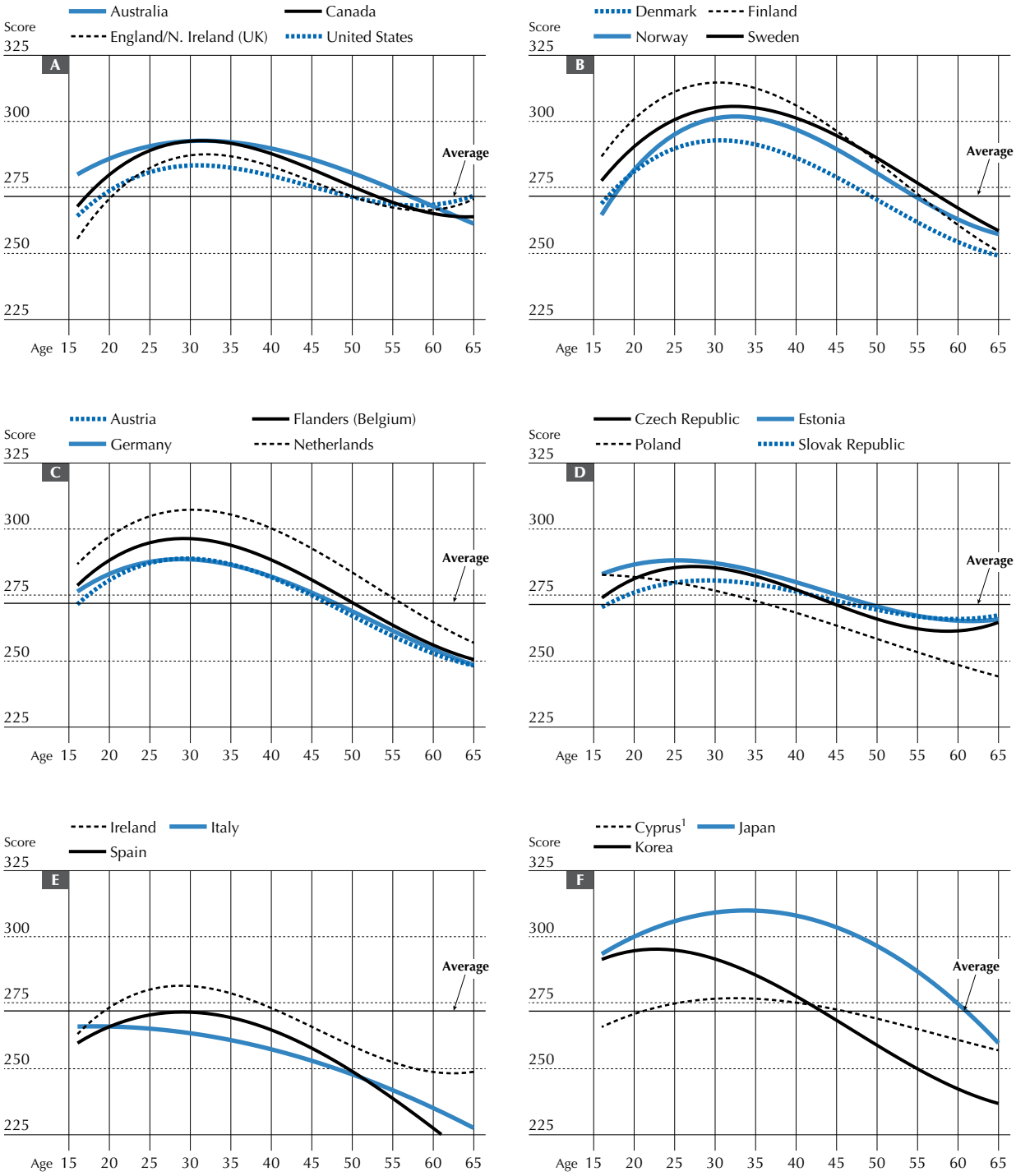
Source: Survey of Adults Skills (PIAAC) (2012), Table A5.2 (L), and Tables A5.2 (N) and A5.2 (P) (available on line).

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■ Figure 5.2b (L) ■

Relationship between literacy proficiency and age

Trend scores in literacy, by age, foreign-born adults excluded



1. See notes at the end of this chapter.

Notes: A cubic specification of the trend curves is found to be most accurate in reflecting the distribution of scores by age in most countries. Foreign-born adults are excluded from the analysis. See corresponding table mentioned in the source below for regression parameters and significance estimates.

Countries in Panel A-D are grouped according to regional or language considerations with the remainder grouped in Panel E-F.

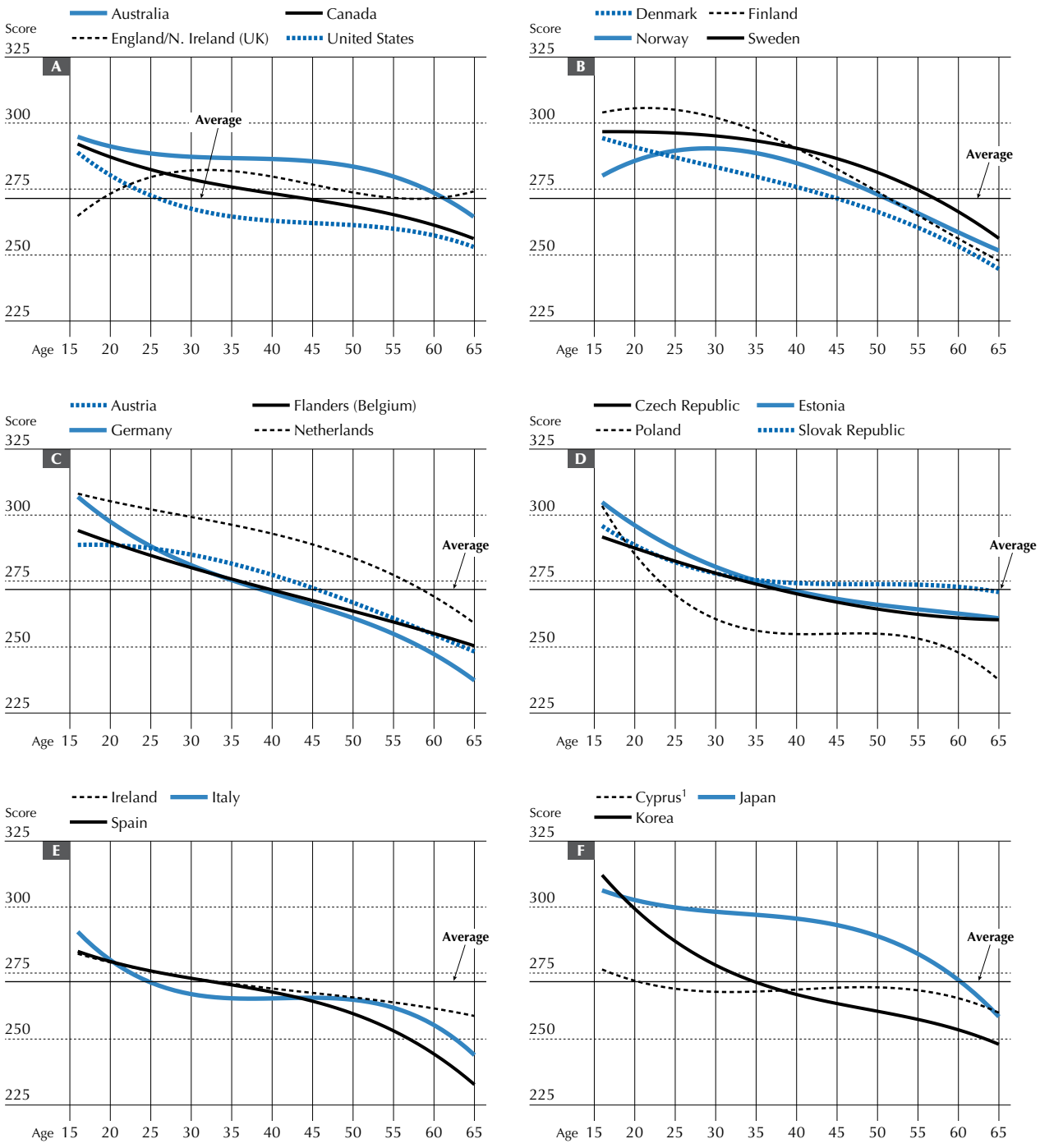
Source: Survey of Adult Skills (PIAAC) (2012), Table A5.2 (L).

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■ Figure 5.2c (L) ■

Relationship between literacy proficiency and age (adjusted)

Trend scores on the literacy scale, by age, adjusted for educational attainment and language background, foreign-born adults excluded



1. See notes at the end of this chapter.

Notes: A cubic specification of the trend curves is found to be most accurate in reflecting the distribution of scores by age in most countries. Adjusted results also account for educational attainment and language background differences. Foreign-born adults are excluded from the analysis. See corresponding table mentioned in the source below for regression parameters and significance estimates.

Countries in Panel A-D are grouped according to regional or language considerations with the remainder grouped in Panel E-F.

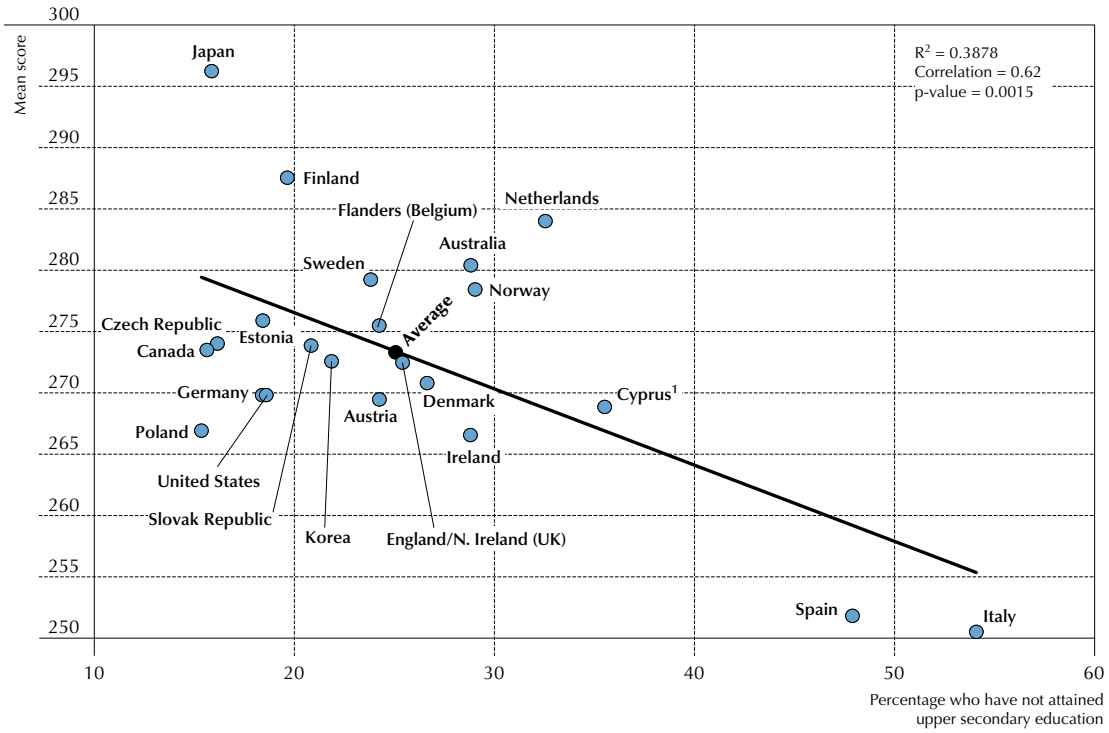
Source: Survey of Adult Skills (PIAAC) (2012), Table A5.2 (L).

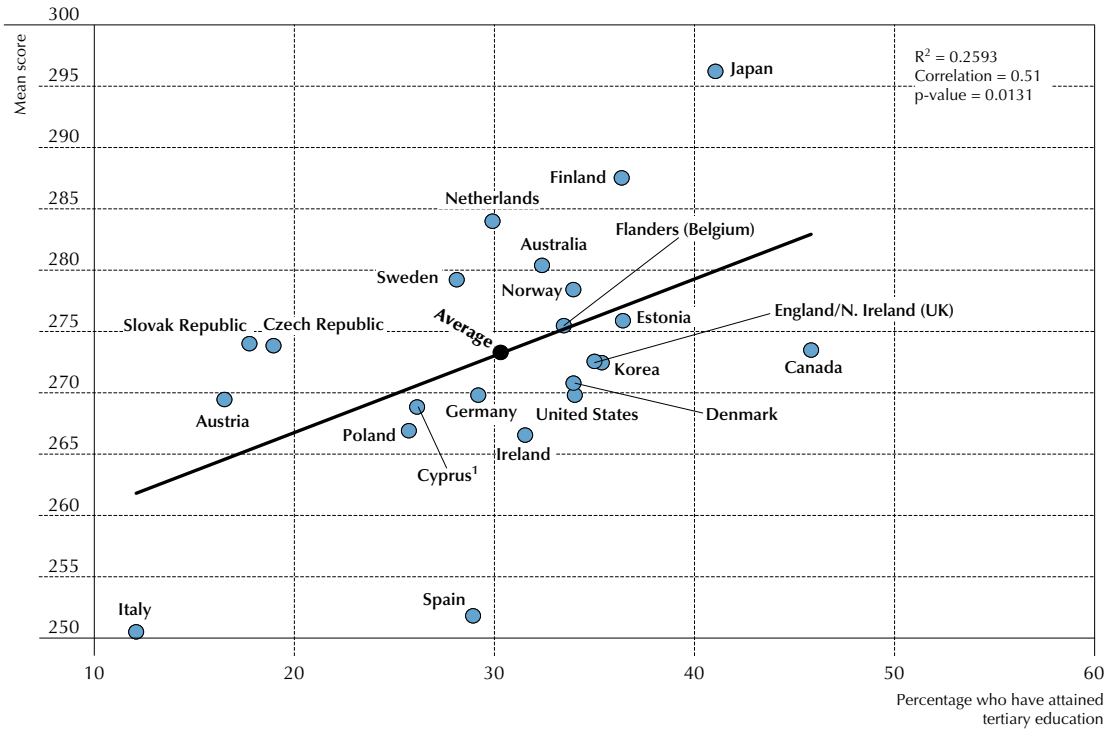
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■ Figure 5.3 (L) ■

Educational attainment, by average literacy proficiency

Percentage of adults who have not attained upper secondary education and of those who have attained tertiary education, by literacy proficiency score

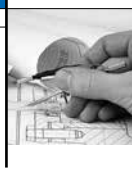




1. See notes at the end of this chapter.

Source: Survey of Adults Skills (PIAAC) (2012), Table A5.3 (L).

StatLink http://dx.doi.org/10.1787/888932902037



The increments in proficiency observed for each additional year of age for adults between 16 and 30 can be linked to the fact that, in most countries, significant proportions of young people continue in education or training until their mid- to late 20s. In other words, participation in education and training after the age of 16 continues to add "value" by increasing proficiency in information-processing skills. This conclusion is also supported by the fact that the mean literacy proficiency of adults is positively related to the overall level of educational qualifications (see Figure 5.3 [L]). There is a positive and moderately strong relationship between average proficiency and the proportion of the population that has attained tertiary-level qualifications, and a moderately strong negative relationship to the proportion of the population that has not attained upper secondary education.

The decline in proficiency in information-processing skills seen in adults over 30 suggests that there are also other factors and processes involved in maintaining skills. Indeed, when educational attainment is accounted for, as shown in Figure 5.2c (L), from as early as the age of 16, older cohorts score progressively lower, on average, than younger cohorts in nearly all countries. This reveals that the negative relationship between key information-processing skills and age cannot be accounted for solely on the basis of generational differences in average levels of educational attainment. Different age cohorts may, of course, have experienced a different quality of education such that similar qualifications do not necessarily translate into similar levels of proficiency as measured by the Survey of Adult Skills. To the extent that differences in the quality of education explain observed differences in proficiency related to age, the results would then suggest that the quality of education, in terms of the skills measured by the Survey of Adult Skills, has steadily improved over time across all participating countries. While this may be possible to some extent, it is likely only part of the explanation. For example, the negative relationship between skills and age can also be related to other developments in society over time or to the loss of skills among individuals or within cohorts as they age.

Despite the striking similarities that emerge when comparing age-skill profiles across countries, there are important country differences. This suggests that policy and other circumstances may weaken the impact of the factors responsible for the otherwise negative relationship between key information-processing skills and age. For example, Italy, Korea and Poland show unadjusted age-skill profiles with progressively lower skills, on average, already from the age of 16. This suggests that, compared with other countries, the quantity and/or quality of post-compulsory education in the recent past may have been insufficient to improve the information-processing skills base of 16-30 year-olds or that the quality of initial schooling has recently increased. The adjusted profile for England/Northern Ireland (UK) and Norway show that young adults aged 16-24 score lower than those aged 25-29, despite adjusting for the quantity of education. This suggests that post-compulsory learning may add considerably to the stock of information-processing skills in those countries or that the quality of initial schooling has recently declined. Also, in Australia, Finland and Japan, the adjusted age profiles show comparatively high average scores with less rapid declines for specific cohort ranges, which suggests variations in the factors and processes that may help adults maintain skills longer.

Explaining age differences: Cohort and ageing effects

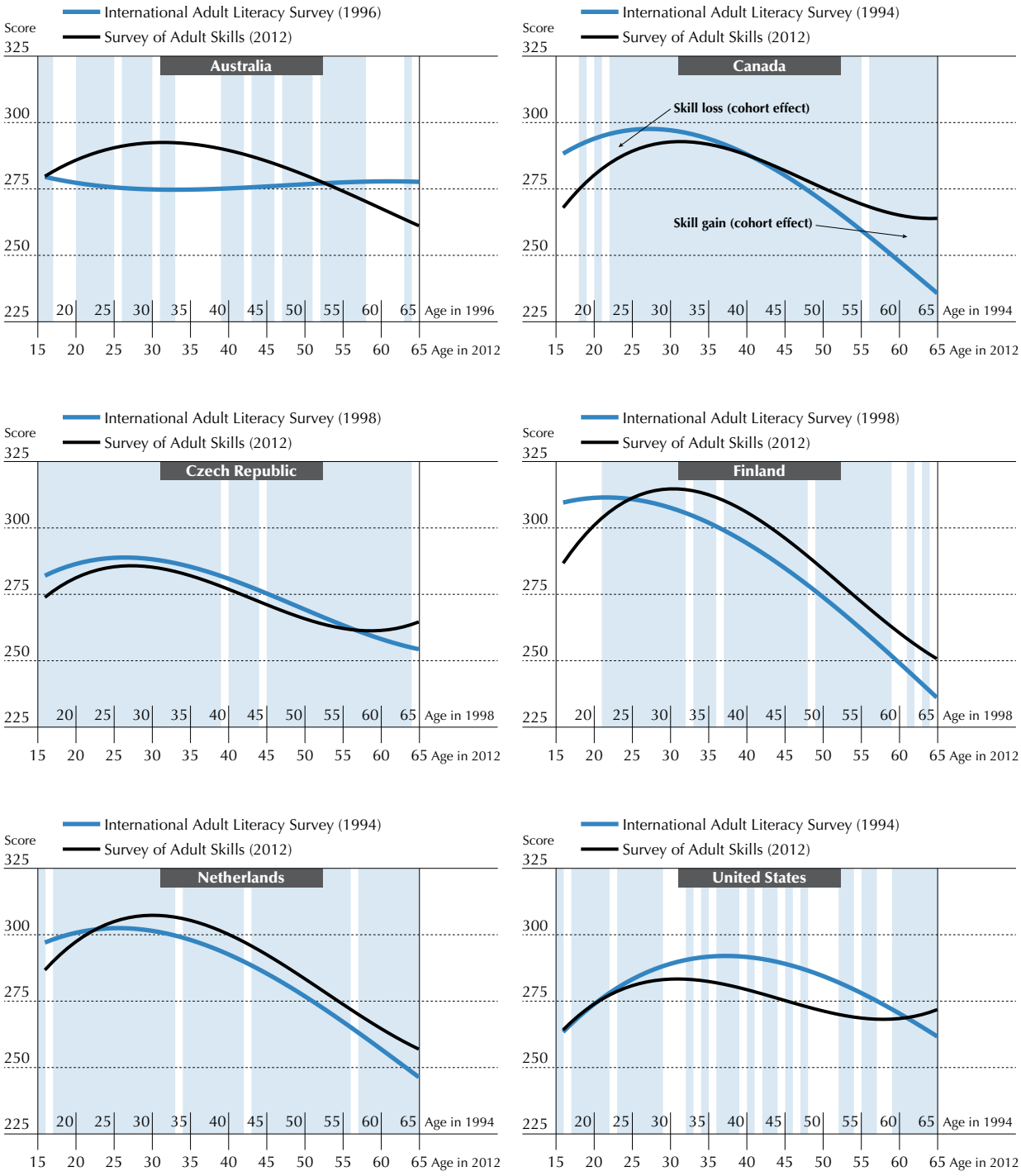
In understanding the relationships between age and other variables using cross-sectional data, it is useful to distinguish age, cohort and period effects. Age effects are the consequences of growing older, such as the effects of neurological development or behavioural maturation. Cohort effects are the consequences of being born at different times: individuals who attended school in the 1960s will not have received the same type of education as adults who went to school in the 1980s. Period effects are the consequences of influences that vary through time, such as economic recessions. The age-skill profiles depicted in Figure 5.2a, 5.2b (L) and 5.2c (L) combine these effects. However, since there are links between the measures of literacy and numeracy in the Survey of Adult Skills and those in previous surveys of adult skills, it is possible to disentangle some of these effects. The *Reader's Companion* to this report provides a brief overview of the relationship between the Survey of Adult Skills and the International Adult Literacy Survey and the Adult Literacy and Life Skills Survey.

In brief, the Survey of Adult Skills, the International Adult Literacy Survey and the Adult Literacy and Life Skills Survey provide repeated cross-sectional measures of literacy proficiency that are representative at the cohort level. These can be used to explore whether the observed differences in proficiency by age are related to the experiences of different age cohorts (cohort effects) or skills loss as adults age (ageing effects) or both. For example, younger cohorts attain higher average levels of education compared with older cohorts. This important difference may explain age differences in proficiency. Alternatively, there is also evidence to suggest that adults experience skills loss as they age (see Desjardins and Warnke, 2012).

■ Figure 5.4a (L) ■

Effect of belonging to a certain age group on literacy proficiency

Trend scores on the literacy scale, by age (cohort effect), for selected countries, foreign-born adults excluded



Notes: Sections of the chart shaded in light blue reveal score differences that are not statistically significant at the 5% level using a one-tailed test. A cubic specification of the trend curves is found to be most accurate in reflecting the distribution of scores by age in most countries. Foreign-born adults are excluded from the analysis. See corresponding table mentioned in the source below for regression parameters and significance estimates.

Only a random sample of countries are shown as an example.

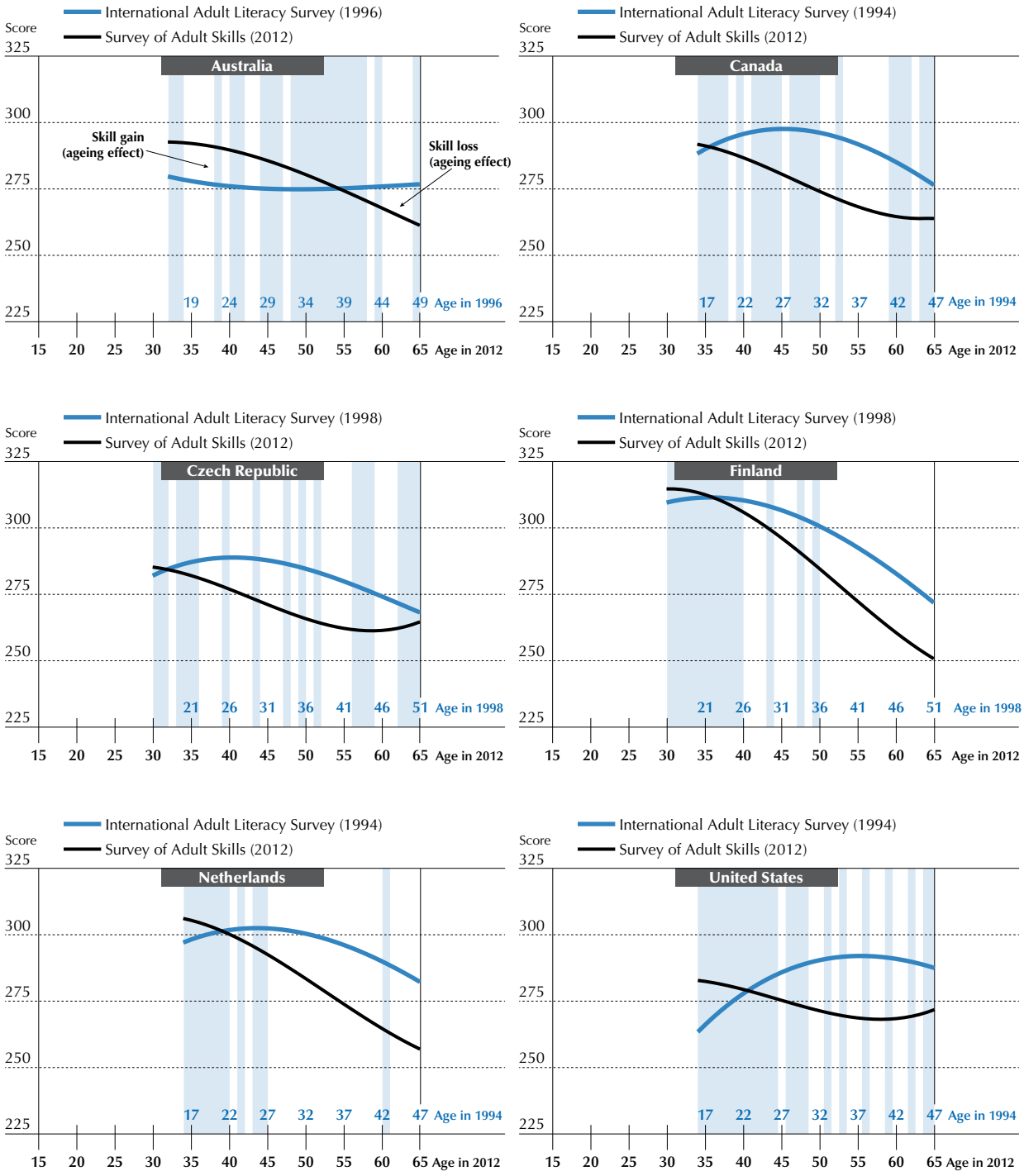
Source: International Adult Literacy Survey (1994-1998), and Survey of Adult Skills (PIAAC) (2012), Tables A5.2 (L), A5.4 (L), and Table B5.1 in Annex B.

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■ Figure 5.4b (L) ■

Effect of ageing on literacy proficiency

Trend scores on the literacy scale, by age (ageing effect), for selected countries, foreign-born adults excluded



Notes: Sections of the chart shaded in light blue reveal score differences that are not statistically significant at the 5% level using a one-tailed test. A cubic specification of the trend curves is found to be most accurate in reflecting the distribution of scores by age in most countries. Foreign-born adults are excluded from the analysis. See corresponding table mentioned in the source below for regression parameters and significance estimates.

Only a random sample of countries are shown as an example.

Source: International Adult Literacy Survey (1994-1998), and Survey of Adult Skills (PIAAC) (2012), Tables A5.2 (L), A5.4 (L), and Table B5.2 in Annex B.

StatLink http://dx.doi.org/10.1787/888932902075



Figure 5.4a (L) compares the average scores of adults of the same age in selected countries at the time of the Survey of Adult Skills and the International Adult Literacy Survey. In doing so, it shows how repeated cross-sectional measures can be used to examine whether specific age cohorts are adding to, or subtracting from, the overall skills base in the selected countries over time. The cohort effects may be due to changes in quality and/or quantity of educational attainment among cohorts but also to other factors. Not all differences depicted are statistically significant (see Figure 5.4a [L]), but there is often sufficient evidence to suggest that both negative and positive cohort effects exist, and that these depend on the age cohort and the country considered. In most countries, higher rates of educational attainment among younger cohorts due to the expansion of participation in education and/or improvements in the quality of education would be expected to yield positive cohort effects. However, this is not always the case. In Canada, a positive cohort effect is observed among adults over 50, but this is only statistically significant for one cohort.

In the same way that individuals may gain or lose skills as they age, age cohorts (i.e. all adults born in 1965, for example) may gain or lose skills, on average, as they age. The Survey of Adult Skills did not track adults of any cohort in the period between 1994-1998 (when the International Adult Literacy Survey was conducted) and 2012, but an overlapping range of age cohorts for which representative samples were drawn participated in both studies. For example, in Canada, adults who were born in 1960 were aged about 34 at the time of the International Adult Literacy Survey and about 51 at the time of the Survey of Adult Skills. Even if the same adults did not participate in both studies, the size of the samples allows for the tracking of a particular age cohort to determine if its members gained or lost skills, on average, as they aged. Some individuals within the cohort may gain skills while others lose them, but a decline in the average for the whole cohort would suggest that the cohort, as a whole, has experienced skills loss. The differences observed between the average proficiency of an age cohort in 1994 and that of the same cohort 17 years later give an idea of the scale of gain or loss in proficiency in information-processing skills linked to ageing.[3]

Figure 5.4b (L) compares the average scores of cohorts aged 16 and over, in selected countries, who participated in the International Adult Literacy Survey and who were not older than 65 in the Survey of Adult Skills (i.e. different sample, but same cohorts 13 to 17 years later, depending on the country). This helps to reveal whether an age cohort has, collectively, gained or lost skills, on average, as it has aged. The chart provides some evidence to suggest that age-related skills loss is widespread. The onset of age-related skills loss ranges from about the age of 33 in the Czech Republic to 42 in the Netherlands and the United States.

Delaying or avoiding age-related declines in information-processing skills

Some scientists associate "normal ageing" with overall declines in cognitive functioning and have suggested that cognitive decline may begin as early as age 20 and continue into old age, accelerating after the age of 50.[4] This pattern is remarkably consistent with the cross-sectional age-skills profiles found through the Survey of Adult Skills. One explanation for this general pattern is that ageing is associated with neurological decline. The observed trend of age-related cognitive decline is, however, based on average data. Individual trajectories vary and may be linked to a wide range of other factors, including biological, behavioural, environmental and social influences. For example, analysis of within-person growth curves using longitudinal data suggests that individual change in cognitive skills such as literacy and numeracy diverges from overall population change at the cohort level (Reder, 2009a). Some individuals show growth in skills, others show a decline, and others show little change in proficiency. Age-skills profiles, whether based on within-person or between-person comparisons do not do justice to the vast individual differences that are observed. Moreover, there are important country differences in average age-skills profiles, which suggests that social and economic factors, such as the kinds of jobs that are prevalent in an economy, that is, the occupational structure of employment, may also affect the strength of the relationship between age and skills.

It may be possible to delay or even avoid age-related declines in information-processing skills. Research suggests that cognitive skills continue to be malleable during adulthood (OECD, 2007), and that individual behaviours and practices can work against decline. Both theory and evidence suggest that cognitive skills can be developed, maintained or lost over a lifetime, depending on the interplay between the negative effects of ageing (Smith and Marsiske, 1997) and the positive effects of behaviours and practices (Reder, 1994). Research has suggested that about one in three elderly people can be considered "successful agers" – a concept that includes maintaining cognitive and physical functioning into old age (see Depp and Jeste, 2006). From a public policy perspective, it is important to identify the factors and conditions that may relate to successful ageing, including the continued development and maintenance of key information-processing skills.



Learning during childhood and young adulthood, and prior exposure to tasks involving literacy and numeracy, are thought to be important for individuals' evolving skills development trajectory (see meta review of adoption studies by Van Ijzendoorn et al., 2005). Some evidence suggests that educational interventions in adulthood – whether as a complement to initial formal education or a substitute for it – can also help to slow or reverse age-related declines in key information-processing skills (e.g. Willis et. al, 2006). Beyond formal education and training, certain physical, social and, particularly, mental activities can also help adults to maintain their skills (see Desjardins and Warnke, 2012, for a review).

EDUCATIONAL ATTAINMENT AND ITS RELATIONSHIP TO PROFICIENCY

Formal education and training programmes represent one of the major settings in which skills such as literacy, numeracy and problem solving are developed. However, since the Survey of Adult Skills covers the working-age population, the relationship between formal education, as expressed by educational attainment and proficiency in the skills assessed by the survey, is complex. Educational qualifications do not necessarily reflect the level of an individual's literacy, numeracy or problem-solving skills – even at the point in time at which those qualifications were awarded. For older adults, the relationship between attainment and proficiency is attenuated by the potential influence of occupations that may positively or negatively affect proficiency and by the effects of ageing. In addition, requirements for entry into higher education that are based on exam results favour individuals with higher levels of interest and motivation, meaning that those with greater abilities and proficiency in information-processing skills are more likely to have higher qualifications. Still, most governments aim to ensure that students leave school with adequate proficiency in literacy, numeracy and problem-solving skills; employers and parents expect no less. From this point of view, it is important to know whether education and training systems are successful in inculcating key information-processing skills.

Upper secondary education and skills proficiency

Proficiency of recent upper secondary graduates (youths aged 16-19)

Across countries, the average literacy score for recent upper secondary graduates is 285 points, which corresponds to Level 3. This is significantly higher than the mean for young people aged 16-19 who have yet to attain upper secondary education or who have pursued alternative education or career paths (270 points). Not all recent graduates score at Level 3, however. The average 25th percentile score across countries is 262 points, which corresponds to Level 2. This means that, on average across countries, at least 25% of upper secondary graduates do not attain Level 3 on the literacy scale. In Italy, the United States, England/Northern Ireland (UK) and Ireland, recent upper secondary graduates score, on average, below the OECD mean. For these countries around 50% or more of recent graduates score at Level 2 or below. On average, recent upper secondary graduates in Australia, Japan and the Netherlands score above the OECD mean.

The distribution of literacy skills among recent upper secondary graduates aged 16-19 is shown in the right panel of Figure 5.5a (L). For comparison, the left panel presents the distribution of literacy skills among youth who have not completed upper secondary education but may be in the process of completing an upper secondary qualification, pursuing an alternative, or may simply have left the education system. Figure 5.5e (L) shows a similar comparison among selected countries and allows for within-country comparisons across education levels.

Proficiency of adults aged 20-65 with upper secondary education as highest attainment

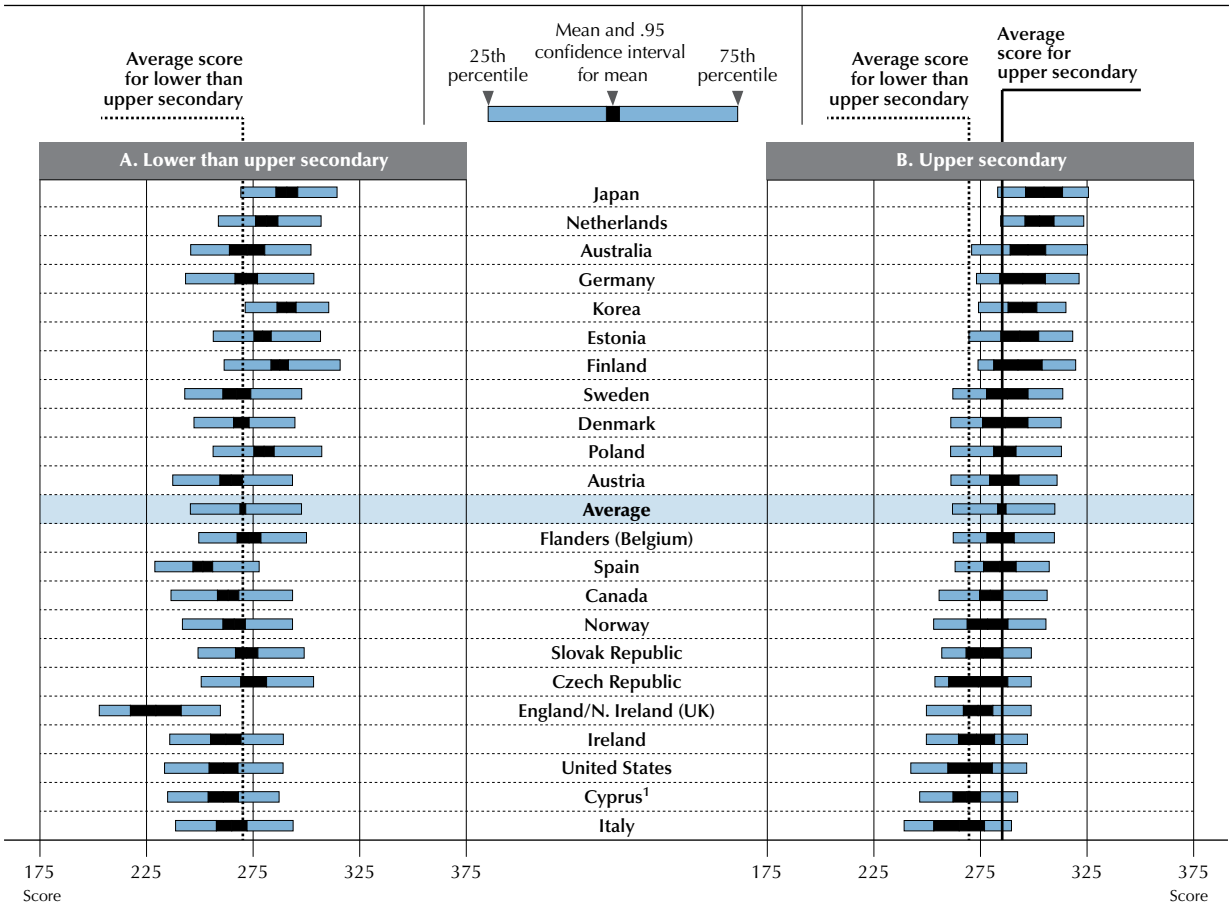
Results suggest that, across countries, adults over 20 who have not completed upper secondary education tend to score at lower levels of proficiency. For example, in the United States and Canada, they score at or near the bottom of Level 2 on the literacy scale, on average. In nearly every participating country, 25% or more of adults aged 20-65 who did not complete upper secondary education score at Level 1 or below. In contrast, adults who have completed upper secondary education as their highest attainment score closer to Level 3. In Australia, Finland, Japan and the Netherlands, adults with upper secondary education as their highest qualification score at Level 3, on average, and significantly above the OECD mean. In Germany, Italy, Poland, Spain, the United States and a handful of other countries, adults with this profile score below the OECD mean, on average.

The right panel in Figure 5.5b (L) depicts the distribution of literacy skills among adults aged 20-65 whose highest level of educational attainment is upper secondary. The left panel depicts the distribution among adults of the same age who did not complete upper secondary education. Younger adults within this age range have the benefit of more recent schooling; older adults have been away from school for some time. Therefore, these results reflect both the impact of upper secondary schooling and the relationship between qualifications and trajectories through the labour market.

■ Figure 5.5a (L) ■

Literacy proficiency among young adults with and without upper secondary education

Mean literacy proficiency and distribution of literacy scores, by educational attainment, 16-19 year-olds



1. See notes at the end of this chapter.

Notes: Lower than upper secondary includes International Standard Classification of Education (ISCED) categories 1, 2 and 3C short. Upper secondary includes ISCED 3A-B, 3C long and 4.

Countries are ranked in descending order of the mean literacy score of young adults aged 16-19 with upper secondary education.

Source: Survey of Adult Skills (PIAAC) (2012), Table A5.5a (L).

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Proficiency of adults with vocationally oriented upper secondary education as highest attainment

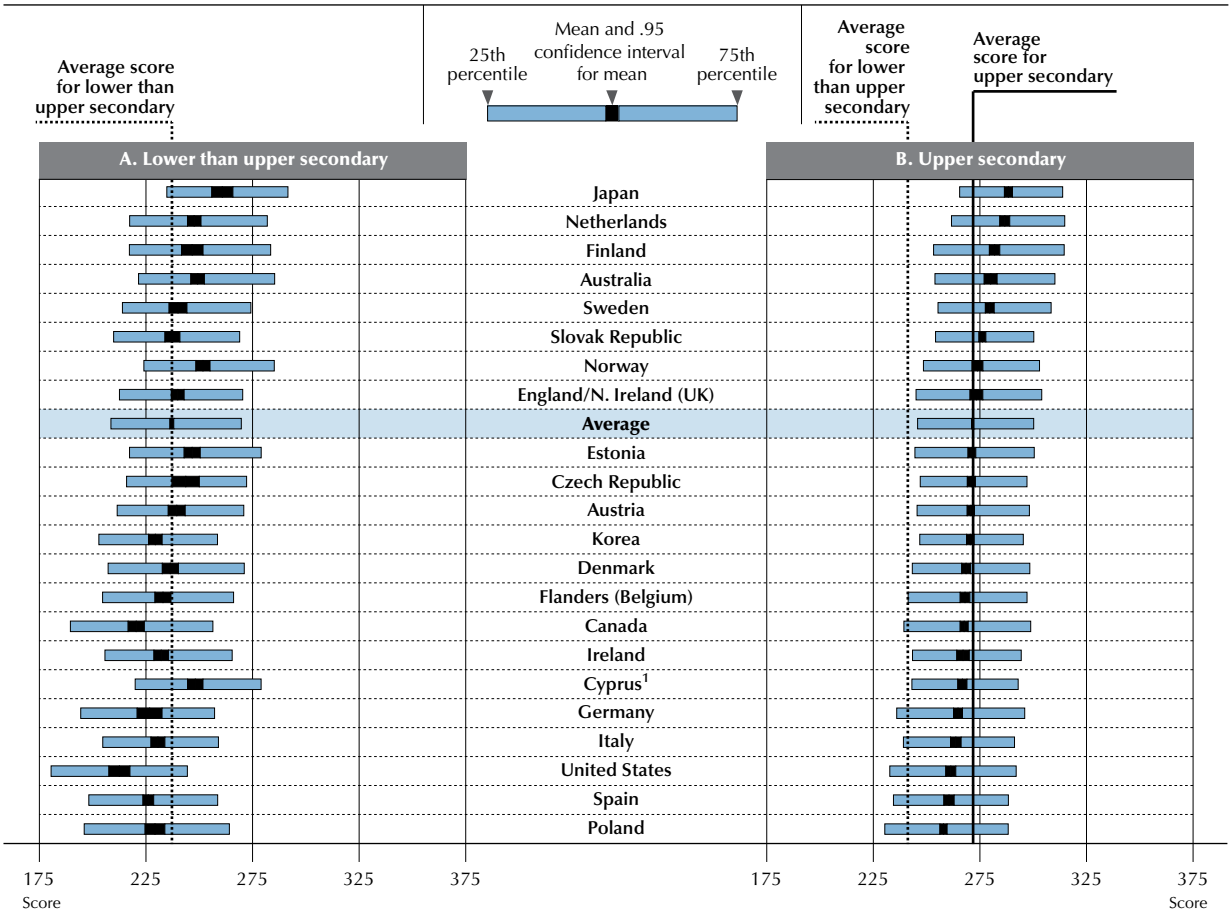
Young adults aged 16-29 whose highest attainment is general (academically oriented) upper secondary education tend to have higher literacy scores than those with a vocationally oriented upper secondary education. This is to be expected, given that general education tends to foster the kind of generic skills assessed by the Survey of Adult Skills, while vocationally oriented upper secondary education may give greater emphasis to skills that are not measured by this survey. Unsurprisingly, countries with separate vocational and general tracks in upper secondary education tend to show larger differences between the two categories, with the largest differences observed in the Czech Republic, Denmark, Finland, Germany and the Netherlands. Some countries, such as Finland (see Box 5.1) and the Netherlands, also show relatively high literacy scores for graduates of both types of programmes. For other countries, such as Ireland, Poland and Spain, adults with both types of education tend to have relatively low scores.

In contrast, there is no statistically significant difference between the mean scores of adults from vocational or general upper secondary education in Australia, Canada, Japan and the United States. This is not unexpected, as in these countries the vocational category does not correspond to a separate upper secondary track but rather to a range of vocational diplomas and certificates, some of which are at post-secondary, but non-tertiary, level (i.e. ISCED 4). In the United States, both groups score relatively low, while in Australia, both groups score relatively high.

■ Figure 5.5b (L) ■

Literacy proficiency among adults with and without upper secondary education

Mean literacy proficiency and distribution of literacy scores, by educational attainment, 20-65 year-olds



1. See notes at the end of this chapter.

Notes: Lower than upper secondary includes International Standard Classification of Education (ISCED) categories 1, 2 and 3C short. Upper secondary includes ISCED 3A-B, 3C long and 4.

Countries are ranked in descending order of the mean literacy score of adults aged 20-65 with upper secondary education.

Source: Survey of Adult Skills (PIAAC) (2012), Table A5.5a (L).

StatLink http://dx.doi.org/10.1787/888932902113

Box 5.1. Vocational education and training (VET) for adults in Finland

More than 1.7 million Finnish adults participate in adult education each year and a growing number of Finnish adults participate in further vocational education and apprenticeship training (Finnish Ministry of Education and Culture, 2010). Vocational adult education and training in Finland aims to maintain and develop the vocational competencies of adults, which, in turn, leads to better employment prospects and a greater capacity among adults to adapt to the labour market (Cedefop, 2006). Individuals can acquire formally recognised VET qualifications by demonstrating an adequate level of vocational skills by taking competence-based tests. While these tests require no preparatory courses, most adults participate in some form of formal programme before seeking certification. Adults over 25 are highly represented in apprenticeship programmes, unlike in other European dual systems: around 80% of apprentices are over 25 and many of the trainees are already employed when they begin an apprenticeship (Finnish National Board of Education, 2010).

The Finnish government allocates a relatively large proportion of its budget for adult education to vocational education and training: of the 12% of the Ministry of Education and Culture's overall budget for adult education, about 40% is allocated to vocational education and apprenticeship training. Most of the programmes are offered free of charge (Finnish Ministry of Education and Culture, 2010).

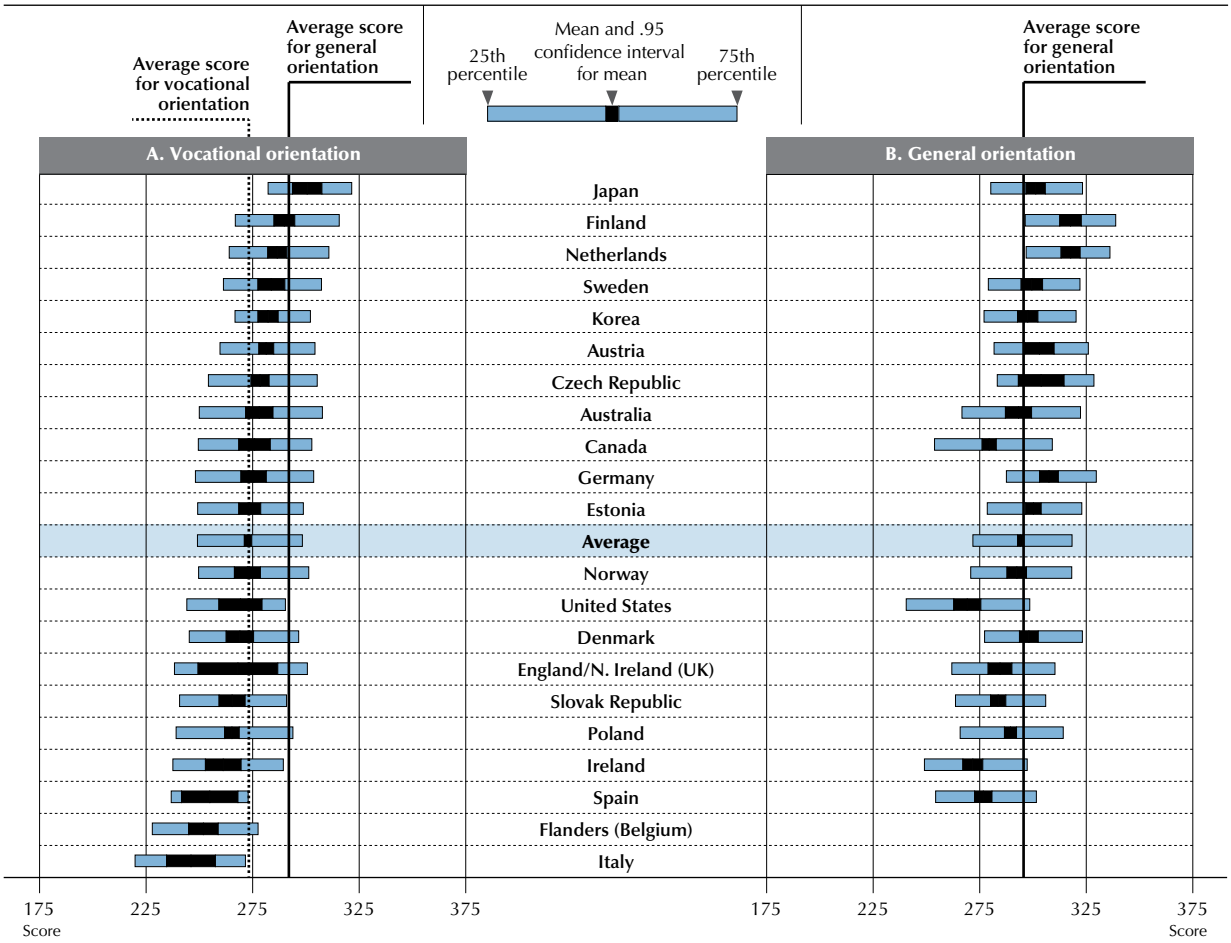
On average across countries, a vocationally oriented upper secondary education is associated with a mean score of 273 points for 16-29 year-olds, which is near the cut-off point between Levels 2 and 3 on the literacy scale. In Finland, Japan and the Netherlands, the mean score for young adults with vocationally oriented upper secondary education corresponds to Level 3 and is significantly above the OECD mean for the same group. Countries significantly below the OECD mean include Flanders (Belgium), Ireland, Italy, Poland, the Slovak Republic and Spain.

Figure 5.5c (L) compares the distribution of literacy skills among adults whose highest level of educational attainment is upper secondary by distinguishing between whether the education was vocational or general. The differences observed between the two groups partly reflect the effectiveness of either type of upper secondary education to impart key information-processing skills, but also other factors, such as selection by ability into different types of education.

■ Figure 5.5c (L) ■

Literacy proficiency among young adults, by orientation of education

Mean literacy proficiency and distribution of literacy scores for adults aged 16-29 whose highest level of education is upper secondary, by orientation of education



1. See notes at the end of this chapter.

Notes: Estimates based on a sample less than 30 are not shown in Panels A and B.

Countries are ranked in descending order of the mean literacy score of young adults aged 16-29 whose highest level of education is vocationally oriented upper secondary.

Source: Survey of Adult Skills (PIAAC) (2012), Table A5.5b (L).

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Tertiary education and skills proficiency

Tertiary-level education strengthens information-processing skills both directly, through the coursework involved, and indirectly, because adults with higher education are more likely to access intellectually demanding jobs that, in turn, help to develop and maintain skills throughout their careers – and throughout their lives.

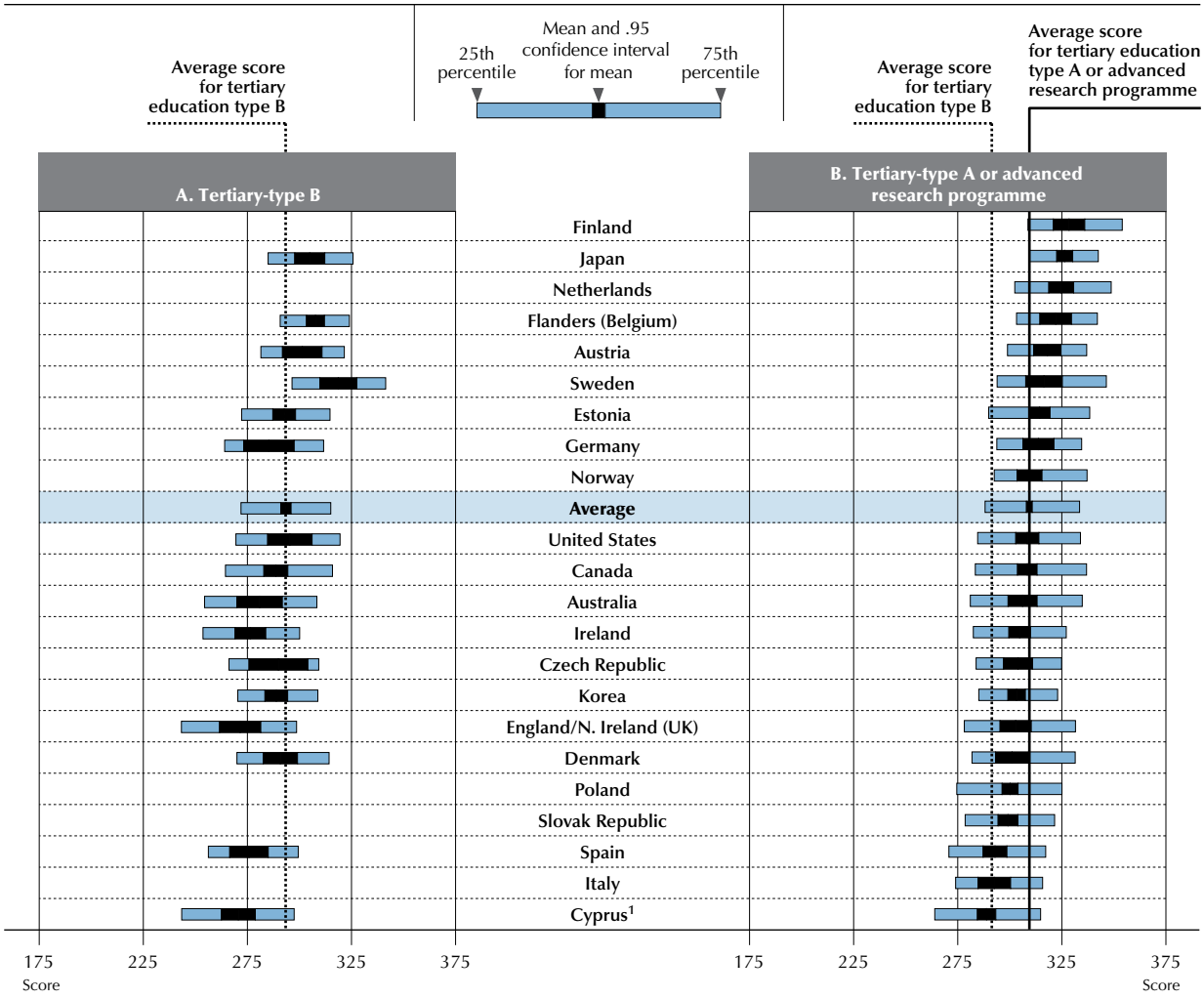
On average across countries, young adults who have attained a university-level education show a mean score of 309 points, which corresponds to well above the mid-point for Level 3; more than 25% of these graduates score at Level 4 or higher. In Finland, Japan and the Netherlands, recent university-level graduates score, on average, well above the corresponding OECD mean: nearly one in two recent graduates scores at Level 4 or higher. Recent graduates in Italy, Poland, the Slovak Republic and Spain score, on average, below the corresponding OECD mean.

Figure 5.5d (L) compares the distribution of literacy skills among adults with tertiary-level qualifications, but distinguishes between tertiary-type B (vocationally oriented) and tertiary-type A (academically oriented) studies. As can be seen in the left panel, young adults who have attained tertiary-type B education score significantly lower, on average, than those who attained university-level qualifications. Covering only the younger and more recent graduates up to the age of 29 offers some insights into the effectiveness of tertiary qualifications vis-a-vis the skills measured in the Survey of Adult Skills.

■ Figure 5.5d (L) ■

Literacy proficiency among young adults with tertiary education

Mean literacy proficiency and distribution of literacy scores, by educational attainment, 16-29 year-olds



1. See notes at the end of this chapter.

Notes: Tertiary-type B corresponds to the International Standard Classification of Education (ISCED) category ISCED 5B. Tertiary-type A corresponds to ISCED 5A and advanced research programmes correspond to ISCED 6. Estimates based on a sample less than 30 are not shown in Panels A and B. The estimate for Tertiary-type B for Finland is based on a sample size very close to 30 and is not shown at the country's request.

Countries are ranked in descending order of the mean literacy score of adults aged 16-29 with tertiary-type A or an advanced research programme.

Source: Survey of Adult Skills (PIAAC) (2012), Table A5.5a (L).

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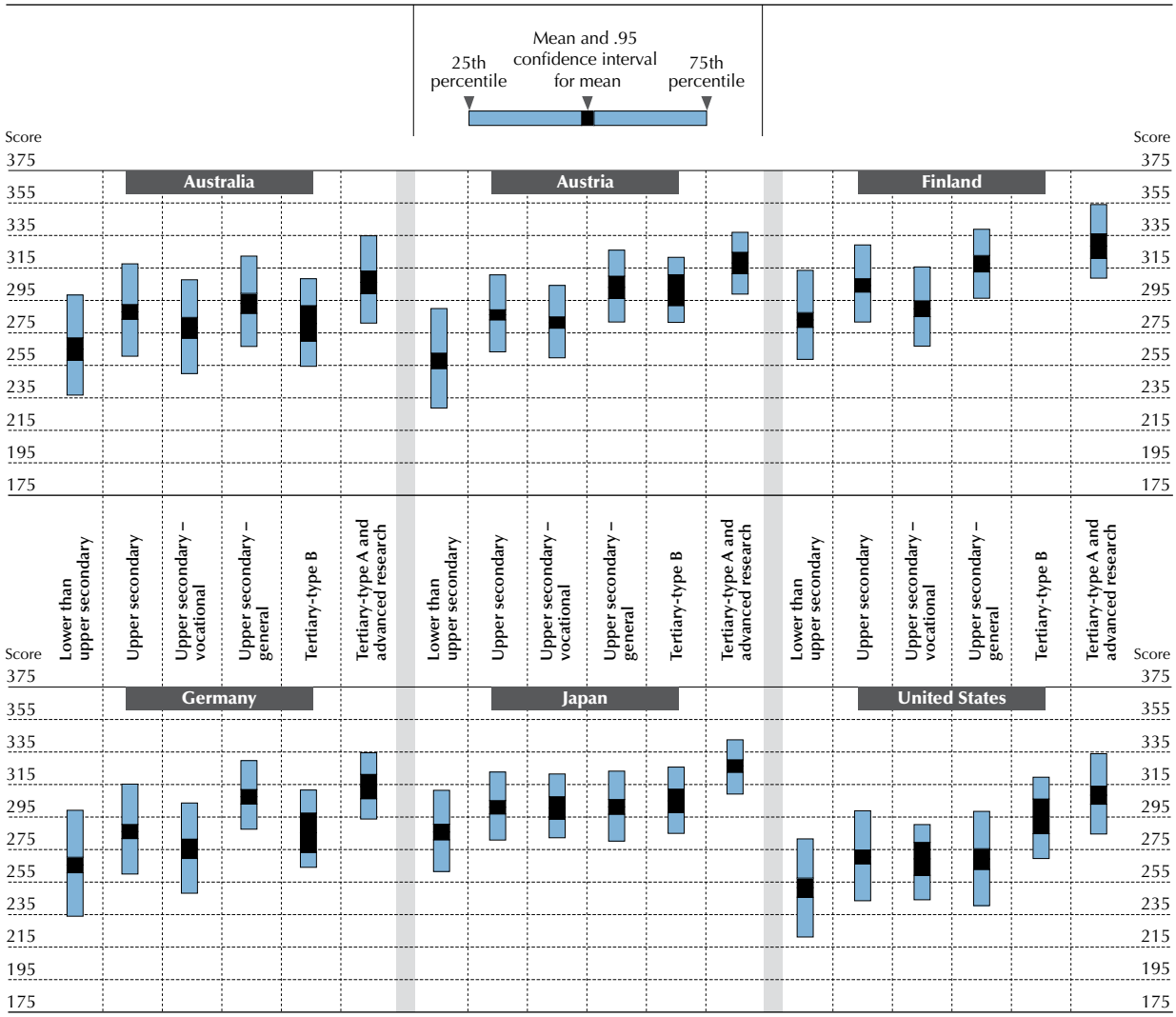
A comparison of educational attainment levels within and across countries

There is a considerable amount of within-country variation in literacy proficiency related to level of educational attainment. Young adults with tertiary qualifications have the highest average proficiency while adults with lower-than-upper secondary education have the lowest average proficiency. Adults in vocational streams generally show lower proficiency than those in general streams. Nonetheless, there is considerable overlap in the proficiency of young adults at different levels of attainment. Not everyone without an upper secondary qualification scores at lower levels of proficiency; conversely, not everyone with upper secondary or higher education necessarily scores at higher levels of proficiency. The distribution of literacy skills and the extent of overlap by qualification level varies significantly across countries. For example, in Japan and the United States, there is sharp distinction in the distribution of literacy skills between adults aged 16-29 who have a university degree and those who do not. At the same time, in Finland, many adults aged 16-29 who graduated from a general upper secondary programme are about as highly skilled in the literacy domain as university graduates in Austria and Australia.

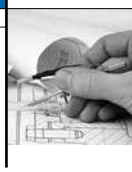
■ Figure 5.5e (L) ■

Literacy proficiency among young adults in selected countries, by educational attainment

Mean literacy proficiency and distribution of literacy scores, by educational attainment, 16-29 year-olds



Notes: The estimate for Tertiary-type B for Finland is based on a sample size very close to 30 and is not shown at the country's request.
Only a sample of countries are shown as an example.
Source: Survey of Adult Skills (PIAAC) (2012), Tables A5.5a (L) and A5.5b (L).
StatLink http://dx.doi.org/10.1787/888932902170



Comparing the distribution of literacy skills among young adults who have different types of upper secondary qualifications reveals considerable differences between countries. In Germany, for example, young adults who have completed general upper secondary programmes have broadly similar levels of proficiency as university graduates; but most young adults who completed vocationally oriented upper secondary education are no more skilled in literacy than those who did not complete upper secondary education. The same is true in Finland, although the average score is higher for each type and level of attainment than in Germany, as are the 25th and 75th percentile scores. In Australia, Japan and the United States, the type of upper secondary qualification appears to have little impact on how proficiency is distributed.

The distribution of literacy skills is presented separately for each level of attainment in Figure 5.5a (L) to Figure 5.5d (L) so that differences in the proficiency of adults with a given level of attainment can be compared across countries. Alternatively, Figure 5.5e (L) provides an overview of the distribution of proficiency by level of educational attainment for adults aged 16-29 in selected countries. This age group was chosen to show as clearly as possible the impact of educational attainment on proficiency, since among older adults, ageing and different career trajectories can also influence proficiency.

Comparing the development of key skills among different age cohorts that participated in PISA

Results from PISA provide an insight into the relative effectiveness of participating countries' school systems in developing reading, mathematics and science skills among 15-year-old students. An important question for policy makers is whether the differences in the performance of school systems observed in PISA are reflected in the proficiency in these skills among adults who have recently completed initial education and training. In other words, to what extent does the performance of countries in the rounds of PISA between 2000 and 2009 predict the proficiency of the age cohorts concerned when assessed by the Survey of Adult Skills? Or, to what extent do improvements in proficiency in skills such as reading and mathematics after the age of 15 vary between countries?

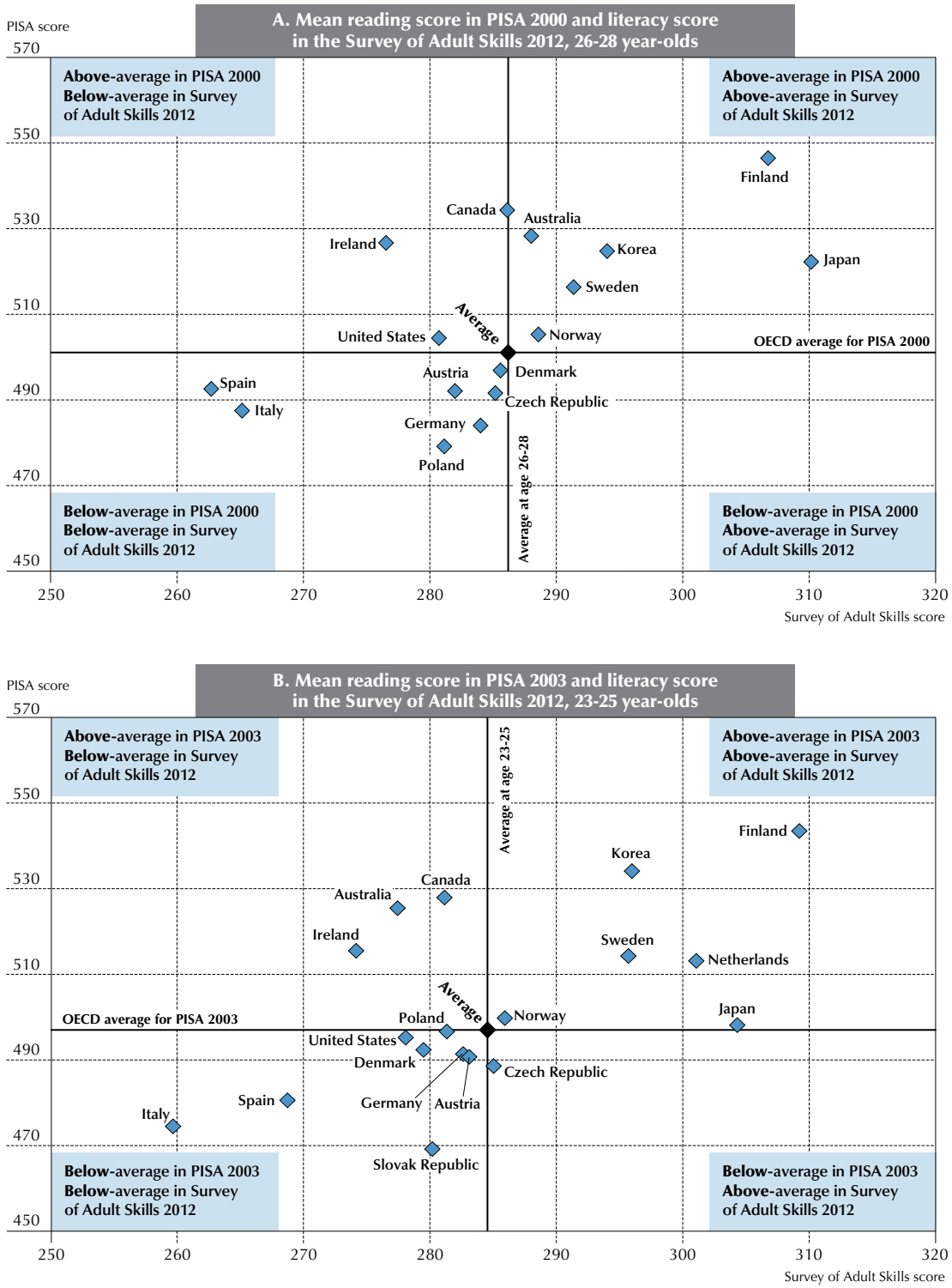
The Survey of Adult Skills can provide some evidence concerning this question. Most adults aged 27 and under in participating countries were members of the cohorts assessed in PISA 2000, 2003, 2006 and 2009, when they were 15 years old. The overlap is not perfect, however: not all adults aged 27 or under were in school at the age of 15; and both emigration and immigration will have changed the composition of each of the PISA cohorts between 2000 and 2009 as they have aged. For example, it may be that the decline in average scores between 2000 and 2011 had more to do with the emigration of educated people from a given country in the wake of the economic crisis than a weakness in the education system. Nonetheless, comparisons of the relationship between mean proficiency scores for literacy/reading and numeracy/mathematics in both studies offer some information regarding the relative growth in proficiency for age cohorts aged 27 years or under from when they were 15.

Some care must be taken in comparing results of the two studies. As mentioned, the overlap between the target populations of the Survey of Adult Skills and PISA is not complete; and while the concepts of literacy in the Survey of Adult Skills and reading literacy in PISA, and the concepts of numeracy in the Survey of Adult Skills and mathematical literacy in PISA are closely related, the measurement scales are not the same (see the *Reader's Companion* to this report for a more detailed comparison of PISA and the Survey of Adult Skills [OECD, 2013]). In addition, the skills of young people aged between 15 and 27 are subject to influences that vary across individuals and countries, including participation in post-secondary and tertiary education and the quality of these programmes, second-chance opportunities for low-skilled young adults, and characteristics of the labour market.

Overall, there is a reasonably close correlation between countries' performance in the different cycles of PISA and the proficiency of the relevant age cohorts in literacy and numeracy in the Survey of Adult Skills. Countries that perform well in PISA in a given year (e.g. 2000) tend to have high performance among the relevant age cohort (e.g. 27-year-olds) in the Survey of Adult Skills and vice versa (see Figures 5.6a [L] and 5.6b [L]). This suggests that, at the country level, the proficiency of an age cohort in reading and mathematics, as measured by PISA, provides a reasonably good predictor of the subsequent performance of the cohort in literacy and numeracy as it moves through post-compulsory education and into the labour market. By implication, much of the difference in the literacy and numeracy proficiency of young adults today is likely related to the effectiveness of the instruction they received in primary and lower secondary school and their educational experiences outside of school as of age 15.

■ Figure 5.6a (L) ■

Mean literacy proficiency in PISA (2000 and 2003) and in the Survey of Adult Skills



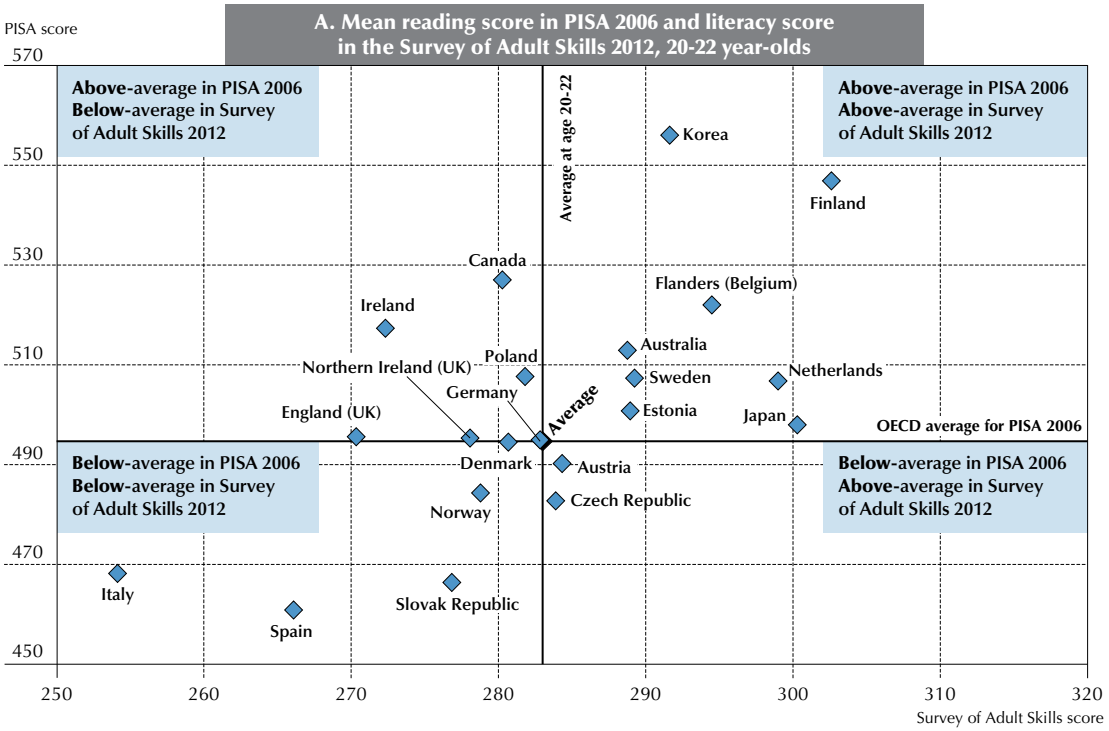
Notes: A three-age band is used in the Survey of Adult Skills to increase size and reliability of estimates. The mix of countries contributing to the average in PISA and the Survey of Adult Skills differs, which may contribute to differences in countries' average scores relative to the overall averages in either study.

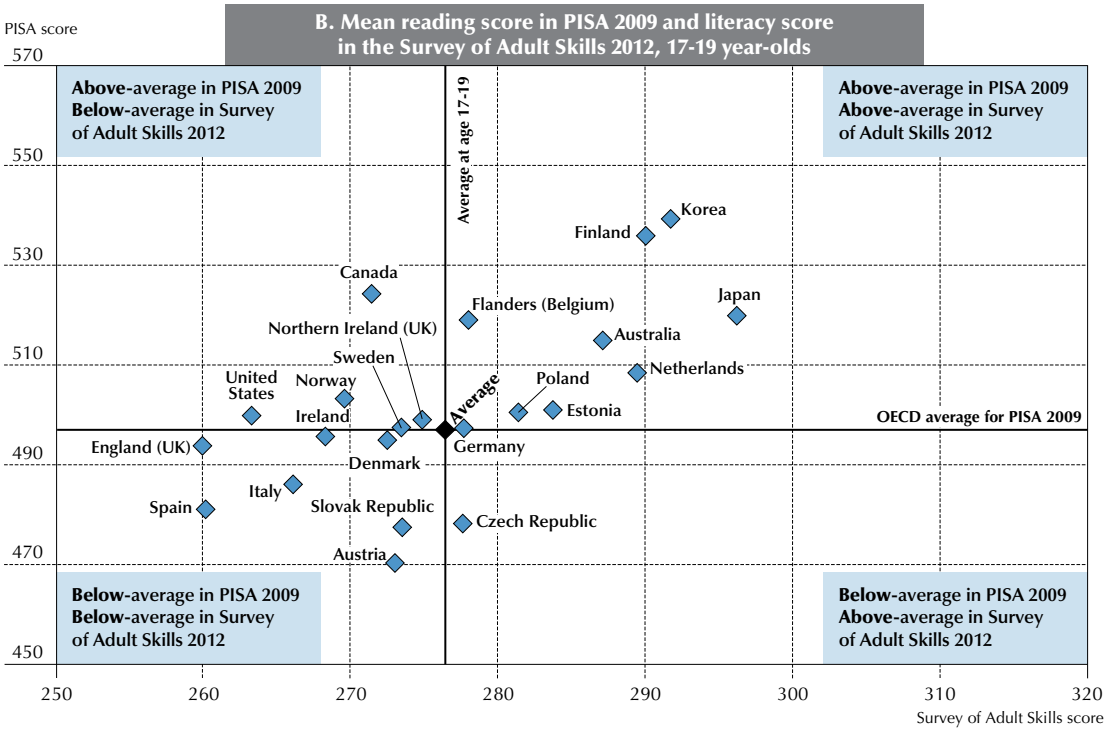
Source: Survey of Adult Skills (PIAAC) (2012) and OECD, PISA 2000-2009 Databases, Table A5.6 (L)

StatLink http://dx.doi.org/10.1787/888932902208

■ Figure 5.6b (L) ■

Mean literacy proficiency in PISA (2006 and 2009) and in the Survey of Adult Skills





Notes: A three-age band is used in the Survey of Adult Skills to increase size and reliability of estimates. The mix of countries contributing to the average in PISA and the Survey of Adult Skills differs, which may contribute to differences in countries' average scores relative to the overall averages in either study.
Source: Survey of Adult Skills (PIAAC) (2012) and OECD, PISA 2009 Databases, Table A5.6 (L).
StatLink http://dx.doi.org/10.1787/888932902227

ADULT EDUCATION AND TRAINING AND PROFICIENCY

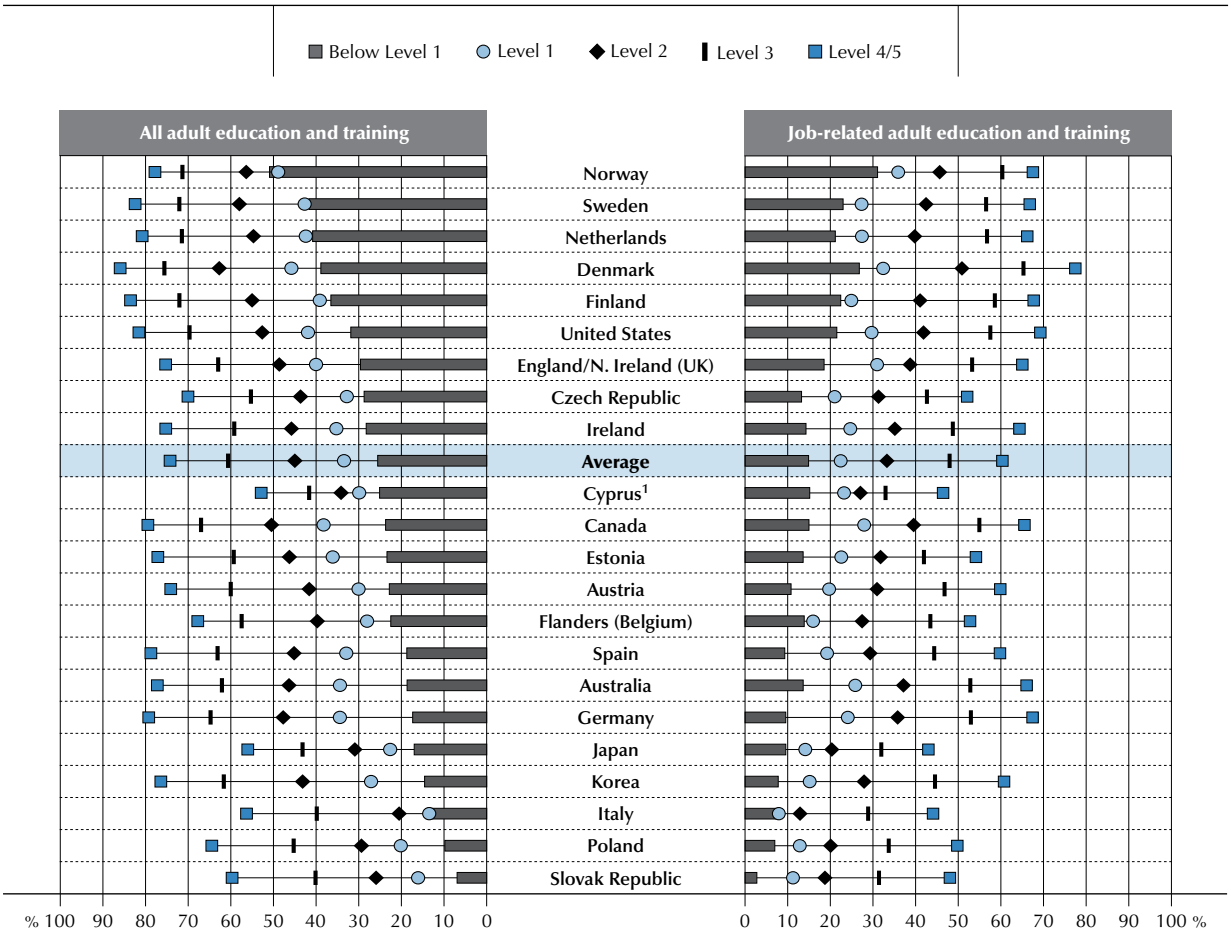
Adult learning can play an important role in helping adults to develop and maintain key information-processing skills, and acquire other knowledge and skills, throughout life. It is crucial to provide, and ensure access to, organised learning opportunities for adults beyond initial formal education, especially for workers who need to adapt to changes throughout their careers. The relevance of continued learning opportunities now extends to workers in both high-skilled and low-skilled occupations. In high-technology sectors, workers need to update their competencies and keep pace with rapidly changing techniques. Workers in low-technology sectors and those performing low-skilled tasks must learn to be adaptable, since they are at higher risk of losing their job, as routine tasks are increasingly performed by machines, and companies may relocate to countries with lower labour costs.

Empirical evidence suggests that adult learning can make a difference. For example, a survey of several European countries found that training increases the probability of re-employment after job loss; and this effect is slightly greater for workers with upper secondary education or less. Participation in adult education and training also increases the probability of being active and reduces the risk of unemployment (OECD, 2004).

■ Figure 5.7 (L) ■

Participation rate in adult education, by literacy proficiency levels

Percentage of adults who participated in adult education and training during year prior to the survey, by level of proficiency in literacy

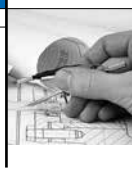


1. See notes at the end of this chapter.

Countries are ranked in descending order of the percentage of adults scoring below Level 1 in literacy in adult education and training during year prior to the survey.

Source: Survey of Adult Skills (PIAAC) (2012), Table A5.7 (L).

StatLink http://dx.doi.org/10.1787/888932902246



Readiness to learn and key information-processing skills

Participation in adult education and training is now common in many OECD countries but varies considerably. Participation rates reported in this section cover adults aged 16-65 excluding students up to the age of 24, who are deemed to be in their initial cycle of formal education. The data refer to education and training undertaken in the previous year. The results, presented in Figure 5.7 (L), show a strong positive relationship, consistent across countries, between participation in adult education and literacy skills. Adults with already high levels of key information-processing skills participate the most, while those with lower levels of skills participate the least.

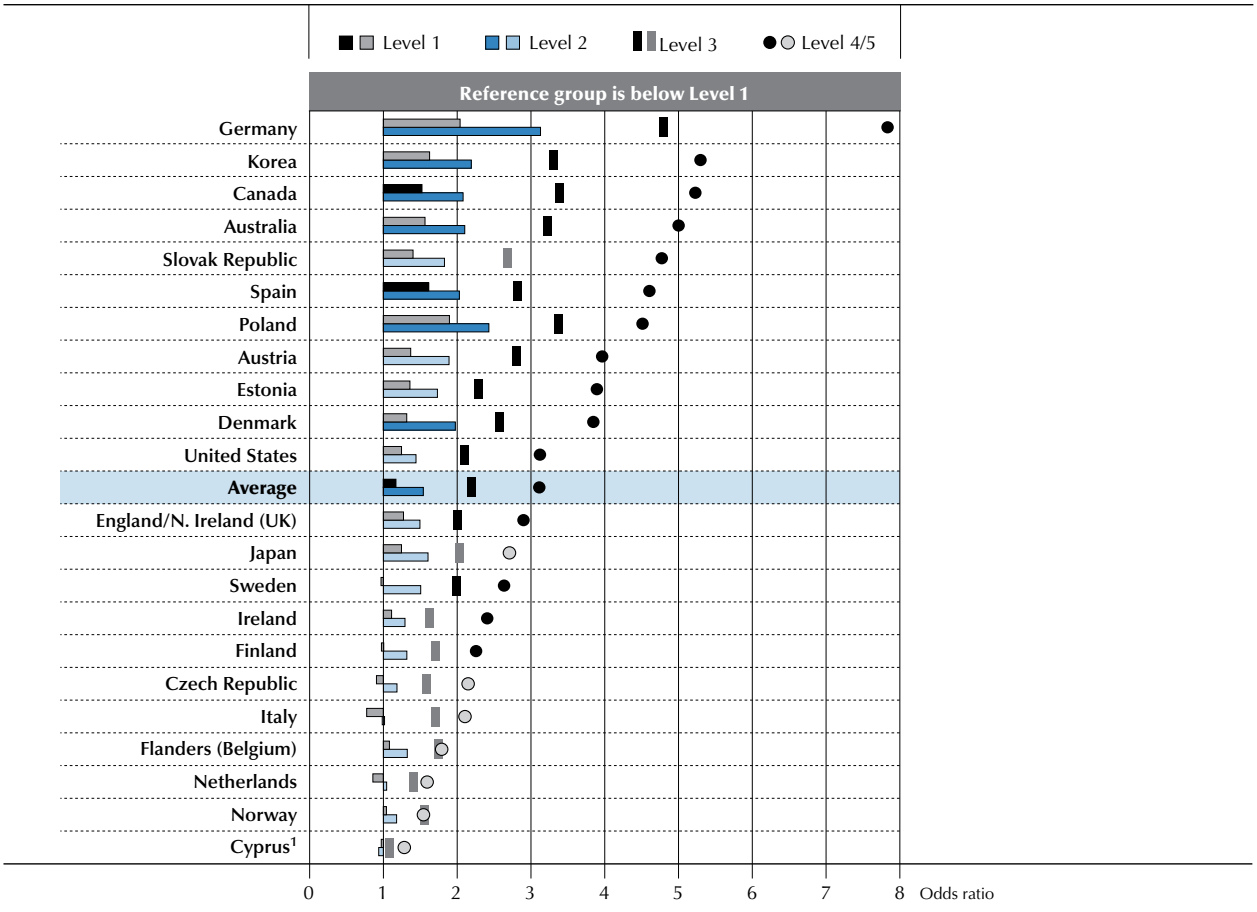
The countries surveyed fall into five groups:

- **Group 1**: Countries with participation rates exceeding 60%: Denmark, Finland, the Netherlands, Norway and Sweden.
- **Group 2**: Countries with participation rates between 50% and 60%: Australia, Canada, England/Northern Ireland (UK), Estonia, Germany, Ireland, Korea and the United States.
- **Group 3**: Countries with participation rates between 40% and 50%: Austria, the Czech Republic, Japan, Spain and Flanders (Belgium).
- **Group 4**: Countries with participation rates between 30% and 40%: Cyprus,[5] Poland and the Slovak Republic.
- **Group 5**: Countries with participation rates below 30%: Italy.

■ Figure 5.8 (L) ■

Likelihood of participating in adult education and training, by level of literacy proficiency

Adjusted odds ratios of adults participating in adult education and training during year prior to the survey, by level of proficiency in literacy



1. See notes at the end of this chapter.

Notes: Statistically significant differences are marked in a darker tone. Odds ratios are adjusted for gender, age, educational attainment and labour force status. *Countries are ranked in descending order of the odds of adults scoring at Level 4 or 5.*

Source: Survey of Adult Skills (PIAAC) (2012), Table A5.8 (L).

StatLink http://dx.doi.org/10.1787/888932902265



Part of the reason for the strong relationship between participation in adult education and proficiency in literacy is the mutually reinforcing link between the skills assessed and continued learning. Demand for training is likely to be higher among individuals with already higher levels of key information-processing skills for a number of reasons. They have the skills that facilitate learning, they are more likely to be in jobs that demand ongoing training, and they have higher levels of education. They may also have other characteristics (e.g. motivation, engagement with work) that encourage individuals to learn and/or their employers to support them. Conversely, participation in adult learning helps to develop and maintain key information-processing skills, especially when the learning programmes require participants to read and write, and confront and solve new problems. In turn, after completing training, workers may be given more demanding tasks with higher skills requirements, which allows them to practice and thus maintain their skills.

These mutually reinforcing aspects create a virtuous cycle for adults with high proficiency and a vicious cycle for those with low proficiency. High-skilled adults will be more likely to participate in learning activities that enhance their skills – which makes these individuals more likely to continue to benefit from learning opportunities (see Figure 5.8 [L]). Conversely, low-skilled adults risk being trapped in a situation in which they rarely benefit from adult learning, and their skills remain weak or deteriorate over time – which makes it even harder for these individuals to participate in learning activities.

The key policy challenge is to help low-skilled adults break this vicious cycle. Many countries offer subsidised adult literacy and numeracy programmes, designed to upgrade the skills of low-skilled adults. In addition, policies may aim specifically to increase the participation of low-skilled adults in adult learning, for example through targeted subsidies (see Box 5.2). Denmark, Finland, the Netherlands, Norway and Sweden are the most successful in extending opportunities for adult learning to those adults who score at Level 1 or below (see Figure 5.7 [L]).

Box 5.2. Adult education for adults with low skills

Adults with low levels of education or in low-skilled occupations are less likely to participate in or have opportunities to participate in adult learning programmes (OECD, 2003). Providing learning opportunities to this group of adults is therefore an important policy issue in many OECD countries.

The Basic Competence in Working Life Programme (BKA) in Norway, Adult Education Initiative in Sweden, and WeGebAU programme in Germany are three examples of learning programmes for adults who have not attained upper secondary education (Albrecht et al., 2004; Ericson, 2005).

In 2006, the Norwegian government launched the BKA programme, which is now administered through Vox, the Norwegian Agency for Lifelong Learning. It aims to strengthen basic skills in reading, writing, numeracy and information and communication technologies (ICT). Courses are aligned to competence goals under a Framework for Basic Skills, developed by Vox, and are adapted to the needs of participants. BKA learning activities are often linked with work and other job-related practices. More than 30 000 adults have participated in the programme so far (European Commission, 2011).

The Swedish Adult Education Initiative was implemented in all municipalities in 1997 and ran until 2002 when it became the basis for a municipal adult education and training reform. The programme focused on providing general basic skills, such as Swedish, English and mathematics, at upper secondary level. More than 10% of the overall labour force participated in this programme between 1997 and 2000. Participation in courses provided by the initiative was free of charge. Unemployed participants received supplementary "special education support", equivalent to unemployment insurance payments for a maximum of one year. Some studies found that young men participating in this initiative had better chances of returning to the labour market compared to those who did not take part in the programme (Albrecht et al., 2004; Ericson, 2005).

The German WeGebAU programme was implemented in 2006 to provide educational support for workers without certified vocational qualifications, those with low skills proficiency and older workers to improve their employability. The Federal Employment Agency covers the cost of training courses, travel and lodging. In addition, participants can receive extra unemployment compensation if they are not able to work while they are taking the courses. At the end of the programme, participants received a recognised vocational qualification or partial qualification. Some 340 000 adults have participated in the programme since 2006 (Federal Institute for Vocational Education and Training , 2013).

■ Figure 5.9 (L) ■

Participation in adult education and training, by average literacy proficiency

Distribution of literacy proficiency scores, and percentage of adults participating in adult education and training during year prior to the survey



1. See notes at the end of this chapter.

Notes: Students aged 16-24 who are considered to still be in their first formal cycle of studies are excluded from the analysis. However, youths aged 16-19 who recently completed or are still in a short duration ISCED 3C or below are included as adult learners. Similarly, youths aged 20-24 who recently completed or are still in ISCED 3A, B, C or below are included as adult learners.

Source: Survey of Adults Skills (PIAAC) (2012), Table A5.9 (L).

StatLink http://dx.doi.org/10.1787/888932902284



Participation rates in organised adult learning at the country level and average proficiency

Results of the Survey of Adult Skills show a clear relationship between the extent of participation in organised adult learning and the average level of key information-processing skills in a given country (Figure 5.9 [L]). The large variation among countries at similar levels of economic development suggests major differences in learning cultures, learning opportunities at work, and adult-education structures. This could be interpreted to suggest that the supply of adult training programmes is a function of demand (proxied by literacy skills); but the chart also shows that differences in participation rates seems to have an impact not only on scores near the top or at the average but also near the bottom of the skills distribution.

WORK-RELATED PRACTICES THAT OPTIMISE THE USE AND DEVELOPMENT OF SKILLS

The best way to develop and maintain skills is to use them (see Reder, 2009a; 2009b). Indeed, there is a two-way relationship between proficiency in information-processing skills and the practices that require using those skills: practice reinforces proficiency, and proficiency facilitates practice. For example, adults with already-high levels of skills are more likely to gain access to jobs that require still higher levels of skills. In turn, holding a job that requires regular use of literacy, numeracy and problem-solving skills helps to develop and maintain these skills. Several studies have found a link between occupations requiring the performance of complex tasks and the level of cognitive skills, even after controlling for education (e.g. Andel et al., 2005; Finkel et al., 2009). There are some indications that job complexity has an effect on the growth rate of skills (see Schooler, Mulatu and Oates, 1999; Baldivia, Andrade and Bueno, 2008; Potter, Helms and Plassman, 2008); and some research suggests that retirement can lead to cognitive decline (e.g. Bonsang, Adam and Perelman, 2010; Mazzonna and Peracchi, 2009). Remaining outside the labour market for long periods can also lead to a loss of skills.

Thus, workers who do not have the opportunity to perform complex tasks involving key information-processing skills may be at risk of losing these kinds of skills more rapidly as they age. From a policy perspective, developing and maintaining the skills supply is not only a goal of education and training systems, but should also be an aim of workplaces. The use of various cognitive and other generic skills at work is considered in more detail in Chapter 4.

Skills proficiency and the use of skills at work

Results from the Survey of Adult Skills show a positive relationship between average literacy proficiency and the extent of engagement in reading practices at work (Figure 5.10). Adults who engage more in reading at work tend to score at higher levels of literacy proficiency. It is not possible to determine whether practices lead to the acquisition of skills or whether adults engage in these tasks because they already have greater proficiency. However, adjusting for educational attainment and language status reveals that the positive relationship between practice and proficiency is strong. That is, adults who practice their literacy skills nearly every day tend to score higher, regardless of their level of education. This suggests that there might be practice effects independent of education effects that influence proficiency. Without controlling for educational attainment, the relationship is much stronger since there are complementary effects between education and practice effects.

In nearly all cases, adults who engage the least in reading at work (i.e. the two lowest quintiles of distribution) tend to score at Level 2 or below. Figures 5.11 and 5.12 show a similar pattern between average numeracy proficiency and the extent of engagement in numeracy practices at work, and between average literacy proficiency and ICT use at work, respectively.

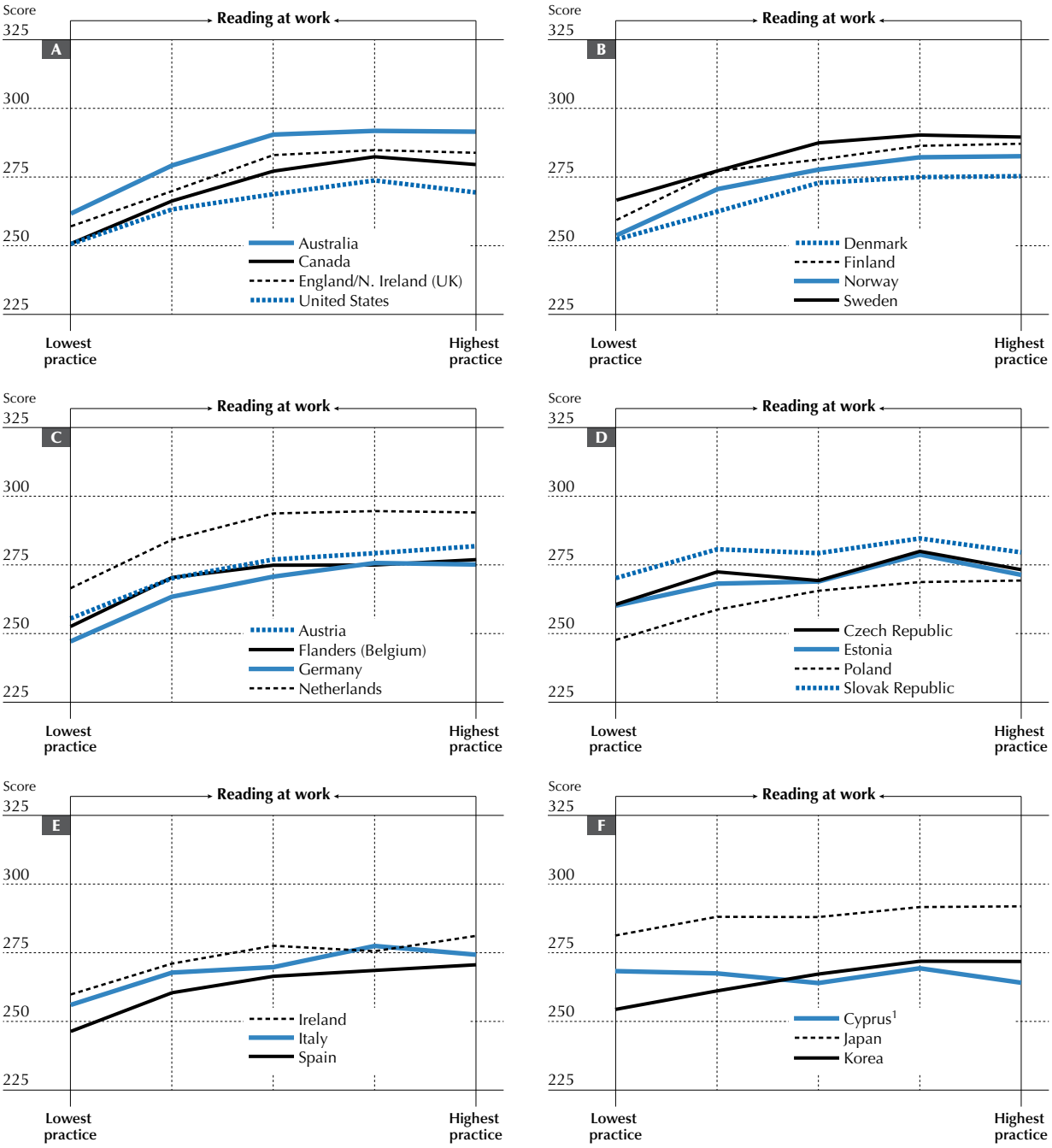
Occupational structure at the country level and average proficiency

A country's occupational structure is significantly related to the underlying level and distribution of key information-processing skills in that country. Results show that about 21% of the cross-national variation in average proficiency in literacy skills is associated with the proportion of adults who work in professional, managerial and technical occupations (Figure 5.13 [L]). While this is merely an association and may reflect selection of the most able workers into highly skilled occupations, there is good reason to believe that what happens beyond initial formal education, including the choice of occupation and the nature of work to which an individual is exposed, has a significant impact on the development and maintenance of literacy skills over a lifetime. It can also suggest that an economy with more people in high-skilled jobs simply has a more highly skilled workforce that also has greater proficiency in literacy.

■ Figure 5.10 ■

Reading at work and literacy proficiency

Relationship between literacy proficiency scores and level of engagement in reading at work, adults aged 30-65 employed during year prior to survey



1. See notes at the end of this chapter.

Notes: Results are adjusted for educational attainment and immigrant and language background. The reference group for which the curves are drawn is adults who have attained upper secondary education, are native-born and whose first or second language learned as a child is the same as the language of the assesment. The curves reflect means scores associated with each quintile of a reading at work index. No practice of reading is combined with the lowest quintile of practice, which generally reflects reading at work rarely or less than once a month, whereas highest practice reflects reading multiple types of texts daily or weekly.

Countries in Panel A-D are grouped according to regional or language considerations with the remainder grouped in Panel E-F.

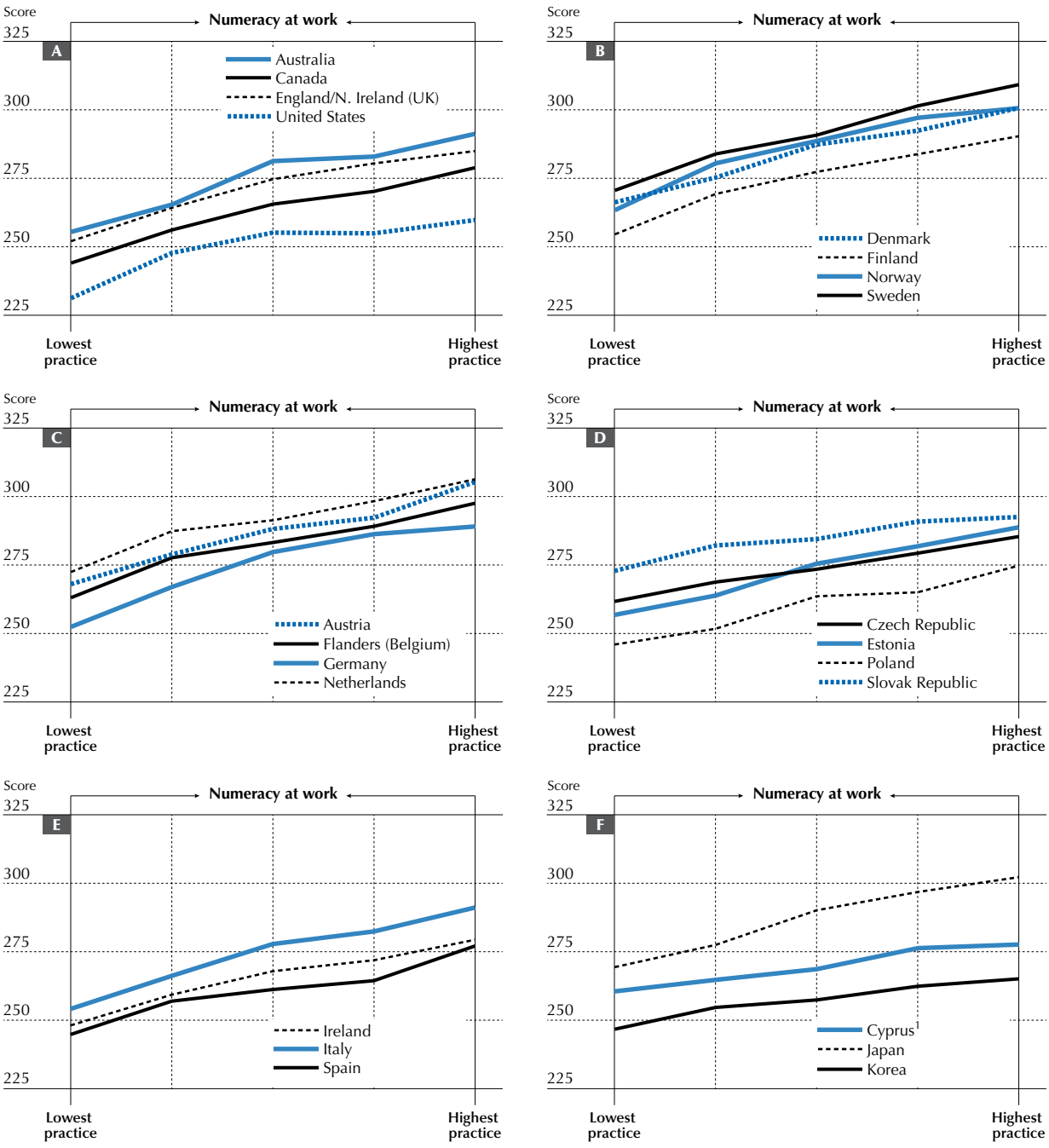
Source: Survey of Adult Skills (PIAAC) (2012), Table A5.10.

StatLink http://dx.doi.org/10.1787/888932902303

■ Figure 5.11 ■

Numeracy practice at work and numeracy proficiency

Relationship between numeracy proficiency scores and level of engagement in numeracy-related practices at work, adults aged 30-65 employed during year prior to survey



1. See notes at the end of this chapter.

Notes: Results are adjusted for educational attainment and immigrant and language background. The reference group for which the curves are drawn is adults who have attained upper secondary education, are native-born, and whose first or second language learned as a child is the same as the language of the assesment. The curves reflect means scores associated with each quintile of a numeracy practice at work index. No practice of numeracy is combined with the lowest quintile of practice, which generally reflects numeracy practice at work rarely or less than once a month, whereas highest practice reflects engagement in multiple types of numeracy-related activities daily or weekly.

Countries in Panel A-D are grouped according to regional or language considerations with the remainder grouped in Panel E-F.

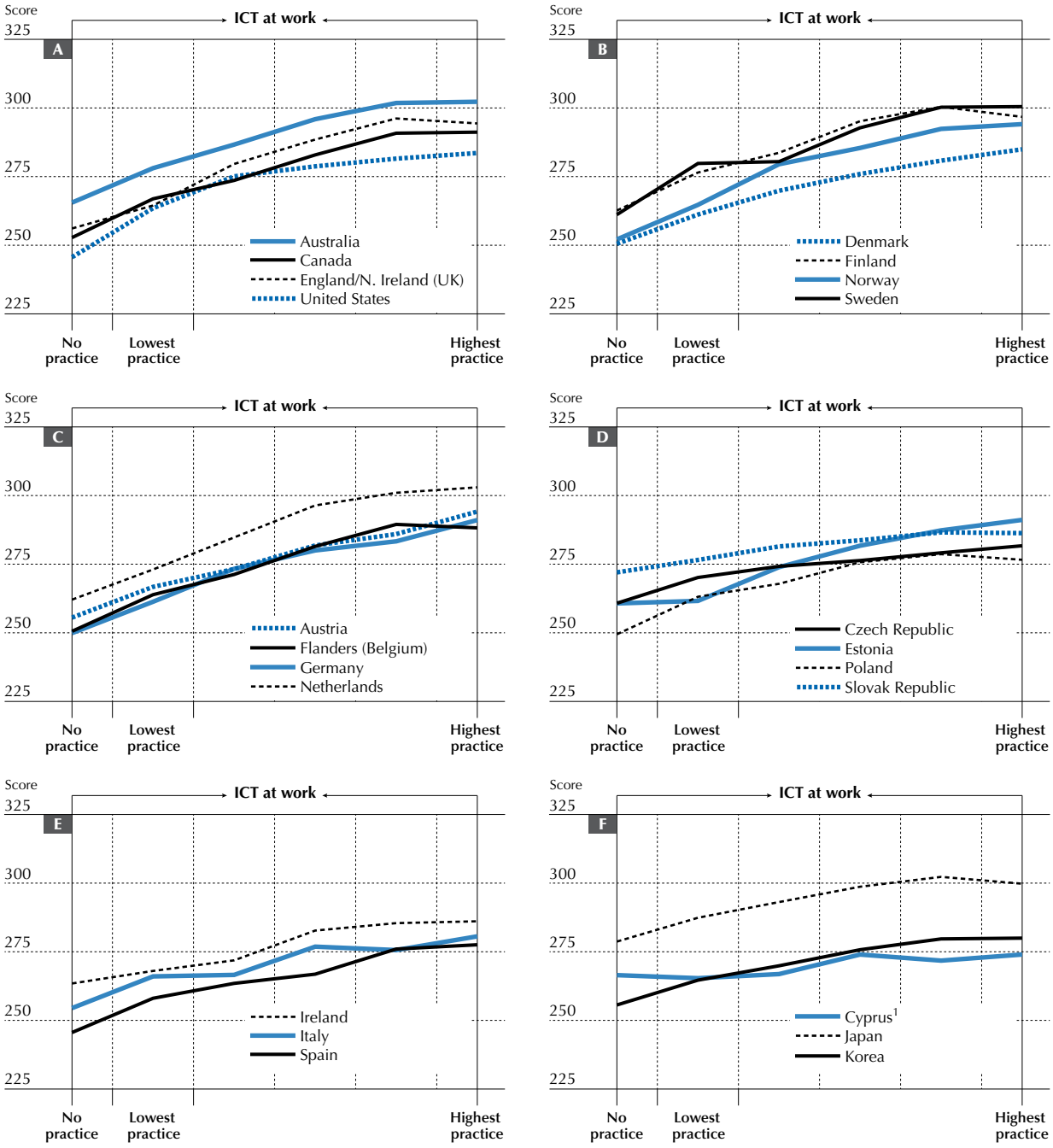
Source: Survey of Adult Skills (PIAAC) (2012), Table A5.11.

StatLink http://dx.doi.org/10.1787/888932902322

■ Figure 5.12 ■

ICT use at work and literacy proficiency

Relationship between literacy proficiency scores and level of engagement in ICT-related practices at work, adults aged 30-65 employed during year prior to survey



1. See notes at the end of this chapter.

Notes: Results are adjusted for educational attainment and immigrant and language background. The reference group for which the curves are drawn is adults who have attained upper secondary education, are native-born, and whose first or second language learned as a child is the same as the language of the assesment. The curves reflect means scores associated with no use and each quintile of a ICT use at work index. The lowest quintile of use generally reflects use of ICTs at work rarely or less than once a month, whereas highest practice reflects engagement in multiple types of ICT-related activities daily or weekly.

Countries in Panel A-D are grouped according to regional or language considerations with the remainder grouped in Panel E-F.

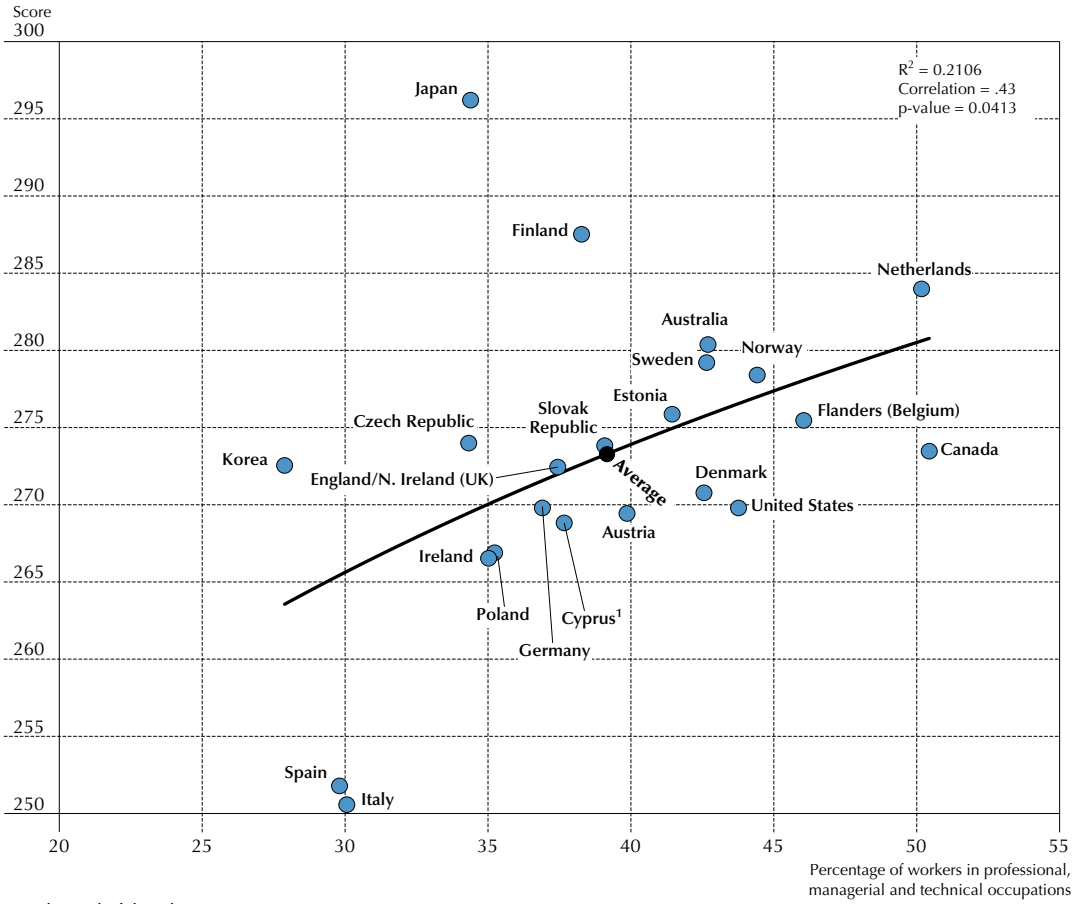
Source: Survey of Adult Skills (PIAAC) (2012), Table A5.12.

StatLink http://dx.doi.org/10.1787/888932902341

■ Figure 5.13 (L) ■

Occupational structure at the country level, by average literacy proficiency

Percentage of workers in professional, managerial and technical occupations during previous five years, by mean literacy proficiency scores



1. See notes at the end of this chapter.

Source: Survey of Adults Skills (PIAAC) (2012), Table A5.13 (L).

StatLink http://dx.doi.org/10.1787/888932902360

SOCIAL, CULTURAL AND OTHER DAILY PRACTICES THAT HELP TO DEVELOP AND MAINTAIN SKILLS

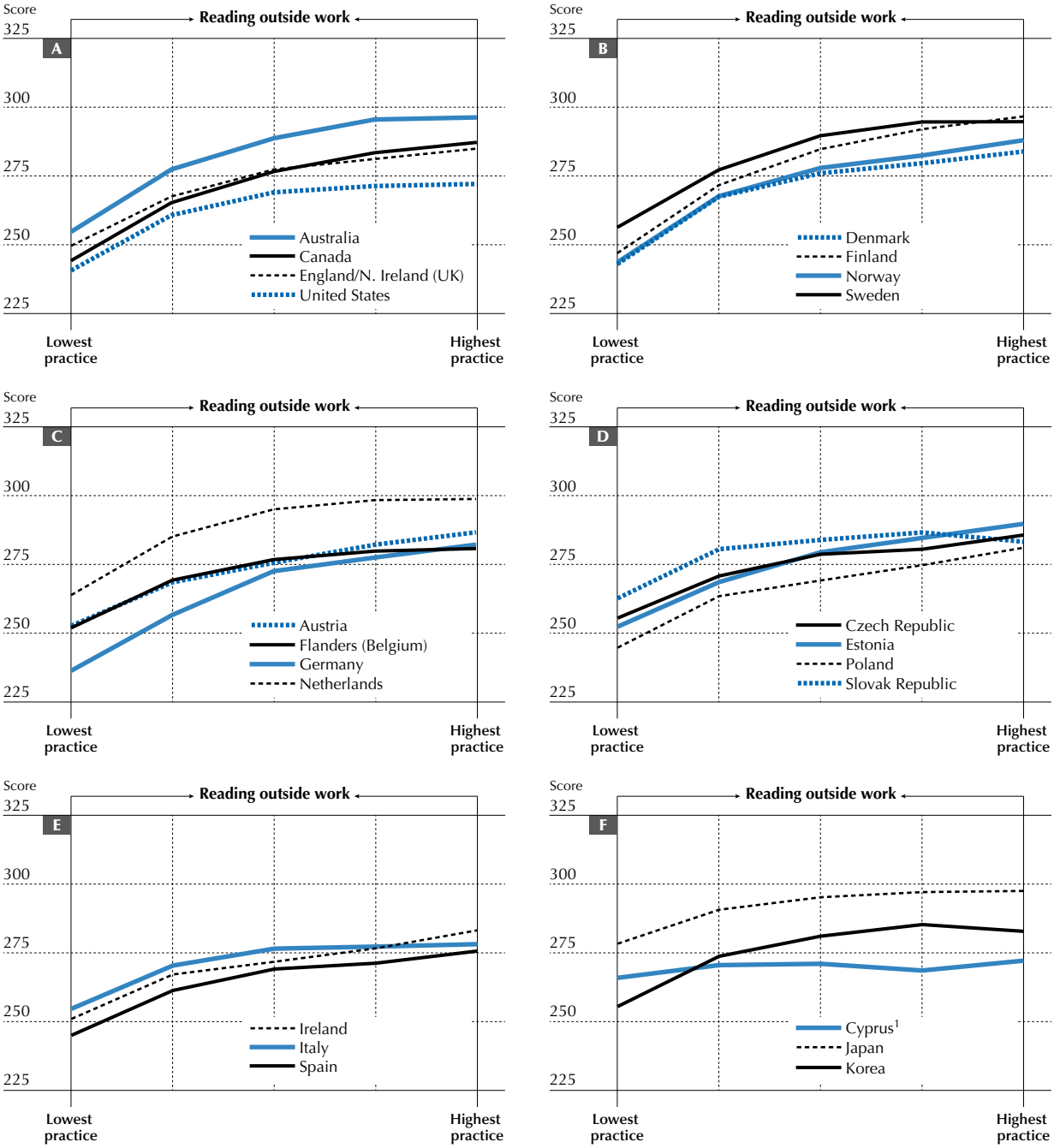
Practicing skills outside of the work environment may also affect the development and maintenance of key information-processing skills over a lifetime. For example, reading outside of work, whether on paper or through the use of ICTs, affects the development of literacy skills, and numeracy practices outside of work affect the development of numeracy skills. Engaging with a wide variety of text-based content also has an impact on skills development and maintenance (Smith, 1996). The indices of reading and numeracy practices used for this analysis incorporate both frequency and variety of engagement in corresponding activities.

Results, presented in Figures 5.14 and 5.16 for literacy and Figure 5.15 for numeracy, suggest that, outside of work, adults who engage more frequently in a variety of practices that are relevant to the skills assessed score higher on average than those who engage less frequently. As for the previous set of findings, adjustments are made to account for the relationship between these types of practices and educational attainment. The results suggest that these activities practiced outside of work have an even stronger relationship with the skills assessed than the corresponding activities that are practiced at work. In particular, adults who engage very little in reading or in activities involving numeracy outside of work score very low in the domains assessed.

■ Figure 5.14 ■

Reading outside work and literacy proficiency

Relationship between literacy proficiency scores and level of engagement in reading outside work



1. See notes at the end of this chapter.

Notes: Results are adjusted for educational attainment and immigrant and language background. The reference group for which the curves are drawn is adults who have attained upper secondary education, are native-born, and whose first or second language learned as a child is the same as the language of the assesment. The curves reflect means scores associated with each quintile of a reading outside work index. No practice of reading is combined with the lowest quintile of practice, which generally reflects reading outside work rarely or less than once a month, whereas highest practice reflects reading multiple types of texts daily or weekly.

Countries in Panel A-D are grouped according to regional or language considerations with the remainder grouped in Panel E-F.

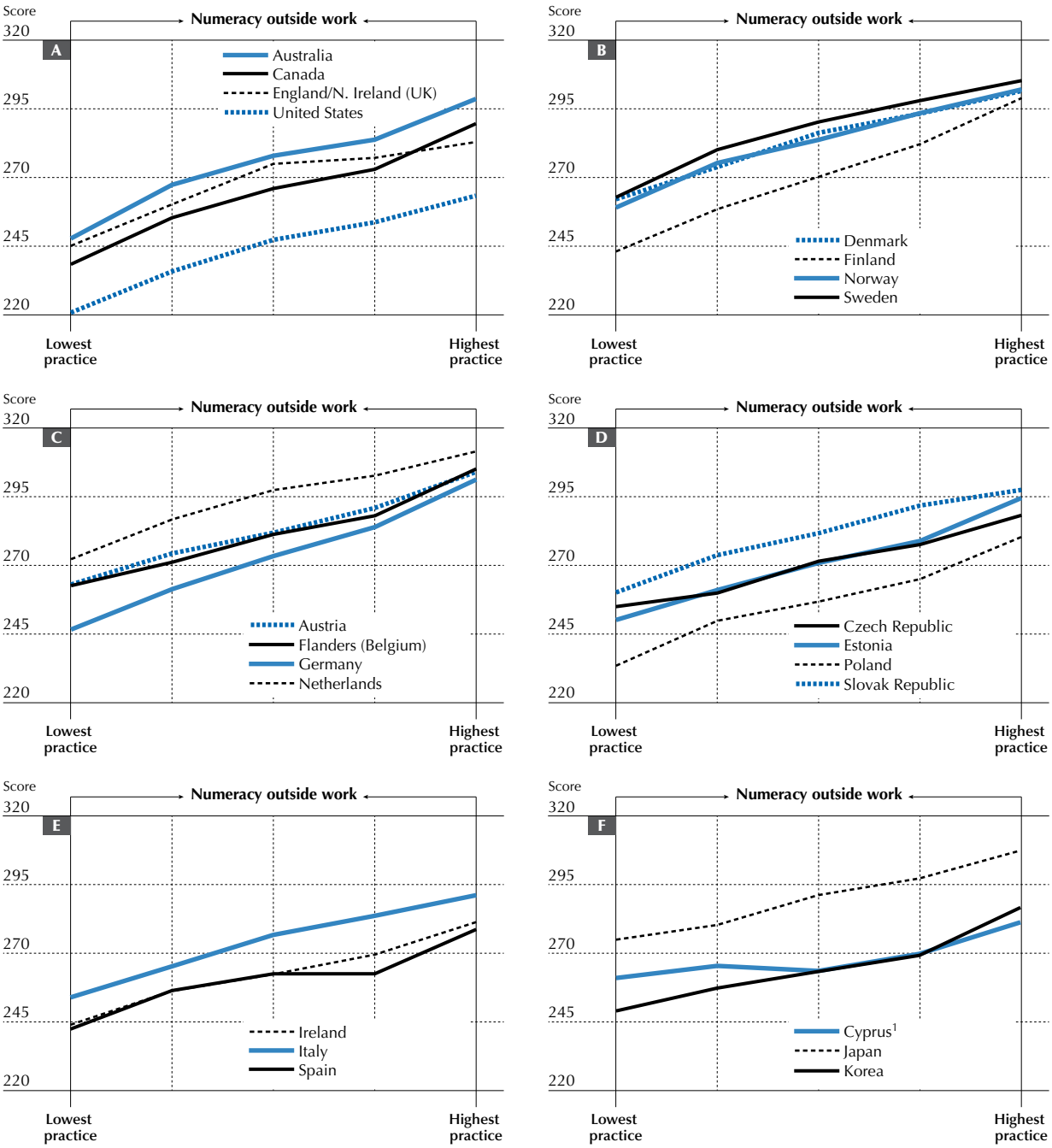
Source: Survey of Adult Skills (PIAAC) (2012), Table A5.14.

StatLink http://dx.doi.org/10.1787/888932902379

■ Figure 5.15 ■

Numeracy practice outside work and numeracy proficiency

Relationship between numeracy proficiency scores and level of engagement in numeracy-related practices outside work



1. See notes at the end of this chapter.

Notes: Results are adjusted for educational attainment and immigrant and language background. The reference group for which the curves are drawn is adults who have attained upper secondary education, are native-born, and whose first or second language learned as a child is the same as the language of the assesment. The curves reflect means scores associated with each quintile of a numeracy practice outside work index. No practice of numeracy is combined with the lowest quintile of practice, which generally reflects numeracy practice outside work rarely or less than once a month, whereas highest practice reflects engagement in multiple types of numeracy-related activities daily or weekly.

Countries in Panel A-D are grouped according to regional or language considerations with the remainder grouped in Panel E-F.

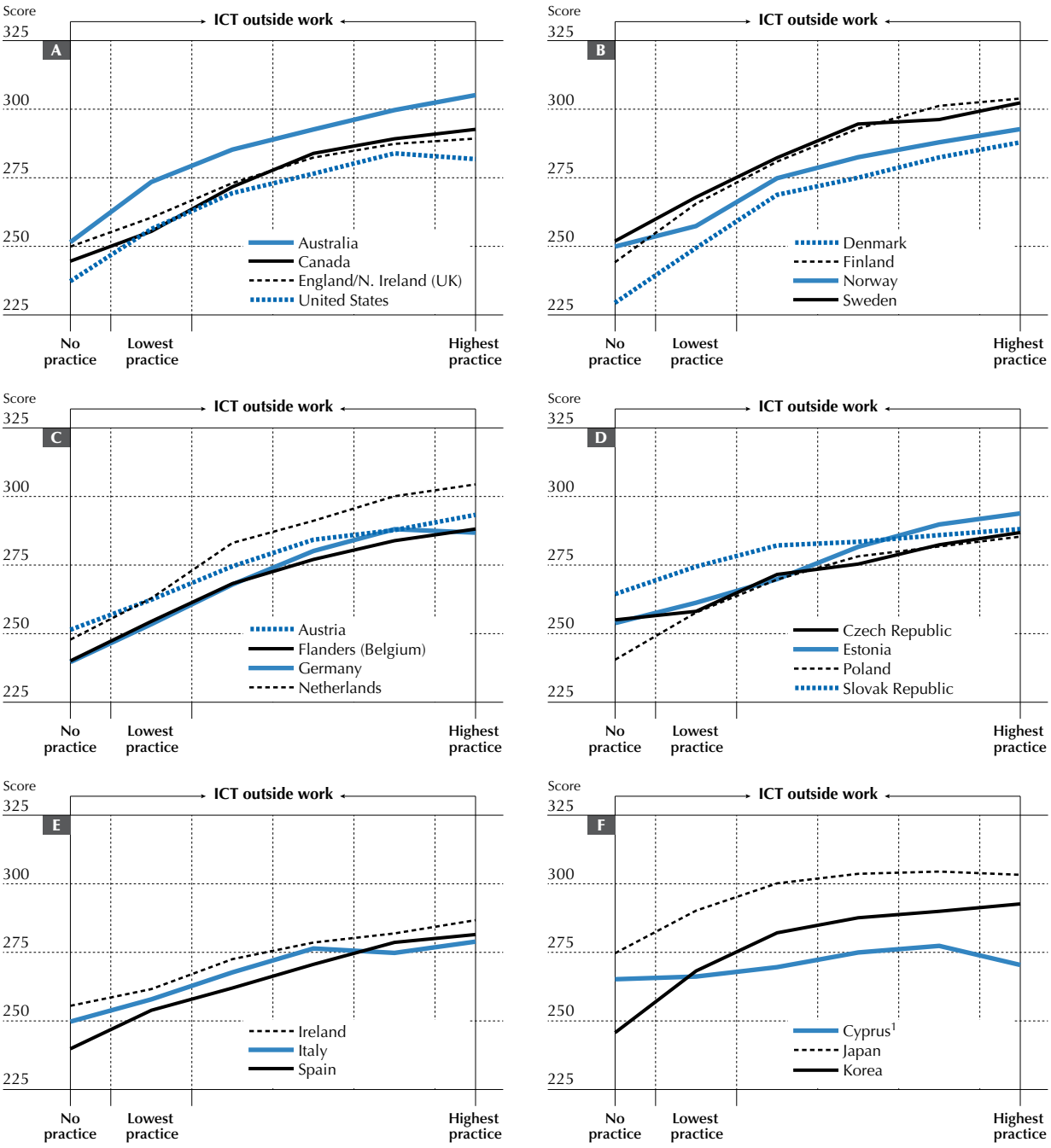
Source: Survey of Adult Skills (PIAAC) (2012), Table A5.15.

StatLink http://dx.doi.org/10.1787/888932902398

■ Figure 5.16 ■

ICT use outside work and literacy proficiency

Relationship between literacy proficiency scores and level of engagement in ICT-related practices outside work



1. See notes at the end of this chapter.

Notes: Results are adjusted for educational attainment and immigrant and language background. The reference group for which the curves are drawn is adults who have attained upper secondary education, are native-born, and whose first or second language learned as a child is the same as the language of the assesment. The curves reflect means scores associated with no use and each quintile of a ICT use outside work index. The lowest quintile of use generally reflects use of ICTs outside work rarely or less than once a month, whereas highest practice reflects engagement in multiple types of ICT-related activities daily or weekly.

Countries in Panel A-D are grouped according to regional or language considerations with the remainder grouped in Panel E-F.

Source: Survey of Adult Skills (PIAAC) (2012), Table A5.16.

StatLink http://dx.doi.org/10.1787/888932902417



SUMMARY

While formal education is found to be the single most important factor related to proficiency, results from the Survey of Adult Skills also suggest that there are large variations in proficiency related to the type and level of an individual's qualifications, and this varies by country. This is partly due to differences in the quality of education concerning the skills measured in the Survey of Adult Skills. It is also due to the fact that literacy, numeracy and problem solving in technology-rich environments can be developed outside of formal education. Indeed, learning does not stop at the end of initial schooling. As individuals age and spend more time out of education, a range of other factors, such as participation in adult learning activities, the tasks they perform at work, and engagement in activities involving the use of literacy, numeracy and problem-solving skills outside of work, become increasingly important for enhancing and maintaining these skills.

Patterns of participation in education and training over a lifetime, providing training for adults, and the nature of job tasks are, themselves, a function of different policy decisions relating to how education and training systems and the workplace are organised. Understanding the potential role of these various factors in developing and maintaining proficiency in information-processing skills and how they function at different stages in life is important, given that most advanced countries are confronting the dual challenge of ageing populations and ongoing structural change.

In addition to the learning that occurs in formal education, reading, whether on a screen or on paper, is found to be closely linked to proficiency: adults who read more are likely to be better readers, and better readers are also likely to read more. Nevertheless, the findings suggest that access to digital technologies, in the workplace or elsewhere, the organisation of work, and the allocation of work tasks make a difference in whether information-processing skills are developed and maintained. This implies that policies aimed at improving literacy and numeracy skills among adults must ensure that the skills inculcated in education and training programmes are put to use in the workplace.

Notes

1. A separate report is planned for 2014 to provide additional detailed analyses of results on the problem solving in technology-rich environments scale.

2. The Report of the Taskforce on the Aging of the American Workforce (2008) estimated that between 2004 and 2014, the labour force participation rate in the US is projected to increase by 42.3% for people aged 55-64, and by 74% for people aged 65 and older.

3. Period effects are also a possibility, but generally cannot be identified with any certainty (see Winship and Harding, 2010). Period effects are similar to cohort effects, but the term is often reserved for effects that could have affected everyone at the time of the assessment. Such occasion-specific influences may include economic conditions such as a recession or crisis.

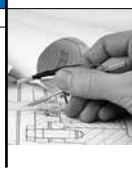
4. A negative relationship between cognitive skills, such as reasoning, episodic memory, vocabulary or processing speed, and age as well as literacy, numeracy and problem solving has been consistently found in a wide range of studies conducted from different disciplinary perspectives (e.g. cognitive scientists, gerontologists, medical doctors, educationalists) and based on different methods (e.g. cross-sectional designs, longitudinal designs) (see Desjardins and Warnke, 2012). Such relationships have been observed since the 1930s (Jones and Conrad, 1933).

5. See notes below.

Notes regarding Cyprus

Note by Turkey: The information in this document with reference to "Cyprus" relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Turkey recognises the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of the United Nations, Turkey shall preserve its position concerning the "Cyprus issue".

Note by all the European Union Member States of the OECD and the European Union: The Republic of Cyprus is recognised by all members of the United Nations with the exception of Turkey. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus.



References and further reading

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6

Key Skills and Economic and Social Well-Being

This chapter details how proficiency in literacy, numeracy and problem solving, as measured by the Survey of Adult Skills (PIAAC), is positively associated with other aspects of well-being, including labour market participation, employment, earnings, health, participation in associative or volunteer activities, and an individual's sense of having influence on the political process. It suggests that improvements in the teaching of literacy and numeracy in schools and in programmes for adults with poor literacy and numeracy skills and limited familiarity with information and communication technologies may provide considerable economic returns for both individuals and society.



To what extent does proficiency in literacy, numeracy and problem solving in technology-rich environments make a difference to the well-being of individuals and nations? Previous chapters of this report have examined the level and distribution of these skills among countries and different groups in the population as well as the relationship between proficiency and factors that are thought to help develop and maintain skills proficiency. This chapter examines the relationships between proficiency and the following aspects of individual and social well-being: participation in the labour market, employment, earnings, health, participation in associative or volunteer activities, and the sense of influence on the political process.

Among the main findings:

- Proficiency in literacy, numeracy and problem solving in technology-rich environments is positively and independently associated with the probability of participating in the labour market and of being employed and earning higher wages. After the effects of educational attainment are taken into account, an increase of one standard deviation in an individual's literacy proficiency (46 score points) is associated with a 20% increase in the probability of participating in the labour market and a 10% increase in the probability of being employed as opposed to being unemployed. An increase of one standard deviation in literacy proficiency is also associated with an 8% increase in hourly wages, on average across countries.
- The strength of the relationship between proficiency and labour market participation, employment and wages varies considerably among countries. This is likely to reflect differences in institutional arrangements (such as wage setting) as well as the relative weight given to educational qualifications and other factors in employers' hiring, promotion and wage-setting decisions.
- Educational qualifications and proficiency in literacy, numeracy and problem solving in technology-rich environments reflect different aspects of individuals' human capital that are separately identified and valued in the labour market.
- Proficiency in literacy, numeracy and problem solving in technology-rich environments is positively associated with other aspects of well-being. In all countries, individuals who score at lower levels of proficiency on the literacy scale are more likely than those with higher levels of proficiency to report poor health, believe that they have little impact on the political process, and not to participate in associative or volunteer activities. In most countries, individuals with lower proficiency are also more likely than those with higher proficiency to have low levels of trust in others.

The results suggest that, independent of policies designed to increase participation in education and training, improvements in the teaching of literacy and numeracy in schools and programmes for adults with poor literacy and numeracy skills and limited familiarity with ICTs may provide considerable economic and social returns for individuals and society a whole.[1]

SKILLS PROFICIENCY, LABOUR MARKET STATUS AND WAGES

To the extent that workers' productivity is related to the knowledge and skills they possess, and that wages reflect such productivity, albeit imperfectly, individuals with more skills should expect higher returns from labour market participation and would thus be more likely to participate. Most studies use educational qualifications attained in the past as a proxy for individuals' current productive potential when investigating the returns to investments in human capital; only a few recent studies examine the return on skills development (Leuven et al., 2004; Tyler, 2004). In contrast, the Survey of Adult Skills (PIAAC) measures key information-processing skills directly, and so can provide more precise information on how an individual's current proficiency in those skills influences their likelihood to work and their wages. [2]

While previous chapters described the distribution of proficiency in the domains of literacy, numeracy and problem solving in technology-rich environments for the entire population, this section reviews these data with reference to the labour market status of the survey respondents – i.e. whether they are employed, unemployed or inactive – as well as to their earnings.

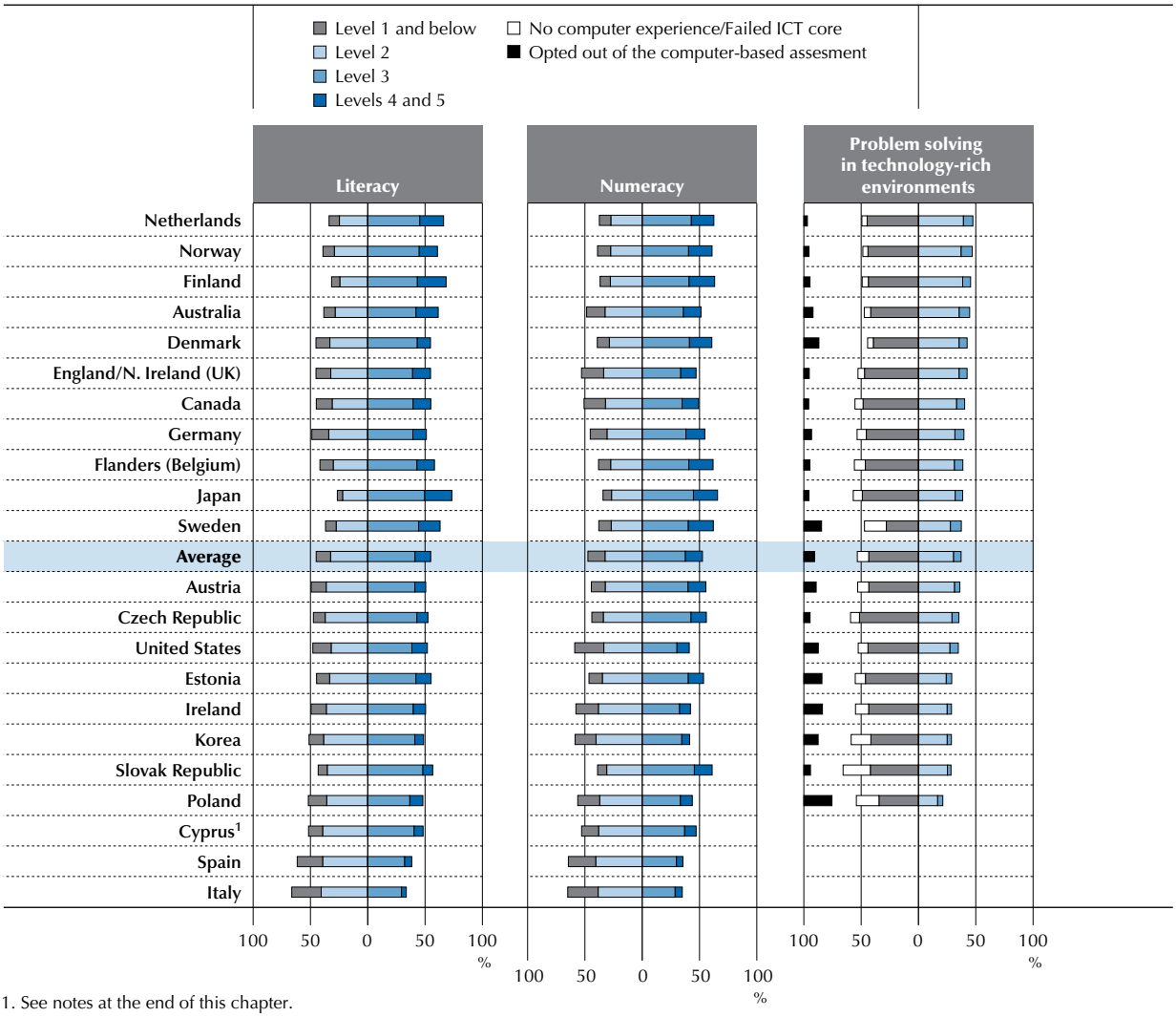
Proficiency and labour market status

Considering first the group of employed individuals (Figure 6.1), only a minority score in the top two levels (Level 4 or 5) in either literacy or numeracy (14%-15%, on average) and about the same proportion (13%-15%, on average) have the lowest level of proficiency. Differences across countries are marked: Italy and Spain have particularly large shares of workers at the bottom of the distribution and a smaller-than-average share at the top in both literacy and numeracy, whereas the opposite is true in Japan, Finland and the Slovak Republic. More generally, in all countries, including those with the highest levels of GDP per capita, such as Norway and the United States, a substantial proportion of workers score at low levels in both literacy and numeracy.

■ Figure 6.1 ■

Workers' proficiency levels

Percentage of workers at each level of proficiency, by skills domain



1. See notes at the end of this chapter.

Countries are ranked in descending order of the percentage of workers in Levels 2 and 3 of problem solving in technology-rich environments.

Source: Survey of Adults Skills (PIAAC) (2012), Tables A6.1 (L), A6.1 (N) and A6.1 (P).

StatLink http://dx.doi.org/10.1787/888932902436

Strikingly, a majority of employed individuals in all countries either do not display proficiency or score at or below Level 1 on the problem solving in technology-rich environments scale. In many cases, this majority is substantial (for example, about 66% in Korea and 59% in the Slovak Republic and the United States). Conversely, only about 6% of workers, on average, score at the highest level in problem solving in technology-rich environments (Level 3). However, caution is advised when interpreting the results for problem solving in technology-rich environments because not all of the employed respondents completed the problem-solving assessment module. Scores for problem solving are not available for around 10% of all employed respondents, on average, ranging from a low of less than 4% in Sweden and the Netherlands to a high of 24% in Korea. In Figure 6.1, this group is shown below the lowest-scoring group, with the assumption that the group's performance in the test would have been poorer than the lowest performers. In addition, an average of about 10% of workers refused to take the computer-based test altogether. They may have done so because of insufficient familiarity with ICTs, but there is no way to verify this. Thus, this group is classified separately in Figure 6.1.

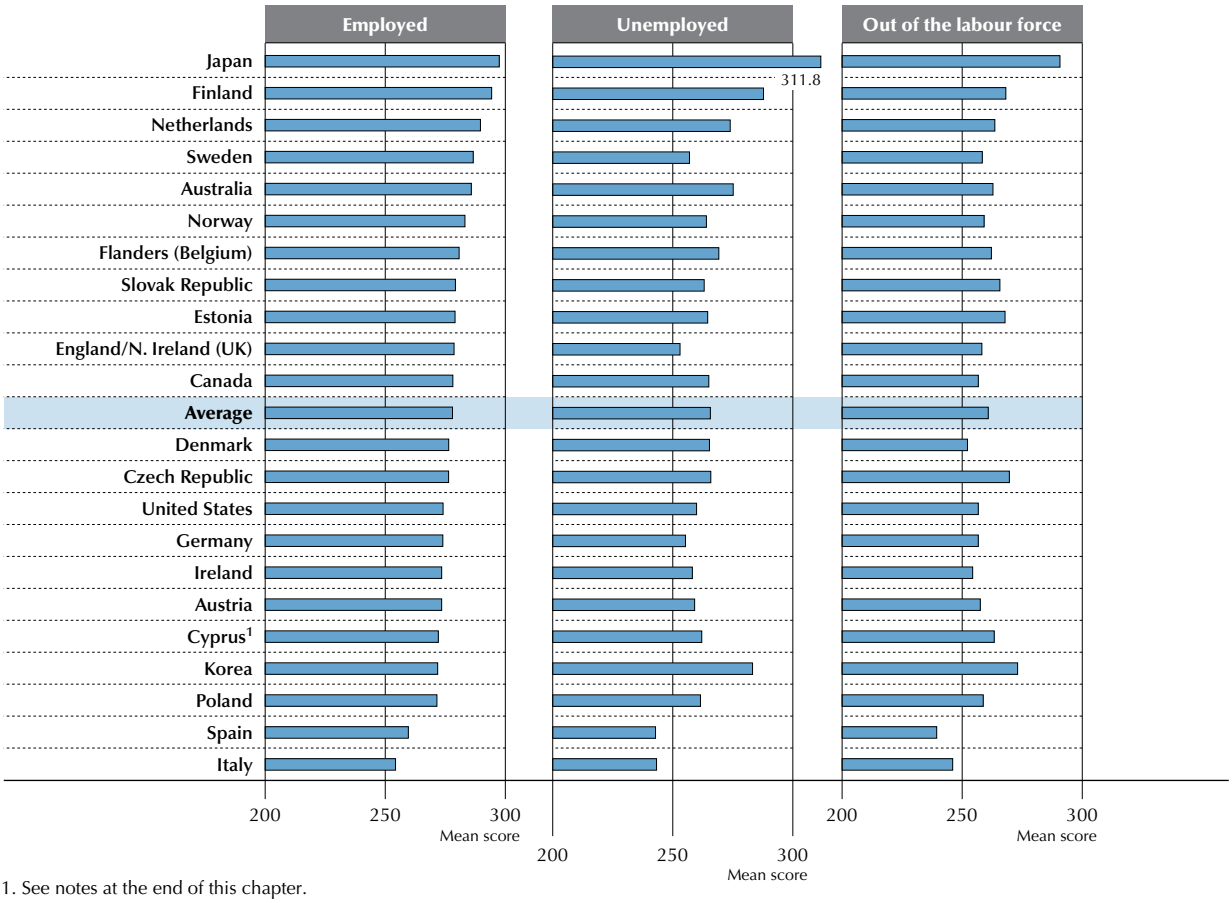
When the total population is divided into the three standard labour market groups – i.e. employed, unemployed and inactive – the average proficiency in literacy among the employed population is generally higher than that among unemployed and inactive individuals (Figure 6.2 [L]). However, the differences in proficiency are surprisingly small.[3]

Across all participating countries, the average literacy score of employed individuals is about 13 score points higher (about 5%) than the average score of unemployed adults, which, in turn, is almost identical to that of the inactive.

This relatively small difference can be partly attributed to the high incidence of unemployment among young people, who are generally more proficient than their older counterparts. The difference in proficiency between the employed and the long-term unemployed – those who have been unemployed for 12 months or more – is larger. When only the long-term unemployed are used in the comparison, the difference in proficiency increases by 9 score points, from about 13 to 22 score points, on average.

■ Figure 6.2 (L) ■

Mean literacy score, by labour force status



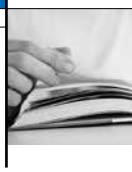
1. See notes at the end of this chapter.

Countries are ranked in descending order of workers' mean literacy score.

Source: Survey of Adults Skills (PIAAC) (2012), Table A6.2 (L).

StatLink http://dx.doi.org/10.1787/888932902455

Overall, while there is a relatively large pool of skilled individuals who are out of work, either unemployed or inactive, some caveats are in order. First, it is important to keep in mind that while some unemployed individuals may have scores in literacy, numeracy and problem solving in technology-rich environments that are similar to those of employed individuals, they may lack other key skills needed to get a job, for example, job-specific skills or generic skills frequently required at work, such as self-organising skills. Second, some inactivity might be voluntary and temporary, such as among young people who are still engaged in full-time education or skilled women who are caring for family members. At the same time, to the extent that literacy is a proxy for a more comprehensive set of competencies, the relatively high proficiency found among unemployed individuals is important for labour-market policy. Mismatches between people's skills and the skill requirements of jobs, in addition to various institutional constraints, are likely to be preventing skilled people from engaging in employment or looking for work.



Proficiency, employment and wages

Another way of looking at the link between labour market outcomes and proficiency is to determine how many individuals, at each proficiency level, are employed, unemployed or inactive (Figure 6.3 [L]). From this viewpoint, both unemployment and inactivity are more common among the least skilled (Level 1 or below). For example, on average, about 57% of those individuals who score at or below Level 1 are employed, 7% are unemployed, and the remaining 36% are inactive. Among the most proficient individuals, who score at Level 4 or 5, 79% are employed, about 4% are unemployed, and 17% are inactive.

This finding highlights the importance of taking stock of the skills held by unemployed individuals at the start of a period of unemployment, both in the domains assessed by the Survey of Adult Skills and in other key areas relevant to labour market needs, including job-specific and generic skills. This would help public employment services to identify the most appropriate course of action for each job-seeker.

Hourly wages are strongly associated with proficiency levels (Figure 6.4 [L]).[4] On average across countries, the median hourly wage of workers scoring at Level 4 or 5 on the literacy scale is 61% higher than that of workers scoring at or below Level 1. Differences in returns as proficiency increases vary across countries, more so than for employment status. In several countries, such as the Czech Republic, Estonia, Poland, the Slovak Republic and Sweden, the distribution of wages appears to be rather compressed; at the other extreme, returns to greater proficiency appear to be extremely large in the United States, Korea, Ireland, Canada and Germany.

However, the relationship between proficiency levels and hourly wages is not linear: there is significant overlap in the distribution of wages by proficiency level within and across countries. For instance, within countries, the top 25% best-paid Korean and Japanese workers scoring at Level 2 in literacy earn more than the median hourly wage of those scoring at Level 4 or 5 (Figure 6.4 [L]). Similarly across countries, workers scoring at Level 2 in the United States earn higher median hourly wages than workers scoring at Level 4 or 5 in the Czech Republic, Estonia, Poland and the Slovak Republic, raising interesting issues concerning work-related migration.

How these relationships are affected by other individual and job characteristics

The relationships between proficiency levels and employment chances and hourly wages presented above could be the result of simple compositional effects. Most important, proficiency could simply be the reflection of higher educational attainment, which, in turn, affects wages as well as the likelihood of labour force participation and employment. This section shows that this is not the case, and that proficiency plays an important and independent role as a determinant of success in the labour market, over and above the role played by formal education.

The relationship between labour market participation, employment and wages, on the one hand, and skills proficiency on the other is explored in more detail using simple linear regressions or logistic models and adjusting for several individual characteristics, including years of education.[5] To interpret the results correctly, it must be borne in mind that, although it may be intuitive that higher levels of proficiency facilitate employment or active participation in the labour market and raise wages, causation is not necessarily self-evident. For example, employment may itself favour the acquisition of skills.[6]

Literacy proficiency, education and labour force participation

An individual who scores one standard deviation higher than another on the literacy scale (around 46 score points) is 20% more likely to participate in the labour market – i.e. to work or be looking for work (the relative probability being 1.2, see Figure 6.5 [L]).[7] This effect is computed holding constant the level of education (as well as all the other variables in the control set) – in other words, by comparing the likelihood of labour force participation among individuals with different levels of literacy proficiency, but who have spent the same number of years in education. Such a calculation is possible because of the imperfect overlap of education and proficiency, as discussed in previous chapters. If such a comparison were conducted without holding education constant, one standard deviation increase in literacy proficiency would be associated with a 36% rise in the probability of participation, suggesting that education and proficiency have, for the most part, distinct and separate effects, a finding that is confirmed in all of the analyses presented later in this chapter.

The link between proficiency and labour force participation is strongest in Sweden and Finland, where an increase of 46 points on the literacy scale raises the probability of being employed or looking for work by 56% and 43%, respectively. On the other hand, it is weakest in Estonia and Poland, where the likelihood of labour force participation increases by 15% and 16%, respectively, following a 46-point rise in the literacy score.

■ Figure 6.3 (L) ■

Employment status, by literacy proficiency level

Percentage of adults in each labour market status



1. See notes at the end of this chapter.

Countries are listed in alphabetical order.

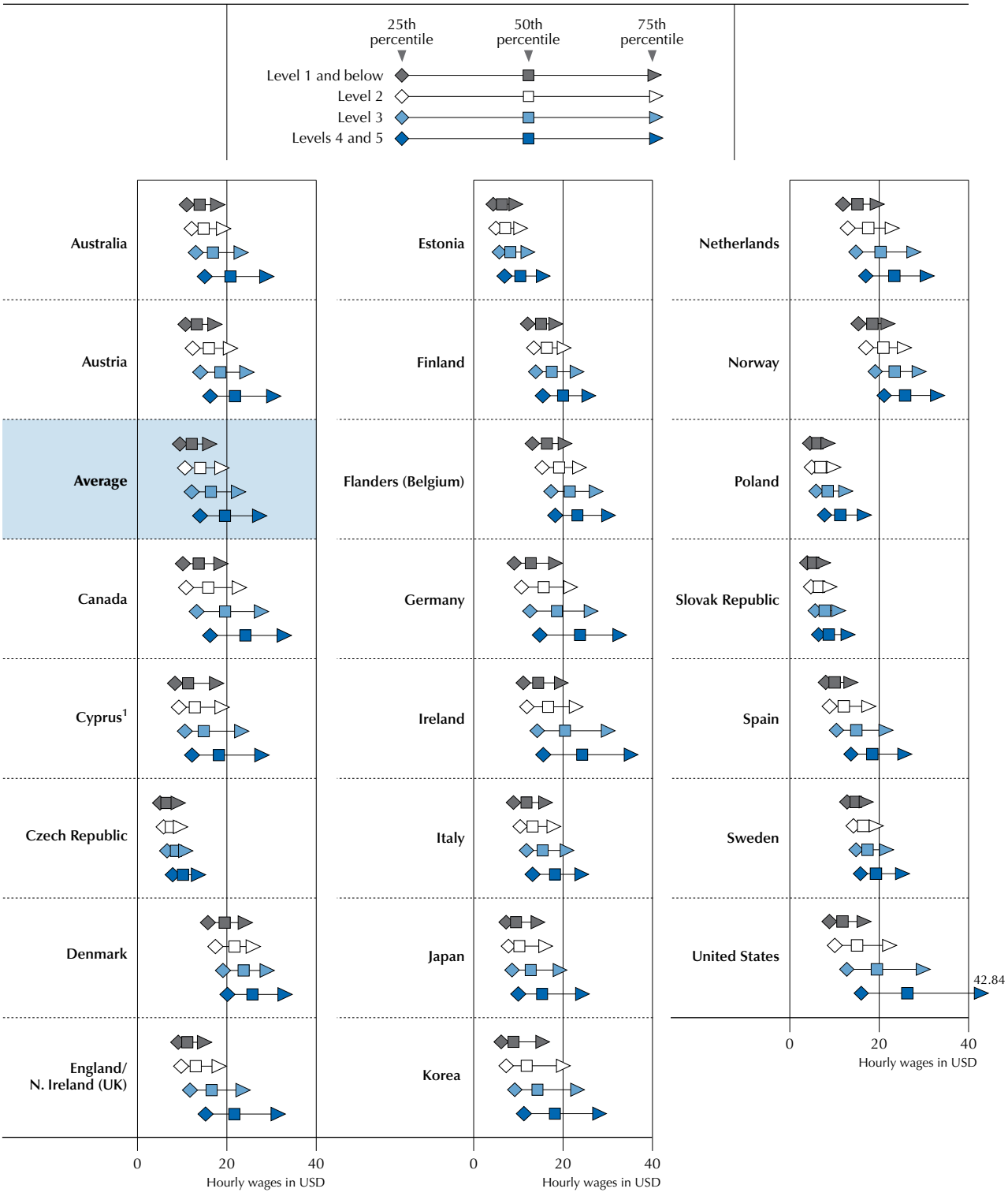
Source: Survey of Adult Skills (PIAAC) (2012), Table A6.3 (L).

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■ Figure 6.4 (L) ■

Distribution of wages, by literacy proficiency level

25th, 50th and 75th percentiles of the wage distribution



1. See notes at the end of this chapter.

Note: Employees only. Hourly wages, including bonuses, in purchasing-power-parity-adjusted USD.
Countries are listed in alphabetical order.

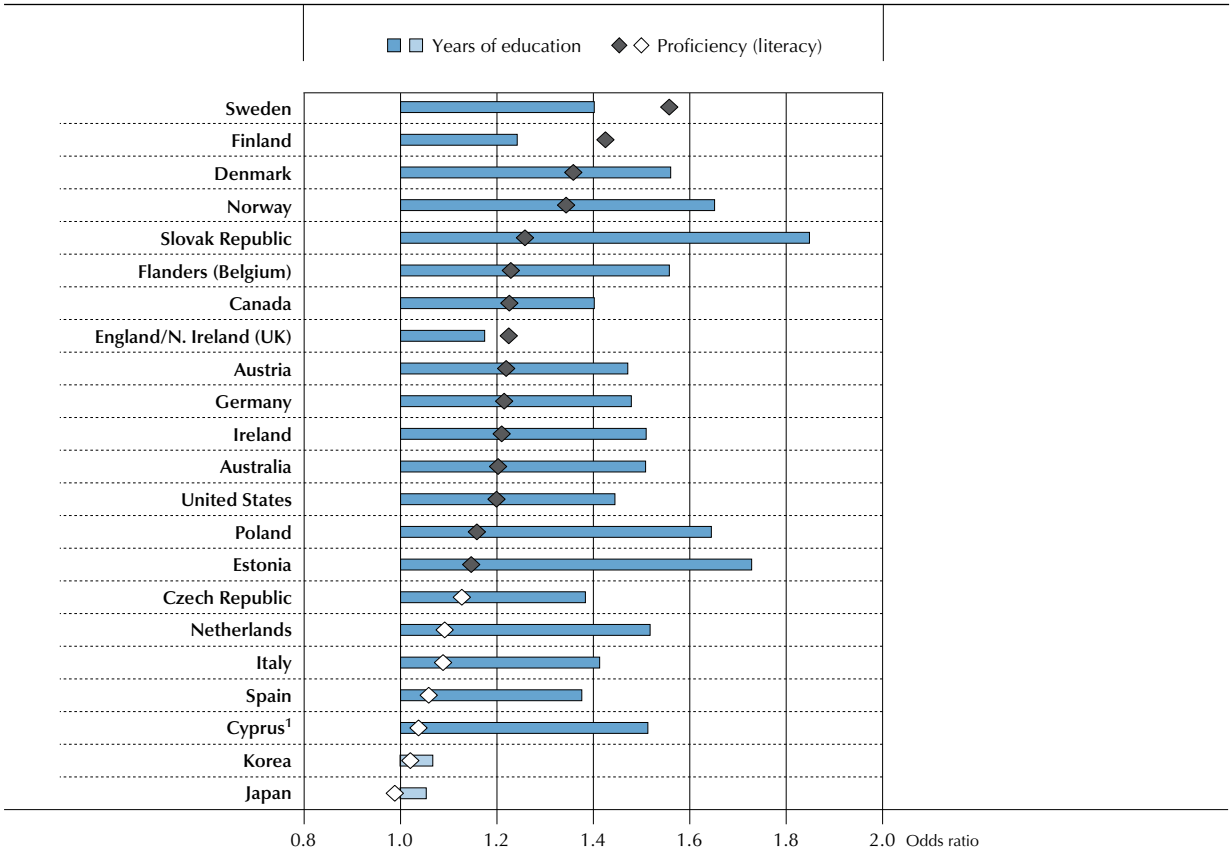
Source: Survey of Adult Skills (PIAAC) (2012), Table A6.4 (L).

StatLink http://dx.doi.org/10.1787/888932902493

■ Figure 6.5 (L) ■

Effect of education and literacy proficiency on labour market participation

Odds ratios showing the effect of education and literacy proficiency on the likelihood of participating in the labour market among adults not in formal education



1. See notes at the end of this chapter.

Notes: Results are adjusted for gender, age, marital and foreign-born status. The odds ratios correspond to a one-standard-deviation increase in proficiency/years of education. Statistically significant values are shown in darker tones. Years of education have a standard deviation of 3.05, literacy has a standard deviation of 45.76.

Countries are ranked in descending order of the odds ratios of proficiency.

Source: Survey of Adult Skills (PIAAC) (2012), Table A6.5 (L).

StatLink http://dx.doi.org/10.1787/888932902512

Along with proficiency, more years spent in school increase the chances of labour force participation. More specifically, an additional three years in education, corresponding to one standard deviation of years of education across all countries in the sample, are associated with a 45% increase in the probability of labour force participation.[8]

On the basis of these results, it is possible to compare the likelihood of labour market participation for individuals with different combinations of education and proficiency. For example, moving up by three proficiency levels on the literacy scale – approximately three standard deviations on that scale – and keeping education constant would improve the likelihood of labour force participation by about 60%. An improvement of the same size would take an additional four years of education to achieve, keeping proficiency in literacy constant.

The most important result of this analysis, which is confirmed in almost all countries, albeit to different extents, is that proficiency, beyond that acquired through initial education, plays an independent and sizeable role in the likelihood that an adult will participate in the labour force. This highlights the importance of lifelong learning and the development of skills beyond school. The separate effects of proficiency and education on labour force participation may be due to a number of factors. First, literacy is one of many skills and bodies of knowledge developed in formal education, all of which are jointly captured by the estimated effect of educational attainment. In addition, as noted in Chapter 5, there is substantial

variation in literacy proficiency among individuals with similar levels of education. Second, employers can readily "see" a prospective employee's educational qualifications when hiring; skills, such as literacy, are only seen during work. As a result, the effects of skills on labour force participation are not as direct as those of educational qualifications.

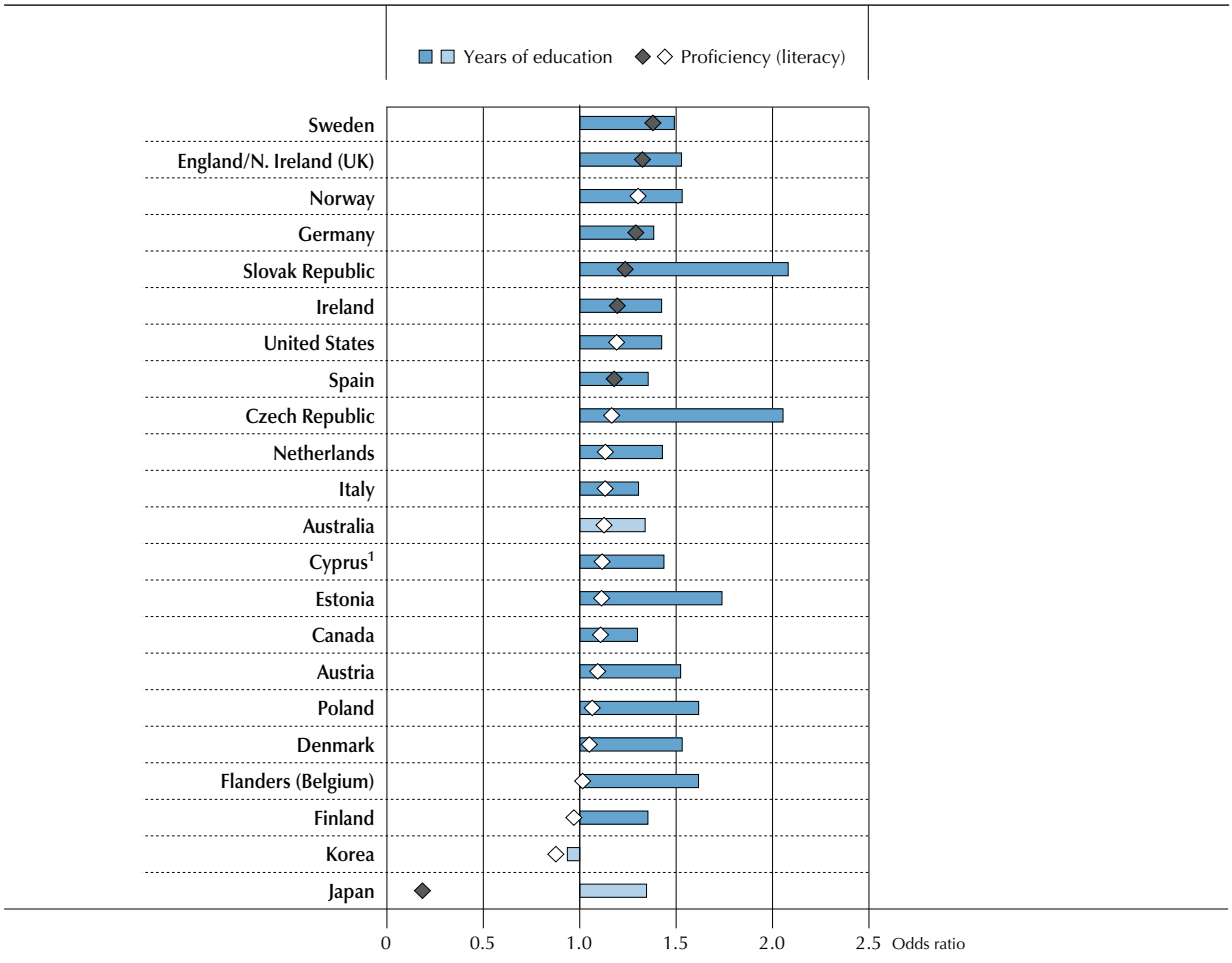
Literacy proficiency, education and employment

Active participants in the labour market include both individuals who are employed and those actively looking for work. Is, then, the positive association between literacy proficiency and labour market participation driven by a correlation with employment or with unemployment? An adult who scores 46 points higher on the literacy scale is 10% more likely to be employed, keeping education constant (see Figure 6.6 [L]). On the other hand, an adult with three additional years of schooling is 49% more likely to be employed. Given these results, it can be inferred that the effect of literacy proficiency on labour market participation (estimated at 20%) is largely the result of its association with a greater likelihood of employment.[9] The same holds for years of education, which has an effect of a similar magnitude on both participation and employment.[10]

■ Figure 6.6 (L) ■

Effect of education and literacy proficiency on the likelihood of being employed

Adjusted odds ratios showing the effect of education and literacy on the likelihood of being employed rather than unemployed among adults not in formal education



1. See notes at the end of this chapter.

Notes: Results are adjusted for gender, age, marital and foreign-born status. The odds ratios correspond to a one standard deviation increase in literacy/years of education. Statistically significant values are shown in darker tones. Years of education have a standard deviation of 3.05, literacy has a standard deviation of 45.76.

Countries are ranked in descending order of the odds ratios of proficiency.

Source: Survey of Adult Skills (PIAAC) (2012), Table A6.6 (L).

StatLink http://dx.doi.org/10.1787/888932902531

Analysis of survey results also finds that young people enjoy the highest returns to schooling, while the role of skills proficiency is similar across all age groups (young, prime-age and older workers). This is consistent with the notion that, when evaluating young job candidates with little work experience, employers attach high importance to educational qualifications in the absence of other information on the quality of potential employees. On the other hand, for older workers with longer labour market experience, educational attainment is just one of the many pieces of information available about their qualities as employees.

Overall, these findings suggest that improving literacy, numeracy and problem-solving skills would have a significant impact on the likelihood of labour force participation and employment, beyond encouraging participation in education and training. Improving the quality of instruction in reading and mathematics in schools, for example, could have long-term beneficial effects, as could improving the quality and broadening the availability of adult learning opportunities.

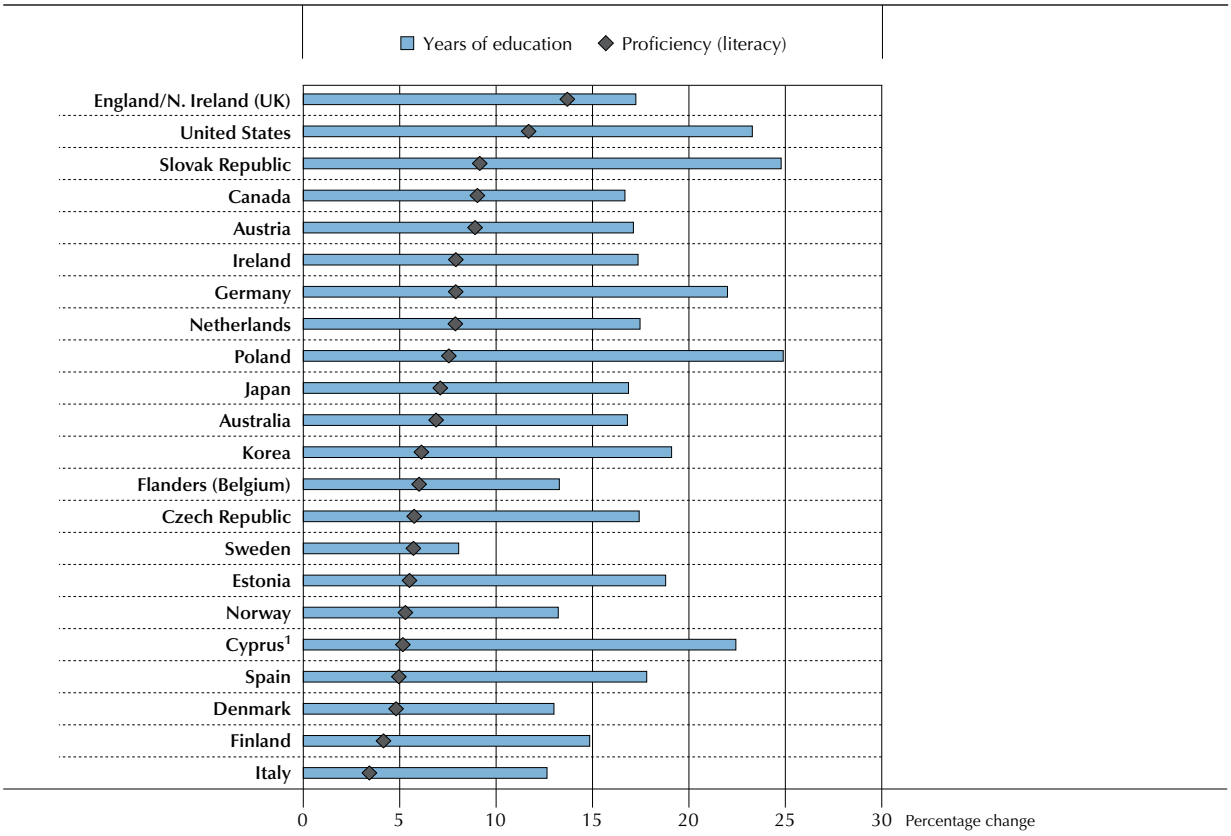
Wage returns to proficiency and schooling

Proficiency and schooling have significant and distinct effects on hourly wages.[11] The increase in wages associated with one standard deviation rise in literacy proficiency ranges from less than 5% in Denmark, Finland and Italy, to above 10% in the United States and England/Northern Ireland (UK) (Figure 6.7 [L]).[12] The effect of years of education on wages is larger, ranging from 7% in Sweden to more than 25% in Poland and the Slovak Republic.

■ Figure 6.7 (L) ■

Effect of education and literacy proficiency on wages

Percentage change in wages associated with a one standard deviation change in years of education and proficiency in literacy



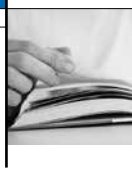
1. See notes at the end of this chapter.

Notes: Coefficients from the OLS regression of log hourly wages on years of education and proficiency, directly interpreted as percentage effects on wages. Coefficients adjusted for age, gender, foreign-born status and tenure. The wage distribution was trimmed to eliminate the 1st and 99th percentiles. All values are statistically significant. The regression sample includes only employees. Years of education have a standard deviation of 3.05, literacy has a standard deviation of 45.76.

Countries are ranked in descending order of the effect of proficiency.

Source: Survey of Adult Skills (PIAAC) (2012), Table A6.7 (L).

StatLink http://dx.doi.org/10.1787/888932902550



Part of the effect of proficiency on hourly wages may be based on the type of tasks and responsibilities workers are expected to carry out in their job. To check whether this is the case, one can also adjust the estimates by indicators of skills use at work. Unsurprisingly, the inclusion of skills-use variables weakens the effect of both education and proficiency on wages by about a third, on average.[13] In about half of the countries, co-operative skills, influence and task discretion, are positively and significantly correlated with wages, while dexterity is negatively and significantly correlated with wages. Also, in all countries but one, the use of physical skills is negatively and significantly correlated with wages. Similarly, the use of information-processing skills, such as writing, ICT and problem solving, is positively and significantly correlated with wages. The fact that skills use, over and above general proficiency and education, influences wages strengthens the findings on skills mismatch presented in Chapter 4.

Overall, the number of years of education tends to have a smaller impact on wages in countries with a more compressed wage distribution, such as the Nordic countries, Italy and Flanders (Belgium) (see OECD, 2013). By contrast, greater proficiency and educational attainment are associated with significantly higher wages in Korea, the Slovak Republic and the United States, all of which have relatively high earnings inequality. However, this only suggests a link between the earnings distribution and returns to education, as other factors affect the ranking of countries. For instance, Canada – a country with a rather dispersed earnings distribution – shows average returns to education, while Germany and Poland – where earnings inequality is relatively low – show relatively high returns to education.

Further analyses of the survey data show that these results are only marginally driven by compositional effects. Differences between age groups and gender in returns to education and proficiency are small.[14] The returns to education as seen in hourly wages are slightly higher for men than for women, but differences between the genders in returns to proficiency vary. Contrary to what was found for labour force participation, the number of years of education appears to have a stronger influence on wages among prime-age and older workers compared to young workers. While this result appears to be counterintuitive, the differences are small.

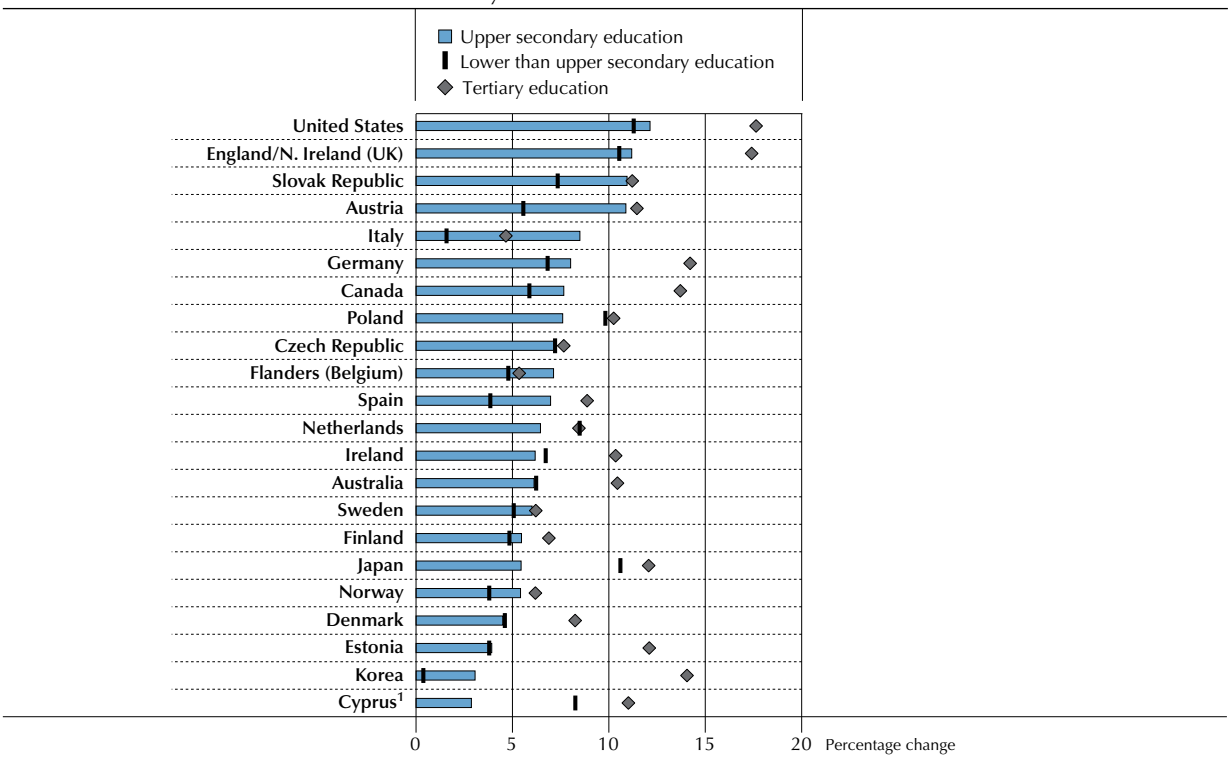
Finally, all of the above analyses assume that the effects of educational attainment and proficiency on wages are independent, while some recent research suggests that this may not be the case. Indeed, in the recent past, several OECD countries have reported a sharp increase in wage inequality at the very top of the earnings distribution (Lemieux, 2006; OECD, 2011). One popular explanation for this is that the returns to education are significantly larger for the most educated individuals. Analysis of results from the Survey of Adult Skills confirms this hypothesis. In over half of the countries, estimates of returns to proficiency increase with qualification levels (Figure 6.8 [L]), pointing to larger returns to training for those who are already highly proficient. But there are exceptions. In Poland, the Czech Republic, Australia, Ireland, the Netherlands, Japan, Denmark and Estonia, increasing proficiency among those with the least education has beneficial effects that are at least as great as those for upper secondary graduates. In Flanders (Belgium) and Italy, upper secondary graduates stand to gain the most from increases in proficiency. More generally, in line with earlier findings in this chapter, the distribution of returns to proficiency by qualification level tends to be more compressed in the Nordic countries, notably, Norway, Finland and Sweden. On the other hand, it is more dispersed in Germany, Canada, Estonia and Korea.

These results suggest that educational attainment and proficiency in literacy, numeracy and problem solving in technology-rich environments reflect different aspects of individuals' human capital, each of which has independent and statistically significant effects on wages. Educational attainment, either in itself or expressed as years of education, represents a wider set of knowledge and skills, including job- and domain-specific competencies, as well as personal attributes, than does proficiency in the three domains tested in the Survey of Adult Skills. Since it is more difficult for a prospective employer to assess skills than qualifications, the relative strength of the influence of years of education and proficiency on wages may also reflect the fact that wage negotiations that occur during hiring are based on the observable characteristics of individuals, i.e. qualifications, and have a lasting impact on wages. In the course of the employment relationship, employers learn more about the competencies of their employees, which is then translated into the effect of proficiency on wages (Pinkston, 2009). However, the fact that proficiency has an independent influence on wages, beyond that of educational attainment, confirms the importance of acquiring skills throughout a lifetime. Differences across countries in the magnitude of the effects are heavily influenced by how wages are distributed across occupations and, in turn, by the labour market institutions, such as minimum wages and unions, that affect that distribution.

■ Figure 6.8 (L) ■

Effect of literacy proficiency on wages, by educational attainment

Percentage change in wages associated with a one standard deviation change in proficiency in literacy, by educational attainment



1. See notes at the end of this chapter.

Notes: Coefficients from the OLS regression of log hourly wages on proficiency, directly interpreted as percentage effects on wages. Coefficients adjusted for age, gender, foreign-born status and tenure. The wage distribution was trimmed to eliminate the 1st and 99th percentiles. The regression sample includes only employees. Literacy has a standard deviation of 45.76.

Countries are ranked in descending order of the effect of literacy proficiency on wages for upper seconday-educated employees.

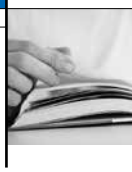
Source: Survey of Adult Skills (PIAAC) (2012), Table A6.8 (L).

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SOCIAL OUTCOMES OF LITERACY, NUMERACY AND PROBLEM SOLVING IN TECHNOLOGY-RICH ENVIRONMENTS

The report by the Commission on the Measurement of Economic Performance and Social Progress (Stiglitz, Sen and Fitoussi, 2009) reflects a growing interest in the competencies needed to achieve social and personal well-being, understood in a broad way, in addition to those believed to be essential for economic success. It is widely accepted that skills affect people's lives and the well-being of countries in ways that go far beyond what can be measured by labour market earnings and economic growth; but less is known about the role of specific skills, such as literacy, numeracy and problem solving in technology-rich environments, on social and economic well-being.

The Survey of Adult Skills collected information on four dimensions of well-being: the level of trust in others; political efficacy or the sense of influence on the political process; participation in associative, religious, political or charity activities (volunteering); and self-assessed health status. Overall, literacy proficiency has a positive relationship with all four of the outcomes considered, net of the effects of education, socio-economic background, age, gender and immigrant background. Lower levels of literacy proficiency are associated with a lower sense of political efficacy and poor self-assessed health in nearly all participating countries. In most countries, low literacy proficiency is associated with lower levels of trust, and, in nearly all countries, it is associated with lower participation in voluntary and associative activities (Figure 6.9 [L]). The strength of the associations varies considerably between countries. Japan and Finland stand out as the countries in which the association of literacy proficiency and the outcomes concerned is weakest, and the United States, Germany, Canada, Australia, England/Northern Ireland (UK) and Sweden as among the countries or regions in which the associations are strongest. Although country-specific patterns can vary, the overall results and strength of the relationships are similar on both the numeracy and problem solving in technology-rich environments scales.



Box 6.1. The STEP Skills Measurement Study: A skills survey in low- and middle-income countries

The World Bank's STEP measurement study was launched in 2010 to gather more evidence on the level and distribution of skills – including socio-emotional skills – relevant to the labour market in the adult populations of developing countries. The study consisted of one survey for individuals and one for employers. The individual survey contained three modules focused on cognitive skills, job specific skills and socio-emotional skills. In addition to collecting self-reported information regarding reading, writing and numeracy, the cognitive module involved administering a direct assessment of reading literacy based on the Survey of Adult Skills instruments.

Eight countries participated in the first wave of data collection, which took place in 2011: Bolivia, Colombia, Ghana, Laos, Sri Lanka, Ukraine, Vietnam, and the Yunnan province of China. The second wave, which took place in 2012-13, involved five countries: Armenia, Azerbaijan, Georgia, Kenya and Macedonia.

Cognitive skills are defined as the "ability to understand complex ideas, to adapt effectively to the environment, to learn from experience, to engage in various forms of reasoning, to overcome obstacles by taking thought". Literacy, numeracy, and the ability to solve abstract problems are all cognitive skills. The STEP Survey asked respondents to report on their use of such skills in daily life and at work (if they work).

The STEP direct assessment of reading literacy mentioned above involved two versions. The first used an extended version of the paper-based literacy assessment administered by the Survey of Adult Skills as well as the latter's reading components assessment. This was implemented in Armenia, Bolivia, Colombia, Georgia, Ghana, Kenya, Ukraine and Vietnam. The second used the literacy core test from the Survey of Adult Skills only, and was implemented in Laos, Macedonia, Sri Lanka and the Yunnan province of China. The STEP literacy assessment was designed with the objective of recording results on the literacy scale of the Survey of Adult Skills.

Socio-emotional skills relate to traits covering multiple domains (social, emotional, personality, behaviours, attitudes, etc.). Modules were specifically developed to gather information on respondents' personality, behaviour, and preferences. The survey built on the "Big Five" personality traits: openness, conscientiousness, extraversion, agreeableness, and neuroticism. Measures of grit and hostility bias were also included. The survey also included a module aimed at assessing respondents' time and risk preferences.

Job-specific skills are task-related and build on a combination of cognitive and non-cognitive skills. The STEP survey included a wide range of questions relating to such skills, e.g. computer use.

Results are available for five countries: Bolivia, Laos, Sri Lanka, Vietnam and the Yunnan province of China. Some of the initial findings from the individual survey module are presented below.

Self-reported cognitive skills

Most adults read regularly; however, the intensity of reading varies widely. In each of the five countries at least 85% of adults read regularly, whether at work or in daily life, with the exception of Sri Lanka, where this is true of about 77% of adults. However, across countries, there are stark contrasts in the intensity of reading activity.

Most adults use numeracy skills regularly. Numeracy skills are used regularly by over 90% of adults, with the exception of the Yunnan province of China, where 80% of adults report doing some math in the context of daily life or at work. As is the case with reading skills, there are sharp differences in the intensity of numeracy skills use across age groups. Younger adults (15-24 year-olds) are more likely to use numeracy more intensively than their older peers.

There is a high correlation between the use of skills and educational attainment. The proportion of adults who reported reading regularly rises with level of educational attainment. Reading intensity is also correlated with educational attainment. In all countries, adults who have completed lower secondary education or higher display a greater intensity of reading (medium and high intensity).

Assessed cognitive skills

Over 80% of adults pass the literacy threshold in most countries. In four of the five countries, more than 80% of adults pass the core test (i.e. get at least three out of eight items correct); in Laos, only 67% of adults reached the literacy threshold.

...



There are differences between self-reported and direct assessment of reading literacy. In the case of Laos and Bolivia, the percentage of adults who reported that they read regularly is higher than the percentage of adults who passed the literacy core module. The opposite was found in Sri Lanka, Vietnam and the Yunnan province of China, where the percentage of adults who reported regular reading was lower than the percentage of adults who passed the core module.

The relationship between reading literacy and gender varies by country. In Sri Lanka, Vietnam and the Yunnan province of China, the proportion of men and women who passed the core module is similar. However, in the case of Laos and Bolivia, men had higher pass rates than women.

There is a correlation between age and performance in most countries. With the exception of the Yunnan province of China, where all age cohorts perform similarly, 15-24 year-olds outperform 25-49 year-olds and 50-64 year-olds. Laos has the largest gap in performance between the youngest and the oldest cohorts.

Educational attainment is positively related to performance. In all countries except the Yunnan province of China, adults with primary education or less are more likely to get fewer than three responses correct. Interestingly, there is little difference in performance between adults with completed secondary and post-secondary education, probably because the core assessment is designed to screen adults with low literacy.

Respondents have better skills in recognising print vocabulary than in sentence processing or passage comprehension. Respondents demonstrate the ability to recognise words that represent everyday objects but have greater difficulty processing sentences and passages.

Socio-emotional skills

As respondents' age increases, there is an increase in conscientiousness and stability, a decrease in openness, and no change in agreeableness and extraversion. A correlation was found between personality traits and age. In three of the five countries, conscientiousness and stability increase with age, while in Bolivia and the Yunnan province of China, these two traits remain stable across all age groups.

Within countries, there are differences in personality related to gender. In all five countries, men are more emotionally stable than women. Also, men are more open to experiences than women, except in Bolivia and the Yunnan province of China. No differences in agreeableness and extraversion related to gender are found in the five STEP countries.

Socio-emotional skills are correlated with educational attainment. In all STEP countries, greater openness and higher levels of conscientiousness are correlated with a higher level of education; neuroticism seems negatively correlated. Extraversion and agreeableness are not significantly correlated with education.

Outcomes

ICT and generic skills are associated with higher earnings. Greater use of cognitive skills (reading and numeracy) is associated with higher earnings for both wage earners and self-employed workers. In most countries, more frequent reading and using mathematics at an advanced level are associated with higher earnings. Interestingly, the basic reading literacy assessment score is positively correlated with employees' wages in all five countries, but is statistically significant only in Laos and Sri Lanka.

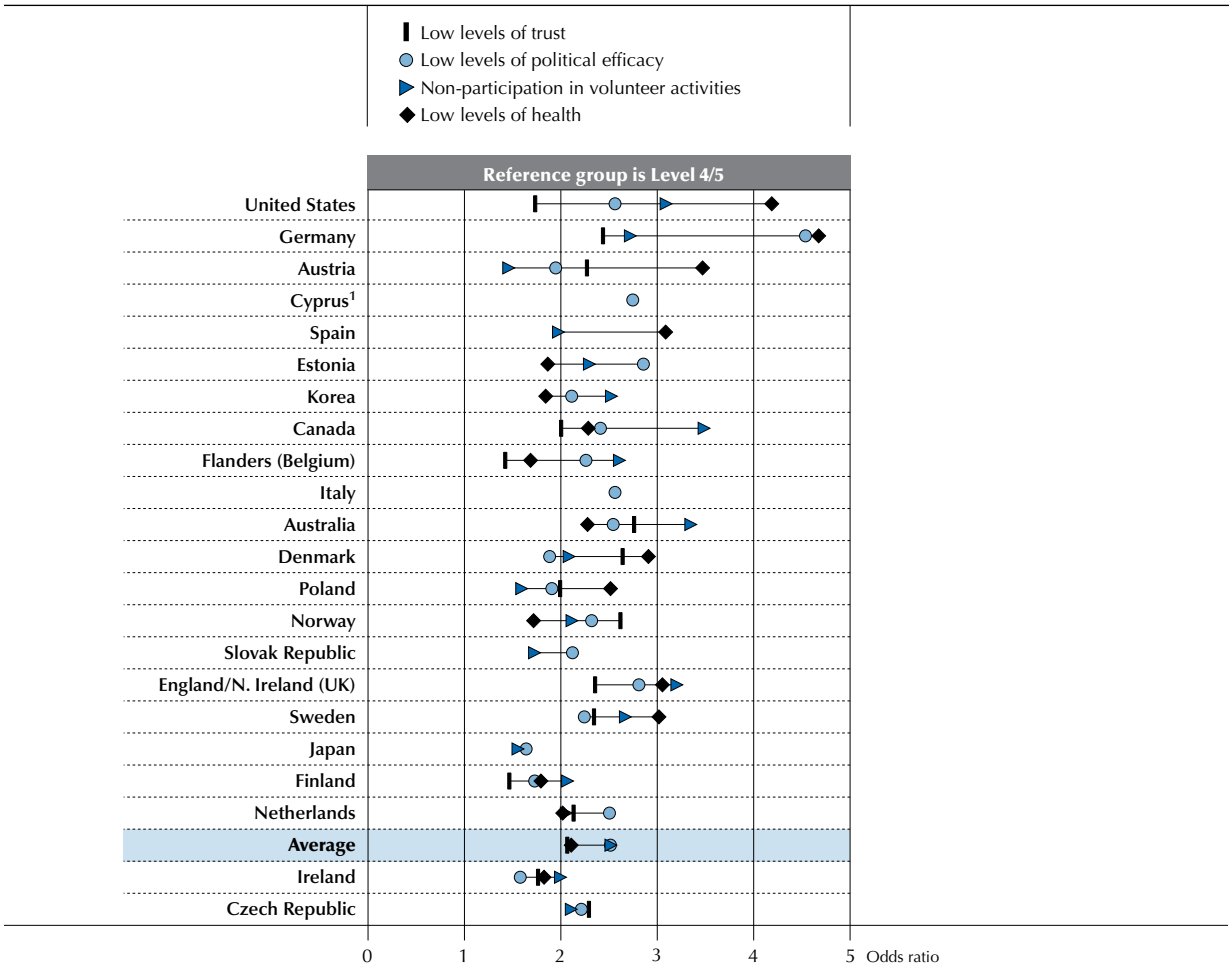
Job-specific skills matter in most countries, both for wage earners and self-employed workers. In most countries, computer use and intensity of use is associated with higher earnings. Greater use of skills, such as cognitive challenge (thinking and learning new things), and the degree of freedom in a job are all associated with greater earnings. In most countries, operating heavy machinery does not seem to be related to earnings.

Higher scores on socio-emotional skills scales are correlated with greater earnings, but no particular skill can be singled out as being important in all countries. Openness to experience is associated with greater earnings for wage earners in Bolivia and Laos and for self-employed workers in Sri Lanka and Vietnam. Better grit is associated with higher wages in Bolivia, Vietnam and the Yunnan province of China, but not at all for the earnings of self-employed workers. Conscientiousness is significantly associated with earnings for self-employed workers in Bolivia and the Yunnan province of China, but not with the earnings of wage earners.

■ Figure 6.9 (L) ■

Low literacy proficiency and negative social outcomes

Odds ratio showing the likelihood of adults scoring at or below Level 1 in literacy reporting low levels of trust and political efficacy, fair or poor health, or of not participating in volunteer activities (adjusted)



1. See notes at the end of this chapter.

Notes: Estimates that are not statistically different from the reference group are not shown. Odds ratios are adjusted for age, gender, educational attainment and immigrant and language background.

Countries are ranked in descending order of the difference between the maximum and the minimum odds ratios for the four social outcomes.

Source: Survey of Adult Skills (PIAAC) (2012), Table A6.9 (L).

StatLink http://dx.doi.org/10.1787/888932902588

The relationship between information-processing skills and indicators of social well-being is complex (see Box 6.2). Given the importance of text-based information found in newspapers, websites, books and magazines as a source of knowledge and information about the world, higher levels of proficiency in accessing, interpreting and analysing this information may be associated with a greater understanding of society and how its institutions operate, and of the beliefs, motivations and behaviour of others. Knowledge may also be associated with a greater sense of control over one's life. For example, the concept of health literacy (Rudd, Kirsch and Yamamoto, 2004) links health outcomes with the ability to understand and process information relating to health, from basic information on appropriate dosages found on medicine bottles to the contents of materials distributed as part of public-health campaigns.

Trust

Trust is the bedrock of democracy. Without trust in others and in the rule of law, all relationships, whether business, political or social, function less efficiently. The foundations of trust are established on three complementary levels: trust as an individual trait, trust as a relationship, and trust as a cultural rule (Sztompka, 1999). For an individual, certain

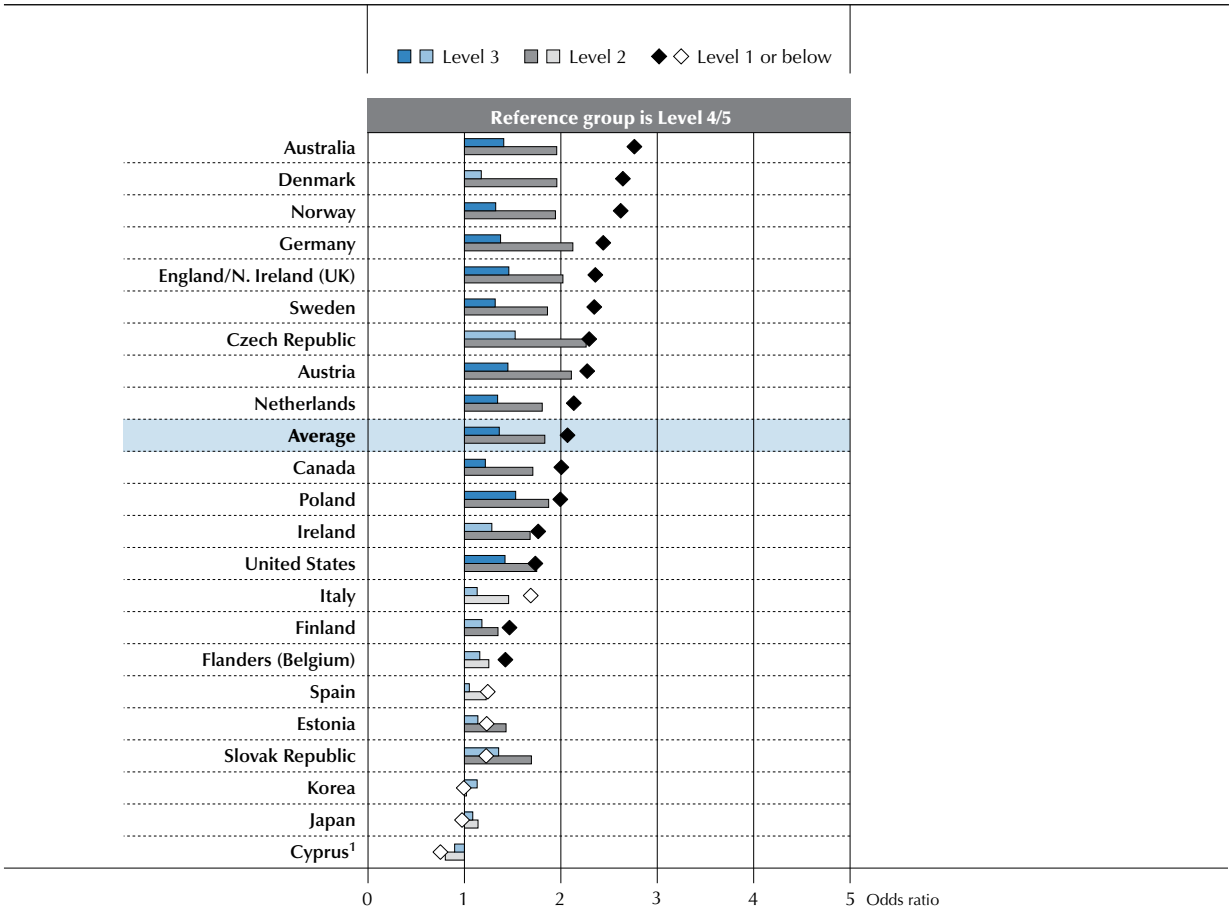
skills may lead to trust in others. For example, key information-processing skills may enable people to understand better the motives and aspirations of others and the conditions under which these may be shown. Skills may also enable people to forge trust by fostering lasting relationships with the aim of accomplishing mutually rewarding outcomes. Key information-processing skills might be particularly helpful for fostering understanding and mutually rewarding social action through text-based communication, such as through newspapers, pamphlets and blogs.

People might be more inclined to trust others who are more like them or share some similar values. Thus, proficiency in skills may have an indirect role in building trust in others through its effects on social inequality or on the geographical and social sorting of people according to the opportunities and outcomes related to key information-processing skills. In other words, a highly skilled person may be more likely to trust another highly skilled person, but not necessarily a low-skilled person, and vice-versa. When this happens, intra-community trust is high, but inter-community trust is low (Desjardins, 2008; OECD 2007). By extension, a high degree of inequality between low- and high-skilled people may breed distrust. These two scenarios are not mutually exclusive, and indicate different forms of social exclusion and poor social cohesion. However, without community-level data, it is not possible to distinguish more precisely between the causes of lack of trust.

■ Figure 6.10 (L) ■

Trust and literacy proficiency

Odds ratio showing the likelihood of adults reporting low levels of trust, by level of proficiency in literacy (adjusted)



1. See notes at the end of this chapter.

Notes: Statistically significant differences are marked in a darker tone. Odds ratios are adjusted for age, gender, educational attainment and immigrant and language background. The survey question asks respondents to what extent they agree or disagree with the following statement: there are only a few people you can trust completely.

Countries are ranked in descending order of the odds ratios of reporting low levels of trust for adults who scored at or below Level 1.

Source: Survey of Adult Skills (PIAAC) (2012), Table A6.10 (L).

StatLink http://dx.doi.org/10.1787/888932902607

Trust in others declines with proficiency levels (Figure 6.10 [L]). On average, adults who score at or below Level 1 in literacy have about two times the odds of reporting that they trust others very little compared to adults who score at Level 4 or 5. The patterns are similar in most countries, but the relationship is stronger in some countries than in others. The relationship between literacy and trust in others is particularly strong in Australia, Denmark and Norway, while it is weak in the Slovak Republic, Estonia, Spain, Korea and Japan. As mentioned above, different mechanisms may be at play in different countries, depending on the socio-cultural and socio-political context.

Volunteering

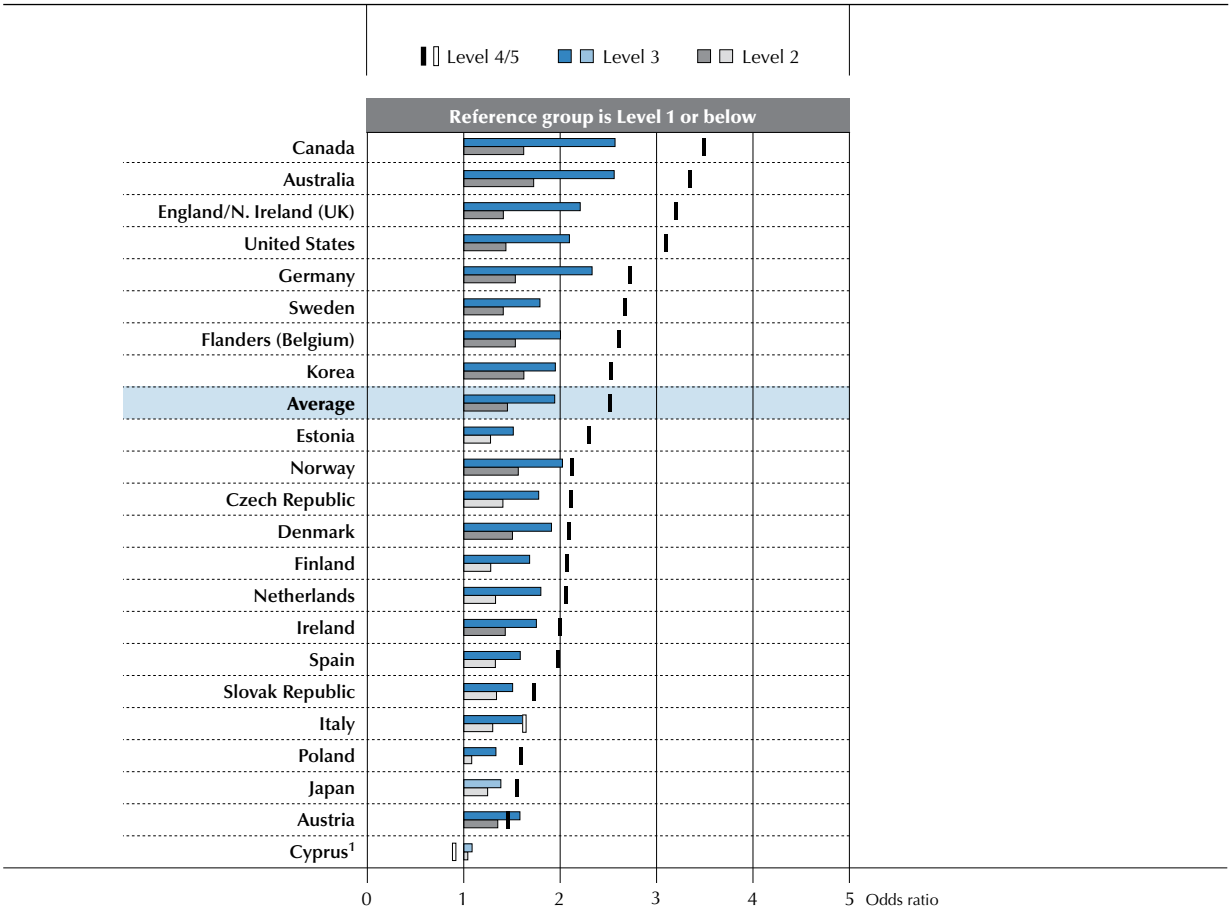
It is still unclear how key information-processing skills are linked to volunteering. One possibility is that such skills motivate people to volunteer by instilling a sense that they have something to offer. Another is that these kinds of skills may help people to be aware of others around them and of the complex processes involved in society (Pring, 1999), creating an interest in participating in the processes of social change.

The Survey of Adult Skills results reveal that adults with higher levels of skills are more likely to report that they engage in volunteer activities (Figure 6.11 [L]). On average across countries, adults who score at Level 4 or 5 have over two times the odds of reporting that they engage in volunteer activities compared to adults who score at or below Level 1.

■ Figure 6.11 (L) ■

Volunteering and literacy proficiency

Odds ratio showing the likelihood of adults participating in volunteer activities, by level of proficiency in literacy (adjusted)



1. See notes at the end of this chapter.

Notes: Statistically significant differences are marked in a darker tone. Odds ratios are adjusted for age, gender, educational attainment and immigrant and language background.

Countries are ranked in descending order of the odds ratios of volunteering for adults who scored at Level 4/5.

Source: Survey of Adult Skills (PIAAC) (2012), Table A6.11a (L).

StatLink http://dx.doi.org/10.1787/888932902626

The patterns are similar in most countries, but the relationship is much stronger in some than in others. The relationship between literacy and volunteering is strong in Canada, Australia, England/Northern Ireland (UK), the United States and Germany, while it is weakest in Japan and Austria.

Political efficacy

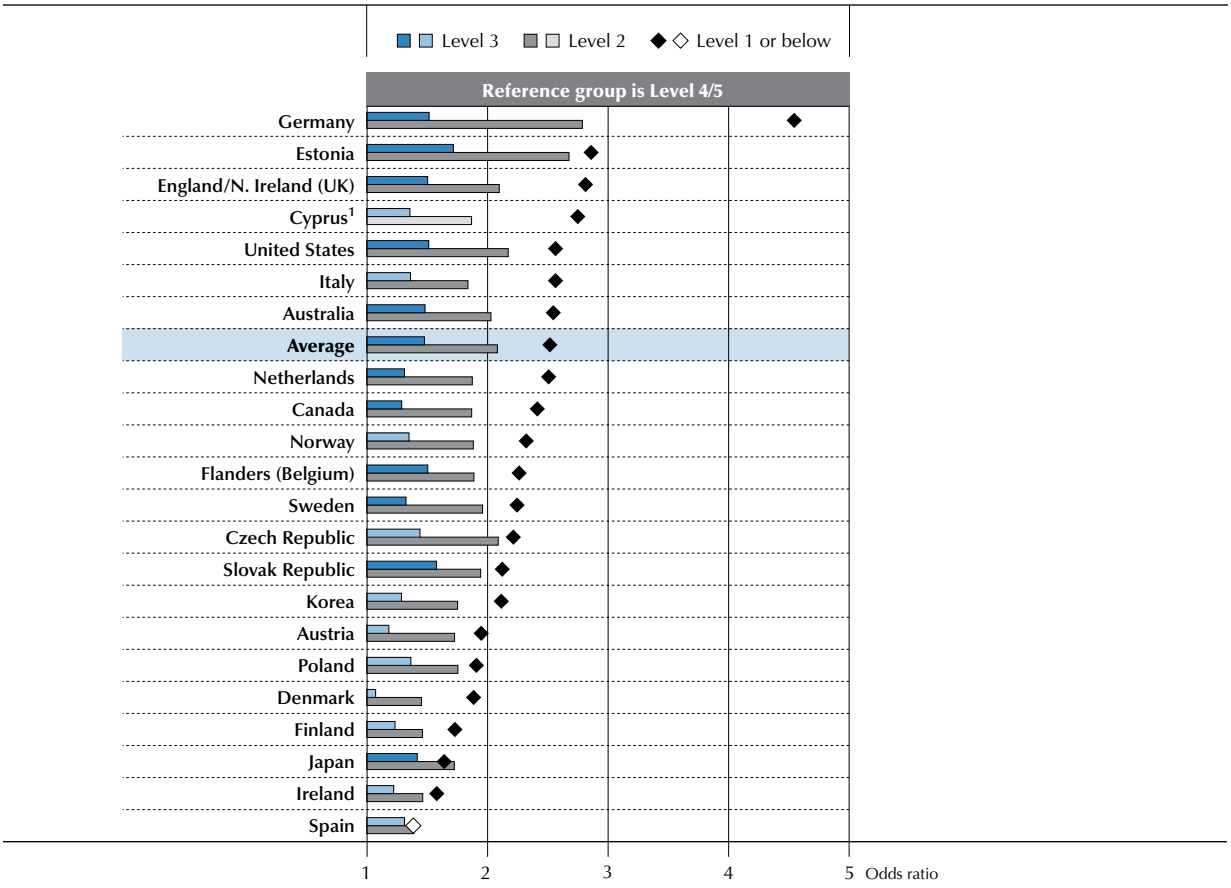
The link between key information-processing skills and political efficacy might be similar to that for volunteering. Certain skills may make people feel more powerful by instilling a sense of control and making people feel that they can make a difference. In addition, skills are needed to understand the political issues facing a country (Campbell, 2006). For example, literacy skills are essential for keeping up with current affairs through text-based sources of information. Information-processing skills, in general, also allow for a broader range of learning experiences through which individuals can develop a better understanding of the complexities of society.

Results reveal that adults with lower levels of skills are more likely to report feeling a low level of political efficacy (Figure 6.12 [L]). On average across countries, adults who score at or below Level 1 have more than two times the odds of reporting that they don't think that people like them have any say about what the government does compared to adults who score at Level 4 or 5. Again, the patterns are similar in most countries, but the relationship is much stronger in some than others. The relationship between literacy and political efficacy is strongest in Germany and Estonia, while it is weakest in Spain and Ireland.

■ Figure 6.12 (L) ■

Political efficacy and literacy proficiency

Odds ratio showing the likelihood of adults reporting low levels of political efficacy, by level of proficiency in literacy (adjusted)



1. See notes at the end of this chapter.

Notes: Statistically significant differences are marked in a darker tone. Odds ratios are adjusted for age, gender, educational attainment and immigrant and language background. Low levels of political efficacy are defined as having agreed with the statement that "People like me don't have any say about what the government does."

Countries are ranked in descending order of the odds ratios of having low levels of political efficacy for adults who scored at or below Level 1.

Source: Survey of Adult Skills (PIAAC) (2012), Table A6.12 (L).

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Health

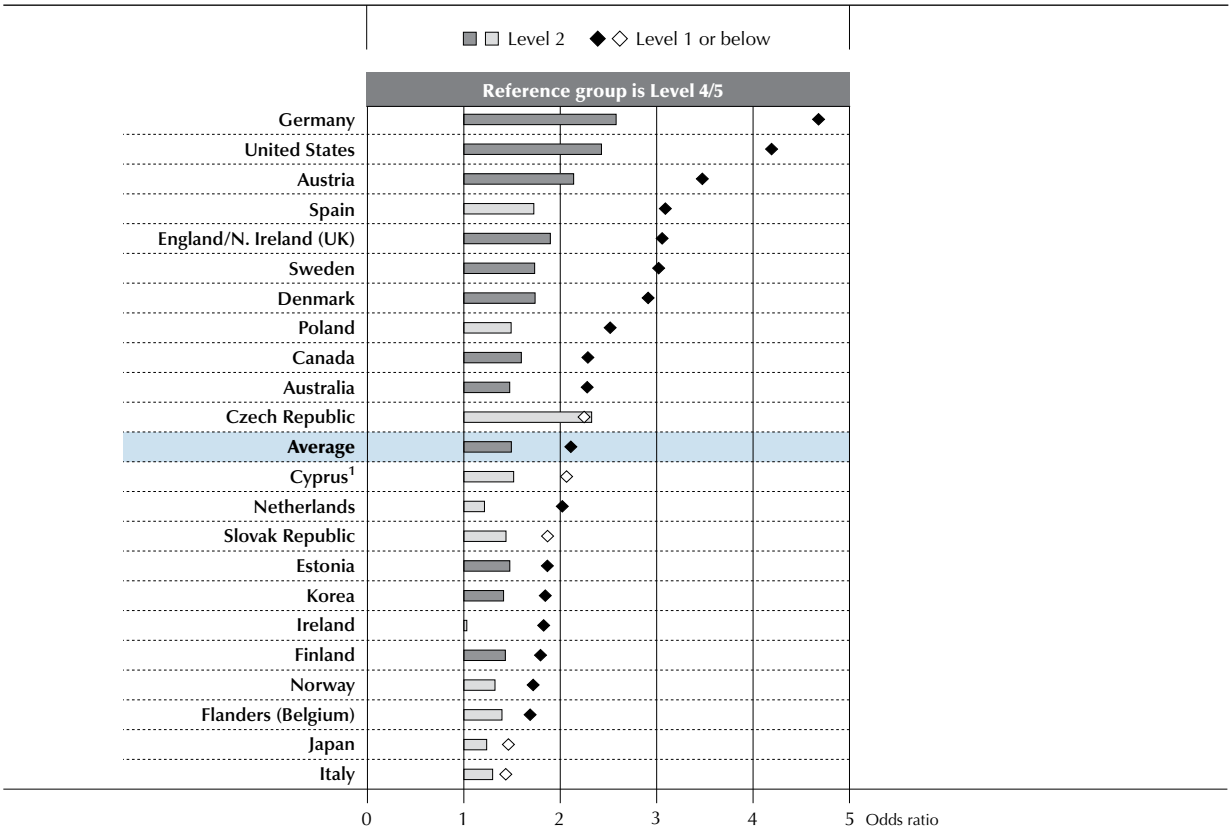
The health benefits of being skilled are potentially large (OECD 2010; 2007). There is a clear incentive for governments to contain healthcare costs and to understand how skills may play a role in achieving this end. People need information-processing skills to cope with modern healthcare systems, which are becoming increasingly complex and sophisticated (Bernhardt, Brownfield and Parker, 2005). In addition, individuals are increasingly being expected to assume more responsibility for managing their health and well-being, including by processing large quantities of health-related information.

Adults with lower levels of skills in literacy are more likely to report having a fair to poor health (Figure 6.13 [L]) than those with higher proficiency, even when account is taken of education attainment and other background characteristics. However, the relationship between health status and skills is likely to be complex. Individuals with better health may be more likely to engage in activities that maintain their proficiency in literacy than those with poor health. They may also be more likely to engage in activities that maintain their proficiency in literacy than those with poor health. They may also be more likely to be employed in occupations that minimise exposure to health risks (e.g. work accidents or toxic materials).

■ Figure 6.13 (L) ■

Reported health and literacy proficiency

Odds ratio showing the likelihood of adults reporting fair or poor health, by level of proficiency in literacy (adjusted)



1. See notes at the end of this chapter.

Notes: Statistically significant differences are marked in a darker tone. Level 3 is insignificant for all countries and is not shown. Odds ratios are adjusted for age, gender, educational attainment and immigrant and language background.

Countries are ranked in descending order of the odds ratios of having fair or poor health for adults who scored at or below Level 1.

Source: Survey of Adult Skills (PIAAC) (2012), Table A6.13 (L).

StatLink http://dx.doi.org/10.1787/888932902664

On average across countries, adults who score at or below Level 1 on the literacy scale have over two times the odds of reporting fair to poor health than those who score at Level 4 or 5. Adults scoring at Level 2 are also markedly more likely, on average, to report fair to poor health even when other factors are taken into account. Across countries, the chances of adults who score at Level 3 reporting poor health are not significantly different from those of their peers at Level 4 or 5,



suggesting a threshold near Level 3 or higher on the literacy scale. However, the relationship between literacy and self-reported health status is strongest in Germany, the United States and Austria, while it is weakest in Japan and Italy.

The role of education in developing skills and fostering positive outcomes

While the OECD has examined the relationship between education and a wide range of social outcomes, such as volunteering, voting, trust and health (see OECD, 2007; 2010), the relationship between education and skills and, in turn, between skills and social outcomes, has been largely left unexplored. The Survey of Adult Skills changes this by making data available for direct measures of skills and the social outcomes defined above.

Education and key information-processing skills are both found to have an independent relationship with a range of outcomes (Tables A6.10 [L] to A6.13 [L] in Annex A). The two, however, are not independent of one another, nor are they expected to be. Although key information-processing skills may be the result of learning in various contexts over a lifetime, education is thought to be particularly important in forming key information-processing skills, as discussed in Chapter 5. To the extent that the relationships between education and different social outcomes operate through key information-processing skills, it would be beneficial if education systems were more effective at imparting those skills.

Box 6.2. Alternative mechanisms linking skills and well-being

Education and a range of social outcomes are strongly related, but the pathways linking them are complex and poorly understood. At least three distinct mechanisms have been identified (for further details, see Desjardins, 2008; OECD, 2007; Campbell, 2006):

- The **absolute mechanism** suggests that education has a direct effect, by developing the resources and capabilities, including key information-processing skills, that can influence outcomes. This implies that what happens in school, including the content of curricula, pedagogical methods, and the ethos and organisation of a school, has an impact on the outcome in question. It presumes that formal education helps people to cultivate the knowledge, competencies, values, attitudes, beliefs and motivations that are relevant to outcomes.
- The **relative mechanism** involves a sorting effect, where social outcomes depend on an individual's level of education relative to others. In essence, education has an impact by influencing the relative position of individuals in society. This implies that education is relevant not for developing resources and capabilities, but for sorting individuals into a hierarchy of social relations, or social status.
- The **cumulative mechanism** suggests that education can have an absolute effect, but the outcome is conditional on the average level of education of the individuals' peers and/or surrounding groups. This means that certain effects of education are only likely to materialise among groups with similar levels of educational attainment, and that the prevalence of the outcome increases with the average level of attainment. This implies that there may be a cumulative pay-off to education, and that high levels of inequality in attainment may have adverse effects on particular outcomes, as is discussed above concerning trust.

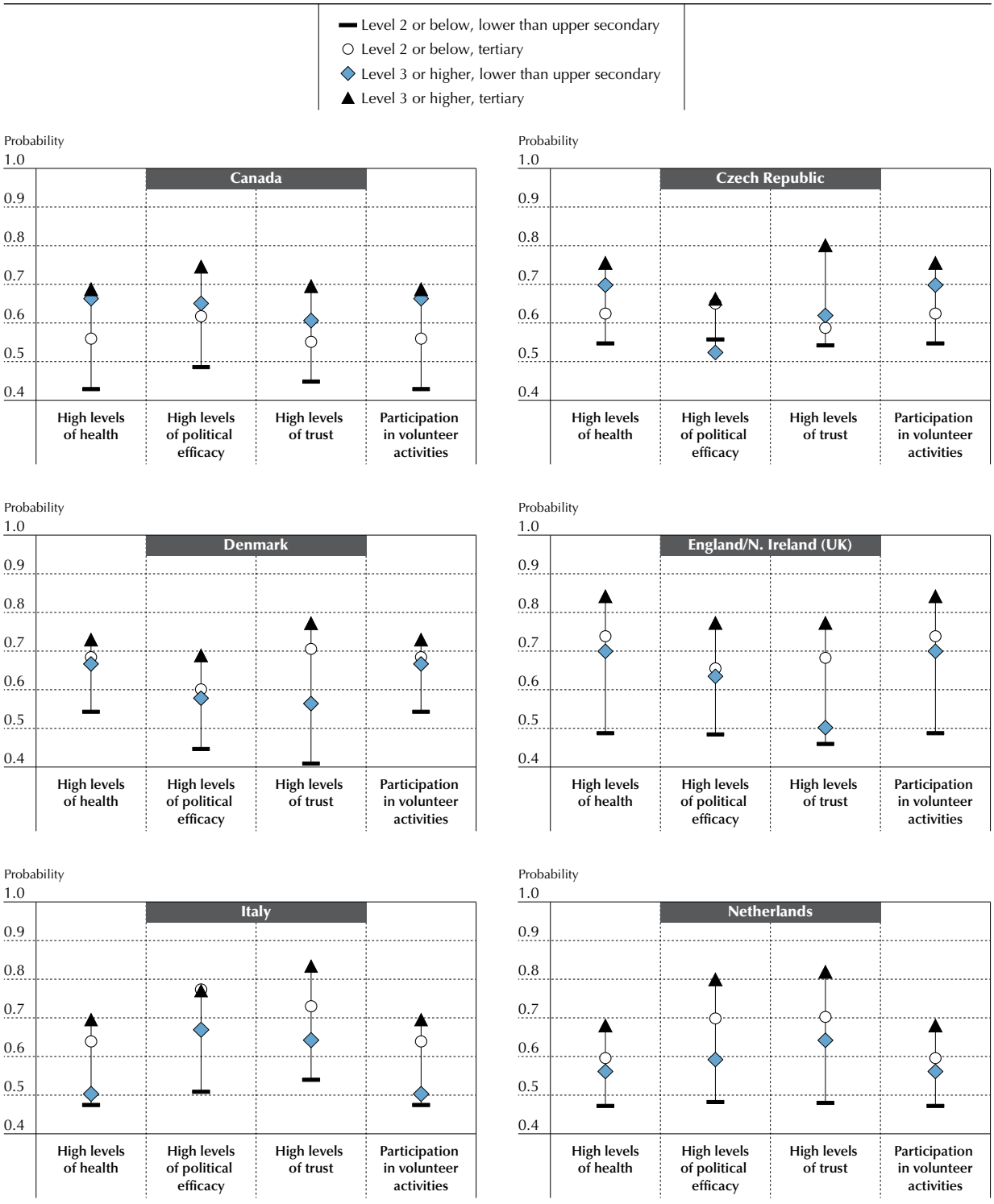
How do education and key information-processing skills interact in their relationship to social outcomes? Results of the survey were analysed comparing adults with different education and skills profiles and the probability that they would realise positive social outcomes (Figure 6.14a [L]). The four groups compared are defined as follows:

- Literacy proficiency at or below Level 2, educational attainment lower than upper secondary.
- Literacy proficiency at or below Level 2, educational attainment at tertiary level.
- Literacy proficiency at or higher than Level 3, educational attainment lower than upper secondary.
- Literacy proficiency at or higher than Level 3, educational attainment at tertiary level.

■ Figure 6.14a (L) ■

Educational attainment, literacy proficiency and positive social outcomes

Adjusted marginal probability showing the likelihood of adults reporting positive social outcomes, by level of education and proficiency in literacy



Notes: Marginal probabilities are adjusted for age, gender and immigrant and language background.
Only a random sample of countries are shown as an example. For full set of countries, consult Figures 6.14b (L) and 6.14c (L) in the web package.
Source: Survey of Adult Skills (PIAAC) (2012), Table A6.14 (L).
StatLink http://dx.doi.org/10.1787/888932902683

The analysis shows that, in nearly all countries, adults with low proficiency and low levels of education show the lowest probability of reporting positive outcomes for all the social outcomes considered. Conversely, adults with higher proficiency and high levels of education have the highest probability of reporting positive social outcomes. Another important finding is that, in some cases, being proficient in literacy at Level 3 or higher seems to be more important than having a high level of education. This depends on the specific outcome and country, however. For example, in Canada, literacy proficiency seems to be more important than education, in that adults with low levels of education but higher proficiency are more likely to report positive social outcomes than adult with high levels of education but lower proficiency. This is particularly true for the health and volunteering outcomes in Canada. The reverse is true in Italy, where educational attainment rather than literacy skills seems to be more important for the outcomes considered. The strength of the sorting effect of education in a given society may play a role in creating such different patterns.

Perhaps the most important finding is that adults with high levels of both proficiency and education are the most likely to report positive outcomes. Education that is not effective in imparting information-processing skills, therefore, is not likely to be as effective in fostering positive outcomes in society.

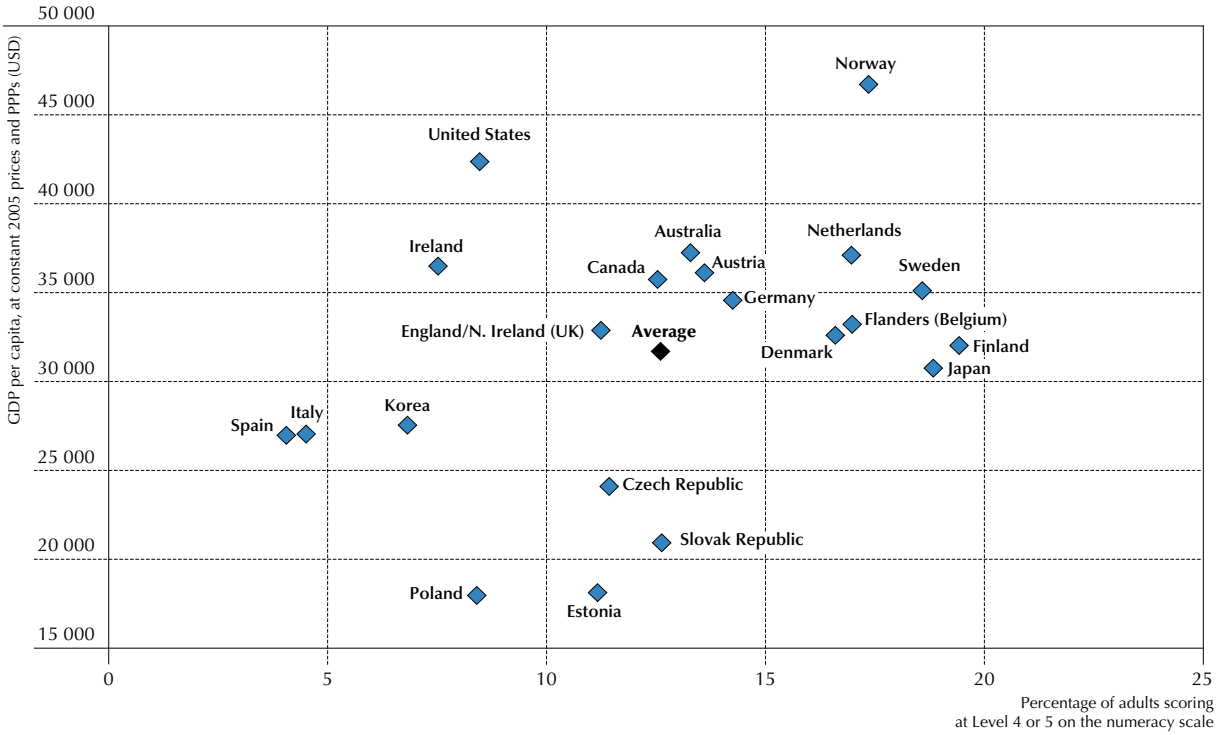
Country-level socio-economic outcomes and key information-processing skills

There is a weak positive relationship between the overall standard of living of the countries participating in the Survey of Adult Skills, as measured by GDP per capita, and the proportion of 16-65 year-olds scoring at Levels 4 or 5 in literacy and numeracy (Figure 6.15 [N]). The relative weakness of the relationship observed is likely to be related to the comparatively small variation in adults' proficiency in these skills across the countries and similarities in the countries' level of economic development, and to the relatively small number of countries that participated in the survey.

■ Figure 6.15 (N) ■

GDP per capita and numeracy

Relationship between GDP per capita and percentage of adults aged 16-65 at Level 4 or 5 in numeracy profiency



Source: OECD.Stat (National Accounts) and Survey of Adult Skills (PIAAC) (2012), Table A6.15 (N).

StatLink http://dx.doi.org/10.1787/888932902702

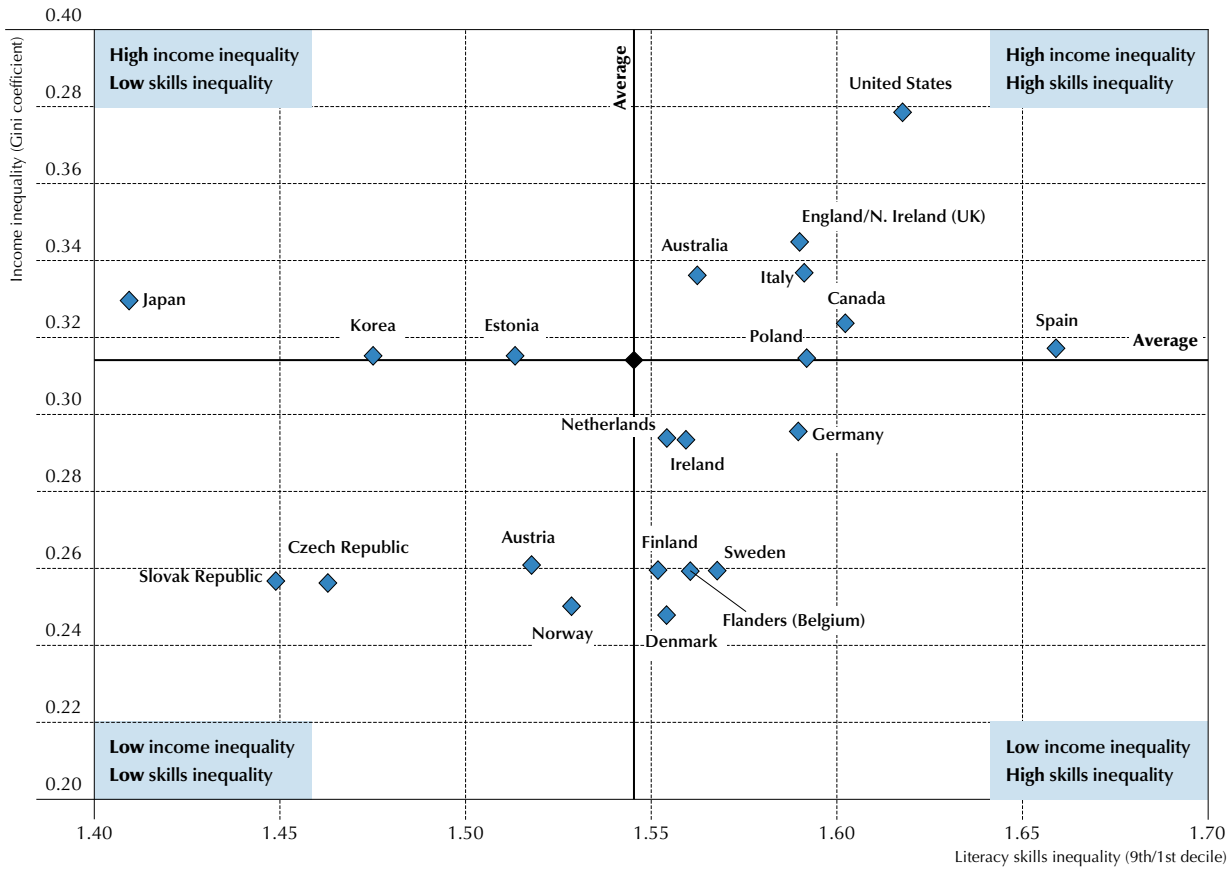
The relationship between income distribution and the distribution of information-processing skills should be further explored. On the one hand, greater income inequality may result in unequal investments in education and key information-processing skills. For example, research has suggested that the distribution of income can affect political, educational and economic institutions, which can have an indirect effect on economic growth (e.g. Benabou, 1996; Alesina and Rodrik, 1992). On the other hand, greater inequality in the distribution of key information-processing skills can also contribute to a more unequal distribution of both economic and social benefits. Other factors that have been linked to economic inequality include education policies, social and labour market policies, and the structure of the labour force (see Osberg, 2000; Devroye and Freeman, 2000; Green et al., 2006). Nevertheless, information-processing skills undoubtedly play a key role in both economic and social well-being, at least to the extent that human capital is an important factor in securing employment and generating income.

The relationship between the distribution of income and literacy skills varies across countries participating in the survey (Figure 6.16 [L]). There is a group of countries (including most of the English-speaking countries in the survey) that displays high levels of inequality in the distribution of both income and literacy skills. At the same time, countries such as Flanders (Belgium), Germany, Ireland and Sweden have low income equality and relatively high inequality in literacy skills. Interestingly, there are few countries in which income equality is relatively high and inequality in the distribution of literacy skills is low. This relationship merits further attention, since developing an inclusive approach to growth and prosperity is crucial for developing and maintaining good standards of living for all.

■ Figure 6.16 (L) ■

Inequality in the distribution of income and literacy skills

Relationship between the Gini coefficient of income and the 9th/1st decile of literacy proficiency



Source: Survey of Adult Skills (PIAAC) (2012), Table A6.16 (L) and OECD.Stat "Country statistical profiles".

StatLink http://dx.doi.org/10.1787/888932902721



SUMMARY

This chapter began with a question: To what extent does proficiency in literacy, numeracy and problem solving in technology-rich environments make a difference to the well-being of individuals and nations? The answer that emerges is clear: proficiency is positively linked to a number of important economic and other outcomes.

Proficiency in literacy, numeracy and problem solving in technology-rich environments is positively and independently associated with the probability of participating in the labour market and being employed, and with higher wages. On average, as an individual's proficiency increases, his chances of being in the labour force and being employed increase, as do his wages. Proficiency in literacy, numeracy and problem solving in technology-rich environments reflects aspects of individuals' human capital that are identified and valued in the labour market separately from other aspects related to education or personal attributes and characteristics.

Proficiency in these information-processing skills is also positively associated with other important aspects of well-being, notably health, beliefs about one's impact on the political process, trust in others, and participation in volunteer or associative activities. There is a clear interaction between proficiency and educational attainment in relation to these outcomes. In nearly all countries, adults with low proficiency and low levels of education show the lowest probability of reporting positively on all the social outcomes considered. Conversely, adults with higher proficiency and high levels of education have the highest probability of reporting positive social outcomes.

Overall, the results suggest that investments in improving adults' proficiency in literacy, numeracy and problem solving in technology-rich environments may have significant benefits. Independent of policies designed to increase participation in education and training, improvements in the teaching of literacy and numeracy in schools and programmes for adults with poor literacy and numeracy skills and limited familiarity with ICTs may result in considerable economic and social returns for individuals and for society a whole.

Notes

1. This is line with findings from the British Birth Cohort Studies (Bynner, 2010), American Longitudinal Study of Adult Learning (Reder, 2010), Canadian Youth in Transition Survey (HRSDC, 2011).

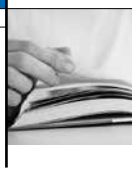
2. Although, literacy, numeracy and problem-solving competencies – the skill domains that are explicitly tested in the PIAAC assessment exercise – are important elements of people's productive capacity, it should be kept in mind that they only imperfectly proxy workers' overall set of skills.

3. In some countries, particularly Japan and Korea, results might be driven by the relatively few cases of unemployed individuals in the survey.

4. The measure of hourly wages includes bonuses.

5. The set of control variables includes years of education, gender, age, marital status and immigrant background. In the wage analysis, the control set is augmented with tenure.

6. The literature on the identification and estimation of the returns on schooling may provide further guidance about the correct interpretation of the results in this section (Heckman et al., 2006).



7. To interpret the magnitude of these effects, consider that literacy proficiency levels normally span 50 points and that in the pooled sample of all survey respondents in all countries one additional year of schooling is associated with an increase of approximately 7 score points on the literacy scale.

8. Once again, this effect is computed comparing individuals who are equally proficient in literacy; otherwise, if the comparison were carried out across proficiency levels, the result would be 56%, confirming the idea that the two effects overlap only partially.

9. More precisely, about two-thirds of the estimated effect on participation is due to proficiency increasing the likelihood of employment.

10. The results for Japan are somewhat surprising and might be due to the relatively few cases of unemployed individuals in the survey (68 cases).

11. The set of control variables used to produce the estimates presented in this section is more limited than those commonly used in the literature. The reason for this is twofold. First, the results are meant to be as comparable as possible with those on participation and employment (Figures 6.5 and 6.6). Second, the estimated effects are meant to capture a broad notion of the association between wages and proficiency or education. For example, since the control set does not include occupation or industry, some of the effects might be due to the fact that more educated or more proficient individuals are employed in higher-paying sectors or occupations. However, such individuals might obtain these jobs precisely because they are more educated or more proficient, so it is unclear whether it would be more interesting to broaden the control set.

12. The wage distribution is much more compressed – i.e. the differences in wages among individuals are limited – in Nordic countries than in the United States.

13. This consists in adding the skills-use indicators (see Chapter 4) to the control set of the linear regressions. For brevity's sake, results are not reported.

14. For brevity's sake, these results are not reported.

Notes regarding Cyprus

Note by Turkey: The information in this document with reference to "Cyprus" relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Turkey recognises the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of the United Nations, Turkey shall preserve its position concerning the "Cyprus issue".

Note by all the European Union Member States of the OECD and the European Union: The Republic of Cyprus is recognised by all members of the United Nations with the exception of Turkey. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus.

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Annex A

OECD SKILLS OUTLOOK TABLES OF RESULTS

All tables in Annex A are available on line

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Notes regarding Cyprus

Note by Turkey: The information in this document with reference to "Cyprus" relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Turkey recognises the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of the United Nations, Turkey shall preserve its position concerning the "Cyprus issue".

Note by all the European Union Member States of the OECD and the European Union: The Republic of Cyprus is recognised by all members of the United Nations with the exception of Turkey. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus.

A note regarding Israel

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

A note regarding the Russian Federation

The data from the Russian Federation are *preliminary* and may be subject to change. Readers should note that the sample for the Russian Federation does not include the population of the Moscow municipal area. The data published, therefore, do not represent the entire resident population aged 16-65 in Russia but rather the population of Russia *excluding* the population residing in the Moscow municipal area.

More detailed information regarding the data from the Russian Federation as well as that of other countries can be found in the *Technical Report of the Survey of Adult Skills* (OECD, 2013, forthcoming).

[Part 1/1]

Table A1.1 Percentage of households with access to computers and the Internet at home, 2010 or latest available year

	Access to the Internet	Access to computer
Australia[1]	72.0	78.0
Austria	72.9	76.2
Belgium	72.7	76.7
Canada[2]	77.8	81.7
Chile[2]	30.0	43.9
Czech Republic	60.5	64.1
Denmark	86.1	88.0
Estonia	67.8	69.2
Finland	80.5	82.0
France	73.6	76.4
Germany	82.5	85.7
Greece	46.4	53.4
Hungary	60.5	66.4
Iceland	92.0	93.1
Ireland	71.7	76.5
Israel[2]	66.3	74.4
Italy	59.0	64.8
Japan[2]	67.1	83.4
Korea	96.8	81.8
Luxembourg	90.3	90.2
Mexico	22.3	29.9
Netherlands	90.9	92.0
New Zealand[2]	75.0	80.0
Norway	89.8	90.9
Poland	63.4	69.0
Portugal	53.7	59.5
Slovak Republic	67.5	72.2
Slovenia	68.1	70.5
Spain	59.1	68.7
Sweden	88.3	89.5
Switzerland[1]	77.0	81.4
Turkey	41.6	44.2
United Kingdom	79.6	82.6
United States	71.1	77.0
Average	69.8	73.9

1. Year of reference 2008.
2. Year of reference 2009.

Notes: Generally, data from the EU Community Survey on Household use of ICT, which covers EU countries plus Iceland, Norway and Turkey, relate to the first quarter of the reference year. For the Czech Republic, data relate to the fourth quarter of the reference year. For Australia: data were based on a multi-staged area sample of private and non-private dwellings, and covers the civilian population only. Households in remote and sparsely settled parts of Australia are excluded from the survey. For Japan: PCs only. For Korea: from 2006 onwards, data include portable and handheld PCs. For New Zealand: the information is based on households in private occupied dwellings; visitor-only dwellings, such as hotels, are excluded.

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

Source: OECD, ICT Database and Eurostat, Community Survey on ICT usage in households and by individuals, November 2011.

StatLink http://dx.doi.org/10.1787/888932896926

[Part 1/1]

Table A1.2 Percentage of individuals and businesses using the Internet to interact with public authorities, 2005 and 2010

	Individuals		Businesses	
	2005	2010	2005	2010
Australia	15.0	m	m	m
Austria	29.0	39.0	75.0	75.0
Belgium	18.0	32.0	61.0	81.0
Canada	m	45.5	m	m
Czech Republic	5.0	17.0	79.0	89.0
Denmark	43.0	72.0	87.0	92.0
Estonia	31.0	48.0	70.0	80.0
Finland	47.0	58.0	91.0	96.0
France	26.0	37.0	66.0	78.0
Germany	32.0	37.0	44.0	68.0
Greece	7.0	13.0	81.0	77.0
Hungary	18.0	28.0	67.0	71.0
Iceland	55.0	75.0	95.0	90.0
Ireland	18.0	67.0	76.0	87.0
Italy	14.0	17.0	73.0	84.0
Japan	18.0	m	m	m
Korea	21.4	60.0	42.0	82.0
Luxembourg	46.0	55.0	83.0	89.0
Mexico	38.0	54.0	76.0	m
Netherlands	46.0	59.0	57.0	95.0
New Zealand	32.4	m	m	m
Norway	52.0	68.0	84.0	79.0
Poland	13.0	21.0	64.0	89.0
Portugal	14.0	23.0	58.0	75.0
Slovak Republic	27.0	35.0	57.0	88.0
Slovenia	19.0	40.0	72.0	88.0
Spain	25.0	32.0	55.0	67.0
Sweden	52.0	62.0	80.0	90.0
Switzerland	24.4	m	53.0	m
Turkey	6.0	9.0	57.0	66.0
United Kingdom	24.0	40.0	39.0	67.0
United States	23.0	m	m	m
Average	28.0	42.0	69.0	82.0

Notes: For Australia, Japan and the United States, 2005 data refer to 2003. For Switzerland, 2005 data refer to 2004. For Denmark, France, Germany, New Zealand and Spain, 2005 data refer to 2006. For Canada and Mexico, 2010 data refer to 2007. For Iceland, 2010 data refer to 2009.

In the columns that refer to citizens, 2005 data are missing for Canada and 2010 data are missing for Australia, Japan, New Zealand, Switzerland and the United States. In the columns that refer to businesses, 2005 data are missing for Australia, Canada, Japan, New Zealand and the United States and 2010 data are missing for Australia, Canada, Japan, Mexico, New Zealand, Switzerland and the United States.

Source: Eurostat Information Society Database, OECD ICT Database and Korean Survey by Ministry of Public Administration and Security on ICT usage.

StatLink http://dx.doi.org/10.1787/888932896945

[Part 1/1]

Trends in employment in selected industrial sectors relative to total employment, 1980-2007

Table A1.3 *Percentage change from 1980, OECD average*

	Total manufacturing	Total services	Community, social and personal services	Finance, insurance, real estate and business services	Communication services	High-technology manufactures	Medium-high technology manufactures	Medium-low technology manufactures	Low-technology manufactures
1980	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1981	-2.33	1.77	2.43	3.78	2.55	1.30	-6.19	-4.63	-2.68
1982	-4.80	3.70	5.08	6.89	4.18	-0.14	-8.19	-7.07	-5.14
1983	-6.53	5.23	7.21	10.63	4.95	0.80	-9.82	-9.49	-6.29
1984	-7.67	6.39	8.29	14.99	4.91	3.72	-10.08	-10.70	-7.71
1985	-8.70	7.58	8.00	19.00	4.78	6.40	-9.65	-12.07	-9.22
1986	-9.42	8.69	8.77	23.02	4.50	9.35	-10.02	-13.28	-9.85
1987	-10.36	9.69	9.67	27.40	3.49	11.11	-9.86	-14.61	-10.89
1988	-11.02	10.36	10.13	30.91	3.55	12.12	-10.03	-15.05	-11.87
1989	-11.65	11.21	10.48	34.90	3.16	9.80	-9.65	-14.52	-13.15
1990	-13.06	12.41	11.79	38.54	2.24	7.89	-10.12	-15.21	-15.35
1991	-14.31	13.01	12.19	43.12	0.74	13.94	-12.79	-17.02	-19.47
1992	-16.99	14.73	14.73	45.28	-0.04	10.08	-14.98	-19.68	-21.71
1993	-19.28	16.50	17.05	47.72	0.57	8.19	-18.01	-22.27	-23.40
1994	-20.31	17.42	17.92	51.83	0.70	8.02	-19.25	-22.63	-24.31
1995	-15.71	12.26	12.30	39.66	-2.83	2.61	-20.53	-21.28	-16.84
1996	-16.58	13.13	12.86	43.31	-2.98	3.65	-20.81	-21.61	-18.40
1997	-17.41	13.68	12.70	47.64	-4.08	5.11	-20.89	-22.23	-19.48
1998	-18.69	14.81	12.58	53.60	-4.59	4.58	-22.04	-23.10	-21.55
1999	-20.51	16.09	13.03	59.23	-4.31	5.46	-23.40	-23.73	-24.06
2000	-21.33	17.09	13.01	66.23	-1.83	7.02	-24.11	-23.84	-25.50
2001	-22.48	18.08	13.91	69.96	-3.42	6.18	-24.69	-24.53	-27.28
2002	-24.63	19.33	15.96	72.89	-6.48	-0.09	-26.38	-26.01	-29.13
2003	-26.14	20.27	17.96	73.56	-10.12	-2.88	-27.75	-27.13	-30.82
2004	-27.18	20.97	18.71	76.63	-12.03	-3.98	-29.22	-28.29	-32.70
2005	-28.69	21.69	18.71	80.85	-13.19	-4.67	-30.00	-28.99	-35.34
2006	-30.09	22.36	18.94	85.28	-15.09	-4.55	-31.19	-29.65	-37.83
2007	-31.38	23.32	18.64	93.77	-15.76	-7.42	-31.05	-31.49	-41.47

Notes: Only the OECD countries available in the 1980 STAN Database are included for the period 1980-90. Similarly, only the OECD countries available in the 1991 STAN Database are included for the period 1991-94, and only the OECD countries available in the 1995 STAN Database are included for the period 1995-2007.

Source: OECD (2010), "STAN Indicators 2009", STAN: OECD Structural Analysis Statistics (Database). *http://dx. doi: 10.1787/data-00031-en* (Accessed 20 March 2012).

StatLink http://dx.doi.org/10.1787/888932896964

[Part 1/1]

Share of employment in occupational groups, 1998-2009, and change in share since 1998

Table A1.4 *Occupational groups defined by workers' average level of education*

	Employment share (in %)			Percentage change relative to 1998		
	Occupations with high-educated workers	Occupations with medium-educated workers	Occupations with low-educated workers	Occupations with high-educated workers	Occupations with medium-educated workers	Occupations with low-educated workers
1998	31.95	52.14	15.91	0.00	0.00	0.00
1999	32.71	51.94	15.35	2.39	-0.38	-3.54
2000	32.98	51.71	15.31	3.23	-0.82	-3.79
2001	33.27	51.19	15.54	4.15	-1.82	-2.36
2002	33.51	51.12	15.37	4.90	-1.96	-3.41
2003	34.15	50.86	15.00	6.89	-2.46	-5.78
2004	35.69	49.64	14.67	11.72	-4.79	-7.84
2005	36.91	48.65	14.43	15.55	-6.69	-9.30
2006	37.13	48.55	14.32	16.24	-6.89	-10.02
2007	37.41	48.22	14.37	17.11	-7.51	-9.74
2008	38.17	47.87	13.96	19.47	-8.18	-12.28
2009	38.01	48.01	13.98	18.97	-7.92	-12.13

Notes: Only the 24 OECD countries available in the 1998 LFS Database are included in the analysis. High level of education refers to tertiary level or more than 15 years of schooling; medium level of education refers to no tertiary but at least upper secondary education or around 12 years of schooling; low level of education refers to lower than upper secondary education or 11 years of schooling. Occupations with high-educated workers: legislators and senior officials; corporate managers; physical, mathematical and engineering science professionals; life science and health professionals; teaching professionals; other professionals; physical and engineering science associate professionals; life science and health associate professionals; teaching associate professionals; and other associate professionals. Occupations with medium-educated workers: managers of small enterprises; office clerks; customer services clerks; personal and protective services workers; models, salespersons and demonstrators; extraction and building trades workers; metal, machinery and related trades workers; precision, handicraft, craft printing and related trades workers; stationary plant and related operators; and drivers and mobile plant operators. Occupations with low-educated workers: other craft and related trades workers; machine operators and assemblers; sales and services elementary occupations; and labourers in mining, construction, manufacturing and transport.

Source: Eurostat, LFS Database, 1998-2009.

StatLink http://dx.doi.org/10.1787/888932896983

[Part 1/1]

Table A1.5 Trends in routine and non-routine tasks in occupations, United States, 1960 to 2009

	Mean task input in percentiles of 1960 distribution				
	Routine manual	Non-routine manual	Routine cognitive	Non-routine analytic	Non-routine interpersonal
1960	50.0	50.0	50.0	50.0	50.0
1970	55.3	47.0	53.2	51.5	49.9
1980	54.9	45.2	51.2	57.5	57.9
1990	52.6	43.0	46.9	60.8	62.4
2000	47.6	42.5	42.6	64.2	66.4
2006	46.0	43.8	41.0	63.3	66.1
2009	45.2	43.1	39.5	63.9	66.7

Source: Autor, D.H. and B.M. Price (2013), "The Changing Task Composition of the US Labor Market: An Update of Autor, Levy, and Murnane (2003)", MIT Mimeograph, June.

StatLink http://dx.doi.org/10.1787/888932897002

[Part 1/1]

Table A1.6 Share of employment in occupational groups, 1998-2009, and change in share since 1998

Occupational groups defined by workers' proficiency in literacy and numeracy

	Employment share (in %)				Percentage change relative to 1998			
	Occupations with lowest average scores	Occupations with next to lowest average scores	Occupations with next to highest average scores	Occupations with highest average scores	Occupations with lowest average scores	Occupations with next to lowest average scores	Occupations with next to highest average scores	Occupations with highest average scores
1998	29.34	27.46	24.65	17.12	0.00	0.00	0.00	0.00
1999	29.23	26.97	24.49	17.81	-0.40	-1.77	-0.62	4.02
2000	29.62	26.84	24.02	17.90	0.95	-2.24	-2.55	4.53
2001	29.60	26.95	23.77	18.16	0.88	-1.87	-3.56	6.04
2002	29.83	26.53	23.86	18.25	1.66	-3.37	-3.17	6.57
2003	29.93	25.91	24.11	18.59	1.99	-5.64	-2.17	8.55
2004	29.71	25.32	23.97	19.42	1.26	-7.78	-2.76	13.39
2005	28.90	24.29	25.18	20.06	-1.50	-11.54	2.18	17.17
2006	29.28	24.01	24.98	20.21	-0.21	-12.56	1.34	18.02
2007	29.70	23.69	24.58	20.53	1.22	-13.74	-0.27	19.89
2008	29.52	23.17	24.71	21.03	0.61	-15.60	0.26	22.84
2009	29.69	23.35	24.41	20.97	1.17	-14.96	-0.96	22.49

Notes: The Survey of Adult Skills (PIAAC) is used to identify occupations associated with high and low literacy and numeracy scores, and the time series data available from the Labour Force Survey (LFS) Database are used to track changes in those occupations over time. See Chapter 2 of this volume and *The Survey of Adult Skills: Reader's Companion* for an extended discussion describing the literacy and numeracy scales. Only the 24 OECD countries available in the 1998 LFS Database are included in the analysis. Highest average scores are in or near upper half of Level 3 for literacy and numeracy; next to highest average scores are in or near lower half of Level 3 for literacy and numeracy; next to lowest average scores are in or near upper half of Level 2 for literacy and numeracy; lowest average scores are in or near lower half of Level 2 for literacy and numeracy.

Source: Eurostat, LFS Database 1998-2009; Survey of Adults Skills (PIAAC) (2012).

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[Part 1/1]

Percentage of workers who reported structural changes in their workplace

Structural changes defined as restructuring or reorganisation of the workplace in the previous three years that affected the work environment

Table A1.7a

OECD	High-skilled clerical	Low-skilled clerical	High-skilled manual	Low-skilled manual	Total
Austria	6.12	16.49	4.35	5.11	32.30
Belgium	7.73	15.27	2.74	5.07	30.60
Czech Republic	5.97	17.29	4.90	7.31	35.50
Denmark	15.14	22.57	3.65	7.05	48.20
Estonia	13.42	15.05	5.09	7.75	41.50
Finland	11.74	27.51	5.39	8.19	52.20
France	8.72	18.05	3.36	4.44	34.80
Germany	5.24	17.56	3.57	4.61	31.10
Greece	8.49	10.11	3.07	3.07	25.40
Hungary	7.19	10.76	3.57	5.90	27.80
Ireland	11.73	15.64	3.66	5.31	37.60
Italy	6.90	11.58	3.13	2.50	23.50
Korea	13.76	14.97	5.11	3.95	37.60
Luxembourg	13.72	11.89	3.50	4.69	34.00
Netherlands	14.89	16.88	1.97	3.66	37.10
Norway	11.82	22.29	3.17	3.99	41.00
Poland	4.67	7.05	3.34	2.95	18.40
Portugal	7.68	12.73	4.26	6.05	30.30
Slovak Republic	8.68	14.37	3.09	7.37	32.70
Slovenia	6.71	13.18	4.09	4.97	28.90
Spain	4.45	11.96	2.72	4.95	24.90
Sweden	25.25	19.78	2.60	3.83	50.20
Turkey	8.13	9.47	2.37	3.15	20.80
United Kingdom	13.41	19.02	2.42	4.57	39.80
Average	10.06	15.48	3.55	5.02	34.01
Partners					
Albania	5.73	6.67	5.22	4.00	22.00
Bulgaria	6.71	8.82	1.95	5.30	22.30
Croatia	7.27	16.96	3.31	5.23	32.00
Cyprus[1]	11.93	17.18	6.11	4.27	38.70
Latvia	13.32	13.68	4.16	6.25	37.00
Lithuania	10.23	8.19	5.61	6.21	30.60
Macedonia	5.82	8.54	3.19	4.43	20.90
Malta	13.53	17.92	4.61	7.18	43.60
Montenegro	6.66	11.36	4.24	4.42	26.50
Romania	5.45	8.48	6.70	7.86	28.80

1. See notes on page 250.

Source: European Working Conditions Survey, 2010.

StatLink http://dx.doi.org/10.1787/888932897040

[Part 1/1]

Percentage of workers who reported new ways of working in their workplace

Introduction of new processes or technologies in the workplace in the previous three years that affected the work environment

Table A1.7b

OECD	High-skilled clerical	Low-skilled clerical	High-skilled manual	Low-skilled manual	Total
Austria	9.11	21.94	6.62	6.07	44.30
Belgium	12.02	20.38	4.12	6.18	43.00
Czech Republic	6.97	17.49	8.25	6.38	39.10
Denmark	16.96	24.25	4.78	7.31	52.90
Estonia	14.32	16.23	5.34	7.12	43.40
Finland	13.63	29.80	4.37	8.68	56.10
France	9.54	17.48	4.45	3.98	36.20
Germany	8.25	23.53	6.46	5.19	44.40
Greece	9.79	11.10	5.20	3.86	30.50
Hungary	9.35	12.09	5.89	7.41	35.30
Ireland	15.01	18.30	3.87	5.21	44.60
Italy	9.16	16.74	4.68	3.48	33.40
Korea	15.39	16.32	6.94	5.05	43.60
Luxembourg	20.89	15.93	5.20	5.96	48.10
Netherlands	20.01	18.66	3.25	4.59	46.00
Norway	15.02	26.38	3.73	3.59	48.10
Poland	6.76	9.10	8.38	4.30	29.30
Portugal	10.24	16.50	6.31	7.03	39.70
Slovak Republic	11.52	16.68	6.00	8.84	42.70
Slovenia	9.59	15.73	6.00	6.86	38.40
Spain	6.75	19.03	4.93	5.82	37.60
Sweden	29.52	20.15	3.69	5.41	57.30
Turkey	7.99	9.28	3.55	3.95	22.90
United Kingdom	17.06	22.64	3.09	5.22	48.70
Average	12.70	18.15	5.21	5.73	41.90
Partners					
Albania	7.05	6.17	8.93	4.24	26.60
Bulgaria	6.63	8.16	1.83	4.91	21.10
Croatia	9.00	20.27	4.95	7.03	40.50
Cyprus[1]	15.59	18.79	7.74	5.09	45.70
Latvia	15.85	15.35	4.88	6.41	41.90
Lithuania	14.88	11.22	7.86	7.26	42.10
Macedonia	7.51	9.85	5.23	5.41	26.50
Malta	15.41	22.71	6.08	7.96	52.70
Montenegro	7.49	13.24	5.96	4.37	30.80
Romania	6.68	8.48	5.66	5.82	26.60

1. See notes on page 250.

Source: European Working Conditions Survey, 2010.

StatLink http://dx.doi.org/10.1787/888932897059

[Part 1/1]

Table A2.1 **Percentage of adults scoring at each proficiency level in literacy**

OECD	Below Level 1		Level 1		Level 2		Level 3		Level 4		Level 5		Missing	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
National entities														
Australia	3.1	(0.3)	9.4	(0.5)	29.2	(0.7)	39.4	(0.9)	15.7	(0.7)	1.3	(0.2)	1.9	(0.2)
Austria	2.5	(0.3)	12.8	(0.7)	37.2	(0.9)	37.3	(0.9)	8.2	(0.5)	0.3	(0.1)	1.8	(0.2)
Canada	3.8	(0.2)	12.6	(0.5)	31.7	(0.7)	37.3	(0.7)	12.8	(0.5)	0.9	(0.1)	0.9	(0.1)
Czech Republic	1.5	(0.3)	10.3	(0.7)	37.5	(1.6)	41.4	(1.4)	8.3	(0.8)	0.4	(0.2)	0.6	(0.2)
Denmark	3.8	(0.3)	11.9	(0.6)	34.0	(0.9)	39.9	(0.8)	9.6	(0.5)	0.4	(0.1)	0.4	(0.1)
Estonia	2.0	(0.2)	11.0	(0.5)	34.3	(0.7)	40.6	(0.8)	11.0	(0.5)	0.8	(0.2)	0.4	(0.1)
Finland	2.7	(0.2)	8.0	(0.5)	26.5	(0.9)	40.7	(0.8)	20.0	(0.6)	2.2	(0.3)	0.0	(0.0)
France	5.3	(0.3)	16.2	(0.5)	35.9	(0.8)	34.0	(0.7)	7.4	(0.4)	0.3	(0.1)	0.8	(0.1)
Germany	3.3	(0.4)	14.2	(0.7)	33.9	(1.0)	36.4	(0.9)	10.2	(0.6)	0.5	(0.2)	1.5	(0.2)
Ireland	4.3	(0.4)	13.2	(0.8)	37.6	(0.9)	36.0	(0.9)	8.1	(0.5)	0.4	(0.1)	0.5	(0.1)
Italy	5.5	(0.6)	22.2	(1.0)	42.0	(1.0)	26.4	(1.0)	3.3	(0.4)	0.1	(0.0)	0.7	(0.2)
Japan	0.6	(0.2)	4.3	(0.4)	22.8	(0.8)	48.6	(1.0)	21.4	(0.7)	1.2	(0.2)	1.2	(0.1)
Korea	2.2	(0.2)	10.6	(0.5)	37.0	(0.9)	41.7	(0.9)	7.9	(0.5)	0.2	(0.1)	0.3	(0.1)
Netherlands	2.6	(0.3)	9.1	(0.5)	26.4	(0.7)	41.5	(0.8)	16.8	(0.6)	1.3	(0.2)	2.3	(0.2)
Norway	3.0	(0.3)	9.3	(0.6)	30.2	(0.8)	41.6	(0.8)	13.1	(0.6)	0.6	(0.1)	2.2	(0.2)
Poland	3.9	(0.3)	14.8	(0.6)	36.5	(0.9)	35.0	(0.9)	9.0	(0.5)	0.7	(0.1)	0.0	(0.0)
Slovak Republic	1.9	(0.2)	9.7	(0.5)	36.2	(1.0)	44.4	(0.9)	7.3	(0.5)	0.2	(0.1)	0.3	(0.1)
Spain	7.2	(0.5)	20.3	(0.8)	39.1	(0.7)	27.8	(0.7)	4.6	(0.4)	0.1	(0.1)	0.8	(0.1)
Sweden	3.7	(0.3)	9.6	(0.6)	29.1	(1.0)	41.6	(0.9)	14.9	(0.6)	1.2	(0.2)	0.0	(0.0)
United States	3.9	(0.5)	13.6	(0.7)	32.6	(1.2)	34.2	(1.0)	10.9	(0.7)	0.6	(0.2)	4.2	(0.6)
Sub-national entities														
Flanders (Belgium)	2.7	(0.3)	11.3	(0.5)	29.6	(0.8)	38.8	(0.9)	11.9	(0.5)	0.4	(0.2)	5.2	(0.2)
England (UK)	3.3	(0.4)	13.1	(0.7)	33.1	(1.0)	36.0	(1.0)	12.4	(0.7)	0.8	(0.2)	1.4	(0.2)
Northern Ireland (UK)	2.5	(0.5)	14.9	(0.9)	36.2	(1.5)	34.3	(1.6)	9.4	(0.6)	0.5	(0.2)	2.2	(0.3)
England/N. Ireland (UK)	3.3	(0.4)	13.1	(0.7)	33.2	(1.0)	35.9	(1.0)	12.3	(0.7)	0.8	(0.2)	1.4	(0.2)
Average	3.3	(0.1)	12.2	(0.1)	33.3	(0.2)	38.2	(0.2)	11.1	(0.1)	0.7	(0.0)	1.2	(0.0)
Partners														
Cyprus[1]	1.6	(0.2)	10.3	(0.5)	33.0	(0.9)	32.1	(0.9)	5.2	(0.4)	0.2	(0.1)	17.7	(0.4)
Russian Federation[2]	1.6	(0.5)	11.5	(1.2)	34.9	(1.9)	41.2	(2.0)	10.4	(1.6)	0.4	(0.2)	0.0	(0.0)

1. See notes on page 250.

2. See note on page 250.

Note: Adults in the missing category were not able to provide enough background information to impute proficiency scores because of language difficulties, or learning or mental disabilities (referred to as literacy-related non-response).

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932897078

[Part 1/1]

Table A2.2a Mean literacy proficiency

OECD	Mean		Difference between country mean score and overall average	
	Score	S.E.	t-value	p-value
National entities				
Australia	280.4	(0.9)	8.2	0.000
Austria	269.5	(0.7)	4.4	0.000
Canada	273.5	(0.6)	1.2	0.238
Czech Republic	274.0	(1.0)	1.2	0.219
Denmark	270.8	(0.6)	3.1	0.002
Estonia	275.9	(0.7)	4.2	0.000
Finland	287.5	(0.7)	21.5	0.000
France	262.1	(0.6)	17.3	0.000
Germany	269.8	(0.9)	3.2	0.001
Ireland	266.5	(0.9)	6.7	0.000
Italy	250.5	(1.1)	20.1	0.000
Japan	296.2	(0.7)	33.3	0.000
Korea	272.6	(0.6)	0.4	0.713
Netherlands	284.0	(0.7)	15.4	0.000
Norway	278.4	(0.6)	9.0	0.000
Poland	266.9	(0.6)	9.4	0.000
Slovak Republic	273.8	(0.6)	1.7	0.097
Spain	251.8	(0.7)	28.6	0.000
Sweden	279.2	(0.7)	9.2	0.000
United States	269.8	(1.0)	2.8	0.005
Sub-national entities				
Flanders (Belgium)	275.5	(0.8)	3.2	0.001
England (UK)	272.6	(1.1)	0.2	0.849
Northern Ireland (UK)	268.7	(1.9)	2.1	0.035
England/N. Ireland (UK)	272.5	(1.0)	0.3	0.750
Average	272.8	(0.2)	0.0	1.000
Partners				
Cyprus[1]	268.8	(0.8)	5.1	0.000
Russian Federation[2]	275.2	(2.7)	0.9	0.371

1. See notes on page 250.

2. See note on page 250.

Note: Literacy-related non-response (missing) is excluded from the calculation of mean scores. Table A2.2b, however, presents an estimate of lower-bound mean scores by attributing a very low score (85 points) to those adults who were not able to provide enough background information because of language difficulties, or learning or mental disabilities (literacy-related non-response).

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932897097

[Part 1/1]

Mean proficiency in literacy among 16-65 year-olds (adjusted)

Table A2.2b *Assuming a score of 85 points for literacy-related non-response*

OECD	Adjusted mean		
	Score	S.E.	S.D.
National entities			
Australia	276.7	(1.0)	(56.7)
Austria	266.1	(0.8)	(50.1)
Canada	271.8	(0.6)	(53.2)
Czech Republic	272.8	(1.1)	(43.3)
Denmark	270.1	(0.6)	(49.0)
Estonia	275.2	(0.7)	(45.9)
Finland	287.5	(0.7)	(50.7)
France	260.6	(0.6)	(51.4)
Germany	267.1	(0.9)	(52.1)
Ireland	265.7	(0.9)	(48.7)
Italy	249.4	(1.2)	(46.5)
Japan	293.6	(0.7)	(45.9)
Korea	272.1	(0.6)	(42.7)
Netherlands	279.5	(0.7)	(56.2)
Norway	274.1	(0.6)	(54.6)
Poland	266.9	(0.6)	(48.0)
Slovak Republic	273.3	(0.6)	(41.2)
Spain	250.5	(0.7)	(51.0)
Sweden	279.2	(0.7)	(50.6)
United States	262.0	(1.1)	(60.8)
Sub-national entities			
Flanders (Belgium)	w	w	w
England (UK)	270.0	(1.0)	(53.4)
Northern Ireland (UK)	264.6	(1.9)	(52.7)
England/N. Ireland (UK)	269.8	(1.0)	(53.4)
Average	270.7	(0.2)	(50.1)
Partners			
Cyprus[1]	236.3	(0.9)	(79.1)
Russian Federation[2]	275.2	(2.7)	(42.9)

1. See notes on page 250.

2. See note on page 250.

Note: The adjusted mean includes adults who were not able to provide enough background information because of language difficulties, or learning or mental disabilities (literacy-related non-response). They are attributed a very low score (85 points), which represents a lower bound for the mean score in each country.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932897116

[Part 1/1]

Mean proficiency in literacy among 16-24 year-olds (adjusted)

Table A2.3 *Assuming a score of 85 points for literacy-related non-response*

OECD	Adjusted mean		
	Score	S.E.	S.D.
National entities			
Australia	282.9	(2.4)	(47.9)
Austria	275.9	(1.6)	(46.6)
Canada	274.4	(1.3)	(47.8)
Czech Republic	280.3	(2.1)	(40.0)
Denmark	275.4	(1.3)	(43.1)
Estonia	286.2	(1.3)	(42.4)
Finland	296.7	(1.9)	(43.2)
France	274.6	(1.3)	(43.5)
Germany	277.7	(1.7)	(46.9)
Ireland	270.2	(1.9)	(41.7)
Italy	260.2	(2.7)	(44.5)
Japan	296.5	(1.6)	(42.9)
Korea	292.9	(1.7)	(33.3)
Netherlands	292.1	(1.9)	(46.9)
Norway	273.3	(1.5)	(46.8)
Poland	281.5	(1.1)	(41.6)
Slovak Republic	275.5	(1.6)	(40.8)
Spain	263.0	(1.6)	(43.9)
Sweden	282.8	(1.7)	(45.7)
United States	260.9	(2.3)	(60.0)
Sub-national entities			
Flanders (Belgium)	w	w	w
England (UK)	261.8	(2.6)	(52.8)
Northern Ireland (UK)	269.4	(3.0)	(49.0)
England/N. Ireland (UK)	262.1	(2.5)	(52.7)
Average	277.9	(0.4)	(44.9)
Partners			
Cyprus[1]	249.6	(2.8)	(64.8)
Russian Federation[2]	274.0	(4.0)	(42.1)

1. See notes on page 250.

2. See note on page 250.

Note: The adjusted mean includes adults who were not able to provide enough background information because of language difficulties, or learning or mental disabilities (literacy-related non-response). They are attributed a very low score (85 points), which represents a lower bound for the mean score in each country.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932897135

[Part 1/1]

Table A2.4 **Mean literacy proficiency and distribution of literacy scores, by percentile**

OECD	Mean			5th percentile		10th percentile		25th percentile		50th percentile		75th percentile		90th percentile		95th percentile	
	Score	S.E.	S.D.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.
National entities																	
Australia	280.4	(0.9)	(50.5)	193.3	(3.2)	217.4	(2.0)	251.2	(1.3)	284.7	(1.1)	314.9	(1.2)	339.7	(1.2)	354.6	(1.7)
Austria	269.5	(0.7)	(44.0)	194.0	(2.3)	212.7	(1.9)	242.0	(1.2)	272.3	(1.2)	300.0	(1.0)	322.8	(1.1)	336.1	(1.3)
Canada	273.5	(0.6)	(50.4)	185.1	(1.9)	208.4	(1.4)	242.5	(1.0)	277.8	(0.8)	308.7	(0.8)	334.0	(1.1)	348.0	(1.2)
Czech Republic	274.0	(1.0)	(40.8)	202.7	(3.8)	221.1	(2.5)	248.6	(1.6)	276.3	(1.5)	302.0	(1.4)	323.4	(2.2)	335.7	(2.5)
Denmark	270.8	(0.6)	(47.7)	186.0	(2.3)	209.8	(1.5)	243.8	(1.0)	276.2	(0.9)	303.4	(0.9)	326.0	(1.2)	338.9	(1.4)
Estonia	275.9	(0.7)	(44.4)	198.6	(2.0)	217.8	(1.7)	248.4	(0.9)	278.7	(0.8)	306.0	(1.0)	329.7	(1.3)	344.1	(1.8)
Finland	287.5	(0.7)	(50.7)	199.9	(3.2)	223.7	(2.0)	258.3	(1.1)	292.1	(1.1)	322.1	(1.0)	347.2	(1.1)	361.8	(1.4)
France	262.1	(0.6)	(49.0)	173.7	(1.8)	197.0	(1.4)	231.8	(0.9)	266.9	(0.9)	296.9	(0.9)	320.9	(0.9)	333.9	(1.1)
Germany	269.8	(0.9)	(47.4)	186.4	(2.6)	206.1	(2.1)	238.7	(1.5)	273.3	(1.3)	303.8	(1.2)	327.7	(1.4)	341.4	(1.6)
Ireland	266.5	(0.9)	(47.2)	181.7	(4.0)	206.9	(2.2)	239.2	(1.7)	270.4	(1.0)	298.3	(1.1)	322.6	(1.4)	337.0	(1.7)
Italy	250.5	(1.1)	(44.7)	173.1	(3.1)	192.4	(2.0)	221.8	(1.6)	252.4	(1.4)	282.1	(1.6)	306.1	(1.4)	319.5	(1.8)
Japan	296.2	(0.7)	(39.7)	226.3	(2.0)	243.8	(1.7)	272.2	(1.2)	299.6	(0.8)	323.6	(0.8)	343.6	(1.1)	355.3	(1.5)
Korea	272.6	(0.6)	(41.7)	198.5	(1.8)	218.5	(1.5)	247.7	(0.8)	276.0	(0.9)	301.2	(0.9)	322.3	(1.2)	334.6	(1.8)
Netherlands	284.0	(0.7)	(48.4)	195.6	(2.9)	219.4	(2.0)	255.6	(1.0)	289.1	(1.1)	317.2	(0.9)	341.0	(1.4)	354.6	(1.5)
Norway	278.4	(0.6)	(47.0)	194.4	(3.0)	218.1	(1.6)	251.2	(1.3)	283.4	(0.8)	310.7	(0.8)	333.4	(1.1)	346.6	(1.8)
Poland	266.9	(0.6)	(48.0)	182.5	(2.6)	204.3	(1.9)	236.8	(1.1)	270.1	(0.9)	299.9	(0.9)	325.2	(1.4)	340.2	(1.5)
Slovak Republic	273.8	(0.6)	(40.1)	201.0	(2.4)	221.4	(1.5)	250.2	(1.0)	277.9	(0.9)	301.4	(0.8)	320.8	(0.9)	332.4	(1.5)
Spain	251.8	(0.7)	(49.0)	163.5	(3.0)	187.4	(1.7)	221.7	(1.2)	255.6	(1.0)	286.1	(0.8)	310.9	(1.3)	325.1	(1.9)
Sweden	279.2	(0.7)	(50.6)	188.2	(3.5)	215.3	(2.7)	251.3	(1.3)	284.8	(1.0)	313.4	(1.1)	337.6	(1.2)	351.2	(1.4)
United States	269.8	(1.0)	(49.2)	182.0	(3.4)	204.2	(2.7)	238.3	(1.5)	273.2	(1.4)	304.6	(1.5)	330.3	(1.2)	344.3	(2.1)
Sub-national entities																	
Flanders (Belgium)	275.5	(0.8)	(47.1)	191.0	(2.6)	212.5	(2.2)	246.4	(1.2)	280.5	(1.1)	308.9	(1.0)	331.6	(1.4)	343.7	(1.6)
England (UK)	272.6	(1.1)	(49.1)	187.8	(3.8)	209.2	(2.4)	241.3	(1.5)	275.8	(1.3)	307.3	(1.3)	332.8	(1.5)	346.7	(2.0)
Northern Ireland (UK)	268.7	(1.9)	(45.8)	190.8	(4.0)	208.0	(2.7)	238.6	(2.2)	270.5	(2.5)	300.4	(2.2)	326.0	(1.8)	340.9	(2.7)
England/N. Ireland (UK)	272.5	(1.0)	(49.0)	188.0	(3.4)	209.2	(2.4)	241.2	(1.4)	275.6	(1.3)	307.1	(1.3)	332.7	(1.7)	346.6	(1.9)
Average	272.8	(0.2)	(46.7)	190.3	(0.6)	212.1	(0.4)	244.5	(0.3)	276.7	(0.2)	305.1	(0.2)	328.6	(0.3)	342.1	(0.4)
Partners																	
Cyprus[1]	268.8	(0.8)	(40.3)	198.3	(2.4)	215.2	(2.1)	243.6	(1.2)	271.7	(1.0)	296.1	(1.1)	318.0	(1.6)	330.6	(2.3)
Russian Federation[2]	275.2	(2.7)	(42.9)	200.2	(5.4)	217.9	(3.9)	247.7	(3.2)	278.2	(2.9)	305.0	(3.4)	327.9	(3.7)	341.0	(3.7)

1. See notes on page 250.

2. See note on page 250.

Note: Literacy-related non-response (missing) is excluded from the calculation of mean scores. Table A2.2b, however, presents an estimate of lower-bound mean scores by attributing a very low score (85 points) to those adults who were not able to provide enough background information because of language difficulties, or learning or mental disabilities (literacy-related non-response).

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932897154

[Part 1/1]

Table A2.5 **Percentage of adults scoring at each proficiency level in numeracy**

	Below Level 1		Level 1		Level 2		Level 3		Level 4		Level 5		Missing	
OECD	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
National entities														
Australia	5.7	(0.4)	14.4	(0.7)	32.1	(0.9)	32.6	(0.9)	11.7	(0.6)	1.5	(0.2)	1.9	(0.2)
Austria	3.4	(0.3)	10.9	(0.6)	33.1	(0.9)	37.2	(1.0)	12.5	(0.6)	1.1	(0.2)	1.8	(0.2)
Canada	5.9	(0.3)	16.4	(0.4)	31.9	(0.5)	32.4	(0.7)	11.3	(0.4)	1.3	(0.2)	0.9	(0.1)
Czech Republic	1.7	(0.3)	11.1	(0.8)	34.7	(1.2)	40.4	(1.3)	10.6	(0.7)	0.9	(0.3)	0.6	(0.2)
Denmark	3.4	(0.3)	10.8	(0.5)	30.7	(0.8)	38.0	(0.7)	14.9	(0.5)	1.7	(0.2)	0.4	(0.1)
Estonia	2.4	(0.2)	11.9	(0.5)	36.2	(0.6)	38.0	(0.6)	10.4	(0.4)	0.8	(0.2)	0.4	(0.1)
Finland	3.1	(0.3)	9.7	(0.5)	29.3	(0.7)	38.4	(0.8)	17.2	(0.6)	2.2	(0.3)	0.0	(0.0)
France	9.1	(0.3)	18.9	(0.6)	33.8	(0.7)	29.0	(0.6)	7.8	(0.3)	0.5	(0.1)	0.8	(0.1)
Germany	4.5	(0.4)	13.9	(0.7)	31.0	(0.8)	34.9	(0.9)	13.0	(0.6)	1.2	(0.2)	1.5	(0.2)
Ireland	7.1	(0.5)	18.1	(0.8)	38.0	(0.9)	28.8	(0.9)	7.0	(0.6)	0.6	(0.1)	0.5	(0.1)
Italy	8.0	(0.6)	23.7	(1.0)	38.8	(1.1)	24.4	(1.0)	4.3	(0.4)	0.2	(0.1)	0.7	(0.2)
Japan	1.2	(0.2)	7.0	(0.5)	28.1	(0.8)	43.7	(0.8)	17.3	(0.7)	1.5	(0.2)	1.2	(0.1)
Korea	4.2	(0.3)	14.7	(0.6)	39.4	(1.0)	34.6	(0.9)	6.6	(0.5)	0.2	(0.1)	0.3	(0.1)
Netherlands	3.5	(0.3)	9.7	(0.6)	28.2	(0.8)	39.4	(0.9)	15.6	(0.6)	1.3	(0.2)	2.3	(0.2)
Norway	4.3	(0.3)	10.2	(0.5)	28.4	(0.8)	37.4	(0.8)	15.7	(0.7)	1.7	(0.3)	2.2	(0.2)
Poland	5.9	(0.4)	17.6	(0.6)	37.7	(0.9)	30.5	(0.9)	7.7	(0.5)	0.7	(0.1)	0.0	(0.0)
Slovak Republic	3.5	(0.3)	10.3	(0.6)	32.2	(0.9)	41.1	(1.0)	11.8	(0.7)	0.8	(0.2)	0.3	(0.1)
Spain	9.5	(0.5)	21.1	(0.7)	40.1	(0.9)	24.5	(0.7)	4.0	(0.3)	0.1	(0.1)	0.8	(0.1)
Sweden	4.4	(0.4)	10.3	(0.7)	28.7	(1.1)	38.0	(1.1)	16.7	(0.6)	1.9	(0.3)	0.0	(0.0)
United States	9.1	(0.6)	19.6	(0.8)	32.6	(1.0)	25.9	(0.8)	7.8	(0.6)	0.7	(0.2)	4.2	(0.6)
Sub-national entities														
Flanders (Belgium)	3.0	(0.3)	10.4	(0.5)	27.7	(0.7)	36.8	(0.9)	15.4	(0.7)	1.6	(0.2)	5.2	(0.2)
England (UK)	6.4	(0.5)	17.8	(0.9)	33.3	(1.0)	29.8	(1.1)	10.4	(0.8)	0.9	(0.2)	1.4	(0.2)
Northern Ireland (UK)	5.6	(0.8)	18.7	(1.2)	35.9	(1.1)	29.0	(1.1)	7.8	(0.7)	0.7	(0.2)	2.2	(0.3)
England/N. Ireland (UK)	6.3	(0.5)	17.8	(0.9)	33.4	(1.0)	29.8	(1.0)	10.3	(0.7)	0.9	(0.2)	1.4	(0.2)
Average	5.0	(0.1)	14.0	(0.1)	33.0	(0.2)	34.4	(0.2)	11.4	(0.1)	1.1	(0.0)	1.2	(0.0)
Partners														
Cyprus[1]	3.4	(0.3)	12.1	(0.7)	31.8	(0.9)	28.4	(0.8)	6.3	(0.4)	0.3	(0.1)	17.7	(0.4)
Russian Federation[2]	2.0	(0.7)	12.1	(1.2)	39.7	(1.8)	38.1	(1.7)	7.7	(1.4)	0.3	(0.2)	0.0	(0.0)

1. See notes on page 250.

2. See note on page 250.

Note: Adults in the missing category were not able to provide enough background information to impute proficiency scores because of language difficulties, or learning or mental disabilities (referred to as literacy-related non-response).

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932897173

[Part 1/1]

Table A2.6a **Mean numeracy proficiency**

OECD	Mean		Difference between country mean score and overall average	
	Score	S.E.	t-value	p-value
National entities				
Australia	267.6	(1.0)	1.1	0.263
Austria	275.0	(0.9)	7.0	0.000
Canada	265.5	(0.7)	4.5	0.000
Czech Republic	275.7	(0.9)	7.4	0.000
Denmark	278.3	(0.7)	12.8	0.000
Estonia	273.1	(0.5)	7.9	0.000
Finland	282.2	(0.7)	18.6	0.000
France	254.2	(0.6)	22.9	0.000
Germany	271.7	(1.0)	3.0	0.003
Ireland	255.6	(1.0)	12.7	0.000
Italy	247.1	(1.1)	20.0	0.000
Japan	288.2	(0.7)	25.4	0.000
Korea	263.4	(0.7)	7.5	0.000
Netherlands	280.3	(0.7)	15.8	0.000
Norway	278.3	(0.8)	11.9	0.000
Poland	259.8	(0.8)	10.6	0.000
Slovak Republic	275.8	(0.8)	8.7	0.000
Spain	245.8	(0.6)	35.3	0.000
Sweden	279.1	(0.8)	12.3	0.000
United States	252.8	(1.2)	13.5	0.000
Sub-national entities				
Flanders (Belgium)	280.4	(0.8)	13.8	0.000
England (UK)	261.8	(1.1)	6.2	0.000
Northern Ireland (UK)	259.2	(1.8)	5.2	0.000
England/N. Ireland (UK)	261.7	(1.1)	6.5	0.000
Average	268.7	(0.2)	0.0	1.000
Partners				
Cyprus[1]	264.6	(0.8)	5.0	0.000
Russian Federation[2]	269.9	(2.7)	0.4	0.658

1. See notes on page 250.

2. See note on page 250.

Note: Literacy-related non-response (missing) is excluded from the calculation of mean scores. Table A2.6b, however, presents an estimate of lower-bound mean scores by attributing a very low score (85 points) to those adults who were not able to provide enough background information because of language difficulties, or learning or mental disabilities (literacy-related non-response).

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932897192

[Part 1/1]

Mean proficiency in numeracy among 16-65 year-olds (adjusted)

Table A2.6b *Assuming a score of 85 points for literacy-related non-response*

OECD	Adjusted mean		
	Score	S.E.	S.D.
National entities			
Australia	264.1	(1.0)	(61.4)
Austria	271.6	(0.9)	(55.1)
Canada	263.9	(0.7)	(57.8)
Czech Republic	274.5	(1.0)	(46.1)
Denmark	277.5	(0.7)	(52.5)
Estonia	272.4	(0.5)	(46.9)
Finland	282.2	(0.7)	(52.2)
France	252.8	(0.6)	(58.0)
Germany	269.0	(1.0)	(57.3)
Ireland	254.8	(1.0)	(54.8)
Italy	246.1	(1.2)	(51.5)
Japan	285.7	(0.7)	(49.1)
Korea	262.9	(0.7)	(46.5)
Netherlands	275.9	(0.7)	(58.2)
Norway	274.0	(0.8)	(60.8)
Poland	259.8	(0.8)	(50.7)
Slovak Republic	275.3	(0.8)	(48.6)
Spain	244.6	(0.6)	(53.0)
Sweden	279.1	(0.8)	(54.9)
United States	245.7	(1.2)	(65.2)
Sub-national entities			
Flanders (Belgium)	w	w	w
England (UK)	259.4	(1.0)	(58.4)
Northern Ireland (UK)	255.3	(1.8)	(56.7)
England/N. Ireland (UK)	259.2	(1.0)	(58.3)
Average	266.2	(0.2)	(54.2)
Partners			
Cyprus[1]	232.9	(0.9)	(80.6)
Russian Federation[2]	269.9	(2.7)	(42.0)

1. See notes on page 250.

2. See note on page 250.

Note: The adjusted mean includes adults who were not able to provide enough background information because of language difficulties, or learning or mental disabilities (literacy-related non-response). They are attributed a very low score (85 points), which represents a lower bound for the mean score in each country.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932897211

[Part 1/1]

Mean proficiency in numeracy among 16-24 year-olds (adjusted)

Table A2.7 *Assuming a score of 85 points for literacy-related non-response*

OECD	Adjusted mean		
	Score	S.E.	S.D.
National entities			
Australia	269.0	(2.7)	(47.9)
Austria	277.4	(1.8)	(46.6)
Canada	267.1	(1.6)	(47.8)
Czech Republic	277.8	(1.6)	(40.0)
Denmark	272.5	(1.5)	(43.1)
Estonia	277.7	(1.3)	(42.4)
Finland	284.8	(1.8)	(43.2)
France	262.9	(1.6)	(43.5)
Germany	273.9	(1.8)	(46.9)
Ireland	257.6	(2.3)	(41.7)
Italy	250.8	(2.6)	(44.5)
Japan	280.5	(2.3)	(42.9)
Korea	280.9	(1.9)	(33.3)
Netherlands	283.0	(2.0)	(46.9)
Norway	269.2	(1.8)	(46.8)
Poland	268.6	(1.1)	(41.6)
Slovak Republic	277.4	(1.8)	(40.8)
Spain	254.3	(1.8)	(43.9)
Sweden	278.2	(1.7)	(45.7)
United States	240.0	(2.5)	(60.0)
Sub-national entities			
Flanders (Belgium)	w	w	w
England (UK)	252.8	(2.9)	(52.8)
Northern Ireland (UK)	260.8	(3.6)	(49.0)
England/N. Ireland (UK)	253.1	(2.8)	(52.7)
Average	269.4	(0.4)	(44.9)
Partners			
Cyprus[1]	246.9	(3.0)	(64.8)
Russian Federation[2]	272.5	(3.7)	(42.1)

1. See notes on page 250.

2. See note on page 250.

Note: The adjusted mean includes adults who were not able to provide enough background information because of language difficulties, or learning or mental disabilities (literacy-related non-response). They are attributed a very low score (85 points), which represents a lower bound for the mean score in each country.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932897230

[Part 1/1]

Table A2.8 **Mean numeracy proficiency and distribution of numeracy scores, by percentile**

OECD	Mean			5th percentile		10th percentile		25th percentile		50th percentile		75th percentile		90th percentile		95th percentile	
	Score	S.E.	S.D.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.
National entities																	
Australia	267.6	(1.0)	(56.6)	169.3	(4.6)	197.7	(2.3)	234.7	(1.4)	271.9	(1.1)	305.4	(1.4)	334.3	(1.6)	351.6	(2.1)
Austria	275.0	(0.9)	(49.3)	189.8	(3.6)	212.9	(2.2)	245.7	(1.4)	278.2	(1.3)	308.6	(0.9)	334.1	(1.3)	349.2	(2.2)
Canada	265.5	(0.7)	(55.5)	169.2	(2.5)	194.2	(1.4)	230.8	(1.1)	269.8	(0.9)	303.9	(0.8)	332.4	(1.0)	349.3	(1.2)
Czech Republic	275.7	(0.9)	(43.7)	200.6	(2.8)	218.4	(2.1)	248.1	(1.8)	278.4	(1.4)	305.2	(1.1)	329.4	(1.8)	343.1	(2.9)
Denmark	278.3	(0.7)	(51.2)	189.6	(3.1)	213.4	(1.7)	247.5	(1.2)	282.0	(1.0)	313.3	(1.0)	339.5	(1.2)	355.0	(1.8)
Estonia	273.1	(0.5)	(45.5)	195.1	(1.8)	214.8	(1.3)	245.1	(0.8)	275.3	(0.6)	303.9	(0.8)	328.7	(0.9)	343.7	(1.4)
Finland	282.2	(0.7)	(52.2)	193.6	(3.0)	217.4	(1.7)	250.8	(1.4)	285.8	(0.8)	317.3	(0.9)	345.0	(1.3)	360.8	(2.2)
France	254.2	(0.6)	(56.2)	152.1	(2.8)	179.7	(1.5)	219.9	(1.4)	259.2	(1.0)	293.9	(0.9)	321.5	(1.2)	336.5	(1.5)
Germany	271.7	(1.0)	(53.1)	179.0	(3.4)	201.9	(2.3)	238.4	(1.5)	275.9	(1.5)	309.3	(1.2)	335.0	(1.2)	350.5	(2.1)
Ireland	255.6	(1.0)	(53.7)	160.5	(4.2)	189.5	(2.6)	225.4	(1.6)	259.6	(1.1)	291.1	(1.2)	318.8	(1.7)	335.9	(2.0)
Italy	247.1	(1.1)	(50.0)	161.1	(3.3)	182.9	(2.5)	215.4	(1.6)	249.3	(1.4)	281.9	(1.6)	309.1	(1.4)	324.1	(1.8)
Japan	288.2	(0.7)	(44.0)	212.6	(2.5)	231.7	(1.7)	260.7	(1.3)	290.8	(1.0)	318.1	(1.0)	341.7	(1.4)	355.4	(1.3)
Korea	263.4	(0.7)	(45.6)	181.3	(2.2)	203.8	(1.5)	236.2	(1.0)	267.1	(0.9)	294.7	(1.1)	318.4	(1.4)	331.6	(1.3)
Netherlands	280.3	(0.7)	(51.1)	188.6	(2.7)	214.6	(1.7)	251.0	(1.3)	285.8	(1.0)	315.3	(0.9)	339.7	(1.1)	354.2	(1.6)
Norway	278.3	(0.8)	(54.2)	181.2	(3.1)	209.6	(2.3)	248.1	(1.4)	283.5	(1.1)	314.9	(0.9)	341.4	(1.2)	356.8	(2.1)
Poland	259.8	(0.8)	(50.7)	171.0	(2.7)	194.0	(2.0)	228.6	(1.4)	262.6	(1.1)	294.4	(1.1)	321.8	(1.6)	338.1	(1.7)
Slovak Republic	275.8	(0.8)	(47.6)	188.9	(3.3)	214.3	(2.0)	248.7	(1.4)	280.4	(1.2)	307.9	(1.1)	331.4	(1.4)	345.8	(1.7)
Spain	245.8	(0.6)	(51.3)	149.1	(3.1)	177.8	(2.3)	216.3	(1.2)	250.3	(1.0)	280.9	(1.0)	307.4	(1.2)	322.3	(1.5)
Sweden	279.1	(0.8)	(54.9)	181.7	(4.0)	209.9	(2.8)	249.2	(1.3)	284.0	(1.3)	316.0	(1.3)	342.8	(1.3)	358.4	(1.7)
United States	252.8	(1.2)	(57.0)	151.7	(3.7)	177.9	(2.5)	217.1	(1.8)	256.1	(1.5)	293.1	(1.7)	322.7	(2.0)	340.0	(2.6)
Sub-national entities																	
Flanders (Belgium)	280.4	(0.8)	(50.6)	191.1	(2.8)	213.7	(2.3)	249.0	(1.6)	284.4	(1.2)	315.6	(1.0)	341.5	(1.5)	356.2	(2.0)
England (UK)	261.8	(1.1)	(55.0)	167.3	(3.1)	191.6	(2.3)	227.0	(1.6)	265.1	(1.4)	300.3	(1.5)	329.5	(1.6)	345.5	(2.2)
Northern Ireland (UK)	259.2	(1.8)	(51.1)	171.6	(4.5)	193.1	(3.5)	225.8	(2.7)	261.0	(2.1)	294.5	(2.0)	322.6	(2.3)	338.8	(3.7)
England/N. Ireland (UK)	261.7	(1.1)	(54.9)	167.4	(3.0)	191.6	(2.1)	227.0	(1.5)	265.0	(1.4)	300.1	(1.5)	329.3	(1.7)	345.4	(2.0)
Average	268.7	(0.2)	(51.3)	178.4	(0.7)	202.8	(0.4)	237.9	(0.3)	272.5	(0.2)	303.9	(0.2)	330.3	(0.3)	345.6	(0.4)
Partners																	
Cyprus[1]	264.6	(0.8)	(46.8)	182.5	(3.4)	205.1	(2.2)	236.5	(1.4)	267.8	(1.2)	296.4	(1.2)	321.3	(1.4)	335.2	(1.7)
Russian Federation[2]	269.9	(2.7)	(42.0)	198.4	(5.3)	216.5	(3.3)	243.8	(2.7)	272.2	(2.8)	298.0	(2.7)	321.2	(3.9)	334.7	(3.6)

1. See notes on page 250.
2. See note on page 250.

Note: Literacy-related non-response (missing) is excluded from the calculation of mean scores. Table A2.6b, however, presents an estimate of lower-bound mean scores by attributing a very low score (85 points) to those adults who were not able to provide enough background information because of language difficulties, or learning or mental disabilities (literacy-related non-response)

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932897249

[Part 1/1]

Table A2.9 **Correlation between literacy and numeracy proficiency**

OECD	Correlation coefficient
National entities	
Australia	0.89
Austria	0.86
Canada	0.87
Czech Republic	0.80
Denmark	0.88
Estonia	0.83
Finland	0.86
France	0.87
Germany	0.88
Ireland	0.87
Italy	0.82
Japan	0.85
Korea	0.88
Netherlands	0.89
Norway	0.90
Poland	0.86
Slovak Republic	0.86
Spain	0.89
Sweden	0.89
United States	0.89
Sub-national entities	
Flanders (Belgium)	0.87
England (UK)	0.87
Northern Ireland (UK)	0.88
England/N. Ireland (UK)	0.87
Average	0.87
Partners	
Cyprus[1]	0.80
Russian Federation[2]	0.78

1. See notes on page 250.
2. See note on page 250.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932897268

[Part 1/1]

Table A2.10a Percentage of adults scoring at each proficiency level in problem solving in technology-rich environments

	Proficiency levels								No computer experience		Opted out of computer based assessment		Failed ICT core		Missing	
	Below Level 1		Level 1		Level 2		Level 3									
OECD	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
National entities																
Australia	9.2	(0.6)	28.9	(0.8)	31.8	(1.0)	6.2	(0.5)	4.0	(0.3)	13.7	(0.6)	3.5	(0.3)	2.7	(0.3)
Austria	9.9	(0.5)	30.9	(0.9)	28.1	(0.8)	4.3	(0.4)	9.6	(0.4)	11.3	(0.5)	4.0	(0.3)	1.8	(0.2)
Canada	14.8	(0.4)	30.0	(0.7)	29.4	(0.5)	7.1	(0.4)	4.5	(0.2)	6.3	(0.3)	5.9	(0.2)	1.9	(0.1)
Czech Republic	12.9	(0.9)	28.8	(1.3)	26.5	(1.1)	6.6	(0.6)	10.3	(0.5)	12.1	(0.8)	2.2	(0.3)	0.6	(0.2)
Denmark	13.9	(0.6)	32.9	(0.8)	32.3	(0.7)	6.3	(0.4)	2.4	(0.2)	6.4	(0.3)	5.3	(0.2)	0.4	(0.1)
Estonia	13.8	(0.5)	29.0	(0.7)	23.2	(0.6)	4.3	(0.4)	9.9	(0.3)	15.8	(0.4)	3.4	(0.2)	0.5	(0.1)
Finland	11.0	(0.5)	28.9	(0.8)	33.2	(0.7)	8.4	(0.6)	3.5	(0.3)	9.7	(0.4)	5.2	(0.3)	0.1	(0.1)
France	m	m	m	m	m	m	m	m	10.5	(0.3)	11.6	(0.4)	6.0	(0.3)	m	m
Germany	14.4	(0.8)	30.5	(0.8)	29.2	(0.8)	6.8	(0.6)	7.9	(0.5)	6.1	(0.5)	3.7	(0.4)	1.5	(0.2)
Ireland	12.6	(0.7)	29.5	(0.9)	22.1	(0.8)	3.1	(0.3)	10.1	(0.4)	17.4	(0.7)	4.7	(0.4)	0.6	(0.1)
Italy	m	m	m	m	m	m	m	m	24.4	(0.8)	14.6	(0.9)	2.5	(0.3)	m	m
Japan	7.6	(0.6)	19.7	(0.8)	26.3	(0.8)	8.3	(0.5)	10.2	(0.5)	15.9	(0.9)	10.7	(0.7)	1.3	(0.1)
Korea	9.8	(0.5)	29.6	(0.9)	26.8	(0.8)	3.6	(0.3)	15.5	(0.4)	5.4	(0.3)	9.1	(0.4)	0.3	(0.1)
Netherlands	12.5	(0.6)	32.6	(0.7)	34.3	(0.8)	7.3	(0.4)	3.0	(0.2)	4.5	(0.3)	3.7	(0.3)	2.3	(0.2)
Norway	11.4	(0.6)	31.8	(0.8)	34.9	(0.9)	6.1	(0.4)	1.6	(0.2)	6.7	(0.4)	5.2	(0.3)	2.2	(0.2)
Poland	12.0	(0.6)	19.0	(0.7)	15.4	(0.7)	3.8	(0.3)	19.5	(0.5)	23.8	(0.7)	6.5	(0.4)	0.0	(0.0)
Slovak Republic	8.9	(0.5)	28.8	(0.9)	22.8	(0.7)	2.9	(0.3)	22.0	(0.7)	12.2	(0.4)	2.2	(0.2)	0.3	(0.1)
Spain	m	m	m	m	m	m	m	m	17.0	(0.5)	10.7	(0.5)	6.2	(0.3)	m	m
Sweden	13.1	(0.5)	30.8	(0.8)	35.2	(0.9)	8.8	(0.6)	1.6	(0.2)	5.7	(0.3)	4.8	(0.3)	0.1	(0.0)
United States	15.8	(0.9)	33.1	(0.9)	26.0	(0.9)	5.1	(0.4)	5.2	(0.4)	6.3	(0.6)	4.1	(0.4)	4.3	(0.6)
Sub-national entities																
Flanders (Belgium)	14.8	(0.6)	29.8	(0.8)	28.7	(0.8)	5.8	(0.4)	7.4	(0.3)	4.7	(0.3)	3.5	(0.3)	5.2	(0.2)
England (UK)	15.1	(0.8)	33.8	(1.1)	29.3	(0.9)	5.7	(0.5)	4.1	(0.3)	4.6	(0.4)	5.8	(0.4)	1.6	(0.2)
Northern Ireland (UK)	16.4	(1.5)	34.5	(1.2)	25.0	(1.2)	3.7	(0.6)	10.0	(0.6)	2.3	(0.3)	5.8	(0.4)	2.2	(0.3)
England/N. Ireland (UK)	15.1	(0.8)	33.9	(1.0)	29.1	(0.9)	5.6	(0.5)	4.3	(0.3)	4.5	(0.4)	5.8	(0.3)	1.6	(0.2)
Average	12.3	(0.1)	29.4	(0.2)	28.2	(0.2)	5.8	(0.1)	9.3	(0.1)	10.2	(0.1)	4.9	(0.1)	1.5	(0.0)
Partners																
Cyprus[1]	m	m	m	m	m	m	m	m	18.4	(0.4)	18.0	(0.5)	1.9	(0.2)	m	m
Russian Federation[2]	14.9	(2.2)	25.6	(1.3)	20.4	(1.4)	5.5	(1.1)	18.3	(1.7)	12.8	(1.6)	2.5	(0.6)	0.0	(0.0)

1. See notes on page 250.

2. See note on page 250.

Note: Adults in the missing category were not able to provide enough background information to impute proficiency scores because of language difficulties, or learning or mental disabilities (referred to as literacy-related non-response). The missing category also includes adults who could not complete the assessment of problem solving in technology-rich environments because of technical problems with the computer used for the survey. Cyprus,[1] France, Italy and Spain did not participate in the problem solving in technology-rich environments assessment.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932897287

[Part 1/1]

Table A2.10b Percentage of 16-24 year-olds scoring at each proficiency level in problem solving in technology-rich environments

	Proficiency levels								No computer experience		Opted out of computer based assessment		Failed ICT core		Missing	
	Below Level 1		Level 1		Level 2		Level 3									
OECD	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
National entities																
Australia	6.7	(1.2)	32.2	(2.4)	41.7	(2.7)	8.9	(1.7)	0.4	(0.3)	6.9	(1.1)	2.1	(0.6)	1.0	(0.4)
Austria	7.2	(1.2)	33.9	(2.1)	41.9	(2.1)	8.8	(1.2)	0.2	(0.2)	4.6	(0.8)	2.5	(0.5)	0.9	(0.3)
Canada	9.0	(0.8)	32.0	(1.9)	40.9	(1.6)	9.9	(1.0)	0.2	(0.1)	1.9	(0.3)	4.6	(0.6)	1.5	(0.2)
Czech Republic	8.1	(1.4)	31.0	(2.7)	43.1	(2.7)	11.7	(1.6)	0.6	(0.3)	4.0	(0.9)	1.5	(0.5)	0.1	(0.1)
Denmark	7.2	(1.1)	34.6	(2.3)	42.4	(2.0)	8.0	(1.1)	0.1	(0.1)	2.5	(0.5)	4.9	(0.7)	0.3	(0.1)
Estonia	8.2	(1.2)	35.2	(2.2)	41.4	(2.0)	9.1	(1.1)	0.1	(0.1)	3.7	(0.5)	1.9	(0.4)	0.4	(0.2)
Finland	3.6	(0.9)	29.7	(1.9)	50.4	(2.1)	11.5	(1.8)	0.0	(0.0)	1.8	(0.5)	3.1	(0.7)	0.0	(0.0)
France	m	m	m	m	m	m	m	m	0.5	(0.2)	3.9	(0.5)	1.4	(0.4)	m	m
Germany	9.1	(1.3)	32.8	(1.7)	43.2	(2.0)	10.9	(1.8)	0.5	(0.3)	1.3	(0.4)	1.5	(0.5)	0.6	(0.3)
Ireland	9.9	(1.5)	37.8	(2.6)	35.5	(2.5)	4.7	(1.2)	0.6	(0.3)	7.2	(1.1)	3.8	(0.8)	0.3	(0.2)
Italy	m	m	m	m	m	m	m	m	2.5	(0.7)	6.3	(1.4)	3.1	(1.0)	m	m
Japan	5.9	(1.2)	21.9	(2.2)	35.7	(2.5)	10.2	(1.3)	1.6	(0.6)	12.9	(1.6)	10.5	(1.4)	1.4	(0.3)
Korea	2.6	(0.7)	27.9	(2.1)	53.6	(2.1)	9.9	(1.5)	0.7	(0.3)	0.8	(0.3)	4.6	(0.7)	0.0	(0.0)
Netherlands	5.1	(1.1)	30.8	(2.0)	46.9	(2.0)	11.4	(1.5)	0.0	(0.0)	1.6	(0.5)	2.8	(0.6)	1.4	(0.5)
Norway	7.0	(1.1)	31.9	(1.8)	46.7	(1.9)	8.1	(1.0)	0.2	(0.1)	1.1	(0.4)	4.1	(0.6)	0.9	(0.2)
Poland	11.4	(0.7)	30.6	(1.1)	30.3	(1.2)	7.6	(0.9)	0.7	(0.2)	12.4	(0.7)	7.0	(0.4)	0.0	(0.0)
Slovak Republic	8.0	(1.1)	38.0	(2.0)	36.3	(1.7)	4.2	(1.0)	4.8	(0.7)	6.9	(0.7)	1.6	(0.4)	0.3	(0.1)
Spain	m	m	m	m	m	m	m	m	1.2	(0.4)	3.5	(0.6)	4.5	(0.7)	m	m
Sweden	5.2	(1.0)	28.3	(2.0)	49.9	(2.4)	11.7	(1.7)	0.4	(0.3)	0.7	(0.3)	3.6	(0.8)	0.1	(0.1)
United States	10.7	(1.7)	38.7	(2.4)	31.1	(2.2)	6.5	(1.2)	0.8	(0.3)	3.0	(0.7)	3.5	(0.8)	5.7	(1.0)
Sub-national entities																
Flanders (Belgium)	7.0	(1.1)	28.7	(2.0)	46.0	(1.9)	11.1	(1.4)	0.2	(0.1)	1.8	(0.4)	1.1	(0.3)	4.1	(0.5)
England (UK)	9.8	(1.5)	39.7	(2.6)	35.7	(2.3)	6.6	(1.4)	0.7	(0.4)	0.8	(0.4)	4.2	(0.7)	2.5	(0.7)
Northern Ireland (UK)	9.6	(1.9)	40.3	(3.3)	38.6	(3.2)	5.6	(1.7)	1.5	(0.6)	0.3	(0.3)	2.6	(0.7)	1.6	(0.8)
England/N. Ireland (UK)	9.8	(1.5)	39.7	(2.5)	35.8	(2.2)	6.6	(1.4)	0.7	(0.4)	0.8	(0.4)	4.1	(0.7)	2.4	(0.6)
Average	7.5	(0.3)	32.4	(0.5)	41.7	(0.5)	9.0	(0.3)	0.8	(0.1)	4.1	(0.2)	3.5	(0.1)	1.1	(0.1)
Partners																
Cyprus[1]	m	m	m	m	m	m	m	m	1.5	(0.5)	12.8	(1.5)	2.1	(0.6)	m	m
Russian Federation[2]	15.6	(3.7)	35.7	(3.0)	30.4	(3.0)	8.4	(2.2)	0.8	(0.4)	6.6	(1.3)	2.6	(0.5)	0.0	(0.0)

1. See notes on page 250.

2. See note on page 250.

Note: Young adults in the missing category were not able to provide enough background information to impute proficiency scores because of language difficulties, or learning or mental disabilities (referred to as literacy-related non-response). The missing category also includes adults who could not complete the assessment of problem solving in technology-rich environments because of technical problems with the computer used for the survey. Cyprus,[1] France, Italy and Spain did not participate in the problem solving in technology-rich environments assessment.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932897306

[Part 1/1]

Table A2.11 **Mean literacy proficiency, by level of proficiency in problem solving in technology-rich environments**

OECD	Proficiency levels: Below Level 1 Mean score	Below Level 1 S.E.	Level 1 Mean score	Level 1 S.E.	Level 2 Mean score	Level 2 S.E.	Level 3 Mean score	Level 3 S.E.	No computer experience Mean score	No computer experience S.E.	Opted out of computer based assessment Mean score	Opted out of computer based assessment S.E.	Failed ICT core Mean score	Failed ICT core S.E.
National entities														
Australia	227.1	(2.1)	272.3	(1.2)	310.8	(1.3)	347.1	(2.2)	204.1	(4.8)	266.4	(2.2)	246.9	(6.0)
Austria	222.6	(1.7)	265.6	(1.2)	301.8	(1.0)	331.7	(2.3)	233.6	(3.0)	258.3	(1.9)	238.1	(3.8)
Canada	222.6	(1.0)	269.6	(0.7)	306.0	(0.8)	339.8	(1.6)	214.5	(2.9)	257.3	(3.2)	245.9	(3.3)
Czech Republic	229.3	(2.3)	268.9	(1.5)	299.0	(2.0)	327.1	(3.1)	245.9	(3.1)	275.0	(2.7)	269.6	(5.6)
Denmark	222.5	(1.5)	268.4	(0.8)	301.9	(0.7)	334.3	(1.9)	198.8	(4.9)	234.1	(2.7)	224.3	(3.2)
Estonia	229.1	(1.4)	273.5	(1.0)	308.1	(0.9)	340.8	(2.2)	243.5	(2.0)	280.0	(1.8)	262.7	(3.5)
Finland	234.5	(2.2)	279.5	(0.9)	317.0	(1.0)	352.0	(1.8)	222.7	(5.0)	269.0	(2.5)	234.8	(4.3)
France	m	m	m	m	m	m	m	m	215.1	(1.9)	263.5	(2.1)	243.5	(2.8)
Germany	219.4	(2.0)	265.3	(1.3)	302.0	(1.1)	333.5	(1.9)	227.4	(3.3)	256.0	(4.2)	246.3	(4.6)
Ireland	226.7	(1.7)	269.8	(1.3)	303.2	(1.2)	336.4	(3.9)	227.2	(2.7)	262.1	(2.0)	234.3	(5.3)
Italy	m	m	m	m	m	m	m	m	225.5	(2.4)	255.1	(2.3)	220.1	(6.8)
Japan	255.2	(2.3)	289.5	(1.2)	316.6	(1.1)	339.5	(1.9)	255.5	(2.6)	292.9	(1.8)	298.4	(2.0)
Korea	236.5	(1.6)	273.5	(0.9)	304.1	(0.9)	331.4	(3.2)	231.8	(2.0)	266.2	(3.1)	265.4	(2.0)
Netherlands	227.4	(1.6)	276.1	(1.0)	313.8	(0.9)	346.1	(2.0)	213.4	(5.6)	256.1	(3.9)	237.3	(5.4)
Norway	224.5	(1.5)	270.2	(1.1)	306.5	(0.9)	339.8	(1.9)	222.5	(7.4)	259.6	(3.0)	229.0	(4.3)
Poland	236.5	(1.8)	275.8	(1.5)	305.0	(1.5)	332.7	(2.5)	233.3	(1.9)	270.4	(1.9)	256.3	(2.9)
Slovak Republic	238.0	(1.8)	274.9	(1.2)	303.7	(1.0)	325.8	(3.8)	249.3	(1.5)	277.6	(1.8)	252.8	(5.8)
Spain	m	m	m	m	m	m	m	m	208.5	(2.1)	255.4	(2.6)	231.9	(3.7)
Sweden	227.8	(1.9)	273.5	(1.2)	307.8	(1.1)	340.7	(2.1)	206.3	(6.9)	243.3	(3.5)	202.6	(4.7)
United States	224.8	(1.6)	270.5	(1.1)	308.2	(1.1)	340.4	(2.6)	199.8	(4.2)	247.3	(3.1)	230.5	(4.8)
Sub-national entities														
Flanders (Belgium)	227.8	(1.8)	274.2	(1.0)	308.4	(1.1)	337.0	(2.6)	225.1	(2.9)	261.6	(3.3)	242.2	(4.3)
England (UK)	222.8	(2.0)	267.5	(1.3)	305.7	(1.2)	338.7	(2.6)	223.7	(4.1)	266.9	(4.3)	240.0	(4.5)
Northern Ireland (UK)	225.7	(2.8)	267.8	(2.8)	305.1	(2.6)	338.8	(6.0)	238.5	(4.2)	259.2	(5.7)	250.4	(5.8)
England/N. Ireland (UK)	222.9	(1.9)	267.5	(1.2)	305.7	(1.2)	338.7	(2.6)	224.8	(3.8)	266.7	(4.3)	240.3	(4.4)
Average	229.2	(0.4)	272.6	(0.3)	306.8	(0.3)	337.6	(0.6)	224.0	(0.8)	262.5	(0.6)	243.3	(0.9)
Partners														
Cyprus[1]	m	m	m	m	m	m	m	m	257.4	(1.6)	284.0	(2.0)	271.9	(6.2)
Russian Federation[2]	234.4	(3.6)	271.4	(2.1)	301.2	(3.1)	324.8	(4.9)	267.5	(4.8)	281.6	(3.8)	260.4	(8.3)

1. See notes on page 250.
2. See note on page 250.

Note: Cyprus,[1] France, Italy and Spain did not participate in the problem solving in technology-rich environments assessment.
Source: Survey of Adult Skills (PIAAC) (2012).
StatLink http://dx.doi.org/10.1787/888932897325

[Part 1/1]

Table A2.12 **Mean numeracy proficiency, by level of proficiency in problem solving in technology-rich environments**

OECD	Proficiency levels								No computer experience		Opted out of computer based assessment		Failed ICT core	
	Below Level 1		Level 1		Level 2		Level 3							
	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.
National entities														
Australia	217.0	(2.6)	262.3	(1.1)	300.7	(1.6)	340.0	(2.7)	183.6	(5.1)	243.2	(2.5)	221.1	(6.0)
Austria	233.2	(2.1)	275.3	(1.5)	309.5	(1.3)	339.9	(2.4)	232.0	(2.8)	251.7	(1.9)	234.2	(4.9)
Canada	218.5	(1.4)	263.6	(0.8)	300.2	(1.0)	335.8	(1.9)	194.1	(2.9)	234.6	(2.9)	226.7	(3.4)
Czech Republic	236.5	(3.1)	275.6	(1.7)	303.0	(1.7)	328.8	(3.0)	239.0	(2.9)	265.4	(2.8)	248.1	(6.6)
Denmark	230.0	(1.6)	275.1	(1.1)	310.2	(1.2)	345.9	(2.4)	218.1	(5.0)	238.1	(2.9)	225.6	(3.2)
Estonia	234.6	(1.3)	275.2	(1.1)	307.1	(0.9)	340.6	(2.2)	235.3	(2.3)	265.0	(1.7)	245.5	(3.7)
Finland	238.7	(2.0)	275.7	(1.3)	311.5	(1.3)	344.5	(2.2)	223.5	(5.2)	252.7	(2.5)	221.1	(4.4)
France	m	m	m	m	m	m	m	m	191.8	(2.2)	235.7	(2.0)	216.5	(2.9)
Germany	226.6	(1.7)	270.6	(1.6)	306.8	(1.1)	339.7	(2.5)	212.7	(3.9)	245.4	(4.6)	224.9	(4.8)
Ireland	220.7	(2.3)	262.3	(1.2)	296.5	(1.7)	330.6	(4.9)	206.5	(3.4)	242.5	(2.0)	218.4	(5.9)
Italy	m	m	m	m	m	m	m	m	212.1	(2.2)	245.4	(2.3)	220.5	(7.7)
Japan	248.8	(2.8)	281.8	(1.5)	310.0	(1.2)	338.1	(2.0)	244.9	(2.5)	282.6	(1.9)	285.3	(2.5)
Korea	233.7	(1.9)	267.9	(1.1)	297.6	(1.3)	325.7	(2.8)	216.5	(2.2)	243.2	(2.5)	247.0	(2.1)
Netherlands	228.0	(1.5)	273.7	(1.0)	310.0	(0.9)	341.3	(2.1)	194.0	(5.5)	248.1	(4.5)	230.2	(5.6)
Norway	223.6	(1.9)	271.1	(1.4)	310.3	(1.3)	345.8	(2.9)	211.9	(9.4)	245.5	(3.4)	212.1	(5.0)
Poland	235.5	(1.9)	270.7	(1.5)	299.4	(1.6)	328.7	(2.8)	224.1	(2.3)	261.4	(1.8)	239.5	(3.0)
Slovak Republic	242.3	(2.4)	280.0	(1.1)	311.6	(1.4)	335.7	(4.3)	242.0	(1.8)	273.7	(2.2)	258.8	(5.9)
Spain	m	m	m	m	m	m	m	m	193.7	(2.0)	240.0	(2.1)	220.2	(3.3)
Sweden	231.1	(2.3)	273.7	(1.6)	308.9	(1.2)	344.5	(2.2)	201.7	(7.3)	234.0	(3.7)	185.3	(5.0)
United States	207.8	(2.2)	254.6	(1.2)	295.5	(1.5)	332.0	(2.7)	171.5	(4.4)	219.4	(3.6)	199.2	(5.2)
Sub-national entities														
Flanders (Belgium)	237.0	(1.9)	281.1	(1.1)	314.3	(1.0)	342.2	(2.6)	225.7	(3.0)	253.2	(3.0)	229.7	(4.7)
England (UK)	212.4	(2.6)	258.9	(1.2)	300.3	(1.4)	337.8	(3.1)	195.1	(4.6)	235.3	(4.4)	208.4	(5.1)
Northern Ireland (UK)	217.0	(2.7)	261.1	(2.2)	301.2	(2.1)	340.2	(5.8)	213.3	(4.6)	233.4	(6.3)	223.7	(6.1)
England/N. Ireland (UK)	212.5	(2.5)	258.9	(1.2)	300.4	(1.3)	337.8	(3.0)	196.5	(4.3)	235.2	(4.3)	208.9	(4.9)
Average	229.3	(0.5)	271.0	(0.3)	305.5	(0.3)	337.8	(0.6)	212.3	(0.9)	248.0	(0.6)	228.1	(1.0)
Partners														
Cyprus[1]	m	m	m	m	m	m	m	m	240.8	(1.7)	269.2	(1.8)	242.6	(7.1)
Russian Federation[2]	234.9	(3.3)	267.7	(1.8)	296.7	(2.6)	323.1	(4.0)	258.6	(5.1)	269.5	(2.8)	251.0	(8.6)

1. See notes on page 250.
2. See note on page 250.

Note: Cyprus,[1] France, Italy and Spain did not participate in the problem solving in technology-rich environments assessment.
Source: Survey of Adult Skills (PIAAC) (2012).
StatLink http://dx.doi.org/10.1787/888932897344

[Part 1/1]

Table A3.1 (L) Difference in literacy scores between contrast categories, by socio-demographic characteristics (adjusted)

OECD	Age		Gender		Immigrant and language background		Educational attainment		Parents' educational attainment		Type of occupation	
	Difference between youngest and oldest adults		Difference between men and women		Difference between native born/ native language and foreign born/ foreign language		Difference between adults with tertiary and lower than upper secondary		Difference between adults with at least one parent who attained tertiary and neither parent who attained upper secondary		Difference between workers in skilled and elementary occupations	
	Score dif.	p-value	Score dif.	p-value	Score dif.	p-value	Score dif.	p-value	Score dif.	p-value	Score dif.	p-value
National entities												
Australia	11.6	0.000	4.4	0.004	36.9	0.000	32.1	0.000	17.4	0.000	23.6	0.000
Austria	28.5	0.000	2.5	0.002	31.4	0.000	32.9	0.000	16.5	0.000	26.5	0.000
Canada	17.1	0.000	4.4	0.000	33.0	0.000	44.9	0.000	18.6	0.000	25.5	0.000
Czech Republic	22.6	0.000	4.6	0.029	3.5	0.242	35.2	0.000	15.2	0.000	22.6	0.000
Denmark	32.2	0.000	3.6	0.003	42.7	0.000	34.0	0.000	17.0	0.000	18.4	0.000
Estonia	26.0	0.000	2.6	0.016	15.5	0.000	27.8	0.000	11.1	0.000	15.6	0.000
Finland	42.1	0.000	2.3	0.055	53.7	0.000	33.0	0.000	18.2	0.000	17.9	0.000
France	23.0	0.000	2.0	0.050	35.4	0.000	41.3	0.000	20.0	0.000	20.5	0.000
Germany	39.1	0.000	5.2	0.000	31.0	0.000	37.3	0.000	20.9	0.000	20.1	0.000
Ireland	10.9	0.000	5.3	0.001	29.0	0.000	41.0	0.000	19.4	0.000	12.5	0.000
Italy	22.1	0.000	0.4	0.845	29.2	0.000	28.8	0.000	18.9	0.000	20.2	0.000
Japan	25.2	0.000	2.3	0.142	c	c	32.7	0.000	10.9	0.000	12.1	0.000
Korea	38.3	0.000	5.8	0.000	54.0	0.000	34.7	0.000	11.5	0.000	19.1	0.000
Netherlands	33.4	0.000	4.0	0.000	40.4	0.000	39.6	0.000	14.4	0.000	23.2	0.000
Norway	19.6	0.000	6.8	0.000	43.7	0.000	31.8	0.000	18.0	0.000	25.4	0.000
Poland	28.5	0.000	-1.8	0.090	c	c	34.8	0.000	22.7	0.000	19.8	0.000
Slovak Republic	7.2	0.003	-1.8	0.335	-1.8	0.293	32.7	0.000	24.4	0.000	9.8	0.000
Spain	32.9	0.000	6.8	0.000	34.2	0.000	39.0	0.000	14.6	0.000	17.0	0.000
Sweden	25.8	0.000	5.4	0.000	52.9	0.000	37.9	0.000	14.7	0.000	24.4	0.000
United States	16.7	0.000	2.4	0.114	30.8	0.000	44.9	0.000	27.9	0.000	24.9	0.000
Sub-national entities												
Flanders (Belgium)	28.9	0.000	6.6	0.000	48.4	0.000	41.7	0.000	16.6	0.000	20.9	0.000
England (UK)	-2.4	0.517	2.6	0.167	34.3	0.000	35.8	0.000	26.9	0.000	26.2	0.000
Northern Ireland (UK)	6.1	0.146	5.7	0.004	33.2	0.000	36.6	0.000	20.0	0.000	19.1	0.000
England/N. Ireland (UK)	-2.1	0.553	2.7	0.141	34.3	0.000	35.8	0.000	26.7	0.000	26.0	0.000
Average	24.1	0.000	3.5	0.000	33.8	0.000	36.1	0.000	18.0	0.000	20.3	0.000
Partners												
Cyprus[1]	0.7	0.736	-0.9	0.598	26.0	0.000	24.3	0.000	12.4	0.000	10.9	0.007

1. See notes on page 250.

Note: Differences are based on a regression model and take account of differences associated with the following variables: age, gender, education, immigration and language background, socio-economic background, and type of occupation. Only the score-point differences between two contrast categories are shown, which is useful for showing the relative significance of each socio-demographic variable vis-a-vis observed score-point differences.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932897363

[Part 1/1]

Table A3.2 (L) Mean literacy proficiency, by 10-year age groups, and score difference between youngest and oldest adults

OECD	16-24 year-olds		25-34 year-olds		35-44 year-olds		45-54 year-olds		55-65 year-olds		Difference between youngest and oldest adults		
	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Dif.	S.E.	p-value
National entities													
Australia	284.1	(2.2)	287.5	(1.7)	288.7	(1.5)	276.9	(1.8)	262.7	(1.7)	21.4	(2.5)	0.000
Austria	277.7	(1.5)	279.8	(1.5)	274.6	(1.7)	266.2	(1.4)	249.8	(1.6)	27.9	(2.1)	0.000
Canada	275.7	(1.3)	285.1	(1.3)	279.7	(1.4)	268.0	(1.3)	260.4	(1.1)	15.4	(1.6)	0.000
Czech Republic	280.5	(2.1)	286.7	(1.8)	275.1	(2.0)	265.8	(1.7)	262.4	(2.0)	18.2	(2.8)	0.000
Denmark	276.1	(1.3)	282.1	(1.7)	281.1	(1.6)	265.5	(1.4)	252.4	(1.1)	23.6	(1.6)	0.000
Estonia	287.1	(1.3)	285.9	(1.7)	277.8	(1.2)	268.8	(1.4)	260.6	(1.5)	26.4	(1.8)	0.000
Finland	296.7	(1.9)	308.9	(1.7)	298.8	(2.1)	283.6	(1.8)	259.7	(1.4)	37.0	(2.5)	0.000
France	275.0	(1.3)	278.0	(1.4)	266.8	(1.3)	253.7	(1.2)	241.8	(1.3)	33.2	(1.7)	0.000
Germany	278.9	(1.6)	281.3	(1.8)	275.3	(1.6)	263.6	(1.7)	253.6	(1.7)	25.3	(2.2)	0.000
Ireland	270.6	(1.8)	275.6	(1.5)	271.1	(1.8)	259.3	(2.1)	250.5	(1.8)	20.1	(2.5)	0.000
Italy	260.8	(2.7)	260.2	(2.2)	252.8	(1.9)	248.8	(1.8)	233.4	(2.2)	27.4	(3.6)	0.000
Japan	299.4	(1.6)	309.2	(1.7)	307.0	(1.0)	297.1	(1.5)	273.3	(1.6)	26.1	(2.2)	0.000
Korea	292.9	(1.7)	289.5	(1.2)	277.5	(1.2)	258.6	(1.4)	244.1	(1.4)	48.8	(2.3)	0.000
Netherlands	294.6	(1.6)	298.1	(2.0)	294.0	(1.8)	277.2	(1.7)	260.8	(1.6)	33.8	(2.3)	0.000
Norway	275.0	(1.4)	288.5	(1.8)	288.2	(1.6)	277.5	(1.5)	261.9	(1.5)	13.2	(2.1)	0.000
Poland	281.5	(1.1)	277.2	(1.5)	268.1	(1.9)	259.1	(1.7)	249.1	(1.7)	32.4	(2.0)	0.000
Slovak Republic	276.0	(1.6)	278.4	(1.4)	278.3	(1.4)	270.1	(1.3)	266.0	(1.3)	10.0	(2.1)	0.000
Spain	263.9	(1.6)	262.8	(1.5)	259.6	(1.3)	248.5	(1.5)	226.7	(1.9)	37.2	(2.4)	0.000
Sweden	282.8	(1.7)	290.0	(1.9)	287.4	(1.8)	276.0	(1.7)	262.4	(1.3)	20.4	(2.2)	0.000
United States	271.5	(2.0)	275.5	(2.0)	273.4	(1.8)	265.9	(1.7)	262.9	(1.5)	8.6	(2.1)	0.000
Sub-national entities													
Flanders (Belgium)	285.0	(1.6)	290.8	(1.8)	282.4	(1.6)	271.9	(1.6)	255.0	(1.6)	30.0	(2.2)	0.000
England (UK)	265.4	(2.4)	280.1	(2.1)	279.2	(1.6)	271.3	(1.8)	265.3	(2.0)	0.1	(2.9)	0.969
Northern Ireland (UK)	272.3	(2.7)	277.6	(2.9)	273.9	(2.3)	262.5	(2.6)	255.1	(3.2)	17.2	(4.0)	0.000
England/N. Ireland (UK)	265.7	(2.3)	280.0	(2.1)	279.0	(1.6)	271.0	(1.8)	265.0	(1.9)	0.7	(2.8)	0.813
Average	279.6	(0.4)	284.1	(0.4)	278.9	(0.3)	267.9	(0.3)	255.2	(0.3)	24.4	(0.5)	0.000
Partners													
Cyprus[1]	267.1	(1.7)	275.1	(1.7)	269.9	(1.5)	270.0	(1.7)	260.7	(1.6)	6.5	(2.4)	0.006

1. See notes on page 250.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932897382

[Part 1/1]

Table A3.2 (N) Mean numeracy proficiency, by 10-year age groups, and score difference between youngest and oldest adults

OECD	16-24 year-olds		25-34 year-olds		35-44 year-olds		45-54 year-olds		55-65 year-olds		Difference between youngest and oldest adults		
	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Dif.	S.E.	p-value
National entities													
Australia	270.1	(2.6)	275.1	(1.8)	275.8	(1.7)	264.7	(1.8)	250.4	(2.0)	19.6	(2.9)	0.000
Austria	279.3	(1.6)	282.1	(1.7)	281.4	(2.0)	274.5	(1.7)	257.5	(1.7)	21.8	(2.2)	0.000
Canada	268.3	(1.6)	276.5	(1.4)	271.9	(1.5)	260.7	(1.4)	251.4	(1.4)	16.9	(2.2)	0.000
Czech Republic	278.0	(1.6)	288.4	(1.8)	277.4	(1.8)	271.9	(2.2)	263.2	(2.0)	14.8	(2.3)	0.000
Denmark	273.1	(1.5)	286.7	(1.9)	290.0	(1.6)	276.8	(1.6)	265.3	(1.2)	7.7	(1.9)	0.000
Estonia	278.5	(1.2)	283.6	(1.7)	275.1	(1.1)	269.0	(1.4)	259.4	(1.3)	19.1	(1.8)	0.000
Finland	284.8	(1.8)	302.5	(2.1)	292.0	(2.2)	279.3	(2.0)	260.0	(1.3)	24.7	(2.3)	0.000
France	263.4	(1.6)	269.4	(1.5)	262.1	(1.6)	246.0	(1.4)	234.1	(1.5)	29.2	(2.2)	0.000
Germany	275.1	(1.8)	282.0	(1.8)	278.6	(2.0)	268.2	(1.9)	256.4	(1.9)	18.7	(2.5)	0.000
Ireland	257.9	(2.2)	265.5	(1.7)	260.5	(1.7)	249.6	(2.1)	238.3	(2.3)	19.6	(3.2)	0.000
Italy	251.3	(2.6)	262.4	(2.3)	250.9	(1.9)	243.7	(2.0)	229.4	(2.2)	21.9	(3.5)	0.000
Japan	283.2	(2.3)	297.3	(1.6)	296.6	(1.3)	291.5	(1.7)	273.2	(1.6)	10.0	(2.8)	0.000
Korea	280.9	(1.9)	280.7	(1.4)	270.6	(1.5)	251.1	(1.4)	231.8	(1.7)	49.2	(2.8)	0.000
Netherlands	285.4	(1.8)	293.0	(1.8)	287.4	(2.1)	277.1	(1.7)	262.0	(1.7)	23.4	(2.3)	0.000
Norway	270.9	(1.7)	284.9	(2.0)	289.0	(1.9)	280.3	(1.7)	264.7	(1.7)	6.2	(2.4)	0.009
Poland	268.6	(1.1)	270.4	(1.5)	261.7	(2.2)	254.2	(2.1)	243.7	(1.9)	24.9	(2.2)	0.000
Slovak Republic	278.0	(1.8)	278.8	(1.6)	281.4	(1.7)	275.4	(1.6)	265.3	(1.6)	12.7	(2.4)	0.000
Spain	255.2	(1.7)	257.3	(1.3)	254.9	(1.3)	242.3	(1.6)	220.5	(1.7)	34.6	(2.5)	0.000
Sweden	278.2	(1.7)	287.8	(2.0)	286.1	(2.0)	276.3	(2.3)	268.3	(1.7)	10.0	(2.5)	0.000
United States	249.4	(2.2)	259.8	(2.2)	257.7	(1.9)	249.8	(2.1)	247.2	(1.8)	2.3	(2.3)	0.318
Sub-national entities													
Flanders (Belgium)	282.8	(1.7)	295.0	(1.9)	289.3	(1.8)	280.3	(1.9)	259.9	(1.6)	22.9	(2.4)	0.000
England (UK)	256.3	(2.7)	266.7	(2.2)	268.8	(1.9)	259.1	(1.9)	256.9	(1.9)	-0.7	(3.1)	0.832
Northern Ireland (UK)	263.6	(3.4)	267.6	(2.9)	265.8	(2.4)	251.6	(2.1)	245.2	(3.1)	18.4	(3.8)	0.000
England/N. Ireland (UK)	256.5	(2.6)	266.7	(2.2)	268.7	(1.9)	258.9	(1.9)	256.6	(1.9)	0.0	(3.0)	0.988
Average	271.3	(0.4)	279.4	(0.4)	275.4	(0.4)	265.5	(0.4)	252.7	(0.4)	18.7	(0.5)	0.000
Partners													
Cyprus[1]	264.2	(2.1)	273.1	(2.0)	269.0	(1.6)	264.6	(1.8)	250.2	(1.8)	14.0	(2.7)	0.000

1. See notes on page 250.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932897382

[Part 1/5]

Table A3.3 (P) **Percentage of adults at each proficiency level in problem solving in technology-rich environments, by 10-year age groups**

	16-24 year-olds									
	No experience/failed core		Below Level 1		Level 1		Level 2		Level 3	
OECD	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
National entities										
Australia	2.6	(0.8)	6.7	(1.2)	32.2	(2.4)	41.7	(2.7)	8.9	(1.7)
Austria	2.7	(0.5)	7.2	(1.2)	33.9	(2.1)	41.9	(2.1)	8.8	(1.2)
Canada	4.8	(0.6)	9.0	(0.8)	32.0	(1.9)	40.9	(1.6)	9.9	(1.0)
Czech Republic	2.1	(0.6)	8.1	(1.4)	31.0	(2.7)	43.1	(2.7)	11.7	(1.6)
Denmark	5.0	(0.7)	7.2	(1.1)	34.6	(2.3)	42.4	(2.0)	8.0	(1.1)
Estonia	2.0	(0.4)	8.2	(1.2)	35.2	(2.2)	41.4	(2.0)	9.1	(1.1)
Finland	3.1	(0.7)	3.6	(0.9)	29.7	(1.9)	50.4	(2.1)	11.5	(1.8)
France	m	m	m	m	m	m	m	m	m	m
Germany	2.0	(0.6)	9.1	(1.3)	32.8	(1.7)	43.2	(2.0)	10.9	(1.8)
Ireland	4.4	(0.8)	9.9	(1.5)	37.8	(2.6)	35.5	(2.5)	4.7	(1.2)
Italy	m	m	m	m	m	m	m	m	m	m
Japan	12.1	(1.4)	5.9	(1.2)	21.9	(2.2)	35.7	(2.5)	10.2	(1.3)
Korea	5.3	(0.7)	2.6	(0.7)	27.9	(2.1)	53.6	(2.1)	9.9	(1.5)
Netherlands	2.8	(0.6)	5.1	(1.1)	30.8	(2.0)	46.9	(2.0)	11.4	(1.5)
Norway	4.3	(0.6)	7.0	(1.1)	31.9	(1.8)	46.7	(1.9)	8.1	(1.0)
Poland	7.6	(0.5)	11.4	(0.7)	30.6	(1.1)	30.3	(1.2)	7.6	(0.9)
Slovak Republic	6.4	(0.9)	8.0	(1.1)	38.0	(2.0)	36.3	(1.7)	4.2	(1.0)
Spain	m	m	m	m	m	m	m	m	m	m
Sweden	3.9	(0.8)	5.2	(1.0)	28.3	(2.0)	49.9	(2.4)	11.7	(1.7)
United States	4.3	(0.8)	10.7	(1.7)	38.7	(2.4)	31.1	(2.2)	6.5	(1.2)
Sub-national entities										
Flanders (Belgium)	1.3	(0.4)	7.0	(1.1)	28.7	(2.0)	46.0	(1.9)	11.1	(1.4)
England (UK)	4.9	(0.8)	9.8	(1.5)	39.7	(2.6)	35.7	(2.3)	6.6	(1.4)
Northern Ireland (UK)	4.0	(0.9)	9.6	(1.9)	40.3	(3.3)	38.6	(3.2)	5.6	(1.7)
England/N. Ireland (UK)	4.8	(0.8)	9.8	(1.5)	39.7	(2.5)	35.8	(2.2)	6.6	(1.4)
Average	4.3	(0.2)	7.5	(0.3)	32.4	(0.5)	41.7	(0.5)	9.0	(0.3)
Partners										
Cyprus[1]	m	m	m	m	m	m	m	m	m	m

[Part 2/5]

Table A3.3 (P) **Percentage of adults at each proficiency level in problem solving in technology-rich environments, by 10-year age groups**

	25-34 year-olds									
	No experience/failed core		Below Level 1		Level 1		Level 2		Level 3	
OECD	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
National entities										
Australia	4.9	(0.8)	8.1	(1.3)	27.2	(1.9)	38.5	(1.9)	9.4	(1.2)
Austria	5.5	(0.9)	6.0	(1.1)	29.6	(1.7)	40.9	(1.8)	8.2	(1.0)
Canada	5.0	(0.6)	12.1	(1.1)	29.1	(1.6)	37.7	(1.8)	11.3	(1.2)
Czech Republic	3.8	(1.1)	9.1	(1.3)	27.8	(2.3)	39.3	(2.9)	12.2	(1.9)
Denmark	7.5	(0.7)	6.7	(0.9)	23.8	(1.8)	43.8	(2.1)	13.9	(1.4)
Estonia	3.8	(0.5)	11.1	(1.1)	32.5	(1.4)	35.6	(1.7)	8.1	(1.2)
Finland	3.5	(0.7)	4.1	(0.9)	23.3	(1.7)	47.7	(2.1)	19.8	(1.5)
France	m	m	m	m	m	m	m	m	m	m
Germany	3.3	(0.6)	10.8	(1.4)	28.4	(1.8)	39.7	(1.9)	13.2	(1.6)
Ireland	8.1	(0.8)	10.3	(1.1)	33.0	(1.6)	31.0	(1.5)	5.0	(0.9)
Italy	m	m	m	m	m	m	m	m	m	m
Japan	10.0	(1.1)	3.5	(0.8)	19.5	(1.8)	37.7	(1.9)	16.0	(1.4)
Korea	7.1	(0.9)	6.1	(0.9)	35.6	(2.3)	42.4	(2.2)	6.2	(1.2)
Netherlands	3.4	(0.7)	7.3	(1.2)	28.0	(2.3)	43.5	(2.2)	14.1	(1.6)
Norway	6.6	(0.8)	5.9	(1.3)	24.8	(1.7)	44.6	(1.9)	11.7	(1.3)
Poland	9.6	(0.8)	15.1	(1.5)	26.1	(1.7)	22.8	(1.7)	7.2	(1.0)
Slovak Republic	11.4	(1.0)	10.0	(1.2)	33.7	(2.1)	30.2	(2.2)	4.7	(0.8)
Spain	m	m	m	m	m	m	m	m	m	m
Sweden	6.1	(0.9)	6.1	(1.0)	24.9	(1.7)	44.4	(1.9)	16.0	(1.5)
United States	5.6	(0.9)	14.4	(1.4)	32.7	(2.3)	31.6	(2.2)	7.3	(1.2)
Sub-national entities										
Flanders (Belgium)	4.5	(0.7)	7.9	(1.0)	27.9	(1.8)	40.9	(2.2)	10.9	(1.3)
England (UK)	6.5	(0.9)	10.0	(1.2)	31.6	(1.8)	37.4	(2.0)	10.0	(1.5)
Northern Ireland (UK)	6.8	(1.3)	13.0	(1.8)	34.3	(2.1)	36.1	(2.4)	6.0	(1.5)
England/N. Ireland (UK)	6.5	(0.8)	10.1	(1.1)	31.7	(1.7)	37.3	(2.0)	9.8	(1.5)
Average	6.1	(0.2)	8.7	(0.3)	28.4	(0.4)	38.4	(0.5)	10.8	(0.3)
Partners										
Cyprus[1]	m	m	m	m	m	m	m	m	m	m

1. See notes on page 250.

Note: Cyprus,[1] France, Italy and Spain did not participate in the problem solving in technology-rich environments assessment.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932897401

[Part 3/5]

Table A3.3 (P) **Percentage of adults at each proficiency level in problem solving in technology-rich environments, by 10-year age groups**

	35-44 year-olds									
	No experience/failed core		Below Level 1		Level 1		Level 2		Level 3	
OECD	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
National entities										
Australia	4.6	(0.6)	8.5	(1.1)	28.6	(1.7)	35.1	(1.6)	6.9	(1.0)
Austria	8.8	(1.1)	10.6	(1.5)	31.5	(2.1)	33.0	(1.8)	3.9	(0.7)
Canada	7.2	(0.6)	12.8	(0.9)	29.8	(1.2)	33.3	(1.2)	8.8	(0.8)
Czech Republic	4.2	(0.6)	17.8	(2.3)	34.5	(2.9)	25.4	(2.4)	6.5	(1.6)
Denmark	5.8	(0.7)	10.3	(1.0)	31.2	(1.7)	39.8	(1.9)	8.1	(1.1)
Estonia	8.5	(0.8)	15.4	(0.9)	33.8	(1.3)	24.0	(1.1)	3.3	(0.7)
Finland	5.9	(0.9)	7.7	(1.1)	28.9	(1.7)	43.1	(2.1)	9.6	(1.4)
France	m	m	m	m	m	m	m	m	m	m
Germany	8.2	(1.1)	12.2	(1.2)	32.2	(1.7)	32.0	(1.8)	7.1	(1.0)
Ireland	10.4	(1.0)	15.0	(1.4)	30.8	(1.5)	22.7	(1.3)	3.5	(0.5)
Italy	m	m	m	m	m	m	m	m	m	m
Japan	14.1	(1.4)	5.2	(0.9)	21.0	(1.4)	33.6	(1.7)	11.0	(1.2)
Korea	12.0	(0.9)	12.6	(1.3)	42.0	(1.5)	26.7	(1.4)	2.3	(0.6)
Netherlands	4.5	(0.7)	9.3	(1.2)	31.1	(1.7)	41.1	(2.3)	8.4	(1.0)
Norway	5.0	(0.6)	8.7	(1.2)	30.2	(1.7)	41.2	(1.8)	7.2	(0.9)
Poland	20.7	(1.5)	13.9	(1.7)	18.9	(1.8)	14.8	(1.7)	3.5	(0.8)
Slovak Republic	18.6	(1.3)	10.9	(1.3)	33.0	(2.2)	23.3	(2.0)	3.0	(0.8)
Spain	m	m	m	m	m	m	m	m	m	m
Sweden	5.0	(0.9)	11.1	(1.3)	29.1	(1.8)	39.4	(1.8)	11.1	(1.5)
United States	8.2	(0.9)	17.0	(1.4)	30.7	(2.0)	28.3	(1.7)	6.0	(1.0)
Sub-national entities										
Flanders (Belgium)	7.2	(0.7)	12.2	(1.2)	31.9	(1.9)	32.0	(1.9)	6.9	(1.0)
England (UK)	7.0	(0.8)	14.7	(1.5)	34.1	(2.4)	32.3	(1.7)	6.7	(1.0)
Northern Ireland (UK)	11.6	(1.2)	16.9	(2.4)	38.3	(2.6)	24.8	(2.2)	4.0	(1.1)
England/N. Ireland (UK)	7.2	(0.8)	14.7	(1.4)	34.3	(2.4)	32.0	(1.7)	6.6	(0.9)
Average	8.7	(0.2)	11.9	(0.3)	30.7	(0.4)	31.6	(0.4)	6.5	(0.2)
Partners										
Cyprus[1]	m	m	m	m	m	m	m	m	m	m

[Part 4/5]

Table A3.3 (P) **Percentage of adults at each proficiency level in problem solving in technology-rich environments, by 10-year age groups**

	45-54 year-olds									
	No experience/failed core		Below Level 1		Level 1		Level 2		Level 3	
OECD	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
National entities										
Australia	9.2	(0.8)	9.7	(1.5)	30.1	(2.1)	27.0	(2.1)	3.7	(0.8)
Austria	15.2	(1.1)	12.2	(1.2)	33.9	(1.8)	20.7	(1.4)	1.9	(0.6)
Canada	13.0	(0.7)	17.9	(1.0)	30.7	(1.2)	23.5	(1.1)	4.7	(0.7)
Czech Republic	17.4	(1.7)	15.2	(2.1)	28.7	(2.7)	16.4	(2.3)	2.3	(1.1)
Denmark	8.2	(0.7)	16.0	(1.4)	37.9	(1.5)	27.1	(1.6)	2.9	(0.6)
Estonia	17.7	(1.0)	19.0	(1.2)	26.6	(1.3)	11.9	(1.1)	1.2	(0.4)
Finland	9.4	(1.0)	14.1	(1.2)	35.4	(1.7)	26.6	(1.5)	3.5	(0.8)
France	m	m	m	m	m	m	m	m	m	m
Germany	14.6	(1.1)	17.8	(1.4)	31.4	(1.8)	23.7	(1.6)	3.7	(0.6)
Ireland	21.2	(1.6)	13.9	(1.5)	26.4	(1.6)	12.5	(1.1)	1.3	(0.4)
Italy	m	m	m	m	m	m	m	m	m	m
Japan	21.2	(1.5)	10.6	(1.4)	23.9	(1.6)	22.0	(1.5)	4.8	(0.8)
Korea	38.7	(1.2)	15.8	(1.2)	24.6	(1.7)	10.7	(1.2)	0.7	(0.3)
Netherlands	7.4	(0.9)	15.0	(1.2)	36.9	(1.5)	28.7	(1.7)	3.6	(0.8)
Norway	6.6	(0.8)	13.7	(1.3)	38.6	(1.6)	29.0	(1.5)	2.7	(0.7)
Poland	38.1	(1.7)	11.2	(1.3)	12.4	(1.5)	7.2	(1.2)	0.7	(0.4)
Slovak Republic	33.5	(1.6)	9.5	(1.1)	24.6	(1.8)	15.7	(1.5)	1.8	(0.6)
Spain	m	m	m	m	m	m	m	m	m	m
Sweden	6.5	(0.9)	15.8	(1.4)	36.1	(2.0)	29.7	(1.8)	4.9	(0.9)
United States	12.8	(1.2)	18.2	(1.4)	32.9	(1.9)	22.3	(1.7)	3.3	(0.7)
Sub-national entities										
Flanders (Belgium)	11.4	(1.0)	18.8	(1.4)	34.0	(1.7)	22.3	(1.5)	2.4	(0.6)
England (UK)	11.6	(1.1)	20.0	(1.7)	33.0	(2.0)	25.0	(1.6)	3.5	(0.8)
Northern Ireland (UK)	23.9	(1.7)	21.6	(2.6)	33.3	(2.4)	15.1	(1.6)	1.9	(0.7)
England/N. Ireland (UK)	12.0	(1.1)	20.0	(1.7)	33.0	(1.9)	24.7	(1.6)	3.5	(0.7)
Average	16.5	(0.3)	15.0	(0.3)	30.4	(0.4)	21.1	(0.4)	2.8	(0.2)
Partners										
Cyprus[1]	m	m	m	m	m	m	m	m	m	m

1. See notes on page 250.

Note: Cyprus,[1] France, Italy and Spain did not participate in the problem solving in technology-rich environments assessment.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932897401

[Part 5/5]

Table A3.3 (P) **Percentage of adults at each proficiency level in problem solving in technology-rich environments, by 10-year age groups**

	55-65 year-olds									
	No experience/failed core		Below Level 1		Level 1		Level 2		Level 3	
OECD	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
National entities										
Australia	16.7	(1.2)	13.0	(1.2)	26.5	(1.5)	15.6	(1.3)	1.6	(0.5)
Austria	35.0	(1.5)	12.4	(1.1)	25.0	(1.6)	7.3	(1.0)	0.0	(0.0)
Canada	20.4	(0.7)	20.7	(0.9)	28.9	(1.0)	14.6	(1.0)	1.8	(0.4)
Czech Republic	33.1	(2.0)	13.6	(1.7)	22.3	(2.7)	11.1	(1.9)	1.0	(0.6)
Denmark	11.7	(0.7)	26.7	(1.4)	35.6	(1.3)	12.8	(1.0)	0.5	(0.2)
Estonia	34.0	(1.1)	14.7	(0.9)	17.6	(1.0)	4.6	(0.7)	0.2	(0.1)
Finland	18.1	(1.1)	21.5	(1.4)	27.0	(1.5)	8.4	(0.8)	0.5	(0.3)
France	m	m	m	m	m	m	m	m	m	m
Germany	26.9	(1.6)	20.0	(1.6)	27.3	(1.8)	12.1	(1.6)	1.3	(0.6)
Ireland	34.4	(1.5)	13.7	(1.3)	16.9	(1.3)	5.0	(0.8)	0.2	(0.2)
Italy	m	m	m	m	m	m	m	m	m	m
Japan	40.9	(1.7)	11.5	(1.3)	14.1	(1.5)	8.6	(1.0)	1.3	(0.4)
Korea	63.5	(1.3)	8.7	(1.0)	12.9	(1.1)	3.9	(0.7)	0.0	(0.0)
Netherlands	13.8	(1.0)	23.0	(1.7)	34.7	(1.6)	15.6	(1.1)	1.0	(0.4)
Norway	11.8	(1.0)	21.9	(1.7)	33.5	(1.9)	13.4	(1.3)	0.8	(0.3)
Poland	53.5	(1.6)	8.3	(1.1)	7.2	(0.9)	2.4	(0.6)	0.0	(0.0)
Slovak Republic	51.1	(1.5)	6.0	(0.8)	14.9	(1.3)	8.6	(1.3)	0.5	(0.3)
Spain	m	m	m	m	m	m	m	m	m	m
Sweden	9.7	(1.0)	25.4	(1.7)	34.6	(1.7)	16.0	(1.2)	1.4	(0.4)
United States	15.2	(1.0)	18.3	(1.8)	30.8	(1.9)	17.2	(1.9)	2.5	(0.8)
Sub-national entities										
Flanders (Belgium)	25.1	(1.1)	23.9	(1.6)	26.0	(1.6)	11.4	(1.2)	0.7	(0.3)
England (UK)	19.7	(1.4)	20.5	(1.8)	31.3	(2.3)	16.0	(1.6)	1.6	(0.6)
Northern Ireland (UK)	35.1	(2.3)	21.4	(2.5)	25.5	(2.6)	8.9	(1.7)	0.6	(0.4)
England/N. Ireland (UK)	20.2	(1.4)	20.6	(1.7)	31.2	(2.2)	15.7	(1.6)	1.6	(0.6)
Average	28.2	(0.3)	17.0	(0.3)	24.6	(0.4)	10.8	(0.3)	0.9	(0.1)
Partners										
Cyprus[1]	m	m	m	m	m	m	m	m	m	m

1. See notes on page 250.

Note: Cyprus,[1] France, Italy and Spain did not participate in the problem solving in technology-rich environments assessment.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932897401

[Part 1/1]

Table A3.4 (N) **Mean numeracy proficiency, by gender, and score difference between men and women**

OECD	Men		Women		Difference between men and women		
	Mean score	S.E.	Mean score	S.E.	Dif.	S.E.	p-value
National entities							
Australia	274.5	(1.4)	260.8	(1.2)	13.7	(1.8)	0.000
Austria	281.7	(1.2)	268.5	(1.1)	13.2	(1.5)	0.000
Canada	272.7	(0.9)	258.2	(0.9)	14.6	(1.2)	0.000
Czech Republic	280.2	(1.4)	271.2	(1.3)	9.0	(1.9)	0.000
Denmark	283.4	(1.2)	273.1	(0.9)	10.3	(1.6)	0.000
Estonia	276.2	(0.9)	270.3	(0.8)	6.0	(1.3)	0.000
Finland	287.3	(1.2)	277.1	(1.0)	10.2	(1.7)	0.000
France	259.7	(0.9)	248.9	(0.9)	10.8	(1.3)	0.000
Germany	280.3	(1.3)	263.0	(1.3)	17.3	(1.7)	0.000
Ireland	261.7	(1.3)	249.8	(1.3)	11.9	(1.6)	0.000
Italy	252.5	(1.4)	241.8	(1.4)	10.7	(1.8)	0.000
Japan	294.3	(1.1)	282.0	(1.1)	12.3	(1.6)	0.000
Korea	268.6	(0.9)	258.3	(1.0)	10.3	(1.3)	0.000
Netherlands	288.7	(1.1)	271.9	(1.0)	16.7	(1.5)	0.000
Norway	285.6	(1.2)	270.7	(1.1)	14.8	(1.6)	0.000
Poland	260.7	(1.2)	258.8	(0.9)	1.9	(1.4)	0.170
Slovak Republic	277.0	(1.1)	274.6	(1.0)	2.4	(1.3)	0.070
Spain	252.0	(1.0)	239.5	(1.0)	12.5	(1.5)	0.000
Sweden	285.7	(1.3)	272.2	(1.0)	13.6	(1.6)	0.000
United States	260.0	(1.3)	246.0	(1.5)	14.1	(1.5)	0.000
Sub-national entities							
Flanders (Belgium)	288.3	(1.1)	272.3	(1.2)	16.0	(1.6)	0.000
England (UK)	269.0	(1.4)	254.7	(1.5)	14.3	(1.9)	0.000
Northern Ireland (UK)	266.3	(2.1)	252.3	(2.1)	14.1	(2.1)	0.000
England/N. Ireland (UK)	268.9	(1.4)	254.6	(1.4)	14.3	(1.8)	0.000
Average	274.5	(0.3)	262.9	(0.2)	11.7	(0.3)	0.000
Partners							
Cyprus[1]	268.5	(1.1)	261.2	(1.2)	7.3	(1.7)	0.000

1. See notes on page 250.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932897420

[Part 1/6]

Table A3.5 (P) **Percentage of adults at each proficiency level in problem solving in technology-rich environments, by gender and labour force status**

	Women									
	No experience/failed core		Below Level 1		Level 1		Level 2		Level 3	
OECD	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
National entities										
Australia	7.4	(0.5)	8.9	(0.7)	28.7	(1.3)	31.9	(1.5)	5.6	(0.8)
Austria	14.0	(0.7)	11.4	(0.8)	31.9	(1.3)	25.2	(1.3)	3.1	(0.5)
Canada	9.8	(0.3)	14.8	(0.6)	30.9	(0.8)	29.4	(0.7)	6.5	(0.5)
Czech Republic	13.7	(0.9)	12.9	(1.2)	28.4	(1.8)	25.3	(1.5)	5.3	(0.8)
Denmark	6.1	(0.4)	14.8	(0.7)	35.3	(1.1)	31.9	(1.0)	5.4	(0.6)
Estonia	11.6	(0.5)	14.7	(0.8)	29.4	(0.9)	23.2	(0.8)	3.7	(0.5)
Finland	7.6	(0.5)	11.1	(0.6)	30.7	(1.2)	32.9	(1.2)	7.5	(0.7)
France	m	m	m	m	m	m	m	m	m	m
Germany	13.3	(0.9)	14.4	(0.9)	31.1	(1.1)	26.6	(1.1)	5.4	(0.5)
Ireland	12.9	(0.6)	13.5	(0.9)	31.8	(1.4)	21.4	(1.2)	2.4	(0.4)
Italy	m	m	m	m	m	m	m	m	m	m
Japan	23.8	(0.9)	7.6	(0.8)	19.6	(1.0)	23.5	(1.1)	5.7	(0.6)
Korea	26.0	(0.7)	10.6	(0.7)	30.4	(1.1)	24.8	(1.0)	2.8	(0.4)
Netherlands	7.0	(0.5)	14.3	(0.8)	33.6	(1.2)	31.9	(1.1)	5.7	(0.6)
Norway	6.5	(0.5)	12.6	(0.8)	33.5	(1.2)	32.8	(1.1)	5.0	(0.5)
Poland	23.6	(0.8)	13.1	(0.9)	19.5	(1.0)	14.6	(0.8)	3.1	(0.4)
Slovak Republic	23.9	(0.9)	8.9	(0.7)	29.2	(1.1)	22.2	(0.9)	2.6	(0.4)
Spain	m	m	m	m	m	m	m	m	m	m
Sweden	6.0	(0.5)	13.5	(0.9)	32.2	(1.2)	34.5	(1.3)	7.5	(0.6)
United States	8.2	(0.6)	16.3	(1.1)	35.8	(1.3)	25.8	(1.2)	3.8	(0.5)
Sub-national entities										
Flanders (Belgium)	11.8	(0.6)	16.0	(0.8)	30.6	(1.1)	27.1	(1.0)	4.6	(0.5)
England (UK)	10.2	(0.6)	16.4	(1.0)	36.0	(1.2)	27.1	(1.0)	3.8	(0.5)
Northern Ireland (UK)	16.1	(0.8)	18.8	(1.8)	36.6	(1.4)	22.2	(1.6)	2.2	(0.5)
England/N. Ireland (UK)	10.4	(0.6)	16.5	(1.0)	36.0	(1.2)	26.9	(1.0)	3.8	(0.5)
Average	12.8	(0.1)	12.9	(0.2)	30.4	(0.3)	26.9	(0.3)	4.7	(0.1)
Partners										
Cyprus[1]	m	m	m	m	m	m	m	m	m	m

[Part 2/6]

Table A3.5 (P) **Percentage of adults at each proficiency level in problem solving in technology-rich environments, by gender and labour force status**

	Men									
	No experience/failed core		Below Level 1		Level 1		Level 2		Level 3	
OECD	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
National entities										
Australia	7.6	(0.5)	9.5	(0.8)	29.1	(1.1)	31.7	(1.2)	6.8	(0.8)
Austria	13.4	(0.7)	8.4	(0.7)	29.8	(1.1)	31.1	(1.0)	5.6	(0.5)
Canada	11.0	(0.5)	14.7	(0.6)	29.2	(0.9)	29.5	(0.8)	7.8	(0.6)
Czech Republic	11.3	(0.9)	13.0	(1.4)	29.1	(1.8)	27.8	(1.6)	7.9	(1.0)
Denmark	9.4	(0.5)	13.1	(0.7)	30.5	(1.0)	32.8	(1.0)	7.3	(0.6)
Estonia	15.2	(0.6)	12.7	(0.8)	28.7	(0.9)	23.3	(0.9)	5.0	(0.6)
Finland	9.8	(0.6)	11.0	(0.7)	27.0	(1.2)	33.5	(1.1)	9.2	(0.8)
France	m	m	m	m	m	m	m	m	m	m
Germany	10.0	(0.6)	14.3	(1.1)	29.8	(1.3)	31.7	(1.2)	8.1	(0.8)
Ireland	16.6	(0.8)	11.5	(0.9)	27.0	(1.1)	22.9	(1.1)	3.9	(0.5)
Italy	m	m	m	m	m	m	m	m	m	m
Japan	18.1	(0.9)	7.6	(0.8)	19.9	(1.1)	29.2	(1.3)	10.8	(0.9)
Korea	23.1	(0.8)	8.9	(0.7)	28.8	(1.2)	28.9	(1.1)	4.4	(0.5)
Netherlands	6.3	(0.5)	10.7	(0.7)	31.5	(0.9)	36.6	(1.0)	8.8	(0.8)
Norway	7.2	(0.4)	10.4	(0.7)	30.2	(1.0)	36.9	(1.2)	7.1	(0.7)
Poland	28.4	(0.8)	10.9	(0.8)	18.4	(1.0)	16.1	(1.0)	4.6	(0.5)
Slovak Republic	24.4	(0.9)	9.0	(0.6)	28.4	(1.3)	23.3	(1.2)	3.2	(0.5)
Spain	m	m	m	m	m	m	m	m	m	m
Sweden	6.7	(0.7)	12.8	(0.9)	29.4	(1.2)	35.9	(1.3)	10.0	(0.8)
United States	10.4	(0.7)	15.3	(1.2)	30.3	(1.3)	26.3	(1.3)	6.4	(0.7)
Sub-national entities										
Flanders (Belgium)	10.0	(0.6)	13.7	(0.8)	29.1	(1.1)	30.4	(1.0)	6.9	(0.6)
England (UK)	9.7	(0.6)	13.8	(1.1)	31.7	(1.6)	31.5	(1.5)	7.6	(0.8)
Northern Ireland (UK)	15.6	(0.9)	14.0	(1.6)	32.4	(1.7)	27.9	(1.5)	5.3	(0.9)
England/N. Ireland (UK)	9.9	(0.6)	13.8	(1.1)	31.7	(1.5)	31.4	(1.5)	7.5	(0.8)
Average	13.1	(0.2)	11.6	(0.2)	28.3	(0.3)	29.4	(0.3)	6.9	(0.2)
Partners										
Cyprus[1]	m	m	m	m	m	m	m	m	m	m

1. See notes on page 250.

Note: Cyprus,[1] France, Italy and Spain did not participate in the problem solving in technology-rich environments assessment.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932897439

[Part 3/6]

Table A3.5 (P) **Percentage of adults at each proficiency level in problem solving in technology-rich environments, by gender and labour force status**

	Women in labour force									
	No experience/failed core		Below Level 1		Level 1		Level 2		Level 3	
OECD	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
National entities										
Australia	4.4	(0.5)	8.4	(1.0)	30.6	(1.5)	37.5	(1.7)	6.6	(0.9)
Austria	9.3	(0.7)	12.1	(1.2)	34.6	(1.8)	28.5	(1.5)	3.4	(0.6)
Canada	7.0	(0.4)	14.0	(0.7)	32.4	(1.0)	32.7	(0.9)	7.1	(0.7)
Czech Republic	10.2	(1.1)	14.6	(1.6)	28.4	(2.1)	25.1	(2.0)	5.6	(1.1)
Denmark	4.1	(0.4)	13.3	(0.8)	36.8	(1.3)	35.3	(1.2)	6.0	(0.8)
Estonia	7.5	(0.5)	15.7	(0.9)	32.1	(1.0)	23.9	(1.0)	3.9	(0.6)
Finland	4.8	(0.5)	10.3	(0.7)	33.3	(1.3)	35.5	(1.3)	8.4	(0.9)
France	m	m	m	m	m	m	m	m	m	m
Germany	11.1	(1.0)	14.0	(1.1)	33.0	(1.3)	29.4	(1.4)	6.0	(0.6)
Ireland	8.9	(0.7)	13.3	(1.0)	35.2	(1.8)	25.0	(1.6)	2.8	(0.5)
Italy	m	m	m	m	m	m	m	m	m	m
Japan	20.9	(1.2)	8.0	(0.9)	20.6	(1.2)	24.5	(1.3)	6.9	(0.8)
Korea	24.3	(1.1)	11.4	(0.9)	31.4	(1.5)	25.1	(1.4)	2.5	(0.5)
Netherlands	4.4	(0.5)	11.4	(0.8)	35.9	(1.2)	37.8	(1.4)	6.8	(0.7)
Norway	4.6	(0.5)	11.5	(1.0)	36.1	(1.5)	36.7	(1.3)	5.5	(0.6)
Poland	17.2	(1.1)	14.7	(1.2)	21.8	(1.3)	16.2	(1.2)	3.7	(0.7)
Slovak Republic	16.9	(1.0)	9.8	(0.9)	31.9	(1.4)	24.4	(1.2)	3.4	(0.6)
Spain	m	m	m	m	m	m	m	m	m	m
Sweden	3.9	(0.6)	12.0	(0.9)	33.9	(1.4)	37.2	(1.5)	8.1	(0.7)
United States	5.7	(0.7)	16.9	(1.3)	38.9	(1.6)	28.7	(1.6)	4.5	(0.7)
Sub-national entities										
Flanders (Belgium)	7.6	(0.6)	16.7	(1.1)	35.0	(1.6)	31.2	(1.4)	5.2	(0.7)
England (UK)	6.9	(0.7)	14.7	(1.2)	37.7	(1.5)	31.6	(1.4)	4.5	(0.6)
Northern Ireland (UK)	11.4	(0.9)	17.5	(2.1)	39.5	(1.9)	27.5	(2.0)	2.7	(0.7)
England/N. Ireland (UK)	7.0	(0.7)	14.8	(1.2)	37.8	(1.5)	31.5	(1.3)	4.5	(0.6)
Average	9.5	(0.2)	12.8	(0.2)	32.6	(0.3)	29.8	(0.3)	5.3	(0.2)
Partners										
Cyprus[1]	m	m	m	m	m	m	m	m	m	m

[Part 4/6]

Table A3.5 (P) **Percentage of adults at each proficiency level in problem solving in technology-rich environments, by gender and labour force status**

	Women not in labour force									
	No experience/failed core		Below Level 1		Level 1		Level 2		Level 3	
OECD	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
National entities										
Australia	15.1	(1.4)	10.8	(1.7)	26.4	(2.4)	21.0	(2.4)	3.5	(1.3)
Austria	28.2	(1.9)	10.3	(1.4)	26.4	(2.1)	17.7	(1.8)	2.3	(0.6)
Canada	19.0	(1.0)	17.9	(1.2)	27.3	(1.5)	20.1	(1.4)	4.8	(0.8)
Czech Republic	20.2	(1.7)	10.0	(1.7)	28.8	(2.5)	26.0	(2.3)	4.7	(1.1)
Denmark	12.3	(1.1)	19.4	(1.6)	31.1	(2.0)	21.9	(2.0)	3.4	(1.0)
Estonia	25.0	(1.2)	11.9	(1.3)	20.8	(1.6)	21.1	(1.5)	2.9	(0.7)
Finland	15.7	(1.5)	13.4	(1.5)	23.3	(1.9)	25.8	(2.0)	4.8	(1.0)
France	m	m	m	m	m	m	m	m	m	m
Germany	20.5	(1.8)	16.7	(1.7)	27.9	(2.3)	20.2	(2.1)	4.1	(0.8)
Ireland	20.3	(1.2)	14.0	(1.4)	25.7	(2.0)	14.8	(1.5)	1.7	(0.6)
Italy	m	m	m	m	m	m	m	m	m	m
Japan	29.5	(1.6)	7.1	(1.1)	18.4	(1.8)	22.6	(1.8)	3.8	(0.8)
Korea	28.6	(1.1)	9.4	(1.0)	29.2	(1.7)	24.5	(1.5)	3.2	(0.7)
Netherlands	15.1	(1.6)	23.9	(2.2)	29.9	(2.4)	17.5	(1.9)	3.1	(0.8)
Norway	14.8	(1.8)	18.5	(2.2)	26.8	(2.9)	20.8	(2.1)	3.1	(0.9)
Poland	33.5	(1.3)	10.7	(1.2)	15.9	(1.3)	12.2	(0.9)	2.1	(0.4)
Slovak Republic	34.9	(1.4)	7.5	(1.0)	25.3	(1.7)	19.0	(1.5)	1.3	(0.5)
Spain	m	m	m	m	m	m	m	m	m	m
Sweden	12.4	(1.6)	18.1	(2.5)	27.0	(2.3)	26.2	(2.2)	5.6	(1.4)
United States	17.5	(1.2)	16.8	(1.8)	31.4	(2.4)	20.4	(2.1)	2.3	(0.7)
Sub-national entities										
Flanders (Belgium)	22.4	(1.3)	17.3	(1.4)	26.6	(1.9)	23.2	(1.6)	4.1	(0.8)
England (UK)	18.7	(1.4)	21.1	(1.8)	33.2	(1.9)	17.3	(1.7)	2.3	(0.8)
Northern Ireland (UK)	25.3	(1.8)	22.1	(2.7)	33.1	(2.6)	13.7	(2.2)	1.3	(0.8)
England/N. Ireland (UK)	19.0	(1.3)	21.1	(1.7)	33.2	(1.8)	17.2	(1.6)	2.3	(0.7)
Average	21.2	(0.3)	14.5	(0.3)	26.4	(0.4)	20.7	(0.4)	3.3	(0.2)
Partners										
Cyprus[1]	m	m	m	m	m	m	m	m	m	m

1. See notes on page 250.

Note: Cyprus,[1] France, Italy and Spain did not participate in the problem solving in technology-rich environments assessment.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932897439

[Part 5/6]

Table A3.5 (P) **Percentage of adults at each proficiency level in problem solving in technology-rich environments, by gender and labour force status**

	Men in labour force									
	No experience/failed core		Below Level 1		Level 1		Level 2		Level 3	
OECD	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
National entities										
Australia	5.4	(0.5)	9.9	(0.9)	30.3	(1.2)	33.2	(1.4)	7.1	(0.8)
Austria	10.2	(0.7)	8.5	(0.8)	32.5	(1.3)	33.7	(1.2)	5.6	(0.6)
Canada	9.5	(0.5)	14.5	(0.6)	30.1	(0.9)	30.9	(0.8)	8.4	(0.6)
Czech Republic	7.3	(0.8)	13.5	(1.6)	31.1	(2.1)	29.3	(1.8)	8.2	(1.2)
Denmark	7.3	(0.5)	11.9	(0.8)	31.7	(1.1)	35.8	(1.2)	7.9	(0.7)
Estonia	11.6	(0.7)	14.2	(0.9)	30.4	(1.1)	23.5	(1.0)	5.3	(0.8)
Finland	6.7	(0.5)	10.3	(0.8)	28.9	(1.4)	36.0	(1.2)	10.2	(0.9)
France	m	m	m	m	m	m	m	m	m	m
Germany	8.5	(0.6)	14.7	(1.2)	31.2	(1.5)	32.5	(1.3)	8.1	(0.9)
Ireland	14.1	(0.7)	11.3	(1.0)	28.6	(1.3)	24.5	(1.2)	4.1	(0.6)
Italy	m	m	m	m	m	m	m	m	m	m
Japan	17.7	(0.9)	7.6	(0.8)	20.2	(1.2)	30.4	(1.3)	11.3	(0.9)
Korea	23.0	(0.9)	10.3	(0.8)	30.6	(1.3)	26.2	(1.2)	3.8	(0.5)
Netherlands	5.0	(0.5)	10.2	(0.8)	33.2	(1.1)	39.5	(1.2)	9.1	(0.9)
Norway	6.4	(0.5)	9.7	(0.8)	31.2	(1.1)	39.7	(1.4)	7.9	(0.8)
Poland	23.7	(1.0)	12.1	(1.0)	20.0	(1.3)	16.7	(1.2)	4.7	(0.6)
Slovak Republic	20.6	(0.9)	9.8	(0.8)	30.4	(1.4)	24.3	(1.3)	3.5	(0.6)
Spain	m	m	m	m	m	m	m	m	m	m
Sweden	5.9	(0.7)	12.6	(0.9)	29.7	(1.3)	36.4	(1.4)	10.5	(0.9)
United States	9.3	(0.7)	16.4	(1.3)	32.3	(1.5)	28.9	(1.5)	7.0	(0.8)
Sub-national entities										
Flanders (Belgium)	8.0	(0.6)	14.0	(1.0)	32.7	(1.4)	32.9	(1.4)	7.6	(0.8)
England (UK)	8.2	(0.6)	13.4	(1.2)	32.6	(1.7)	33.2	(1.8)	8.6	(0.9)
Northern Ireland (UK)	13.0	(1.0)	13.8	(1.8)	34.0	(2.0)	31.2	(1.8)	6.2	(1.1)
England/N. Ireland (UK)	8.3	(0.6)	13.4	(1.2)	32.7	(1.7)	33.2	(1.7)	8.5	(0.9)
Average	11.0	(0.1)	11.8	(0.2)	29.9	(0.3)	30.9	(0.3)	7.3	(0.2)
Partners										
Cyprus[1]	m	m	m	m	m	m	m	m	m	m

[Part 6/6]

Table A3.5 (P) **Percentage of adults at each proficiency level in problem solving in technology-rich environments, by gender and labour force status**

	Men not in labour force									
	No experience/failed core		Below Level 1		Level 1		Level 2		Level 3	
OECD	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
National entities										
Australia	21.3	(2.5)	7.9	(1.9)	24.5	(3.6)	25.6	(3.5)	5.4	(2.3)
Austria	27.4	(1.9)	8.4	(1.5)	21.8	(2.3)	23.6	(2.2)	6.1	(1.3)
Canada	19.9	(1.5)	16.7	(1.6)	26.2	(2.6)	23.3	(2.2)	4.7	(1.1)
Czech Republic	24.5	(2.8)	11.6	(2.4)	23.4	(2.7)	23.3	(2.7)	7.2	(1.7)
Denmark	18.8	(1.7)	18.5	(1.9)	26.3	(2.3)	20.3	(1.9)	4.7	(1.1)
Estonia	29.7	(1.4)	7.3	(1.2)	22.8	(2.3)	23.2	(2.0)	4.3	(1.1)
Finland	19.1	(1.5)	12.9	(1.4)	21.5	(1.7)	25.9	(2.0)	6.4	(1.3)
France	m	m	m	m	m	m	m	m	m	m
Germany	18.8	(2.1)	13.2	(2.2)	24.2	(2.7)	30.3	(2.6)	8.9	(1.7)
Ireland	25.5	(2.0)	12.7	(1.8)	22.7	(2.4)	18.8	(2.4)	3.2	(1.0)
Italy	m	m	m	m	m	m	m	m	m	m
Japan	21.4	(2.3)	8.4	(2.2)	20.1	(3.1)	24.6	(3.1)	8.5	(1.7)
Korea	23.7	(2.0)	2.8	(0.9)	21.2	(2.3)	41.8	(2.8)	7.3	(1.6)
Netherlands	15.3	(2.1)	14.9	(2.6)	26.3	(2.8)	24.9	(3.0)	8.3	(1.7)
Norway	12.5	(1.5)	15.2	(2.0)	29.3	(2.6)	27.5	(2.4)	4.2	(1.0)
Poland	43.2	(1.9)	7.3	(1.1)	13.6	(1.3)	14.1	(1.4)	4.3	(0.8)
Slovak Republic	36.3	(1.8)	6.8	(1.4)	22.7	(2.2)	20.4	(2.1)	2.2	(0.8)
Spain	m	m	m	m	m	m	m	m	m	m
Sweden	9.9	(1.7)	13.7	(2.4)	27.7	(3.0)	33.7	(3.0)	7.9	(1.8)
United States	21.2	(2.4)	13.9	(2.6)	29.3	(3.1)	19.9	(3.2)	5.3	(1.9)
Sub-national entities										
Flanders (Belgium)	19.0	(1.5)	15.6	(1.6)	23.9	(2.0)	29.0	(1.9)	6.5	(1.1)
England (UK)	18.6	(2.1)	16.4	(2.9)	29.7	(3.5)	25.6	(3.3)	3.4	(1.9)
Northern Ireland (UK)	28.7	(3.3)	15.4	(2.8)	30.6	(3.7)	19.2	(3.2)	2.5	(1.1)
England/N. Ireland (UK)	19.0	(2.1)	16.4	(2.7)	29.7	(3.4)	25.3	(3.2)	3.4	(1.8)
Average	22.4	(0.4)	11.8	(0.4)	24.1	(0.5)	25.0	(0.5)	5.7	(0.3)
Partners										
Cyprus[1]	m	m	m	m	m	m	m	m	m	m

1. See notes on page 250.

Note: Cyprus,[1] France, Italy and Spain did not participate in the problem solving in technology-rich environments assessment.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932897439

[Part 1/1]

Table A3.6 (L) **Mean literacy proficiency and score difference, by parents' educational attainment**

OECD	Neither parent attained upper secondary		At least one parent attained upper secondary		At least one parent attained tertiary		Difference between adults with at least one parent who attained tertiary and neither parent attained upper secondary		
	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Dif.	S.E.	p-value
National entities									
Australia	270.6	(1.5)	286.6	(1.6)	300.5	(1.4)	29.9	(2.0)	0.000
Austria	248.5	(1.5)	273.7	(1.0)	289.3	(1.5)	40.7	(2.1)	0.000
Canada	252.6	(1.1)	276.2	(1.0)	288.9	(0.9)	36.3	(1.5)	0.000
Czech Republic	252.5	(2.9)	273.9	(1.1)	294.0	(2.6)	41.5	(3.8)	0.000
Denmark	253.4	(1.2)	268.9	(1.1)	290.2	(1.0)	36.8	(1.6)	0.000
Estonia	261.4	(1.3)	276.4	(1.1)	291.2	(1.0)	29.8	(1.5)	0.000
Finland	270.3	(1.3)	295.2	(1.2)	311.3	(1.8)	40.9	(2.4)	0.000
France	246.3	(0.9)	271.3	(1.2)	294.5	(1.2)	48.1	(1.5)	0.000
Germany	235.7	(2.9)	268.2	(1.2)	289.4	(1.4)	53.7	(3.1)	0.000
Ireland	254.7	(1.3)	275.6	(1.5)	288.4	(1.7)	33.7	(2.2)	0.000
Italy	242.6	(1.2)	268.2	(2.0)	282.5	(3.8)	39.9	(3.9)	0.000
Japan	278.6	(1.5)	298.3	(1.0)	310.1	(1.1)	31.5	(1.8)	0.000
Korea	259.2	(0.8)	283.5	(1.1)	294.0	(1.3)	34.8	(1.4)	0.000
Netherlands	269.7	(1.0)	293.4	(1.5)	306.6	(1.5)	36.9	(1.8)	0.000
Norway	259.3	(1.5)	279.0	(1.0)	294.0	(1.3)	34.7	(1.9)	0.000
Poland	244.5	(1.5)	271.9	(0.9)	295.7	(2.1)	51.1	(2.6)	0.000
Slovak Republic	253.8	(1.3)	279.4	(0.8)	294.3	(1.6)	40.5	(2.0)	0.000
Spain	243.9	(0.9)	267.5	(1.6)	282.3	(1.8)	38.4	(2.0)	0.000
Sweden	263.5	(1.3)	284.0	(1.7)	296.8	(1.3)	33.2	(1.9)	0.000
United States	233.2	(2.6)	270.5	(1.4)	290.4	(1.6)	57.2	(3.1)	0.000
Sub-national entities									
Flanders (Belgium)	256.5	(1.3)	282.7	(1.4)	300.3	(1.3)	43.8	(1.8)	0.000
England (UK)	252.2	(1.7)	281.7	(1.4)	296.2	(1.8)	44.0	(2.5)	0.000
Northern Ireland (UK)	253.3	(2.3)	275.5	(2.4)	295.7	(2.9)	42.4	(3.0)	0.000
England/N. Ireland (UK)	252.3	(1.7)	281.5	(1.4)	296.2	(1.7)	43.9	(2.4)	0.000
Average	254.7	(0.3)	278.4	(0.3)	294.6	(0.4)	39.9	(0.5)	0.000
Partners									
Cyprus[1]	264.2	(1.1)	272.1	(1.7)	279.9	(1.6)	15.7	(1.9)	0.000

1. See notes on page 250.

Note: Lower than upper secondary includes ISCED 1, 2 and 3C short. Upper secondary education includes ISCED 3A, 3B, 3C long and 4. Tertiary includes ISCED 5A, 5B and 6.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932897458

[Part 1/3]

Table A3.7 (P) Percentage of adults at each proficiency level in problem solving in technology-rich environments, by parents' educational attainment

	Neither parent attained upper secondary									
	No experience/failed core		Below Level 1		Level 1		Level 2		Level 3	
OECD	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
National entities										
Australia	11.1	(0.8)	12.2	(1.1)	30.5	(1.3)	23.3	(1.2)	3.4	(0.6)
Austria	30.0	(1.2)	13.6	(1.1)	26.1	(1.5)	13.0	(1.1)	0.9	(0.3)
Canada	19.2	(0.7)	22.2	(0.9)	29.4	(1.1)	15.1	(0.9)	1.9	(0.4)
Czech Republic	33.5	(3.5)	18.3	(3.6)	19.7	(3.8)	6.8	(1.9)	1.2	(1.1)
Denmark	12.4	(0.6)	21.2	(1.1)	33.4	(1.3)	21.2	(1.2)	2.0	(0.5)
Estonia	29.3	(1.1)	17.6	(1.1)	21.0	(1.2)	7.0	(0.8)	0.3	(0.2)
Finland	14.1	(0.9)	17.6	(1.1)	30.3	(1.2)	18.3	(0.9)	2.4	(0.4)
France	m	m	m	m	m	m	m	m	m	m
Germany	34.2	(2.9)	22.2	(2.7)	23.6	(2.8)	8.8	(1.7)	0.6	(0.5)
Ireland	21.5	(0.8)	15.7	(1.1)	25.4	(1.1)	12.2	(0.8)	1.1	(0.3)
Italy	m	m	m	m	m	m	m	m	m	m
Japan	35.0	(1.5)	11.7	(1.2)	16.5	(1.4)	14.9	(1.3)	2.8	(0.6)
Korea	37.4	(0.9)	12.3	(0.7)	26.5	(1.0)	14.8	(0.8)	1.2	(0.3)
Netherlands	10.0	(0.6)	17.8	(1.0)	36.5	(1.1)	26.1	(1.2)	3.4	(0.6)
Norway	11.8	(0.9)	20.3	(1.3)	33.8	(1.6)	18.4	(1.2)	1.5	(0.5)
Poland	53.8	(1.3)	8.5	(1.0)	7.1	(0.9)	3.6	(0.7)	0.3	(0.2)
Slovak Republic	54.1	(1.4)	8.6	(0.9)	16.1	(1.1)	7.0	(0.7)	0.6	(0.3)
Spain	m	m	m	m	m	m	m	m	m	m
Sweden	8.7	(0.7)	22.0	(1.2)	34.9	(1.2)	22.1	(1.1)	2.7	(0.5)
United States	26.0	(2.0)	26.1	(2.4)	26.0	(2.3)	7.6	(1.3)	0.5	(0.4)
Sub-national entities										
Flanders (Belgium)	21.1	(0.9)	23.2	(1.1)	30.5	(1.6)	15.5	(1.3)	1.5	(0.4)
England (UK)	17.1	(1.2)	24.9	(1.6)	33.8	(1.8)	14.3	(1.5)	1.3	(0.6)
Northern Ireland (UK)	29.0	(1.3)	23.6	(2.1)	31.3	(2.1)	11.5	(1.2)	0.9	(0.5)
England/N. Ireland (UK)	17.7	(1.1)	24.8	(1.5)	33.7	(1.7)	14.1	(1.4)	1.3	(0.6)
Average	25.3	(0.3)	17.7	(0.4)	26.4	(0.4)	14.2	(0.3)	1.6	(0.1)
Partners										
Cyprus[1]	m	m	m	m	m	m	m	m	m	m

[Part 2/3]

Table A3.7 (P) Percentage of adults at each proficiency level in problem solving in technology-rich environments, by parents' educational attainment

	At least one parent has attained upper secondary									
	No experience/failed core		Below Level 1		Level 1		Level 2		Level 3	
OECD	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
National entities										
Australia	3.8	(0.5)	8.3	(1.1)	29.9	(1.9)	37.9	(2.0)	7.3	(1.1)
Austria	8.4	(0.6)	9.7	(0.9)	35.0	(1.4)	32.1	(1.2)	4.5	(0.5)
Canada	8.2	(0.5)	14.6	(0.8)	32.2	(1.2)	31.3	(1.0)	6.6	(0.6)
Czech Republic	11.2	(0.7)	13.3	(1.1)	31.4	(1.4)	26.8	(1.3)	5.7	(0.7)
Denmark	6.8	(0.6)	14.3	(1.1)	35.7	(1.6)	31.3	(1.4)	5.2	(0.6)
Estonia	8.9	(0.5)	14.9	(0.9)	34.8	(1.3)	23.8	(1.0)	3.1	(0.6)
Finland	5.1	(0.5)	7.4	(0.7)	31.6	(1.3)	40.9	(1.6)	9.2	(0.9)
France	m	m	m	m	m	m	m	m	m	m
Germany	11.2	(0.9)	15.6	(1.0)	33.4	(1.1)	28.6	(1.2)	5.2	(0.6)
Ireland	7.8	(0.9)	12.0	(1.0)	36.1	(1.7)	28.1	(1.8)	3.7	(0.6)
Italy	m	m	m	m	m	m	m	m	m	m
Japan	19.0	(1.0)	7.7	(0.9)	23.2	(1.2)	26.3	(1.1)	6.6	(0.7)
Korea	13.1	(0.8)	8.1	(0.8)	34.7	(1.5)	36.9	(1.6)	4.3	(0.6)
Netherlands	3.3	(0.5)	9.7	(1.1)	34.1	(1.5)	41.0	(1.6)	8.5	(1.0)
Norway	5.9	(0.5)	10.7	(1.0)	36.1	(1.3)	36.5	(1.4)	5.4	(0.6)
Poland	16.9	(0.7)	14.5	(0.8)	23.4	(1.0)	17.1	(0.9)	3.6	(0.4)
Slovak Republic	14.3	(0.6)	9.9	(0.7)	34.3	(1.2)	26.2	(1.0)	3.0	(0.4)
Spain	m	m	m	m	m	m	m	m	m	m
Sweden	4.9	(0.9)	8.7	(1.1)	32.1	(1.7)	41.8	(1.7)	9.2	(1.0)
United States	6.9	(0.6)	16.5	(1.2)	39.2	(1.5)	27.1	(1.6)	4.1	(0.6)
Sub-national entities										
Flanders (Belgium)	5.2	(0.5)	13.7	(1.0)	35.8	(1.4)	35.9	(1.6)	6.7	(0.7)
England (UK)	7.4	(0.7)	10.2	(1.1)	35.3	(1.6)	36.8	(1.6)	6.6	(0.8)
Northern Ireland (UK)	9.0	(0.9)	14.8	(2.0)	38.3	(1.8)	31.6	(2.0)	4.7	(0.9)
England/N. Ireland (UK)	7.5	(0.7)	10.4	(1.0)	35.4	(1.5)	36.6	(1.5)	6.6	(0.7)
Average	8.9	(0.2)	11.6	(0.2)	33.1	(0.3)	31.9	(0.3)	5.7	(0.2)
Partners										
Cyprus[1]	m	m	m	m	m	m	m	m	m	m

1. See notes on page 250.

Note: Lower than upper secondary includes ISCED 1, 2 and 3C short. Upper secondary education includes ISCED 3A, 3B, 3C long and 4. Tertiary includes ISCED 5A, 5B and 6. Cyprus,[1] France, Italy and Spain did not participate in the problem solving in technology-rich environments assessment.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932897477

[Part 3/3]

Table A3.7 (P) Percentage of adults at each proficiency level in problem solving in technology-rich environments, by parents' educational attainment

	At least one parent has attained tertiary									
	No experience/failed core		Below Level 1		Level 1		Level 2		Level 3	
OECD	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
National entities										
Australia	3.6	(0.7)	4.3	(0.8)	27.2	(1.6)	45.4	(2.0)	11.3	(1.5)
Austria	4.6	(0.8)	6.4	(0.9)	29.5	(2.0)	42.7	(2.1)	9.4	(1.1)
Canada	5.5	(0.4)	9.6	(0.6)	29.9	(0.9)	39.3	(0.9)	11.6	(0.8)
Czech Republic	3.2	(0.9)	5.4	(1.5)	26.0	(3.1)	43.1	(3.8)	16.5	(2.5)
Denmark	4.6	(0.5)	6.6	(0.8)	29.8	(1.3)	44.6	(1.5)	11.8	(1.1)
Estonia	4.6	(0.4)	9.7	(0.7)	30.1	(1.3)	37.1	(1.3)	9.0	(1.0)
Finland	4.2	(0.7)	4.9	(0.9)	21.0	(1.9)	48.7	(2.0)	19.1	(1.7)
France	m	m	m	m	m	m	m	m	m	m
Germany	4.4	(0.5)	9.0	(1.1)	29.6	(1.3)	40.5	(1.4)	12.5	(1.2)
Ireland	5.3	(1.0)	5.7	(1.0)	32.3	(1.8)	40.2	(1.6)	7.6	(1.1)
Italy	m	m	m	m	m	m	m	m	m	m
Japan	11.4	(0.9)	4.5	(0.7)	19.0	(1.4)	37.4	(1.4)	14.9	(1.0)
Korea	6.8	(0.8)	5.3	(0.8)	31.1	(1.8)	45.3	(1.7)	9.0	(1.1)
Netherlands	2.7	(0.5)	4.8	(0.9)	26.9	(1.6)	48.5	(1.7)	15.0	(1.4)
Norway	4.2	(0.5)	6.0	(0.8)	27.8	(1.3)	48.9	(1.6)	10.8	(0.9)
Poland	5.4	(1.0)	9.3	(1.5)	25.4	(2.5)	32.5	(2.3)	12.7	(1.5)
Slovak Republic	3.1	(0.6)	5.0	(1.2)	32.8	(2.5)	43.1	(2.6)	7.5	(1.6)
Spain	m	m	m	m	m	m	m	m	m	m
Sweden	3.4	(0.6)	6.5	(0.9)	25.2	(1.2)	46.6	(1.6)	16.0	(1.2)
United States	3.6	(0.5)	10.8	(1.0)	34.2	(1.6)	38.3	(1.7)	9.5	(1.0)
Sub-national entities										
Flanders (Belgium)	2.6	(0.5)	6.3	(0.8)	27.5	(1.4)	48.2	(1.7)	13.1	(1.3)
England (UK)	4.3	(0.7)	6.2	(1.0)	29.2	(2.0)	44.4	(2.3)	13.2	(1.3)
Northern Ireland (UK)	3.7	(0.9)	4.9	(1.6)	33.7	(3.3)	47.4	(3.6)	9.6	(2.2)
England/N. Ireland (UK)	4.3	(0.7)	6.2	(1.0)	29.3	(2.0)	44.5	(2.3)	13.1	(1.3)
Average	4.6	(0.2)	6.6	(0.2)	28.1	(0.4)	42.9	(0.4)	12.1	(0.3)
Partners										
Cyprus[1]	m	m	m	m	m	m	m	m	m	m

1. See notes on page 250.

Note: Lower than upper secondary includes ISCED 1, 2 and 3C short. Upper secondary education includes ISCED 3A, 3B, 3C long and 4. Tertiary includes ISCED 5A, 5B and 6. Cyprus,[1] France, Italy and Spain did not participate in the problem solving in technology-rich environments assessment.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932897477

[Part 1/4]

Table A3.8 (L) Mean literacy proficiency, by parents' educational attainment, and impact of parents' education on proficiency, adults aged 16-24, 25-44 and 45-65

	16-24 year-olds							
	Neither parent attained upper secondary		At least one parent attained upper secondary		At least one parent attained tertiary		Slope of the socio-economic gradient	
OECD	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Slope	S.E.
National entities								
Australia	258.8	(5.7)	285.2	(3.5)	297.9	(2.8)	18.4	(2.9)
Austria	244.0	(6.4)	276.0	(1.9)	293.6	(2.8)	22.3	(3.0)
Canada	246.4	(5.5)	270.5	(2.4)	282.6	(1.6)	14.6	(2.0)
Czech Republic	c	c	275.9	(2.4)	298.4	(3.7)	23.6	(4.0)
Denmark	248.5	(4.6)	267.6	(2.1)	289.1	(1.9)	20.7	(2.0)
Estonia	263.8	(5.6)	280.3	(2.3)	297.6	(1.7)	17.1	(2.1)
Finland	263.0	(10.0)	291.7	(2.4)	310.5	(2.3)	21.3	(2.9)
France	257.1	(3.7)	270.6	(2.1)	294.1	(1.9)	19.9	(1.9)
Germany	246.4	(6.1)	270.7	(2.5)	293.5	(2.3)	23.2	(2.8)
Ireland	255.6	(3.7)	268.6	(3.0)	283.1	(2.6)	13.8	(2.0)
Italy	247.3	(4.9)	263.9	(3.3)	287.1	(5.5)	19.2	(3.6)
Japan	c	c	292.2	(2.5)	306.1	(1.9)	11.4	(3.0)
Korea	276.0	(5.1)	290.1	(1.8)	299.2	(2.5)	10.6	(2.2)
Netherlands	278.9	(3.0)	293.2	(2.7)	306.5	(2.5)	13.8	(1.8)
Norway	239.3	(6.4)	269.5	(2.3)	284.5	(1.9)	18.7	(2.6)
Poland	246.1	(5.8)	277.3	(1.3)	299.8	(1.7)	23.8	(2.1)
Slovak Republic	232.4	(5.1)	276.3	(1.7)	291.9	(3.2)	24.9	(2.9)
Spain	253.3	(2.4)	268.5	(2.8)	280.7	(2.7)	13.8	(1.6)
Sweden	260.6	(6.0)	279.9	(2.7)	292.0	(2.2)	13.9	(2.7)
United States	248.4	(6.2)	264.1	(2.8)	284.8	(2.8)	19.1	(2.5)
Sub-national entities								
Flanders (Belgium)	251.2	(5.6)	280.6	(2.5)	298.7	(2.0)	21.7	(2.6)
England (UK)	230.9	(6.7)	270.7	(3.2)	287.1	(3.9)	24.3	(3.7)
Northern Ireland (UK)	242.1	(5.7)	272.4	(3.6)	295.1	(4.2)	26.0	(3.1)
England/N. Ireland (UK)	231.6	(6.3)	270.8	(3.1)	287.4	(3.7)	24.3	(3.6)
Average	252.4	(1.3)	276.5	(0.5)	293.6	(0.6)	18.6	(0.6)
Partners								
Cyprus[1]	253.9	(4.5)	267.3	(2.5)	274.6	(2.8)	9.9	(2.5)

[Part 2/4]

Table A3.8 (L) Mean literacy proficiency, by parents' educational attainment, and impact of parents' education on proficiency, adults aged 16-24, 25-44 and 45-65

	25-44 year-olds							
	Neither parent attained upper secondary		At least one parent attained upper secondary		At least one parent attained tertiary		Slope of the socio-economic gradient	
OECD	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Slope	S.E.
National entities								
Australia	279.0	(2.1)	289.8	(2.1)	305.7	(1.9)	13.3	(1.4)
Austria	250.7	(2.6)	281.0	(1.4)	294.9	(2.2)	22.1	(1.7)
Canada	258.6	(2.4)	281.2	(1.7)	294.8	(1.2)	17.2	(1.2)
Czech Republic	249.0	(7.1)	279.5	(1.6)	299.7	(3.1)	23.1	(3.1)
Denmark	262.6	(2.3)	277.7	(2.0)	296.5	(1.7)	17.2	(1.5)
Estonia	266.3	(2.3)	279.9	(1.6)	293.7	(1.5)	13.7	(1.2)
Finland	293.2	(2.6)	303.8	(1.5)	318.6	(3.0)	12.7	(2.1)
France	255.1	(1.5)	278.5	(1.7)	300.7	(1.8)	22.9	(1.2)
Germany	238.3	(4.6)	277.0	(1.7)	294.9	(1.9)	24.1	(2.0)
Ireland	260.9	(1.9)	280.1	(2.0)	293.4	(2.4)	16.5	(1.5)
Italy	247.7	(1.7)	271.6	(2.5)	279.8	(5.3)	19.2	(2.0)
Japan	296.5	(2.9)	305.9	(1.3)	315.1	(1.6)	9.3	(1.5)
Korea	274.2	(1.1)	287.8	(1.2)	296.9	(1.8)	11.8	(1.0)
Netherlands	281.8	(2.3)	302.5	(2.2)	312.8	(2.1)	15.8	(1.5)
Norway	264.8	(3.7)	285.8	(1.9)	302.5	(1.9)	18.5	(2.1)
Poland	253.4	(3.3)	272.0	(1.4)	301.2	(3.2)	24.1	(2.2)
Slovak Republic	247.6	(2.7)	282.5	(1.2)	299.2	(2.5)	26.5	(1.8)
Spain	254.0	(1.1)	270.3	(2.4)	286.2	(2.5)	16.1	(1.3)
Sweden	269.5	(2.9)	289.2	(2.6)	303.5	(1.9)	16.8	(1.8)
United States	229.7	(3.8)	271.6	(2.3)	295.0	(2.1)	30.3	(2.2)
Sub-national entities								
Flanders (Belgium)	266.3	(2.5)	288.9	(2.0)	305.4	(1.9)	19.4	(1.5)
England (UK)	252.2	(3.2)	287.4	(2.1)	301.8	(2.3)	23.6	(2.0)
Northern Ireland (UK)	258.0	(3.3)	282.1	(2.8)	298.1	(4.1)	20.6	(2.2)
England/N. Ireland (UK)	252.5	(3.1)	287.2	(2.0)	301.7	(2.3)	23.5	(2.0)
Average	261.4	(0.6)	283.8	(0.4)	299.7	(0.5)	18.8	(0.4)
Partners								
Cyprus[1]	266.4	(1.5)	275.9	(2.4)	283.9	(2.3)	8.9	(1.5)

1. See notes on page 250.

Note: The slope of the socio-economic gradient is based on the trend line connecting mean scores for each level of parents' educational attainment. Lower than upper secondary includes ISCED 1, 2 and 3C short. Upper secondary education includes ISCED 3A, 3B, 3C long and 4. Tertiary includes ISCED 5A, 5B and 6.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932897496

[Part 3/4]

Table A3.8 (L) **Mean literacy proficiency, by parents' educational attainment, and impact of parents' education on proficiency, adults aged 16-24, 25-44 and 45-65**

	45-65 year-olds							
	Neither parent attained upper secondary		At least one parent attained upper secondary		At least one parent attained tertiary		Slope of the socio-economic gradient	
OECD	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Slope	S.E.
National entities								
Australia	266.8	(2.0)	282.5	(2.9)	292.5	(3.2)	13.2	(2.0)
Austria	247.7	(1.8)	263.7	(1.6)	277.6	(2.6)	15.2	(1.7)
Canada	250.6	(1.3)	273.0	(1.5)	284.9	(1.7)	17.7	(1.2)
Czech Republic	253.9	(3.2)	266.4	(1.6)	276.1	(6.1)	11.5	(2.7)
Denmark	250.1	(1.2)	260.8	(1.5)	278.8	(1.8)	13.7	(1.1)
Estonia	259.9	(1.4)	268.7	(1.7)	278.1	(2.0)	9.0	(1.2)
Finland	264.2	(1.5)	283.0	(2.2)	294.2	(4.5)	16.4	(2.0)
France	241.0	(1.1)	261.1	(1.8)	280.8	(2.5)	20.0	(1.3)
Germany	232.9	(3.3)	260.6	(1.6)	279.3	(2.1)	22.4	(1.9)
Ireland	249.5	(1.9)	272.0	(3.0)	281.7	(2.9)	17.7	(1.7)
Italy	238.0	(1.7)	265.6	(3.3)	280.9	(5.6)	24.1	(2.5)
Japan	273.9	(1.7)	290.4	(1.5)	303.6	(2.2)	15.1	(1.3)
Korea	248.3	(1.1)	262.6	(2.3)	276.8	(2.6)	14.3	(1.3)
Netherlands	261.3	(1.3)	282.4	(2.6)	295.0	(2.5)	17.7	(1.4)
Norway	258.2	(1.8)	275.5	(1.5)	287.9	(2.2)	15.2	(1.5)
Poland	241.9	(1.7)	267.4	(1.5)	276.0	(5.4)	21.1	(2.0)
Slovak Republic	258.1	(1.4)	276.6	(1.2)	286.0	(3.6)	16.4	(1.4)
Spain	233.5	(1.4)	259.6	(4.0)	275.5	(4.2)	22.0	(2.0)
Sweden	261.3	(1.5)	279.3	(2.7)	289.4	(2.7)	14.5	(1.6)
United States	232.7	(2.9)	271.9	(1.6)	287.8	(2.2)	27.2	(1.9)
Sub-national entities								
Flanders (Belgium)	253.1	(1.5)	276.4	(2.1)	292.4	(2.8)	20.6	(1.5)
England (UK)	254.5	(2.0)	280.3	(2.4)	294.0	(3.6)	21.0	(2.1)
Northern Ireland (UK)	252.1	(2.7)	267.3	(4.1)	290.1	(4.5)	17.4	(2.4)
England/N. Ireland (UK)	254.4	(2.0)	279.9	(2.3)	293.9	(3.5)	21.0	(2.0)
Average	251.4	(0.4)	271.8	(0.5)	285.0	(0.7)	17.5	(0.4)
Partners								
Cyprus[1]	263.9	(1.4)	273.5	(3.6)	281.2	(4.4)	8.8	(2.2)

[Part 4/4]

Table A3.8 (L) **Mean literacy proficiency, by parents' educational attainment, and impact of parents' education on proficiency, adults aged 16-24, 25-44 and 45-65**

	16-65 year-olds							
	Neither parent attained upper secondary		At least one parent attained upper secondary		At least one parent attained tertiary		Slope of the socio-economic gradient	
OECD	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Slope	S.E.
National entities								
Australia	270.6	(1.5)	286.6	(1.6)	300.5	(1.4)	15.0	(1.0)
Austria	248.5	(1.5)	273.7	(1.0)	289.3	(1.5)	20.8	(1.1)
Canada	252.6	(1.1)	276.2	(1.0)	288.9	(0.9)	17.7	(0.7)
Czech Republic	252.5	(2.9)	273.9	(1.1)	294.0	(2.6)	20.7	(1.9)
Denmark	253.4	(1.2)	268.9	(1.1)	290.2	(1.0)	18.4	(0.8)
Estonia	261.4	(1.3)	276.4	(1.1)	291.2	(1.0)	14.9	(0.8)
Finland	270.3	(1.3)	295.2	(1.2)	311.3	(1.8)	21.1	(1.2)
France	246.3	(0.9)	271.3	(1.2)	294.5	(1.2)	24.2	(0.7)
Germany	235.7	(2.9)	268.2	(1.2)	289.4	(1.4)	25.0	(1.3)
Ireland	254.7	(1.3)	275.6	(1.5)	288.4	(1.7)	17.3	(1.0)
Italy	242.6	(1.2)	268.2	(2.0)	282.5	(3.8)	22.2	(1.5)
Japan	278.6	(1.5)	298.3	(1.0)	310.1	(1.1)	15.5	(0.9)
Korea	259.2	(0.8)	283.5	(1.1)	294.0	(1.3)	18.5	(0.7)
Netherlands	269.7	(1.0)	293.4	(1.5)	306.6	(1.5)	18.9	(0.9)
Norway	259.3	(1.5)	279.0	(1.0)	294.0	(1.3)	17.2	(1.0)
Poland	244.5	(1.5)	271.9	(0.9)	295.7	(2.1)	25.9	(1.3)
Slovak Republic	253.8	(1.3)	279.4	(0.8)	294.3	(1.6)	21.5	(1.0)
Spain	243.9	(0.9)	267.5	(1.6)	282.3	(1.8)	20.0	(1.0)
Sweden	263.5	(1.3)	284.0	(1.7)	296.8	(1.3)	16.7	(1.0)
United States	233.2	(2.6)	270.5	(1.4)	290.4	(1.6)	27.1	(1.5)
Sub-national entities								
Flanders (Belgium)	256.5	(1.3)	282.7	(1.4)	300.3	(1.3)	22.2	(0.9)
England (UK)	252.2	(1.7)	281.7	(1.4)	296.2	(1.8)	22.1	(1.2)
Northern Ireland (UK)	253.3	(2.3)	275.5	(2.4)	295.7	(2.9)	21.4	(1.5)
England/N. Ireland (UK)	252.3	(1.7)	281.5	(1.4)	296.2	(1.7)	22.1	(1.2)
Average	254.7	(0.3)	278.4	(0.3)	294.6	(0.4)	20.1	(0.2)
Partners								
Cyprus[1]	264.2	(1.1)	272.1	(1.7)	279.9	(1.6)	7.9	(1.0)

1. See notes on page 250.

Note: The slope of the socio-economic gradient is based on the trend line connecting mean scores for each level of parents' educational attainment. Lower than upper secondary includes ISCED 1, 2 and 3C short. Upper secondary education includes ISCED 3A, 3B, 3C long and 4. Tertiary includes ISCED 5A, 5B and 6.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932897496

[Part 1/1]

Table A3.9 (L) **Mean literacy proficiency, by level of educational attainment, and score difference between high- and low-educated adults**

OECD	Lower than upper secondary		Upper secondary		Tertiary		Difference between adults with tertiary and lower than upper secondary		
	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Dif.	S.E.	p-value
National entities									
Australia	252.7	(1.6)	281.5	(1.5)	302.3	(1.2)	49.6	(1.9)	0.000
Austria	245.4	(1.7)	271.1	(0.9)	296.4	(1.3)	51.0	(1.9)	0.000
Canada	233.6	(1.6)	268.5	(1.0)	290.4	(0.8)	56.8	(1.8)	0.000
Czech Republic	255.8	(2.5)	270.9	(1.0)	301.5	(2.3)	45.6	(3.1)	0.000
Denmark	246.1	(1.5)	268.8	(1.0)	292.2	(1.0)	46.1	(1.8)	0.000
Estonia	257.5	(1.6)	271.7	(0.9)	290.1	(1.0)	32.6	(1.7)	0.000
Finland	260.4	(1.9)	282.1	(1.2)	308.8	(1.1)	48.5	(2.2)	0.000
France	231.9	(1.1)	261.6	(0.8)	294.4	(0.9)	62.5	(1.4)	0.000
Germany	244.4	(2.3)	265.2	(1.0)	293.0	(1.3)	48.6	(2.3)	0.000
Ireland	237.4	(1.6)	267.5	(1.4)	291.7	(1.2)	54.3	(1.9)	0.000
Italy	235.1	(1.6)	263.6	(1.3)	281.8	(1.6)	46.8	(2.1)	0.000
Japan	269.5	(2.0)	289.0	(1.0)	313.4	(0.9)	43.9	(2.2)	0.000
Korea	244.0	(1.6)	272.0	(0.9)	291.0	(0.9)	47.0	(1.8)	0.000
Netherlands	253.5	(1.4)	287.5	(1.2)	310.5	(1.2)	57.0	(1.9)	0.000
Norway	255.8	(1.3)	274.0	(1.2)	301.1	(0.9)	45.3	(1.6)	0.000
Poland	248.8	(1.8)	258.5	(0.8)	297.0	(1.2)	48.3	(2.2)	0.000
Slovak Republic	247.7	(1.5)	276.1	(0.8)	295.2	(1.3)	47.5	(2.2)	0.000
Spain	228.2	(1.2)	261.8	(1.2)	282.3	(1.1)	54.0	(1.6)	0.000
Sweden	247.6	(1.6)	279.7	(1.0)	305.6	(1.2)	58.0	(2.1)	0.000
United States	230.3	(2.1)	261.7	(1.2)	297.7	(1.5)	67.4	(2.4)	0.000
Sub-national entities									
Flanders (Belgium)	242.3	(1.7)	269.0	(1.1)	302.6	(1.2)	60.3	(2.0)	0.000
England (UK)	239.0	(1.5)	273.3	(1.5)	294.4	(1.5)	55.5	(2.0)	0.000
Northern Ireland (UK)	239.3	(2.4)	274.3	(2.2)	294.0	(2.4)	54.6	(2.4)	0.000
England/N. Ireland (UK)	239.0	(1.4)	273.3	(1.4)	294.4	(1.4)	55.4	(1.9)	0.000
Average	245.8	(0.4)	271.6	(0.2)	297.0	(0.3)	51.2	(0.4)	0.000
Partners									
Cyprus[1]	251.6	(1.6)	266.9	(1.0)	283.4	(1.2)	31.8	(1.8)	0.000

1. See notes on page 250.

Note: Lower than upper secondary includes ISCED 1, 2 and 3C short. Upper secondary education includes ISCED 3A, 3B, 3C long and 4. Tertiary includes ISCED 5A, 5B and 6. Where possible, foreign qualifications are included as per their closest correspondance to the respective national education systems.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932897515

[Part 1/3]

Table A3.10 (P) **Percentage of adults at each proficiency level in problem solving in technology-rich environments, by level of educational attainment**

	Lower than upper secondary									
	No experience/failed core		Below Level 1		Level 1		Level 2		Level 3	
OECD	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
National entities										
Australia	14.3	(0.9)	13.8	(1.1)	28.6	(1.5)	18.1	(1.6)	2.0	(0.7)
Austria	29.7	(1.4)	13.9	(1.2)	24.5	(1.7)	15.0	(1.2)	1.3	(0.5)
Canada	23.2	(0.9)	22.1	(1.1)	24.0	(1.7)	16.2	(1.4)	2.6	(0.7)
Czech Republic	25.1	(2.2)	10.3	(1.5)	23.6	(2.8)	22.5	(2.3)	5.0	(1.4)
Denmark	14.9	(0.9)	18.9	(1.2)	30.8	(1.5)	21.4	(1.2)	2.2	(0.6)
Estonia	23.4	(1.1)	14.9	(1.2)	28.3	(1.6)	18.6	(1.4)	2.2	(0.6)
Finland	19.8	(1.3)	13.1	(1.2)	26.0	(1.8)	23.2	(1.6)	3.2	(0.7)
France	m	m	m	m	m	m	m	m	m	m
Germany	19.8	(1.8)	17.3	(1.7)	28.6	(2.1)	22.9	(1.8)	4.2	(1.0)
Ireland	33.2	(1.3)	17.5	(1.5)	15.6	(1.2)	7.2	(0.9)	0.7	(0.5)
Italy	m	m	m	m	m	m	m	m	m	m
Japan	41.4	(1.9)	8.1	(1.5)	16.0	(1.5)	14.7	(1.6)	2.4	(0.6)
Korea	58.4	(1.2)	5.9	(0.9)	11.9	(1.1)	14.5	(1.2)	1.3	(0.6)
Netherlands	14.9	(0.9)	21.4	(1.2)	35.2	(1.5)	18.3	(1.1)	1.7	(0.4)
Norway	11.8	(0.9)	17.2	(1.3)	33.5	(1.6)	23.4	(1.6)	1.9	(0.6)
Poland	43.8	(1.6)	7.8	(1.0)	16.1	(1.3)	14.4	(1.5)	3.2	(0.9)
Slovak Republic	52.5	(1.5)	6.7	(0.9)	17.4	(1.6)	13.3	(1.2)	1.0	(0.5)
Spain	m	m	m	m	m	m	m	m	m	m
Sweden	14.3	(1.2)	23.5	(1.7)	29.5	(1.9)	20.3	(1.5)	2.1	(0.6)
United States	29.2	(1.9)	19.0	(2.1)	26.3	(1.9)	12.1	(1.5)	1.5	(0.6)
Sub-national entities										
Flanders (Belgium)	29.0	(1.3)	22.0	(1.4)	24.2	(1.7)	15.2	(1.3)	1.7	(0.5)
England (UK)	21.0	(1.3)	24.4	(1.7)	30.5	(1.8)	9.3	(1.1)	0.8	(0.4)
Northern Ireland (UK)	31.8	(1.5)	22.9	(2.3)	27.0	(2.2)	7.2	(1.4)	0.3	(0.2)
England/N. Ireland (UK)	21.5	(1.2)	24.3	(1.6)	30.4	(1.7)	9.2	(1.1)	0.8	(0.4)
Average	27.4	(0.3)	15.7	(0.3)	24.8	(0.4)	16.9	(0.3)	2.2	(0.2)
Partners										
Cyprus[1]	m	m	m	m	m	m	m	m	m	m

[Part 2/3]

Table A3.10 (P) **Percentage of adults at each proficiency level in problem solving in technology-rich environments, by level of educational attainment**

	Upper secondary									
	No experience/failed core		Below Level 1		Level 1		Level 2		Level 3	
OECD	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
National entities										
Australia	5.9	(0.6)	9.0	(0.9)	32.7	(1.4)	32.5	(1.5)	4.8	(0.7)
Austria	10.9	(0.6)	9.6	(0.7)	33.8	(1.3)	29.9	(1.2)	4.6	(0.6)
Canada	10.7	(0.5)	16.2	(0.8)	32.5	(1.1)	26.9	(0.9)	5.2	(0.5)
Czech Republic	12.7	(0.6)	15.5	(1.2)	30.6	(1.4)	22.8	(1.2)	5.1	(0.7)
Denmark	6.6	(0.4)	16.5	(1.0)	35.8	(1.2)	29.9	(1.2)	5.3	(0.6)
Estonia	16.2	(0.7)	14.6	(0.8)	27.0	(0.9)	19.7	(0.8)	3.6	(0.5)
Finland	8.4	(0.6)	13.1	(0.9)	29.6	(1.1)	29.5	(1.1)	6.6	(0.8)
France	m	m	m	m	m	m	m	m	m	m
Germany	12.9	(0.9)	17.0	(1.1)	32.6	(1.2)	26.1	(1.1)	4.4	(0.6)
Ireland	10.1	(0.8)	13.6	(1.1)	35.0	(1.4)	20.1	(1.5)	2.2	(0.4)
Italy	m	m	m	m	m	m	m	m	m	m
Japan	23.6	(1.0)	9.1	(0.9)	19.9	(1.3)	22.2	(1.2)	5.1	(0.7)
Korea	21.9	(0.8)	13.2	(1.0)	31.9	(1.4)	22.7	(1.2)	3.4	(0.6)
Netherlands	3.9	(0.5)	11.5	(0.9)	37.1	(1.4)	36.9	(1.4)	6.7	(0.7)
Norway	5.9	(0.5)	13.5	(1.1)	36.0	(1.5)	33.1	(1.2)	4.5	(0.6)
Poland	30.4	(0.8)	13.5	(0.9)	16.2	(0.8)	9.8	(0.6)	1.8	(0.2)
Slovak Republic	21.3	(0.7)	10.5	(0.6)	31.4	(1.2)	20.4	(1.0)	1.9	(0.3)
Spain	m	m	m	m	m	m	m	m	m	m
Sweden	4.5	(0.5)	11.8	(0.8)	34.5	(1.2)	36.8	(1.3)	7.4	(0.9)
United States	9.1	(0.6)	21.3	(1.3)	36.7	(1.5)	21.7	(1.2)	3.1	(0.5)
Sub-national entities										
Flanders (Belgium)	10.8	(0.7)	19.0	(0.9)	35.1	(1.2)	25.8	(1.2)	3.8	(0.5)
England (UK)	8.0	(0.7)	15.5	(1.3)	38.6	(1.5)	30.1	(1.5)	4.0	(0.8)
Northern Ireland (UK)	10.4	(0.8)	16.1	(1.7)	39.7	(2.3)	28.7	(2.0)	3.5	(0.9)
England/N. Ireland (UK)	8.0	(0.7)	15.5	(1.3)	38.6	(1.5)	30.0	(1.4)	4.0	(0.7)
Average	12.3	(0.2)	13.9	(0.2)	32.0	(0.3)	26.1	(0.3)	4.4	(0.1)
Partners										
Cyprus[1]	m	m	m	m	m	m	m	m	m	m

1. See notes on page 250.

Note: Lower than upper secondary includes ISCED 1, 2 and 3C short. Upper secondary education includes ISCED 3A, 3B, 3C long and 4. Tertiary includes ISCED 5A, 5B and 6. Where possible, foreign qualifications are included as per their closest correspondance to the respective national education systems. Cyprus,[1] France, Italy and Spain did not participate in the problem solving in technology-rich environments assessment.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932897534

[Part 3/3]

Table A3.10 (P) Percentage of adults at each proficiency level in problem solving in technology-rich environments, by level of educational attainment

	Tertiary									
	No experience/failed core		Below Level 1		Level 1		Level 2		Level 3	
OECD	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
National entities										
Australia	4.1	(0.5)	6.0	(0.8)	26.1	(1.2)	44.1	(1.4)	11.6	(1.0)
Austria	3.5	(0.7)	6.7	(1.1)	32.4	(2.0)	42.6	(2.0)	8.2	(1.2)
Canada	6.2	(0.4)	11.5	(0.5)	30.4	(1.0)	36.3	(0.9)	10.3	(0.7)
Czech Republic	1.3	(0.4)	6.0	(1.4)	27.4	(3.5)	44.7	(3.2)	14.1	(2.7)
Denmark	3.7	(0.3)	7.2	(0.6)	31.5	(1.2)	44.0	(1.2)	10.8	(1.0)
Estonia	4.9	(0.4)	12.3	(0.8)	32.2	(1.0)	30.1	(1.2)	6.3	(0.8)
Finland	3.1	(0.4)	7.3	(0.6)	29.5	(1.1)	43.1	(1.1)	13.2	(1.0)
France	m	m	m	m	m	m	m	m	m	m
Germany	4.9	(0.7)	8.6	(1.0)	29.2	(1.5)	40.0	(1.5)	12.9	(1.1)
Ireland	4.0	(0.5)	7.0	(0.9)	35.4	(1.6)	38.5	(1.4)	6.6	(0.9)
Italy	m	m	m	m	m	m	m	m	m	m
Japan	11.5	(0.9)	6.0	(0.8)	21.5	(1.2)	35.6	(1.3)	13.9	(1.0)
Korea	7.1	(0.6)	8.0	(0.8)	37.8	(1.5)	39.6	(1.4)	5.3	(0.7)
Netherlands	2.2	(0.4)	5.5	(0.7)	26.5	(1.3)	49.6	(1.6)	14.2	(1.1)
Norway	4.4	(0.5)	5.4	(0.6)	28.0	(1.5)	48.2	(1.6)	11.4	(0.9)
Poland	5.2	(0.7)	11.3	(1.1)	27.0	(1.7)	28.8	(1.7)	9.0	(1.0)
Slovak Republic	2.9	(0.6)	6.3	(1.1)	33.2	(1.9)	40.9	(2.2)	8.0	(1.2)
Spain	m	m	m	m	m	m	m	m	m	m
Sweden	2.6	(0.4)	6.7	(0.8)	25.7	(1.5)	45.2	(1.5)	16.9	(1.3)
United States	2.5	(0.4)	8.8	(1.0)	34.9	(1.4)	41.2	(1.5)	10.1	(1.0)
Sub-national entities										
Flanders (Belgium)	2.5	(0.3)	7.7	(0.8)	30.9	(1.3)	44.7	(1.5)	11.5	(0.9)
England (UK)	4.1	(0.6)	8.0	(0.9)	31.0	(1.6)	42.5	(1.7)	11.0	(1.0)
Northern Ireland (UK)	3.8	(0.6)	9.2	(1.6)	37.0	(1.8)	41.3	(2.5)	8.1	(1.3)
England/N. Ireland (UK)	4.1	(0.5)	8.0	(0.9)	31.2	(1.5)	42.4	(1.6)	10.9	(0.9)
Average	4.2	(0.1)	7.7	(0.2)	30.0	(0.4)	41.0	(0.4)	10.8	(0.3)
Partners										
Cyprus[1]	m	m	m	m	m	m	m	m	m	m

1. See notes on page 250.

Note: Lower than upper secondary includes ISCED 1, 2 and 3C short. Upper secondary education includes ISCED 3A, 3B, 3C long and 4. Tertiary includes ISCED 5A, 5B and 6. Where possible, foreign qualifications are included as per their closest correspondance to the respective national education systems. Cyprus,[1] France, Italy and Spain did not participate in the problem solving in technology-rich environments assessment.

Source: Survey of Adult Skills (PIAAC) (2012).

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[Part 1/1]

Table A3.11 (L) Likelihood of 16-24 year-olds scoring at or below Level 2 in literacy, by education and work status (adjusted)

OECD	In education only (reference)			In education and work			In work only			Neither in education nor work but has been in education or training during previous 12 months			Neither in education nor work and has not been in education or training during previous 12 months		
	Odds ratio	p-value	n	Odds ratio	p-value	n	Odds ratio	p-value	n	Odds ratio	p-value	n	Odds ratio	p-value	n
National entities															
Australia	1.0	a	149	0.9	0.858	286	0.9	0.609	322	0.5	0.194	46	1.1	0.855	47
Austria	1.0	a	274	1.8	0.058	209	1.6	0.125	330	1.2	0.652	54	c	c	25
Canada	1.0	a	1 388	1.1	0.390	1 468	1.4	0.037	1 295	1.6	0.099	278	6.1	0.000	221
Czech Republic	1.0	a	845	1.2	0.474	247	2.1	0.014	264	2.7	0.029	61	3.5	0.024	60
Denmark	1.0	a	381	1.1	0.704	412	1.1	0.815	185	1.4	0.229	62	c	c	28
Estonia	1.0	a	600	0.9	0.446	285	1.6	0.033	324	1.6	0.059	83	1.9	0.047	52
Finland	1.0	a	425	0.8	0.484	180	1.2	0.465	192	1.6	0.143	70	1.2	0.674	28
Germany	1.0	a	381	1.4	0.368	342	3.1	0.001	240	2.3	0.017	67	5.2	0.001	32
Ireland	1.0	a	328	1.1	0.711	127	1.0	0.902	162	1.3	0.318	79	2.0	0.107	58
Italy	1.0	a	283	1.4	0.427	36	2.3	0.067	123	c	c	27	5.2	0.001	56
Japan	1.0	a	341	2.1	0.086	144	2.6	0.013	236	c	c	23	c	c	20
Korea	1.0	a	635	2.2	0.013	121	3.5	0.000	213	1.4	0.248	71	c	c	25
Netherlands	1.0	a	256	1.3	0.370	398	2.0	0.009	202	c	c	24	c	c	8
Norway	1.0	a	333	1.2	0.293	348	1.4	0.155	237	c	c	28	c	c	18
Poland	1.0	a	1 906	1.3	0.102	925	2.3	0.000	964	1.5	0.053	291	3.3	0.000	385
Slovak Republic	1.0	a	631	0.8	0.623	92	2.0	0.057	213	3.2	0.005	52	3.3	0.000	146
Spain	1.0	a	536	1.7	0.061	105	2.8	0.000	161	1.8	0.058	85	4.9	0.000	103
Sweden	1.0	a	416	0.6	0.117	129	1.3	0.251	214	1.4	0.325	56	c	c	27
United States	1.0	a	230	1.3	0.315	259	1.7	0.092	224	1.5	0.315	59	1.8	0.409	41
Sub-national entities															
Flanders (Belgium)	1.0	a	517	1.2	0.541	83	1.5	0.128	241	1.8	0.086	47	1.6	0.119	43
England (UK)	1.0	a	164	1.9	0.026	141	1.9	0.048	220	2.7	0.007	64	5.0	0.000	92
Northern Ireland (UK)	1.0	a	154	1.3	0.454	139	1.6	0.207	140	1.9	0.229	42	4.2	0.001	57
England/N. Ireland (UK)	1.0	a	318	1.9	0.024	280	1.9	0.043	360	2.7	0.006	106	4.9	0.000	149
Average	1.0	a	11 173	1.3	0.000	6 476	1.6	0.000	6 702	1.5	0.000	1 669	2.7	0.000	1 572
Partners															
Cyprus[1]	1.0	a	284	1.0	0.992	66	1.3	0.399	156	0.9	0.770	75	0.9	0.606	69

1. See notes on page 250.

Note: Odds ratios are adjusted for age, gender, type of occupation, and immigrant, language and socio-economic background.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932897553

[Part 1/1]

Table A3.12 (L) Likelihood of scoring at or below Level 2 in literacy, by respondent's and parents' level of education (adjusted)

OECD	Both respondent and at least one parent with upper secondary or higher			Respondent's education lower than upper secondary, at least one parent with upper secondary or higher			Respondent's education at least upper secondary, neither parent attained upper secondary			Both respondent and neither parent attained upper secondary			Other		
	Odds ratio	p-value	n	Odds ratio	p-value	n	Odds ratio	p-value	n	Odds ratio	p-value	n	Odds ratio	p-value	n
National entities															
Australia	1.0	a	2 959	2.7	0.000	504	1.8	0.000	1 880	4.1	0.000	1 011	3.9	0.000	1 076
Austria	1.0	a	3 032	2.5	0.000	591	1.9	0.000	830	3.8	0.000	425	2.9	0.000	252
Canada	1.0	a	15 206	3.5	0.000	2 087	1.8	0.000	5 493	7.5	0.000	1 950	3.1	0.000	2 549
Czech Republic	1.0	a	4 434	2.1	0.000	856	1.4	0.062	409	5.7	0.000	141	1.7	0.016	262
Denmark	1.0	a	3 856	2.5	0.000	896	1.4	0.000	1 687	4.0	0.000	768	2.0	0.008	121
Estonia	1.0	a	4 254	2.1	0.000	770	1.5	0.000	1 562	2.9	0.000	439	2.6	0.000	607
Finland	1.0	a	2 673	2.0	0.000	500	1.5	0.000	1 741	3.5	0.000	423	2.7	0.000	127
Germany	1.0	a	3 902	2.4	0.000	650	2.0	0.000	296	6.5	0.000	145	3.7	0.000	472
Ireland	1.0	a	2 524	2.9	0.000	327	1.9	0.000	1 825	6.2	0.000	1 001	3.6	0.000	306
Italy	1.0	a	1 153	1.5	0.023	203	1.8	0.000	1 662	5.1	0.000	1 539	4.4	0.002	64
Japan	1.0	a	3 298	2.0	0.000	422	1.5	0.000	900	4.3	0.000	226	2.0	0.000	432
Korea	1.0	a	2 676	2.0	0.000	446	1.6	0.000	2 400	4.3	0.000	1 065	3.2	0.001	80
Netherlands	1.0	a	1 974	2.7	0.000	507	1.8	0.000	1 481	5.9	0.000	1 012	3.9	0.000	196
Norway	1.0	a	2 839	2.0	0.000	783	1.6	0.000	836	3.6	0.000	395	3.7	0.000	275
Poland	1.0	a	6 678	1.3	0.013	963	1.6	0.000	1 125	4.2	0.000	342	1.7	0.006	258
Slovak Republic	1.0	a	3 343	1.8	0.000	597	1.6	0.000	1 038	7.2	0.000	675	4.2	0.000	70
Spain	1.0	a	1 215	3.6	0.000	442	1.7	0.000	1 671	6.9	0.000	2 448	4.2	0.000	279
Sweden	1.0	a	2 162	2.2	0.000	433	1.6	0.000	1 236	3.9	0.000	408	2.6	0.000	230
United States	1.0	a	3 549	2.6	0.000	332	3.2	0.000	574	10.3	0.000	215	4.1	0.000	340
Sub-national entities															
Flanders (Belgium)	1.0	a	2 519	2.7	0.000	365	2.1	0.000	1 293	5.2	0.000	553	3.5	0.000	733
England (UK)	1.0	a	2 399	4.0	0.000	380	2.7	0.000	669	8.2	0.000	530	3.5	0.000	1 153
Northern Ireland (UK)	1.0	a	1 644	3.6	0.000	338	1.8	0.000	734	5.2	0.000	677	2.9	0.000	368
England/N. Ireland (UK)	1.0	a	4 043	4.0	0.000	718	2.7	0.000	1 403	8.1	0.000	1 207	3.5	0.000	1 521
Average	1.0	a	80 948	2.1	0.000	13 878	1.7	0.000	33 035	5.0	0.000	17 299	2.7	0.000	11 494
Partners															
Cyprus[1]	1.0	a	1 582	2.1	0.000	199	1.5	0.000	1 769	2.9	0.000	800	3.5	0.001	703

1. See notes on page 250.

Note: Odds ratios are adjusted for age, gender, type of occupation, and immigrant and language background.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932897572

[Part 1/2]

Table A3.13 (L) Likelihood of 45-65 year-olds scoring at or below Level 2 in literacy, by gender and by respondent's and parents' educational attainment (adjusted)

	Both men's and one/both parent's education at least upper secondary			Both women's and one/both parent's education at least upper secondary			Men's education less than upper secondary, one/both parent's education at least upper secondary			Women's education less than upper secondary, one/both parent's education at least upper secondary		
OECD	Odds ratio	p-value	n	Odds ratio	p-value	n	Odds ratio	p-value	n	Odds ratio	p-value	n
National entities												
Australia	1.0	a	456	0.8	0.186	444	2.6	0.010	77	3.5	0.000	94
Austria	1.0	a	564	1.4	0.023	539	4.1	0.002	37	3.2	0.000	104
Canada	1.0	a	2 587	1.3	0.001	2 909	8.2	0.000	224	7.0	0.000	159
Czech Republic	1.0	a	739	0.9	0.728	833	c	c	30	2.6	0.010	111
Denmark	1.0	a	936	1.4	0.008	850	3.5	0.000	95	2.6	0.001	146
Estonia	1.0	a	593	1.0	0.899	817	2.8	0.008	49	c	c	28
Finland	1.0	a	381	1.4	0.050	373	3.5	0.001	49	2.8	0.013	35
Germany	1.0	a	871	1.2	0.111	859	c	c	24	3.1	0.014	58
Ireland	1.0	a	240	1.2	0.241	333	5.0	0.000	39	3.0	0.006	45
Italy	1.0	a	146	1.5	0.114	162	c	c	15	c	c	13
Japan	1.0	a	536	0.9	0.316	585	2.4	0.107	32	3.0	0.015	43
Korea	1.0	a	258	1.4	0.145	310	c	c	23	8.6	0.008	57
Netherlands	1.0	a	328	1.6	0.027	337	1.9	0.034	44	4.1	0.000	86
Norway	1.0	a	520	1.3	0.027	443	1.7	0.044	81	2.0	0.018	85
Poland	1.0	a	389	1.0	0.865	461	c	c	25	c	c	18
Slovak Republic	1.0	a	472	1.0	0.837	526	2.8	0.008	44	1.7	0.125	67
Spain	1.0	a	125	1.1	0.613	153	c	c	30	2.4	0.135	34
Sweden	1.0	a	318	1.1	0.519	319	c	c	29	c	c	24
United States	1.0	a	671	1.0	0.840	783	6.5	0.000	37	c	c	30
Sub-national entities												
Flanders (Belgium)	1.0	a	393	1.7	0.002	378	c	c	30	9.3	0.000	33
England (UK)	1.0	a	354	1.5	0.054	440	4.8	0.000	66	3.6	0.000	110
Northern Ireland (UK)	1.0	a	200	1.0	0.902	235	7.3	0.000	58	2.4	0.009	98
England/N. Ireland (UK)	1.0	a	554	1.4	0.053	675	4.8	0.000	124	3.5	0.000	208
Average	1.0	a	12 446	1.1	0.000	13 506	2.7	0.000	1 210	2.8	0.000	1 561
Partners												
Cyprus[1]	1.0	a	89	1.2	0.646	145	c	c	10	c	c	18

[Part 2/2]

Table A3.13 (L) Likelihood of 45-65 year-olds scoring at or below Level 2 in literacy, by gender and by respondent's and parents' educational attainment (adjusted)

	Men's education at least upper secondary, neither parent attained upper secondary			Women's education at least upper secondary, neither parent attained upper secondary			Both men's and their parent's education less than upper secondary			Both women's and their parent's education less than upper secondary		
OECD	Odds ratio	p-value	n	Odds ratio	p-value	n	Odds ratio	p-value	n	Odds ratio	p-value	n
National entities												
Australia	1.5	0.032	514	1.4	0.108	498	3.2	0.000	271	3.2	0.000	442
Austria	1.7	0.003	290	1.7	0.022	222	4.4	0.000	91	3.5	0.000	182
Canada	1.8	0.000	1 765	2.2	0.000	2 131	6.8	0.000	705	11.2	0.000	702
Czech Republic	1.0	0.975	156	1.2	0.506	159	c	c	25	3.6	0.008	74
Denmark	1.5	0.005	633	1.5	0.004	615	2.5	0.000	242	4.4	0.000	291
Estonia	1.1	0.363	483	1.5	0.002	763	2.4	0.000	153	1.9	0.007	125
Finland	1.9	0.000	614	2.0	0.000	681	4.1	0.000	199	4.9	0.000	168
Germany	1.8	0.102	94	2.5	0.002	93	c	c	28	c	c	37
Ireland	1.6	0.011	351	2.2	0.000	448	5.2	0.000	332	6.1	0.000	305
Italy	3.6	0.000	384	2.2	0.002	392	6.7	0.000	416	8.4	0.000	514
Japan	1.4	0.013	337	1.4	0.042	366	3.5	0.000	100	5.1	0.000	95
Korea	1.4	0.046	655	2.1	0.001	496	5.2	0.000	354	5.9	0.000	610
Netherlands	2.1	0.000	467	2.7	0.000	360	6.2	0.000	326	9.0	0.000	372
Norway	1.4	0.023	310	1.8	0.001	247	3.2	0.000	140	3.7	0.000	137
Poland	1.7	0.002	383	1.5	0.037	372	5.2	0.000	120	4.1	0.000	118
Slovak Republic	1.6	0.001	363	1.2	0.289	387	7.6	0.000	150	3.8	0.000	254
Spain	1.4	0.123	332	2.0	0.002	334	6.5	0.000	592	9.1	0.000	672
Sweden	1.8	0.000	430	1.7	0.001	435	4.2	0.000	159	4.2	0.000	157
United States	2.2	0.001	140	3.5	0.000	218	65.0	0.706	54	12.1	0.027	63
Sub-national entities												
Flanders (Belgium)	2.1	0.000	428	2.9	0.000	387	4.4	0.000	196	6.9	0.000	240
England (UK)	2.5	0.000	191	3.0	0.000	224	8.4	0.000	159	7.5	0.000	215
Northern Ireland (UK)	1.3	0.392	177	1.6	0.068	211	3.7	0.000	167	4.2	0.000	278
England/N. Ireland (UK)	2.5	0.000	368	2.9	0.000	435	8.2	0.000	326	7.4	0.000	493
Average	1.5	0.000	10 067	1.7	0.000	10 509	4.2	0.000	5 317	4.8	0.000	6 412
Partners												
Cyprus[1]	1.3	0.355	384	1.1	0.660	500	2.6	0.005	239	2.0	0.035	392

1. See notes on page 250.

Note: Odds ratios are adjusted for age, type of occupation, and immigrant and language background.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932897591

[Part 1/1]

Table A3.14 (L) Mean literacy proficiency, by immigrant background, and score difference between native- and foreign-born adults

	Native-born		Foreign born						Difference between foreign and native born		
			Total		Recent immigrants		Established immigrants				
OECD	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Dif.	S.E.	p-value
National entities											
Australia	284.0	(1.0)	271.3	(1.6)	m	m	m	m	12.7	(1.8)	0.000
Austria	273.7	(0.8)	247.9	(2.1)	260.0	(6.5)	245.8	(2.4)	25.8	(2.3)	0.000
Canada	279.5	(0.7)	255.9	(1.3)	248.8	(2.5)	257.9	(1.5)	23.6	(1.6)	0.000
Czech Republic	274.3	(1.0)	268.1	(5.5)	c	c	265.3	(5.7)	6.2	(5.5)	0.260
Denmark	275.2	(0.7)	237.6	(2.0)	235.8	(4.2)	238.2	(2.0)	37.6	(2.1)	0.000
Estonia	279.0	(0.8)	256.2	(1.5)	c	c	255.4	(1.5)	22.8	(1.5)	0.000
Finland	290.6	(0.7)	239.5	(4.1)	171.7	(9.8)	259.3	(5.4)	51.1	(4.5)	0.000
France	266.9	(0.6)	229.5	(1.8)	224.7	(5.3)	230.2	(1.9)	37.4	(2.5)	0.000
Germany	274.5	(1.0)	240.7	(2.6)	233.9	(8.9)	241.4	(2.6)	33.8	(2.8)	0.000
Ireland	267.5	(0.9)	262.8	(2.0)	260.2	(3.6)	264.2	(2.5)	4.7	(2.0)	0.020
Italy	252.8	(1.1)	228.2	(3.4)	207.5	(10.2)	231.9	(3.3)	24.5	(3.6)	0.000
Japan	296.3	(0.7)	c	c	c	c	c	c	c	c	c
Korea	273.2	(0.6)	235.4	(6.5)	232.1	(8.6)	240.1	(12.0)	37.8	(6.5)	0.000
Netherlands	289.5	(0.7)	246.8	(3.0)	243.7	(9.6)	247.4	(3.2)	42.7	(3.1)	0.000
Norway	283.6	(0.6)	245.4	(2.6)	228.2	(4.8)	253.5	(3.3)	38.2	(2.9)	0.000
Poland	266.9	(0.6)	c	c	c	c	c	c	c	c	c
Slovak Republic	274.0	(0.6)	268.3	(4.4)	c	c	268.3	(4.4)	5.7	(4.4)	0.200
Spain	254.8	(0.7)	232.2	(2.6)	228.5	(4.8)	233.3	(3.0)	22.6	(2.7)	0.000
Sweden	288.7	(0.8)	235.0	(1.9)	202.8	(5.7)	244.2	(2.1)	53.7	(3.5)	0.000
United States	275.1	(1.1)	239.4	(3.1)	244.3	(8.1)	238.8	(3.2)	35.6	(3.7)	0.000
Sub-national entities											
Flanders (Belgium)	278.3	(0.9)	241.7	(3.3)	228.6	(9.3)	244.1	(3.4)	36.6	(3.9)	0.000
England (UK)	275.8	(1.0)	254.8	(3.4)	249.5	(6.4)	257.2	(3.5)	21.0	(3.6)	0.000
Northern Ireland (UK)	269.4	(2.0)	259.6	(4.2)	249.5	(8.1)	266.2	(3.7)	9.9	(4.2)	0.018
England/N. Ireland (UK)	275.6	(1.0)	254.9	(3.4)	249.5	(6.3)	257.3	(3.5)	20.7	(3.5)	0.000
Average	276.1	(0.2)	246.8	(0.7)	231.3	(1.8)	248.2	(1.0)	29.3	(0.8)	0.000
Partners											
Cyprus[1]	270.1	(0.8)	259.7	(2.7)	252.7	(6.5)	262.4	(2.8)	10.4	(2.7)	0.000

1. See notes on page 250.

Note: Information about years since immigration is not available for Australia.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932897610

[Part 1/1]

Table A3.15 (L) Mean literacy proficiency, by immigrant and language background, and score difference between native-born/native-language and foreign-born/foreign-language adults

	Native born and native language		Native born and foreign language		Foreign born and native language		Foreign born and foreign language		Difference between native born/native language and foreign born/foreign language		
OECD	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Dif.	S.E.	p-value
National entities											
Australia	284.4	(1.0)	274.6	(4.4)	287.7	(2.4)	255.0	(1.9)	29.4	(2.2)	0.000
Austria	274.2	(0.8)	250.6	(4.9)	279.1	(3.9)	237.0	(2.5)	37.3	(2.8)	0.000
Canada	279.7	(0.7)	278.1	(2.0)	268.8	(2.2)	249.8	(1.7)	29.8	(1.9)	0.000
Czech Republic	274.2	(1.0)	c	c	265.0	(9.1)	268.3	(6.1)	5.9	(6.1)	0.333
Denmark	275.3	(0.7)	272.0	(8.2)	272.1	(5.6)	232.0	(2.0)	43.3	(2.1)	0.000
Estonia	279.1	(0.8)	272.8	(3.9)	256.2	(1.7)	255.6	(4.7)	23.5	(4.6)	0.000
Finland	291.0	(0.7)	269.9	(7.2)	300.8	(5.7)	240.3	(8.0)	50.7	(7.9)	0.000
France	267.2	(0.6)	252.7	(3.4)	242.5	(2.6)	220.1	(2.6)	47.1	(2.7)	0.000
Germany	275.0	(1.0)	250.4	(5.6)	256.2	(5.3)	236.0	(2.6)	39.0	(2.8)	0.000
Ireland	267.5	(0.9)	272.5	(8.3)	273.9	(2.5)	249.1	(3.0)	18.3	(3.1)	0.000
Italy	253.0	(1.1)	243.4	(5.9)	247.0	(6.1)	223.1	(3.9)	29.9	(4.1)	0.000
Japan	296.3	(0.7)	c	c	c	c	c	c	c	c	c
Korea	273.2	(0.6)	261.0	(9.1)	244.5	(10.0)	225.4	(11.0)	47.8	(11.0)	0.000
Netherlands	289.9	(0.7)	259.9	(8.4)	267.4	(5.9)	239.4	(3.7)	50.5	(3.8)	0.000
Norway	283.9	(0.6)	259.8	(7.6)	283.5	(6.6)	242.1	(2.8)	41.8	(2.9)	0.000
Poland	267.0	(0.6)	264.5	(7.5)	c	c	c	c	c	c	c
Slovak Republic	275.1	(0.6)	254.3	(3.5)	263.5	(6.1)	273.0	(6.5)	2.1	(6.5)	0.742
Spain	255.0	(0.7)	250.6	(4.7)	240.4	(2.6)	218.5	(4.2)	36.5	(4.3)	0.000
Sweden	288.9	(0.8)	279.4	(5.6)	276.0	(5.1)	229.6	(2.2)	59.3	(2.4)	0.000
United States	275.5	(1.2)	267.2	(5.4)	265.7	(4.6)	230.6	(3.8)	44.8	(4.1)	0.000
Sub-national entities											
Flanders (Belgium)	278.5	(0.9)	272.4	(4.2)	277.8	(4.2)	220.8	(4.2)	57.7	(4.4)	0.000
England (UK)	276.0	(1.1)	264.8	(7.0)	269.0	(4.2)	245.4	(4.4)	30.6	(4.5)	0.000
Northern Ireland (UK)	269.6	(2.0)	c	c	271.0	(4.0)	243.6	(7.7)	26.0	(7.3)	0.000
England/N. Ireland (UK)	275.8	(1.0)	264.5	(6.8)	269.1	(4.1)	245.4	(4.3)	30.4	(4.5)	0.000
Average	276.4	(0.2)	263.5	(1.4)	266.9	(1.2)	239.6	(1.0)	36.8	(1.1)	0.000
Partners											
Cyprus[1]	270.1	(0.8)	c	c	268.5	(3.1)	249.8	(4.1)	20.4	(4.1)	0.000

1. See notes on page 250.

Note: Native language refers to whether the first or second language learned as a child is the same as the language of assessment, and not whether the language has official status. Foreign language refers to whether the first or second language learned as a child is not the same as the language of assessment. Thus in some cases, foreign language might refer to minority languages in which the assessment was not administered.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932897629

[Part 1/4]

Table A3.16 (P) **Percentage of adults at each proficiency level in problem solving in technology-rich environments, by immigrant and language background**

	Native born and native language									
	No experience/failed core		Below Level 1		Level 1		Level 2		Level 3	
OECD	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
National entities										
Australia	6.1	(0.5)	8.7	(0.6)	29.8	(1.0)	34.3	(1.2)	6.8	(0.7)
Austria	12.1	(0.6)	9.0	(0.6)	32.4	(1.0)	30.8	(0.9)	4.8	(0.5)
Canada	8.6	(0.3)	13.4	(0.5)	31.2	(0.9)	32.2	(0.7)	8.1	(0.6)
Czech Republic	12.3	(0.6)	12.9	(0.9)	29.2	(1.4)	27.0	(1.1)	6.6	(0.7)
Denmark	5.7	(0.3)	13.6	(0.6)	34.0	(0.8)	34.4	(0.8)	6.8	(0.5)
Estonia	11.7	(0.4)	13.3	(0.6)	30.3	(0.8)	25.3	(0.6)	4.8	(0.5)
Finland	7.0	(0.4)	10.9	(0.5)	29.4	(0.9)	34.2	(0.7)	8.6	(0.6)
France	m	m	m	m	m	m	m	m	m	m
Germany	10.1	(0.6)	12.9	(0.8)	31.3	(0.9)	32.3	(1.0)	7.8	(0.7)
Ireland	15.0	(0.6)	12.9	(0.8)	29.7	(1.1)	21.9	(0.9)	3.1	(0.3)
Italy	m	m	m	m	m	m	m	m	m	m
Japan	21.3	(0.7)	7.7	(0.6)	20.0	(0.8)	26.7	(0.8)	8.3	(0.5)
Korea	24.3	(0.5)	9.5	(0.5)	29.9	(0.9)	27.3	(0.8)	3.6	(0.3)
Netherlands	4.9	(0.3)	11.6	(0.5)	34.2	(0.8)	37.5	(0.8)	8.0	(0.5)
Norway	4.6	(0.3)	10.5	(0.6)	33.4	(0.9)	38.3	(0.9)	6.6	(0.4)
Poland	26.0	(0.6)	12.0	(0.6)	19.0	(0.7)	15.4	(0.7)	3.9	(0.3)
Slovak Republic	22.9	(0.6)	9.1	(0.5)	29.3	(1.0)	23.8	(0.8)	3.0	(0.3)
Spain	m	m	m	m	m	m	m	m	m	m
Sweden	3.1	(0.3)	10.7	(0.6)	31.9	(0.9)	39.1	(1.1)	10.1	(0.7)
United States	6.6	(0.4)	15.1	(0.9)	36.4	(1.1)	29.7	(1.2)	6.0	(0.5)
Sub-national entities										
Flanders (Belgium)	10.8	(0.4)	14.9	(0.6)	32.1	(0.9)	31.4	(0.8)	6.4	(0.4)
England (UK)	8.4	(0.5)	14.9	(0.9)	34.9	(1.2)	30.9	(1.0)	6.2	(0.6)
Northern Ireland (UK)	15.8	(0.6)	16.9	(1.5)	35.2	(1.2)	25.8	(1.2)	4.0	(0.7)
England/N. Ireland (UK)	8.7	(0.5)	15.0	(0.9)	34.9	(1.2)	30.7	(1.0)	6.1	(0.6)
Average	11.7	(0.1)	11.8	(0.2)	30.4	(0.2)	30.1	(0.2)	6.3	(0.1)
Partners										
Cyprus[1]	m	m	m	m	m	m	m	m	m	m

[Part 2/4]

Table A3.16 (P) **Percentage of adults at each proficiency level in problem solving in technology-rich environments, by immigrant and language background**

	Native born and foreign language									
	No experience/failed core		Below Level 1		Level 1		Level 2		Level 3	
OECD	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
National entities										
Australia	5.9	(1.9)	9.9	(3.2)	34.4	(5.0)	35.2	(5.7)	2.1	(2.2)
Austria	c	c	c	c	c	c	c	c	c	c
Canada	6.4	(0.9)	15.2	(1.6)	31.4	(2.3)	32.0	(2.2)	7.9	(1.4)
Czech Republic	c	c	c	c	c	c	c	c	c	c
Denmark	c	c	c	c	c	c	c	c	c	c
Estonia	19.5	(3.5)	10.4	(3.3)	22.2	(3.9)	22.6	(4.6)	5.3	(2.5)
Finland	c	c	c	c	c	c	c	c	c	c
France	m	m	m	m	m	m	m	m	m	m
Germany	c	c	c	c	c	c	c	c	c	c
Ireland	c	c	c	c	c	c	c	c	c	c
Italy	m	m	m	m	m	m	m	m	m	m
Japan	c	c	c	c	c	c	c	c	c	c
Korea	c	c	c	c	c	c	c	c	c	c
Netherlands	c	c	c	c	c	c	c	c	c	c
Norway	c	c	c	c	c	c	c	c	c	c
Poland	c	c	c	c	c	c	c	c	c	c
Slovak Republic	38.0	(3.3)	7.6	(2.2)	25.8	(3.7)	11.3	(2.8)	0.0	(0.0)
Spain	m	m	m	m	m	m	m	m	m	m
Sweden	c	c	c	c	c	c	c	c	c	c
United States	9.4	(2.4)	18.6	(4.1)	31.8	(5.4)	26.1	(6.0)	6.7	(2.9)
Sub-national entities										
Flanders (Belgium)	6.8	(1.9)	20.0	(3.6)	30.0	(4.2)	29.4	(3.9)	4.1	(2.0)
England (UK)	c	c	c	c	c	c	c	c	c	c
Northern Ireland (UK)	c	c	c	c	c	c	c	c	c	c
England/N. Ireland (UK)	c	c	c	c	c	c	c	c	c	c
Average	14.3	(1.0)	13.6	(1.3)	29.2	(1.7)	26.1	(1.8)	4.4	(0.8)
Partners										
Cyprus[1]	m	m	m	m	m	m	m	m	m	m

1. See notes on page 250.

Note: Native language refers to whether the first or second language learned as a child is the same as the language of assessment, and not whether the language has official status. Foreign language refers to whether the first or second language learned as a child is not the same as the language of assessment. Thus in some cases, foreign language might refer to minority languages in which the assessment was not administered. Cyprus,[1] France, Italy and Spain did not participate in the problem solving in technology-rich environments assessment.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932897648

[Part 3/4]

Table A3.16 (P) Percentage of adults at each proficiency level in problem solving in technology-rich environments, by immigrant and language background

	Foreign born and native language									
	No experience/failed core		Below Level 1		Level 1		Level 2		Level 3	
OECD	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
National entities										
Australia	7.5	(1.0)	7.9	(1.4)	30.2	(2.6)	32.6	(2.5)	8.2	(1.3)
Austria	7.3	(2.3)	11.3	(2.9)	28.7	(5.0)	35.8	(4.6)	7.5	(2.8)
Canada	10.1	(1.3)	16.7	(1.7)	30.0	(2.1)	27.1	(2.1)	6.5	(1.3)
Czech Republic	c	c	c	c	c	c	c	c	c	c
Denmark	c	c	c	c	c	c	c	c	c	c
Estonia	22.4	(1.5)	18.5	(1.6)	23.6	(2.0)	11.0	(1.5)	1.4	(0.6)
Finland	c	c	c	c	c	c	c	c	c	c
France	m	m	m	m	m	m	m	m	m	m
Germany	19.3	(3.7)	17.6	(4.1)	28.9	(5.1)	23.4	(4.2)	2.8	(1.5)
Ireland	7.9	(1.2)	12.4	(1.7)	32.4	(2.6)	29.0	(2.7)	3.8	(1.0)
Italy	m	m	m	m	m	m	m	m	m	m
Japan	c	c	c	c	c	c	c	c	c	c
Korea	c	c	c	c	c	c	c	c	c	c
Netherlands	c	c	c	c	c	c	c	c	c	c
Norway	c	c	c	c	c	c	c	c	c	c
Poland	c	c	c	c	c	c	c	c	c	c
Slovak Republic	c	c	c	c	c	c	c	c	c	c
Spain	m	m	m	m	m	m	m	m	m	m
Sweden	c	c	c	c	c	c	c	c	c	c
United States	10.1	(3.0)	25.3	(4.2)	36.3	(5.1)	21.7	(4.5)	2.4	(1.6)
Sub-national entities										
Flanders (Belgium)	6.6	(2.1)	16.7	(3.1)	30.8	(4.7)	33.4	(4.9)	6.5	(2.5)
England (UK)	13.6	(2.7)	14.9	(3.0)	34.6	(3.7)	26.8	(3.6)	4.6	(2.0)
Northern Ireland (UK)	14.3	(3.5)	14.7	(4.2)	40.2	(6.3)	25.6	(6.0)	3.2	(2.1)
England/N. Ireland (UK)	13.6	(2.6)	14.9	(3.0)	34.7	(3.6)	26.7	(3.5)	4.6	(2.0)
Average	11.6	(0.8)	15.7	(0.9)	30.6	(1.3)	26.7	(1.2)	4.9	(0.6)
Partners										
Cyprus[1]	m	m	m	m	m	m	m	m	m	m

[Part 4/4]

Table A3.16 (P) Percentage of adults at each proficiency level in problem solving in technology-rich environments, by immigrant and language background

	Foreign born and foreign language									
	No experience/failed core		Below Level 1		Level 1		Level 2		Level 3	
OECD	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
National entities										
Australia	16.0	(1.6)	13.8	(1.8)	25.6	(2.1)	22.1	(2.0)	3.0	(0.9)
Austria	30.6	(2.1)	15.2	(2.0)	24.5	(2.0)	12.4	(1.6)	1.1	(0.8)
Canada	19.1	(1.0)	19.9	(1.3)	26.6	(1.4)	20.3	(1.4)	3.7	(0.6)
Czech Republic	c	c	c	c	c	c	c	c	c	c
Denmark	25.9	(1.1)	17.8	(1.5)	24.8	(1.5)	14.9	(1.3)	2.7	(0.6)
Estonia	c	c	c	c	c	c	c	c	c	c
Finland	c	c	c	c	c	c	c	c	c	c
France	m	m	m	m	m	m	m	m	m	m
Germany	23.5	(2.5)	26.4	(3.0)	26.3	(2.7)	11.3	(1.9)	1.3	(0.6)
Ireland	20.3	(2.0)	11.1	(2.0)	26.8	(2.8)	17.7	(2.3)	2.6	(0.9)
Italy	m	m	m	m	m	m	m	m	m	m
Japan	c	c	c	c	c	c	c	c	c	c
Korea	c	c	c	c	c	c	c	c	c	c
Netherlands	22.9	(2.5)	22.3	(2.7)	25.8	(2.6)	14.5	(2.3)	2.2	(0.9)
Norway	23.2	(1.7)	19.7	(2.2)	26.5	(2.5)	18.2	(1.9)	3.8	(0.9)
Poland	c	c	c	c	c	c	c	c	c	c
Slovak Republic	c	c	c	c	c	c	c	c	c	c
Spain	m	m	m	m	m	m	m	m	m	m
Sweden	23.3	(1.7)	25.3	(1.9)	23.6	(1.9)	16.0	(1.7)	2.2	(0.7)
United States	32.5	(3.5)	23.0	(3.4)	21.5	(2.8)	11.1	(1.9)	1.0	(0.5)
Sub-national entities										
Flanders (Belgium)	31.2	(3.4)	25.1	(3.7)	20.6	(3.6)	9.8	(2.5)	1.6	(1.1)
England (UK)	23.5	(2.3)	18.4	(2.6)	28.4	(3.2)	20.2	(2.6)	3.1	(1.2)
Northern Ireland (UK)	c	c	c	c	c	c	c	c	c	c
England/N. Ireland (UK)	23.5	(2.2)	18.4	(2.6)	28.5	(3.1)	20.2	(2.6)	3.1	(1.2)
Average	24.3	(0.6)	19.8	(0.7)	25.1	(0.7)	15.7	(0.6)	2.4	(0.2)
Partners										
Cyprus[1]	m	m	m	m	m	m	m	m	m	m

1. See notes on page 250.

Note: Native language refers to whether the first or second language learned as a child is the same as the language of assessment, and not whether the language has official status. Foreign language refers to whether the first or second language learned as a child is not the same as the language of assessment. Thus in some cases, foreign language might refer to minority languages in which the assessment was not administered. Cyprus,[1] France, Italy and Spain did not participate in the problem solving in technology-rich environments assessment.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932897648

[Part 1/1]

Table A3.17 (L) Likelihood of scoring at or below Level 2 in literacy, by immigrant, language and socio-economic background (adjusted)

OECD	Native born/ native language, at least one parent with upper secondary or higher			Native born/ native language, neither parent attained upper secondary			Foreign born/ foreign language, at least one parent with upper secondary or higher			Foreign born/ foreign language, neither parent attained upper secondary			Other		
	Odds ratio	p-value	n	Odds ratio	p-value	n	Odds ratio	p-value	n	Odds ratio	p-value	n	Odds ratio	p-value	n
National entities															
Australia	1.0	a	2 276	1.6	0.000	2 117	3.3	0.000	518	7.0	0.000	319	2.0	0.000	2 200
Austria	1.0	a	3 151	1.6	0.000	974	2.5	0.000	273	5.7	0.000	203	1.5	0.002	529
Canada	1.0	a	12 513	1.8	0.000	5 335	3.1	0.000	2 370	5.2	0.000	873	1.9	0.000	6 194
Czech Republic	1.0	a	5 134	1.3	0.062	499	0.6	0.267	70	c	c	28	1.4	0.092	371
Denmark	1.0	a	3 771	1.2	0.011	1 910	3.6	0.000	842	9.1	0.000	501	1.7	0.001	304
Estonia	1.0	a	4 403	1.4	0.000	1 645	2.1	0.003	63	1.4	0.342	48	1.9	0.000	1 473
Finland	1.0	a	2 963	1.5	0.000	2 070	5.9	0.000	55	c	c	15	3.0	0.000	361
Germany	1.0	a	4 075	1.9	0.001	248	4.7	0.000	312	10.2	0.000	127	2.6	0.000	703
Ireland	1.0	a	2 071	1.8	0.000	2 450	2.5	0.000	338	8.5	0.000	116	1.4	0.000	1 008
Italy	1.0	a	1 195	2.1	0.000	2 848	4.7	0.000	108	6.7	0.000	217	2.0	0.000	253
Japan	1.0	a	3 708	1.4	0.002	1 123	c	c	3	c	c	1	1.4	0.027	443
Korea	1.0	a	3 070	1.4	0.000	3 388	c	c	19	c	c	26	2.4	0.000	164
Netherlands	1.0	a	2 270	1.7	0.000	2 234	3.2	0.000	118	7.7	0.000	186	3.5	0.000	362
Norway	1.0	a	3 140	1.3	0.000	1 043	3.5	0.000	389	13.5	0.000	169	2.1	0.000	387
Poland	1.0	a	7 532	1.6	0.000	1 448	c	c	3	c	c	0	1.5	0.011	383
Slovak Republic	1.0	a	3 723	1.8	0.000	1 484	0.8	0.363	38	c	c	21	1.8	0.000	457
Spain	1.0	a	1 353	1.5	0.000	3 516	2.0	0.007	102	6.2	0.000	204	1.9	0.000	880
Sweden	1.0	a	2 120	1.3	0.002	1 349	5.2	0.000	364	7.9	0.000	243	2.0	0.000	393
United States	1.0	a	3 409	2.5	0.000	498	3.3	0.000	259	9.9	0.000	194	2.4	0.000	650
Sub-national entities															
Flanders (Belgium)	1.0	a	2 589	1.8	0.000	1 632	6.9	0.000	83	12.7	0.000	92	2.2	0.000	1 067
England (UK)	1.0	a	2 333	2.3	0.000	1 012	2.8	0.000	232	6.9	0.000	102	2.3	0.000	1 452
Northern Ireland (UK)	1.0	a	1 822	1.6	0.000	1 310	2.8	0.008	59	2.9	0.013	33	1.7	0.000	537
England/N. Ireland (UK)	1.0	a	4 155	2.3	0.000	2 322	2.8	0.000	291	6.8	0.000	135	2.2	0.000	1 989
Average	1.0	a	78 621	1.6	0.000	40 133	3.1	0.000	6 618	6.7	0.000	3 718	1.9	0.000	20 571
Partners															
Cyprus[1]	1.0	a	1 465	1.2	0.079	2 391	1.5	0.120	129	4.5	0.000	70	1.4	0.017	998

1. See notes on page 250.

Note: Odds ratios are adjusted for age, gender, education and type of occupation.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932897667

[Part 1/1]

Table A3.18 (P) Likelihood of scoring at or below Level 1, or receiving no score, in problem solving in technology-rich environments, by immigrant and language background, and gender (adjusted)

OECD	Native born/ native language, men			Native born/ native language, women			Foreign born/ foreign language, men			Foreign born/ foreign language, women			Other		
	Odds ratio	p-value	n	Odds ratio	p-value	n	Odds ratio	p-value	n	Odds ratio	p-value	n	Odds ratio	p-value	n
National entities															
Australia	1.0	a	2 411	1.2	0.125	2 723	3.3	0.000	423	4.7	0.000	483	1.3	0.012	1 390
Austria	1.0	a	2 092	1.9	0.000	2 155	3.9	0.000	240	5.4	0.000	249	1.5	0.010	394
Canada	1.0	a	9 211	1.2	0.028	10 477	2.2	0.000	1 549	3.6	0.000	1 814	1.5	0.000	4 234
Czech Republic	1.0	a	2 664	1.5	0.000	3 195	1.5	0.556	41	2.0	0.160	62	1.1	0.826	140
Denmark	1.0	a	2 887	1.4	0.000	2 840	4.6	0.000	613	6.2	0.000	755	1.9	0.002	233
Estonia	1.0	a	3 010	1.1	0.443	3 500	1.3	0.508	55	1.8	0.204	66	1.3	0.058	1 001
Finland	1.0	a	2 602	1.3	0.001	2 534	2.1	0.174	32	9.8	0.000	47	4.4	0.000	249
Germany	1.0	a	2 282	1.6	0.000	2 342	4.4	0.000	207	9.5	0.000	288	2.1	0.000	346
Ireland	1.0	a	2 161	1.7	0.000	2 565	3.1	0.000	224	2.4	0.000	261	1.4	0.014	772
Italy	m	a	m	m	m	m	m	m	m	m	m	m	m	m	m
Japan	1.0	a	2 454	1.7	0.000	2 698	c	c	3	c	c	2	0.3	0.107	121
Korea	1.0	a	3 027	1.5	0.000	3 494	c	c	23	34.6	0.750	22	5.3	0.000	101
Netherlands	1.0	a	2 277	1.5	0.000	2 302	3.7	0.000	144	5.0	0.000	184	2.1	0.001	263
Norway	1.0	a	2 187	1.7	0.000	2 067	5.8	0.000	307	5.2	0.000	267	2.1	0.001	300
Poland	1.0	a	4 653	1.4	0.000	4 576	c	c	3	c	c	1	2.0	0.107	133
Slovak Republic	1.0	a	2 495	1.2	0.004	2 756	c	c	28	1.8	0.570	32	1.8	0.002	412
Spain	m	a	m	m	m	m	m	m	m	m	m	m	m	m	m
Sweden	1.0	a	1 846	1.5	0.000	1 780	6.2	0.000	318	6.5	0.000	332	2.0	0.000	193
United States	1.0	a	1 903	1.3	0.021	2 198	3.9	0.000	212	3.0	0.000	254	2.2	0.000	443
Sub-national entities															
Flanders (Belgium)	1.0	a	2 202	1.6	0.000	2 214	8.1	0.000	92	4.1	0.000	105	1.7	0.000	850
England (UK)	1.0	a	1 847	1.6	0.000	2 476	2.7	0.000	162	5.9	0.000	215	2.2	0.000	431
Northern Ireland (UK)	1.0	a	1 414	1.7	0.000	2 021	1.5	0.425	38	4.5	0.001	64	1.6	0.058	224
England/N. Ireland (UK)	1.0	a	3 261	1.6	0.000	4 497	2.6	0.000	200	5.9	0.000	279	2.2	0.000	655
Average	1.0	a	58 886	1.4	0.000	65 410	3.2	0.000	4 914	4.1	0.000	5 782	1.8	0.000	12 885
Partners															
Cyprus[1]	m	a	m	m	m	m	m	m	m	m	m	m	m	m	m

1. See notes on page 250.

Note: Odds ratios are adjusted for age, education, socio-economic background and type of occupation. Cyprus,[1] Italy and Spain did not participate in the problem solving in technology-rich environments assessment.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932897686

[Part 1/1]

Table A3.19 (L) Mean literacy proficiency, by type of occupation, and score difference between workers in skilled and elementary occupations

OECD	Skilled occupations		Semi-skilled white-collar occupations		Semi-skilled blue-collar occupations		Elementary occupations		Difference between workers in skilled and elementary occupations		
	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Dif.	S.E.	p-value
National entities											
Australia	302.3	(1.1)	280.3	(1.6)	263.5	(2.1)	261.9	(3.0)	40.4	(3.4)	0.000
Austria	290.1	(1.0)	268.1	(1.2)	255.6	(1.5)	236.4	(2.8)	53.6	(2.8)	0.000
Canada	292.3	(0.8)	266.0	(1.0)	256.5	(1.8)	251.0	(2.2)	41.2	(2.2)	0.000
Czech Republic	290.9	(1.9)	277.7	(1.8)	263.0	(1.8)	253.7	(3.7)	37.2	(4.2)	0.000
Denmark	290.6	(0.9)	271.3	(1.2)	253.4	(1.6)	251.9	(2.3)	38.7	(2.4)	0.000
Estonia	292.7	(1.0)	276.2	(1.3)	261.8	(1.3)	262.8	(1.9)	29.9	(2.0)	0.000
Finland	309.3	(1.1)	289.7	(1.2)	273.2	(1.8)	272.6	(2.8)	36.7	(2.8)	0.000
France	283.4	(0.8)	264.6	(1.1)	245.4	(1.2)	233.8	(1.7)	49.6	(1.8)	0.000
Germany	293.7	(1.3)	267.7	(1.4)	254.6	(1.9)	245.3	(2.7)	48.5	(2.9)	0.000
Ireland	287.8	(1.2)	267.7	(1.4)	258.0	(1.9)	251.5	(2.9)	36.3	(3.1)	0.000
Italy	273.6	(1.5)	254.8	(2.0)	235.9	(2.5)	229.6	(2.9)	44.0	(3.2)	0.000
Japan	310.6	(1.1)	296.7	(1.1)	285.6	(1.6)	280.4	(2.6)	30.2	(2.9)	0.000
Korea	290.1	(1.2)	275.6	(1.2)	258.4	(1.7)	247.0	(2.0)	43.1	(2.2)	0.000
Netherlands	302.7	(1.0)	283.1	(1.4)	264.0	(2.2)	257.2	(3.2)	45.5	(3.3)	0.000
Norway	300.2	(0.9)	270.9	(1.3)	264.5	(1.7)	244.6	(4.0)	55.6	(4.1)	0.000
Poland	292.5	(1.3)	269.7	(1.5)	250.1	(1.7)	254.5	(2.4)	38.1	(2.9)	0.000
Slovak Republic	288.1	(1.0)	278.0	(1.5)	269.1	(1.4)	258.5	(2.7)	29.6	(2.7)	0.000
Spain	279.4	(1.4)	254.2	(1.2)	237.5	(2.0)	230.6	(2.2)	48.9	(2.6)	0.000
Sweden	302.1	(1.1)	276.5	(1.3)	267.2	(1.8)	248.7	(4.2)	53.4	(4.5)	0.000
United States	292.1	(1.3)	265.8	(1.7)	252.2	(2.2)	239.4	(3.5)	52.7	(3.5)	0.000
Sub-national entities											
Flanders (Belgium)	296.7	(1.1)	274.3	(1.7)	258.7	(1.9)	242.4	(3.0)	54.3	(3.2)	0.000
England (UK)	297.0	(1.5)	270.9	(1.6)	261.5	(1.9)	245.5	(2.8)	51.5	(3.2)	0.000
Northern Ireland (UK)	295.9	(2.4)	271.2	(2.3)	254.1	(3.6)	251.4	(4.0)	44.5	(4.2)	0.000
England/N. Ireland (UK)	297.0	(1.5)	270.9	(1.6)	261.2	(1.8)	245.7	(2.7)	51.3	(3.1)	0.000
Average	293.6	(0.3)	272.7	(0.3)	258.6	(0.4)	250.0	(0.6)	43.6	(0.7)	0.000
Partners											
Cyprus[1]	282.6	(1.3)	267.6	(1.4)	255.8	(2.5)	255.5	(3.7)	27.1	(3.5)	0.000

1. See notes on page 250.

Note: Includes all adults who worked during the previous five years. Skilled occupations include: legislators, senior officials and managers; professionals; technicians and associate professionals. Semi-skilled white-collar occupations include: clerks; service workers and shop and market sales workers. Semi-skilled blue-collar occupations include: skilled agricultural and fishery workers; craft and related trades workers; plant and machine operators and assemblers.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932897705

[Part 1/4]

Table A3.20 (P) Percentage of adults who worked during previous five years at each proficiency level in problem solving in technology-rich environments, by type of occupation

	Skilled occupations									
	No experience/failed core		Below Level 1		Level 1		Level 2		Level 3	
OECD	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
National entities										
Australia	2.6	(0.3)	6.0	(0.9)	28.1	(1.2)	44.3	(1.4)	11.3	(0.9)
Austria	3.1	(0.5)	6.8	(0.7)	33.6	(1.5)	42.0	(1.5)	7.5	(0.9)
Canada	5.0	(0.3)	10.5	(0.6)	30.7	(0.9)	38.1	(0.9)	11.1	(0.7)
Czech Republic	2.4	(0.5)	8.8	(1.2)	31.9	(2.4)	38.3	(2.3)	11.9	(1.6)
Denmark	2.6	(0.3)	8.4	(0.7)	33.1	(1.1)	43.6	(1.2)	10.1	(0.9)
Estonia	2.5	(0.3)	12.0	(0.9)	32.3	(1.0)	34.2	(1.2)	7.9	(0.9)
Finland	2.9	(0.5)	7.4	(0.6)	28.2	(1.2)	44.2	(1.3)	13.7	(1.3)
France	m	m	m	m	m	m	m	m	m	m
Germany	3.5	(0.5)	8.4	(0.9)	30.5	(1.7)	42.1	(1.6)	12.7	(1.0)
Ireland	4.3	(0.6)	9.4	(1.1)	34.9	(1.6)	34.6	(1.5)	6.0	(0.9)
Italy	m	m	m	m	m	m	m	m	m	m
Japan	10.9	(1.2)	6.7	(1.0)	22.2	(1.5)	36.2	(1.7)	15.7	(1.2)
Korea	9.1	(0.7)	8.4	(0.9)	34.5	(2.0)	39.1	(1.6)	5.8	(0.9)
Netherlands	2.3	(0.3)	7.4	(0.7)	31.1	(1.2)	45.7	(1.2)	11.5	(0.8)
Norway	3.0	(0.4)	6.0	(0.7)	30.8	(1.4)	47.5	(1.8)	10.4	(0.9)
Poland	8.3	(0.8)	12.5	(1.3)	24.6	(1.6)	25.1	(1.6)	8.3	(1.0)
Slovak Republic	5.7	(0.7)	8.4	(0.9)	34.4	(1.6)	33.5	(1.5)	5.4	(0.8)
Spain	m	m	m	m	m	m	m	m	m	m
Sweden	2.1	(0.4)	6.8	(0.8)	28.2	(1.3)	45.8	(1.3)	14.8	(1.1)
United States	2.4	(0.4)	11.0	(0.9)	35.1	(1.3)	38.7	(1.4)	9.2	(0.9)
Sub-national entities										
Flanders (Belgium)	2.7	(0.4)	10.6	(1.0)	32.5	(1.4)	41.5	(1.4)	10.1	(0.9)
England (UK)	2.8	(0.4)	7.8	(0.9)	29.7	(1.6)	44.8	(1.8)	12.4	(1.2)
Northern Ireland (UK)	3.6	(0.7)	8.3	(1.5)	35.3	(1.8)	43.4	(2.2)	8.7	(1.4)
England/N. Ireland (UK)	2.8	(0.4)	7.8	(0.9)	29.9	(1.6)	44.8	(1.8)	12.3	(1.2)
Average	4.1	(0.1)	8.6	(0.2)	30.9	(0.3)	40.0	(0.3)	10.3	(0.2)
Partners										
Cyprus[1]	m	m	m	m	m	m	m	m	m	m

[Part 2/4]

Table A3.20 (P) Percentage of adults who worked during previous five years at each proficiency level in problem solving in technology-rich environments, by type of occupation

	Semi-skilled white-collar occupations									
	No experience/failed core		Below Level 1		Level 1		Level 2		Level 3	
OECD	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
National entities										
Australia	4.9	(0.8)	9.7	(0.9)	33.8	(1.9)	32.9	(2.0)	4.8	(1.0)
Austria	7.0	(0.8)	13.6	(1.5)	36.1	(2.1)	27.9	(1.7)	3.5	(0.8)
Canada	9.9	(0.6)	16.3	(0.8)	32.6	(1.3)	29.0	(1.2)	5.1	(0.7)
Czech Republic	7.2	(1.1)	12.7	(1.7)	30.9	(2.6)	27.9	(2.5)	5.3	(1.0)
Denmark	5.3	(0.6)	14.2	(1.0)	37.0	(1.4)	31.8	(1.3)	5.6	(0.7)
Estonia	8.4	(0.8)	15.5	(1.1)	31.6	(1.9)	23.1	(1.4)	3.6	(0.8)
Finland	5.2	(0.6)	11.9	(1.1)	33.5	(1.8)	33.6	(1.6)	7.0	(1.0)
France	m	m	m	m	m	m	m	m	m	m
Germany	8.5	(0.9)	17.2	(1.4)	34.4	(1.6)	28.9	(1.8)	5.4	(0.9)
Ireland	9.5	(0.8)	13.7	(1.2)	33.4	(1.8)	23.1	(1.6)	2.7	(0.6)
Italy	m	m	m	m	m	m	m	m	m	m
Japan	17.6	(1.0)	8.9	(1.0)	22.1	(1.4)	26.7	(1.4)	7.5	(0.9)
Korea	19.3	(0.9)	10.9	(1.0)	33.1	(1.5)	28.1	(1.4)	3.9	(0.5)
Netherlands	3.7	(0.6)	13.5	(1.3)	38.5	(1.8)	34.8	(1.6)	6.0	(1.0)
Norway	6.4	(0.7)	13.3	(1.3)	36.6	(1.7)	32.7	(1.6)	4.5	(0.7)
Poland	16.5	(1.2)	15.6	(1.4)	23.2	(1.7)	16.0	(1.3)	3.0	(0.5)
Slovak Republic	16.7	(1.3)	10.8	(1.5)	32.6	(2.4)	22.9	(2.2)	3.0	(0.9)
Spain	m	m	m	m	m	m	m	m	m	m
Sweden	5.2	(0.7)	14.6	(1.1)	33.9	(1.8)	34.5	(2.0)	6.4	(1.0)
United States	7.7	(0.8)	19.3	(1.7)	38.0	(1.8)	25.6	(1.5)	3.6	(0.8)
Sub-national entities										
Flanders (Belgium)	7.8	(0.8)	17.8	(1.6)	36.8	(2.1)	28.0	(1.9)	3.7	(0.7)
England (UK)	6.9	(0.8)	16.7	(1.5)	39.2	(1.9)	29.2	(1.5)	3.9	(0.6)
Northern Ireland (UK)	11.3	(1.2)	16.6	(2.3)	39.7	(2.3)	28.0	(2.3)	2.8	(0.8)
England/N. Ireland (UK)	7.1	(0.7)	16.7	(1.4)	39.2	(1.8)	29.1	(1.4)	3.9	(0.6)
Average	9.2	(0.2)	14.0	(0.3)	33.5	(0.4)	28.2	(0.4)	4.7	(0.2)
Partners										
Cyprus[1]	m	m	m	m	m	m	m	m	m	m

1. See notes on page 250.

Note: Includes all adults who have worked in the last five years. Skilled occupations include: legislators, senior officials and managers; professionals; technicians and associate professionals. Semi-skilled white-collar occupations include: clerks; service workers and shop and market sales workers. Semi-skilled blue-collar occupations include: skilled agricultural and fishery workers; craft and related trades workers; plant and machine operators and assemblers.Cyprus,[1] France, Italy and Spain did not participate in the problem solving in technology-rich environments assessment.

Source: Survey of Adult Skills (PIAAC) (2012).

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[Part 3/4]

Table A3.20 (P) Percentage of adults who worked during previous five years at each proficiency level in problem solving in technology-rich environments, by type of occupation

	Semi-skilled blue-collar occupations									
	No experience/failed core		Below Level 1		Level 1		Level 2		Level 3	
OECD	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
National entities										
Australia	11.2	(1.1)	12.3	(1.5)	31.1	(2.0)	20.2	(2.0)	1.9	(0.8)
Austria	24.2	(1.4)	11.4	(1.3)	30.5	(2.1)	18.5	(1.7)	1.5	(0.5)
Canada	16.8	(1.1)	21.9	(1.1)	29.4	(1.5)	18.0	(1.2)	2.7	(0.6)
Czech Republic	17.2	(1.6)	18.8	(2.1)	28.9	(2.6)	15.7	(1.8)	3.6	(1.0)
Denmark	12.8	(1.1)	20.9	(1.6)	32.9	(1.9)	21.6	(1.8)	2.2	(0.7)
Estonia	20.6	(1.1)	17.7	(1.1)	27.8	(1.2)	11.0	(1.0)	1.5	(0.4)
Finland	11.8	(0.9)	16.4	(1.4)	30.1	(1.9)	22.2	(1.6)	4.2	(0.9)
France	m	m	m	m	m	m	m	m	m	m
Germany	15.5	(1.4)	20.3	(1.9)	33.3	(1.9)	20.2	(1.8)	1.8	(0.6)
Ireland	22.8	(1.5)	13.6	(1.5)	24.3	(1.8)	13.0	(1.4)	1.3	(0.5)
Italy	m	m	m	m	m	m	m	m	m	m
Japan	29.9	(1.7)	8.3	(1.4)	16.8	(1.7)	19.5	(1.8)	4.2	(0.9)
Korea	38.2	(1.5)	11.2	(1.2)	25.2	(1.7)	14.7	(1.4)	1.2	(0.4)
Netherlands	12.2	(1.5)	17.5	(2.2)	38.0	(2.7)	22.6	(2.3)	1.9	(0.9)
Norway	9.1	(1.0)	14.7	(1.7)	35.9	(2.6)	25.4	(1.9)	2.8	(0.8)
Poland	35.8	(1.4)	13.3	(1.3)	14.3	(1.1)	7.6	(0.8)	1.3	(0.3)
Slovak Republic	33.9	(1.4)	10.3	(1.2)	26.3	(1.6)	15.0	(1.3)	1.0	(0.4)
Spain	m	m	m	m	m	m	m	m	m	m
Sweden	7.4	(1.1)	20.1	(1.7)	35.2	(2.2)	24.6	(2.0)	4.6	(1.1)
United States	16.9	(1.5)	23.5	(2.1)	33.0	(2.2)	15.2	(1.9)	2.0	(0.6)
Sub-national entities										
Flanders (Belgium)	17.7	(1.1)	21.4	(2.0)	33.2	(2.2)	17.9	(1.8)	2.2	(0.6)
England (UK)	15.0	(1.4)	19.7	(2.4)	37.8	(2.4)	17.2	(2.4)	2.2	(0.9)
Northern Ireland (UK)	24.9	(2.3)	23.3	(3.4)	35.7	(3.3)	12.0	(2.5)	1.0	(0.6)
England/N. Ireland (UK)	15.3	(1.4)	19.8	(2.3)	37.8	(2.4)	17.0	(2.3)	2.1	(0.9)
Average	19.4	(0.3)	16.5	(0.4)	29.7	(0.5)	17.9	(0.4)	2.3	(0.2)
Partners										
Cyprus[1]	m	m	m	m	m	m	m	m	m	m

[Part 4/4]

Table A3.20 (P) Percentage of adults who worked during previous five years at each proficiency level in problem solving in technology-rich environments, by type of occupation

	Elementary occupations									
	No experience/failed core		Below Level 1		Level 1		Level 2		Level 3	
OECD	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
National entities										
Australia	10.0	(1.4)	13.6	(1.9)	29.2	(3.5)	22.4	(3.3)	3.0	(1.4)
Austria	34.9	(2.9)	13.4	(2.3)	19.5	(2.5)	10.3	(1.8)	1.5	(0.7)
Canada	16.1	(1.3)	19.5	(1.7)	27.6	(2.1)	21.0	(1.8)	4.0	(1.1)
Czech Republic	24.1	(3.2)	17.9	(3.6)	21.4	(3.8)	16.7	(2.8)	2.6	(1.4)
Denmark	13.1	(1.3)	18.7	(1.9)	29.9	(2.7)	24.6	(2.6)	3.3	(1.0)
Estonia	22.7	(1.5)	15.2	(1.9)	23.2	(2.3)	16.1	(1.7)	2.2	(0.6)
Finland	13.5	(1.6)	10.2	(1.6)	27.8	(2.7)	27.1	(2.3)	6.3	(1.5)
France	m	m	m	m	m	m	m	m	m	m
Germany	28.8	(2.7)	18.2	(2.7)	23.2	(3.2)	14.5	(2.2)	3.0	(1.1)
Ireland	24.8	(2.6)	15.6	(2.5)	24.9	(2.8)	12.7	(2.2)	1.2	(0.8)
Italy	m	m	m	m	m	m	m	m	m	m
Japan	35.5	(3.5)	9.4	(2.5)	14.7	(3.1)	16.8	(2.8)	1.9	(1.3)
Korea	46.8	(2.2)	10.5	(1.6)	20.4	(2.0)	13.8	(1.7)	2.1	(0.7)
Netherlands	14.1	(1.8)	19.3	(2.2)	32.4	(2.9)	21.6	(2.7)	5.3	(1.3)
Norway	15.2	(2.5)	20.4	(3.9)	27.7	(4.3)	21.4	(3.3)	1.5	(1.1)
Poland	38.6	(2.8)	8.9	(1.6)	14.5	(1.9)	10.3	(1.7)	2.2	(0.8)
Slovak Republic	48.7	(2.6)	7.0	(1.6)	18.4	(2.5)	13.5	(2.5)	1.1	(0.6)
Spain	m	m	m	m	m	m	m	m	m	m
Sweden	13.5	(2.6)	19.4	(2.9)	26.9	(3.5)	23.7	(3.4)	3.8	(1.7)
United States	21.5	(2.9)	20.2	(3.3)	30.1	(3.5)	15.1	(2.6)	1.8	(0.9)
Sub-national entities										
Flanders (Belgium)	27.8	(2.0)	25.8	(2.7)	26.0	(2.6)	12.6	(1.9)	1.8	(0.7)
England (UK)	18.2	(2.1)	22.3	(2.8)	34.0	(3.2)	16.6	(2.5)	0.0	(0.0)
Northern Ireland (UK)	27.1	(2.8)	23.4	(3.5)	28.7	(4.0)	16.8	(3.4)	0.0	(0.0)
England/N. Ireland (UK)	18.4	(2.1)	22.3	(2.7)	33.9	(3.1)	16.6	(2.5)	0.9	(0.9)
Average	24.6	(0.5)	16.1	(0.6)	24.8	(0.7)	17.4	(0.6)	2.6	(0.2)
Partners										
Cyprus[1]	m	m	m	m	m	m	m	m	m	m

1. See notes on page 250.

Note: Includes all adults who have worked in the last five years. Skilled occupations include: legislators, senior officials and managers; professionals; technicians and associate professionals. Semi-skilled white-collar occupations include: clerks; service workers and shop and market sales workers. Semi-skilled blue-collar occupations include: skilled agricultural and fishery workers; craft and related trades workers; plant and machine operators and assemblers. Cyprus,[1] France, Italy and Spain did not participate in the problem solving in technology-rich environments assessment.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932897724

[Part 1/1]

Table A3.21 (L) Likelihood of scoring at or below Level 2 in literacy, by educational attainment and type of occupation (adjusted)

OECD	Workers in skilled occupations, attained upper secondary or higher			Workers in low-/semi-skilled occupations, attained upper secondary or higher			Workers in skilled occupations, did not attain upper secondary			Workers in low-/semi-skilled occupations, did not attain upper secondary			Non-employed		
	Odds ratio	p-value	n	Odds ratio	p-value	n	Odds ratio	p-value	n	Odds ratio	p-value	n	Odds ratio	p-value	n
National entities															
Australia	1.0	a	2 669	2.5	0.000	2 318	3.4	0.000	298	5.5	0.000	1 186	4.4	0.000	809
Austria	1.0	a	1 793	3.0	0.000	1 778	2.7	0.000	95	7.1	0.000	646	3.4	0.000	631
Canada	1.0	a	10 824	3.0	0.000	9 375	6.4	0.000	658	10.0	0.000	3 040	4.9	0.000	2 874
Czech Republic	1.0	a	1 764	2.3	0.000	2 567	2.5	0.056	42	6.9	0.000	521	3.2	0.000	1 120
Denmark	1.0	a	2 883	2.9	0.000	2 363	2.6	0.000	154	7.4	0.000	1 207	6.7	0.000	594
Estonia	1.0	a	2 622	2.3	0.000	2 984	3.4	0.000	68	5.0	0.000	854	3.1	0.000	993
Finland	1.0	a	1 917	2.8	0.000	2 276	4.1	0.000	62	5.9	0.000	610	7.1	0.000	559
Germany	1.0	a	1 758	3.1	0.000	2 297	6.2	0.000	48	7.6	0.000	514	4.5	0.000	684
Ireland	1.0	a	1 791	2.0	0.000	2 153	5.7	0.000	121	7.0	0.000	795	4.0	0.000	1 082
Italy	1.0	a	1 198	1.7	0.000	1 155	2.7	0.002	86	4.9	0.000	1 002	3.4	0.000	1 107
Japan	1.0	a	1 440	2.1	0.000	2 282	2.4	0.063	31	4.9	0.000	392	2.8	0.000	716
Korea	1.0	a	1 443	2.0	0.000	2 879	4.1	0.001	47	6.4	0.000	879	2.1	0.000	1 348
Netherlands	1.0	a	1 994	2.2	0.000	1 245	3.5	0.000	266	6.2	0.000	960	4.7	0.000	590
Norway	1.0	a	1 790	3.3	0.000	1 375	3.0	0.000	129	6.4	0.000	751	7.4	0.000	422
Poland	1.0	a	1 884	3.4	0.000	4 217	c	c	26	6.4	0.000	657	3.3	0.000	2 485
Slovak Republic	1.0	a	1 525	1.7	0.000	2 170	2.6	0.017	31	4.4	0.000	484	2.6	0.000	1 436
Spain	1.0	a	1 171	1.9	0.000	1 368	3.6	0.000	180	7.5	0.000	1 958	3.4	0.000	1 243
Sweden	1.0	a	1 787	3.0	0.000	1 546	6.8	0.000	94	6.4	0.000	567	9.3	0.000	412
United States	1.0	a	1 933	3.1	0.000	1 943	5.4	0.000	50	8.6	0.000	394	4.3	0.000	527
Sub-national entities															
Flanders (Belgium)	1.0	a	1 677	3.1	0.000	1 639	4.5	0.000	64	6.7	0.000	496	3.8	0.000	1 016
England (UK)	1.0	a	1 593	2.2	0.000	1 786	3.2	0.000	123	7.3	0.000	789	4.4	0.000	711
Northern Ireland (UK)	1.0	a	960	2.5	0.000	1 165	3.7	0.000	75	7.7	0.000	592	6.3	0.000	783
England/N. Ireland (UK)	1.0	a	2 553	2.3	0.000	2 951	3.2	0.000	198	7.3	0.000	1 381	4.5	0.000	1 494
Average	1.0	a	50 569	2.6	0.000	55 191	3.4	0.000	2 946	6.5	0.000	20 268	4.1	0.000	23 365
Partners															
Cyprus[1]	1.0	a	1 319	1.9	0.000	1 447	2.9	0.004	56	3.0	0.000	537	1.9	0.000	956

1. See notes on page 250.

Note: Odds ratios are adjusted for age, gender, and socio-economic, immigrant and language background. Skilled occupations include: legislators, senior officials and managers (ISCO 1); professionals (ISCO 2); technicians and associate professionals (ISCO 3). Semi-skilled occupations include: clerks (ISCO 4); service workers and shop and market sales workers (ISCO 5); skilled agricultural and fishery workers (ISCO 6); craft and related trades workers (ISCO 7); plant and machine operators and assemblers (ISCO 8). Low-skilled occupations refer to elementary occupations (ISCO 9).

Source: Survey of Adult Skills (PIAAC) (2012).

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[Part 1/2]

Table A3.22 (P) **Likelihood of scoring at or below Level 1, or receiving no score, in problem solving in technology-rich environments, by age, gender and type of occupation (adjusted)**

OECD	Men in skilled occupations, aged 25-44			Men in low-/semi-skilled occupations, aged 25-44			Men in skilled occupations, aged 45-65			Men in low-/semi-skilled occupations, aged 45-65		
	Odds ratio	p-value	n	Odds ratio	p-value	n	Odds ratio	p-value	n	Odds ratio	p-value	n
National entities												
Australia	1.0	a	651	2.3	0.000	749	1.7	0.003	649	4.9	0.000	763
Austria	1.0	a	489	2.6	0.000	487	3.8	0.000	419	10.0	0.000	482
Canada	1.0	a	2 148	2.6	0.000	2 148	2.1	0.000	2 469	5.9	0.000	2 758
Czech Republic	1.0	a	425	1.7	0.023	565	1.7	0.077	319	5.1	0.000	549
Denmark	1.0	a	525	2.2	0.000	556	3.2	0.000	874	11.0	0.000	892
Estonia	1.0	a	568	3.3	0.000	743	2.7	0.000	395	12.5	0.000	806
Finland	1.0	a	444	2.8	0.000	541	3.7	0.000	470	14.5	0.000	630
Germany	1.0	a	387	3.1	0.000	589	3.6	0.000	427	11.7	0.000	582
Ireland	1.0	a	526	1.8	0.000	746	2.2	0.000	331	4.4	0.000	536
Italy	m	a	m	m	m	m	m	m	m	m	m	m
Japan	1.0	a	404	2.4	0.000	541	3.2	0.000	498	7.9	0.000	494
Korea	1.0	a	417	1.8	0.000	857	3.2	0.000	310	11.5	0.000	915
Netherlands	1.0	a	515	2.5	0.000	326	3.2	0.000	660	7.0	0.000	427
Norway	1.0	a	474	2.5	0.000	375	2.9	0.000	454	9.0	0.000	380
Poland	1.0	a	420	2.7	0.000	890	3.6	0.000	177	10.8	0.000	538
Slovak Republic	1.0	a	383	1.9	0.001	632	1.7	0.025	295	4.6	0.000	576
Spain	m	a	m	m	m	m	m	m	m	m	m	m
Sweden	1.0	a	411	3.9	0.000	413	4.5	0.000	476	12.5	0.000	424
United States	1.0	a	391	3.0	0.000	470	2.1	0.000	428	6.3	0.000	412
Sub-national entities												
Flanders (Belgium)	1.0	a	418	1.9	0.000	432	2.4	0.000	456	6.8	0.000	485
England (UK)	1.0	a	390	2.9	0.000	462	2.0	0.000	387	6.0	0.000	481
Northern Ireland (UK)	1.0	a	241	3.1	0.000	317	2.5	0.000	189	6.3	0.000	277
England/N. Ireland (UK)	1.0	a	631	2.9	0.000	779	2.0	0.000	576	6.0	0.000	758
Average	1.0	a	10 627	2.5	0.000	12 839	2.5	0.000	10 683	8.1	0.000	13 407
Partners												
Cyprus[1]	m	a	m	m	m	m	m	m	m	m	m	m

[Part 2/2]

Table A3.22 (P) **Likelihood of scoring at or below Level 1, or receiving no score, in problem solving in technology-rich environments, by age, gender and type of occupation (adjusted)**

OECD	Women in skilled occupations, aged 25-44			Women in low-/semi-skilled occupations, aged 25-44			Women in skilled occupations, aged 45-65			Women in low-/semi-skilled occupations, aged 45-65		
	Odds ratio	p-value	n	Odds ratio	p-value	n	Odds ratio	p-value	n	Odds ratio	p-value	n
National entities												
Australia	1.2	0.159	860	2.1	0.000	696	2.3	0.000	658	3.2	0.000	703
Austria	2.0	0.000	466	3.3	0.000	476	6.4	0.000	337	9.4	0.000	526
Canada	1.3	0.009	3 045	2.5	0.000	2 107	2.7	0.000	2 904	7.0	0.000	2 378
Czech Republic	1.3	0.246	518	2.2	0.001	704	3.1	0.000	400	7.0	0.000	573
Denmark	1.9	0.000	646	2.8	0.000	529	5.5	0.000	885	8.3	0.000	786
Estonia	1.2	0.190	800	2.5	0.000	714	3.7	0.000	707	13.0	0.000	879
Finland	1.2	0.352	487	2.3	0.000	456	7.6	0.000	494	13.2	0.000	651
Germany	2.0	0.000	454	3.2	0.000	502	6.9	0.000	393	13.2	0.000	578
Ireland	1.4	0.062	597	2.1	0.000	807	4.6	0.000	368	5.0	0.000	474
Italy	m	m	m	m	m	m	m	m	m	m	m	m
Japan	1.9	0.001	287	2.6	0.000	610	8.1	0.000	210	11.9	0.000	652
Korea	1.6	0.002	465	2.4	0.000	717	7.4	0.000	190	17.3	0.000	808
Netherlands	1.7	0.000	485	2.5	0.000	401	5.2	0.000	443	7.0	0.000	470
Norway	1.7	0.001	514	3.3	0.000	376	5.2	0.000	389	14.1	0.000	347
Poland	1.9	0.000	580	3.2	0.000	732	4.5	0.000	287	18.0	0.000	337
Slovak Republic	1.7	0.003	412	2.1	0.000	579	1.8	0.005	381	4.9	0.000	521
Spain	m	m	m	m	m	m	m	m	m	m	m	m
Sweden	2.4	0.000	427	3.8	0.000	324	6.0	0.000	465	13.6	0.000	424
United States	1.6	0.004	501	2.9	0.000	484	2.9	0.000	530	6.5	0.000	422
Sub-national entities												
Flanders (Belgium)	1.6	0.005	442	2.1	0.000	463	5.0	0.000	340	5.8	0.000	412
England (UK)	1.6	0.003	500	3.4	0.000	596	3.5	0.000	362	6.7	0.000	600
Northern Ireland (UK)	2.1	0.000	341	3.9	0.000	488	4.3	0.000	202	10.8	0.000	387
England/N. Ireland (UK)	1.6	0.002	841	3.4	0.000	1 084	3.5	0.000	564	6.7	0.000	987
Average	1.6	0.000	12 827	2.7	0.000	12 761	4.0	0.000	10 945	8.2	0.000	12 928
Partners												
Cyprus[1]	m	m	m	m	m	m	m	m	m	m	m	m

1. See notes on page 250.

Note: Odds ratios are adjusted for education, and socio-economic, immigrant and language background. Skilled occupations include: legislators, senior officials and managers (ISCO 1); professionals (ISCO 2); technicians and associate professionals (ISCO 3). Semi-skilled occupations include: clerks (ISCO 4); service workers and shop and market sales workers (ISCO 5); skilled agricultural and fishery workers (ISCO 6); craft and related trades workers (ISCO 7); plant and machine operators and assemblers (ISCO 8). Low-skilled occupations refer to elementary occupations (ISCO 9). Cyprus,[1] Italy and Spain did not participate in the problem solving in technology-rich environments assessment.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932897762

[Part 1/1]

Table A4.1 Mean use of information-processing skills at work

OECD	Information-processing skills									
	Reading at work		Writing at work		Numeracy at work		ICT at work		Problem solving	
	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities										
Australia	2.2	(0.0)	2.1	(0.0)	2.2	(0.0)	2.1	(0.0)	2.1	(0.0)
Austria	2.0	(0.0)	2.0	(0.0)	1.9	(0.0)	1.9	(0.0)	1.7	(0.0)
Canada	2.1	(0.0)	2.1	(0.0)	2.2	(0.0)	2.1	(0.0)	1.9	(0.0)
Czech Republic	1.9	(0.0)	1.9	(0.0)	2.1	(0.0)	2.1	(0.0)	1.9	(0.0)
Denmark	2.1	(0.0)	1.9	(0.0)	1.9	(0.0)	2.1	(0.0)	1.8	(0.0)
Estonia	1.9	(0.0)	1.7	(0.0)	2.0	(0.0)	2.2	(0.0)	1.7	(0.0)
Finland	2.2	(0.0)	2.0	(0.0)	2.1	(0.0)	1.9	(0.0)	1.8	(0.0)
Germany	2.1	(0.0)	2.0	(0.0)	2.0	(0.0)	1.9	(0.0)	1.7	(0.0)
Ireland	2.0	(0.0)	2.0	(0.0)	2.0	(0.0)	2.0	(0.0)	1.8	(0.0)
Italy	1.6	(0.0)	1.8	(0.0)	1.9	(0.0)	2.1	(0.0)	2.0	(0.0)
Japan	2.1	(0.0)	2.2	(0.0)	1.9	(0.0)	1.7	(0.0)	1.4	(0.0)
Korea	2.1	(0.0)	2.3	(0.0)	2.0	(0.0)	2.1	(0.0)	1.5	(0.0)
Netherlands	2.0	(0.0)	2.0	(0.0)	1.9	(0.0)	2.1	(0.0)	1.7	(0.0)
Norway	2.2	(0.0)	2.1	(0.0)	1.8	(0.0)	1.9	(0.0)	1.8	(0.0)
Poland	1.8	(0.0)	1.8	(0.0)	1.9	(0.0)	2.0	(0.0)	1.7	(0.0)
Slovak Republic	1.8	(0.0)	1.9	(0.0)	2.1	(0.0)	2.1	(0.0)	1.9	(0.0)
Spain	1.9	(0.0)	2.0	(0.0)	2.1	(0.0)	2.0	(0.0)	1.8	(0.0)
Sweden	2.2	(0.0)	1.8	(0.0)	1.8	(0.0)	1.9	(0.0)	1.9	(0.0)
United States	2.2	(0.0)	2.2	(0.0)	2.2	(0.0)	2.1	(0.0)	2.1	(0.0)
Sub-national entities										
Flanders (Belgium)	2.0	(0.0)	2.1	(0.0)	1.9	(0.0)	2.1	(0.0)	1.8	(0.0)
England (UK)	2.1	(0.0)	2.1	(0.0)	2.0	(0.0)	2.2	(0.0)	2.1	(0.0)
Northern Ireland (UK)	2.0	(0.0)	2.0	(0.0)	2.0	(0.0)	2.0	(0.0)	1.9	(0.0)
England/N. Ireland (UK)	2.1	(0.0)	2.1	(0.0)	2.0	(0.0)	2.1	(0.0)	2.0	(0.0)
Average	2.0	(0.0)	2.0	(0.0)	2.0	(0.0)	2.0	(0.0)	1.8	(0.0)
Partners										
Cyprus[1]	1.8	(0.0)	1.8	(0.0)	1.9	(0.0)	1.8	(0.0)	1.8	(0.0)

1. See notes on page 250.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932897781

[Part 1/1]

Table A4.2 Mean use of generic skills at work

OECD	Generic skills													
	Task discretion		Learning at work		Influencing skills		Co-operative skills		Self-organising skills		Dexterity		Physical skills	
	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities														
Australia	1.8	(0.0)	2.2	(0.0)	2.3	(0.0)	2.7	(0.0)	3.3	(0.0)	3.4	(0.0)	2.3	(0.0)
Austria	2.3	(0.0)	1.9	(0.0)	1.9	(0.0)	2.4	(0.0)	2.7	(0.0)	2.9	(0.0)	2.2	(0.0)
Canada	1.9	(0.0)	2.1	(0.0)	2.1	(0.0)	2.6	(0.0)	3.3	(0.0)	3.1	(0.0)	2.0	(0.0)
Czech Republic	2.2	(0.0)	1.8	(0.0)	1.9	(0.0)	2.4	(0.0)	3.2	(0.0)	2.8	(0.0)	2.1	(0.0)
Denmark	2.3	(0.0)	2.0	(0.0)	2.1	(0.0)	2.5	(0.0)	3.3	(0.0)	2.9	(0.0)	2.2	(0.0)
Estonia	2.0	(0.0)	2.0	(0.0)	2.0	(0.0)	2.2	(0.0)	3.4	(0.0)	3.2	(0.0)	2.0	(0.0)
Finland	2.3	(0.0)	2.1	(0.0)	2.2	(0.0)	2.1	(0.0)	3.2	(0.0)	2.6	(0.0)	1.7	(0.0)
Germany	2.2	(0.0)	1.9	(0.0)	1.8	(0.0)	2.2	(0.0)	3.0	(0.0)	3.0	(0.0)	2.1	(0.0)
Ireland	1.7	(0.0)	2.0	(0.0)	2.2	(0.0)	2.8	(0.0)	2.9	(0.0)	3.3	(0.0)	2.3	(0.0)
Italy	1.7	(0.0)	1.9	(0.0)	1.7	(0.0)	2.5	(0.0)	3.2	(0.0)	2.8	(0.1)	2.2	(0.1)
Japan	2.3	(0.0)	1.8	(0.0)	1.8	(0.0)	2.6	(0.0)	2.8	(0.0)	1.8	(0.0)	1.6	(0.0)
Korea	2.0	(0.0)	1.5	(0.0)	1.8	(0.0)	1.9	(0.0)	2.8	(0.0)	1.9	(0.0)	2.1	(0.0)
Netherlands	1.9	(0.0)	1.9	(0.0)	1.9	(0.0)	2.2	(0.0)	3.0	(0.0)	2.4	(0.0)	2.0	(0.0)
Norway	2.1	(0.0)	2.1	(0.0)	2.0	(0.0)	2.3	(0.0)	2.8	(0.0)	2.1	(0.0)	2.1	(0.0)
Poland	2.0	(0.0)	1.8	(0.0)	1.9	(0.0)	2.6	(0.0)	3.3	(0.0)	3.2	(0.0)	2.3	(0.0)
Slovak Republic	1.8	(0.0)	2.1	(0.0)	1.8	(0.0)	2.5	(0.0)	2.8	(0.0)	3.1	(0.0)	2.1	(0.0)
Spain	1.9	(0.0)	2.3	(0.0)	1.8	(0.0)	2.5	(0.0)	3.2	(0.0)	2.4	(0.0)	2.1	(0.0)
Sweden	2.2	(0.0)	2.1	(0.0)	2.0	(0.0)	2.3	(0.0)	3.2	(0.0)	2.6	(0.0)	2.1	(0.0)
United States	1.9	(0.0)	2.2	(0.0)	2.2	(0.0)	2.7	(0.0)	3.1	(0.0)	3.4	(0.0)	2.4	(0.0)
Sub-national entities														
Flanders (Belgium)	2.2	(0.0)	1.9	(0.0)	1.9	(0.0)	2.4	(0.0)	3.2	(0.0)	2.6	(0.0)	1.9	(0.0)
England (UK)	1.9	(0.0)	2.0	(0.0)	2.2	(0.0)	2.6	(0.0)	3.2	(0.0)	3.2	(0.0)	2.1	(0.0)
Northern Ireland (UK)	1.7	(0.0)	2.0	(0.0)	2.2	(0.0)	2.7	(0.0)	3.1	(0.0)	3.0	(0.0)	2.2	(0.0)
England/N. Ireland (UK)	1.9	(0.0)	2.0	(0.0)	2.2	(0.0)	2.6	(0.0)	3.2	(0.0)	3.2	(0.0)	2.1	(0.0)
Average	2.0	(0.0)	2.0	(0.0)	2.0	(0.0)	2.4	(0.0)	3.1	(0.0)	2.8	(0.0)	2.1	(0.0)
Partners														
Cyprus[1]	1.8	(0.0)	2.0	(0.0)	2.0	(0.0)	2.6	(0.0)	3.1	(0.0)	3.0	(0.0)	2.1	(0.0)

1. See notes on page 250.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932897800

[Part 1/2]

Table A4.3 Percentage of workers who use their skills frequently

OECD	Percentage of workers in the top 25% of the distribution of the use of skills at work													
	Reading at work		Writing at work		Numeracy at work		ICT at work		Task discretion		Learning at work		Influencing skills	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
National entities														
Australia	28.4	(0.7)	27.8	(0.8)	28.2	(0.7)	31.5	(0.9)	18.9	(0.6)	30.2	(1.0)	36.8	(0.7)
Austria	23.9	(0.7)	22.9	(0.8)	20.8	(0.7)	23.0	(0.9)	38.3	(0.9)	20.8	(0.6)	18.8	(0.6)
Canada	22.7	(0.5)	26.1	(0.5)	28.8	(0.6)	30.4	(0.7)	21.7	(0.5)	29.1	(0.5)	27.8	(0.5)
Czech Republic	18.7	(1.1)	18.5	(1.0)	30.0	(1.2)	21.8	(1.6)	32.2	(1.2)	20.8	(1.2)	15.1	(1.0)
Denmark	23.9	(0.6)	17.2	(0.6)	19.6	(0.6)	26.8	(0.7)	35.0	(0.8)	20.5	(0.7)	25.4	(0.7)
Estonia	23.0	(0.6)	8.7	(0.5)	23.1	(0.6)	31.1	(0.8)	20.4	(0.5)	21.7	(0.5)	22.6	(0.6)
Finland	24.1	(0.7)	19.0	(0.7)	28.0	(0.8)	17.2	(0.7)	33.0	(0.8)	20.7	(0.7)	31.1	(0.8)
Germany	25.7	(0.9)	21.8	(0.8)	26.7	(0.8)	23.2	(1.0)	33.1	(0.9)	19.9	(0.8)	15.6	(0.7)
Ireland	21.2	(0.9)	28.2	(1.1)	22.0	(0.8)	30.2	(1.2)	15.5	(0.8)	26.1	(0.9)	29.5	(0.9)
Italy	17.6	(0.9)	15.9	(0.9)	21.6	(1.0)	34.3	(1.5)	15.1	(0.8)	26.0	(1.2)	14.5	(0.7)
Japan	24.5	(0.8)	29.3	(0.9)	17.7	(0.7)	17.0	(0.7)	35.1	(0.9)	17.7	(0.8)	15.4	(0.7)
Korea	25.8	(0.7)	36.7	(0.9)	23.0	(0.8)	30.9	(0.9)	21.1	(0.8)	10.4	(0.6)	18.3	(0.7)
Netherlands	21.3	(0.7)	23.2	(0.7)	22.3	(0.7)	27.2	(0.8)	21.5	(0.6)	20.1	(0.8)	20.6	(0.7)
Norway	24.7	(0.8)	22.1	(0.6)	16.4	(0.7)	20.8	(0.6)	26.8	(0.7)	25.8	(0.6)	22.6	(0.7)
Poland	17.5	(0.6)	19.8	(0.8)	21.3	(0.9)	26.4	(1.2)	25.1	(1.0)	19.1	(0.7)	19.5	(0.8)
Slovak Republic	17.9	(0.9)	22.8	(1.1)	29.4	(1.0)	31.3	(1.4)	18.4	(0.9)	29.2	(1.0)	21.0	(0.9)
Spain	23.3	(0.8)	25.8	(1.0)	23.9	(0.8)	30.7	(1.3)	22.3	(0.7)	39.0	(1.0)	18.7	(0.7)
Sweden	21.7	(0.7)	10.5	(0.6)	15.9	(0.6)	18.3	(0.8)	33.7	(0.8)	23.0	(0.8)	24.4	(0.7)
United States	28.1	(1.0)	29.8	(0.9)	28.8	(0.9)	31.9	(1.1)	22.4	(0.9)	33.1	(1.0)	33.3	(0.9)
Sub-national entities														
Flanders (Belgium)	20.7	(0.7)	23.3	(0.8)	22.3	(0.8)	26.1	(0.9)	30.2	(0.8)	20.6	(0.8)	22.5	(0.8)
England (UK)	22.9	(0.8)	28.9	(0.8)	24.0	(0.9)	31.2	(1.1)	21.9	(0.9)	24.8	(1.0)	31.8	(0.9)
Northern Ireland (UK)	21.8	(0.9)	26.8	(1.1)	23.1	(1.3)	28.5	(1.6)	15.7	(1.0)	22.6	(0.9)	31.8	(1.1)
England/N. Ireland (UK)	22.9	(0.8)	28.8	(0.8)	24.0	(0.9)	31.1	(1.0)	21.8	(0.8)	24.7	(0.9)	31.8	(0.9)
Partners														
Cyprus[1]	16.7	(0.7)	18.4	(0.9)	21.2	(1.0)	21.5	(1.1)	18.6	(0.9)	30.2	(1.0)	22.1	(0.9)

[Part 2/2]

Table A4.3 Percentage of workers who use their skills frequently

OECD	Percentage of workers using their skills everyday									
	Problem solving		Co-operative skills		Self-organising skills		Dexterity		Physical skills	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
National entities										
Australia	14.3	(0.6)	40.6	(0.9)	74.0	(0.7)	78.5	(0.8)	43.2	(0.7)
Austria	8.6	(0.4)	32.4	(0.9)	56.5	(0.8)	62.9	(0.8)	45.3	(0.8)
Canada	11.8	(0.4)	37.1	(0.6)	72.6	(0.6)	70.2	(0.6)	37.3	(0.6)
Czech Republic	12.3	(1.1)	33.9	(1.3)	71.9	(1.4)	61.9	(1.3)	41.4	(1.0)
Denmark	8.2	(0.3)	32.0	(0.8)	72.7	(0.6)	63.5	(0.7)	39.8	(0.8)
Estonia	7.5	(0.4)	30.4	(0.7)	77.4	(0.5)	70.4	(0.7)	36.7	(0.7)
Finland	5.0	(0.3)	14.4	(0.6)	61.4	(0.9)	49.8	(0.8)	25.9	(0.7)
Germany	7.9	(0.4)	32.2	(0.9)	64.8	(0.9)	65.3	(1.1)	42.8	(1.0)
Ireland	12.6	(0.7)	49.5	(1.0)	66.0	(0.9)	76.6	(0.8)	47.8	(1.0)
Italy	15.6	(0.9)	37.2	(1.0)	69.9	(1.2)	66.2	(1.4)	44.8	(1.5)
Japan	4.4	(0.4)	42.3	(0.9)	60.2	(0.9)	31.9	(1.0)	26.1	(1.0)
Korea	6.2	(0.4)	21.4	(0.7)	49.4	(1.0)	36.9	(0.7)	35.2	(0.8)
Netherlands	7.5	(0.4)	24.8	(0.8)	66.4	(0.7)	52.8	(0.8)	41.4	(0.7)
Norway	6.4	(0.4)	20.7	(0.6)	55.2	(0.9)	38.4	(0.8)	36.9	(0.8)
Poland	6.6	(0.5)	42.1	(1.1)	71.4	(0.8)	73.3	(0.9)	48.8	(0.7)
Slovak Republic	13.0	(0.7)	39.2	(0.9)	56.7	(1.1)	69.9	(1.0)	42.6	(1.1)
Spain	15.7	(0.8)	42.9	(1.0)	72.9	(0.8)	51.9	(0.9)	43.3	(1.0)
Sweden	7.1	(0.4)	29.6	(0.8)	67.2	(1.0)	52.0	(0.7)	39.0	(0.7)
United States	14.9	(0.6)	43.2	(0.9)	68.7	(1.1)	78.4	(0.9)	46.8	(1.1)
Sub-national entities										
Flanders (Belgium)	9.8	(0.6)	33.9	(0.8)	71.8	(0.8)	56.1	(0.9)	37.3	(0.8)
England (UK)	14.5	(0.8)	39.0	(1.1)	72.8	(0.8)	73.4	(0.9)	40.9	(1.0)
Northern Ireland (UK)	13.5	(0.9)	42.5	(1.1)	70.1	(1.2)	67.8	(1.1)	43.8	(1.3)
England/N. Ireland (UK)	14.5	(0.8)	39.1	(1.0)	72.7	(0.8)	73.2	(0.9)	41.0	(1.0)
Average	10.0	(0.1)	34.2	(0.2)	66.7	(0.2)	61.0	(0.2)	40.2	(0.2)
Partners										
Cyprus[1]	13.7	(0.7)	41.2	(1.0)	66.1	(1.1)	69.7	(1.0)	44.4	(1.0)

1. See notes on page 250.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932897819

[Part 1/1]

Table A4.4 **Labour productivity and average reading at work**

	Unadjusted			Adjusted		
	Log labour productivity	Reading at work	Predicted log labour productivity	Log labour productivity	Reading at work	Predicted log labour productivity
OECD	Mean	Mean	Mean	Mean	Mean	Mean
National entities						
Australia	3.9	2.2	4.0	3.8	2.1	3.9
Austria	3.9	2.0	3.8	4.0	2.1	4.0
Canada	3.8	2.1	3.9	3.8	2.1	3.9
Czech Republic	3.4	1.9	3.7	3.4	1.9	3.7
Denmark	4.0	2.1	3.9	4.0	2.2	4.1
Estonia	3.3	1.9	3.7	3.3	1.9	3.7
Finland	3.9	2.2	4.0	3.8	2.0	3.8
Germany	4.0	2.1	3.9	4.1	2.2	4.0
Ireland	4.2	2.0	3.8	4.2	2.0	3.8
Italy	3.8	1.6	3.4	3.9	1.9	3.6
Japan	3.7	2.1	3.9	3.6	1.9	3.6
Korea	3.4	2.1	3.9	3.4	2.1	3.9
Netherlands	4.1	2.0	3.8	4.0	1.9	3.7
Norway	4.4	2.2	4.0	4.4	2.2	4.1
Poland	3.3	1.8	3.5	3.3	1.8	3.5
Slovak Republic	3.5	1.8	3.6	3.5	1.8	3.5
Spain	3.9	1.9	3.7	3.9	2.1	3.9
Sweden	3.9	2.2	4.0	3.9	2.1	3.9
United States	4.1	2.2	4.0	4.1	2.1	4.0
Sub-national entities						
Flanders (Belgium)	m	a	a	m	a	a
England (UK)	m	a	a	m	a	a
Northern Ireland (UK)	m	a	a	m	a	a
England/N. Ireland (UK)	3.9	2.1	3.9	3.8	2.0	3.9
Average	3.8	2.0	3.8	3.8	2.0	3.8
Partners						
Cyprus[1]	m	a	a	m	a	a

Note: Labour productivity is equal to the GDP per hour worked, in USD current prices (Source : OECD.Stat). Predicted labour productivity from the regression of labour productivity on average reading at work. Adjusted estimates are based on OLS regressions including controls for average literacy and numeracy scores.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932897838

[Part 1/2]

Table A4.5a **Mean use of information-processing skills at work, by gender**

OECD	Men									
	Reading at work		Writing at work		Numeracy at work		ICT at work		Problem solving	
	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities										
Australia	2.2	(0.0)	2.1	(0.0)	2.3	(0.0)	2.1	(0.0)	2.2	(0.0)
Austria	2.1	(0.0)	2.1	(0.0)	2.0	(0.0)	2.0	(0.0)	2.0	(0.0)
Canada	2.1	(0.0)	2.1	(0.0)	2.3	(0.0)	2.1	(0.0)	2.0	(0.0)
Czech Republic	1.9	(0.0)	1.9	(0.0)	2.1	(0.0)	2.0	(0.0)	2.1	(0.1)
Denmark	2.1	(0.0)	1.9	(0.0)	2.1	(0.0)	2.2	(0.0)	1.9	(0.0)
Estonia	1.9	(0.0)	1.7	(0.0)	2.0	(0.0)	2.2	(0.0)	1.9	(0.0)
Finland	2.2	(0.0)	2.0	(0.0)	2.3	(0.0)	1.9	(0.0)	1.9	(0.0)
Germany	2.1	(0.0)	2.1	(0.0)	2.1	(0.0)	2.0	(0.0)	1.9	(0.0)
Ireland	2.0	(0.0)	2.0	(0.0)	2.1	(0.0)	2.1	(0.0)	1.9	(0.0)
Italy	1.6	(0.0)	1.8	(0.0)	1.9	(0.0)	2.2	(0.0)	2.1	(0.0)
Japan	2.2	(0.0)	2.3	(0.0)	2.0	(0.0)	1.9	(0.0)	1.7	(0.0)
Korea	2.1	(0.0)	2.3	(0.0)	2.1	(0.0)	2.2	(0.0)	1.6	(0.0)
Netherlands	2.1	(0.0)	2.1	(0.0)	2.2	(0.0)	2.2	(0.0)	1.8	(0.0)
Norway	2.3	(0.0)	2.1	(0.0)	2.0	(0.0)	2.1	(0.0)	2.0	(0.0)
Poland	1.7	(0.0)	1.8	(0.0)	1.9	(0.0)	2.0	(0.0)	1.7	(0.0)
Slovak Republic	1.7	(0.0)	1.9	(0.0)	2.1	(0.0)	2.1	(0.0)	2.1	(0.0)
Spain	2.0	(0.0)	2.1	(0.0)	2.1	(0.0)	2.1	(0.0)	2.0	(0.0)
Sweden	2.2	(0.0)	1.8	(0.0)	2.0	(0.0)	1.9	(0.0)	2.0	(0.0)
United States	2.2	(0.0)	2.2	(0.0)	2.3	(0.0)	2.2	(0.0)	2.2	(0.0)
Sub-national entities										
Flanders (Belgium)	2.0	(0.0)	2.1	(0.0)	2.1	(0.0)	2.1	(0.0)	1.9	(0.0)
England (UK)	2.1	(0.0)	2.1	(0.0)	2.2	(0.0)	2.3	(0.0)	2.1	(0.0)
Northern Ireland (UK)	2.1	(0.0)	2.0	(0.0)	2.1	(0.0)	2.1	(0.0)	2.1	(0.0)
England/N. Ireland (UK)	2.1	(0.0)	2.1	(0.0)	2.2	(0.0)	2.2	(0.0)	2.1	(0.0)
Average	2.0	(0.0)	2.0	(0.0)	2.1	(0.0)	2.1	(0.0)	2.0	(0.0)
Partners										
Cyprus[1]	1.9	(0.0)	1.8	(0.0)	2.0	(0.0)	1.9	(0.0)	1.9	(0.0)

[Part 2/2]

Table A4.5a **Mean use of information-processing skills at work, by gender**

OECD	Women									
	Reading at work		Writing at work		Numeracy at work		ICT at work		Problem solving	
	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities										
Australia	2.2	(0.0)	2.1	(0.0)	2.0	(0.0)	2.1	(0.0)	2.0	(0.0)
Austria	1.9	(0.0)	1.9	(0.0)	1.8	(0.0)	1.9	(0.0)	1.5	(0.0)
Canada	2.1	(0.0)	2.1	(0.0)	2.1	(0.0)	2.0	(0.0)	1.7	(0.0)
Czech Republic	1.8	(0.0)	2.0	(0.0)	2.1	(0.0)	2.1	(0.1)	1.7	(0.1)
Denmark	2.1	(0.0)	1.9	(0.0)	1.7	(0.0)	2.0	(0.0)	1.7	(0.0)
Estonia	2.0	(0.0)	1.7	(0.0)	1.9	(0.0)	2.1	(0.0)	1.5	(0.0)
Finland	2.1	(0.0)	2.0	(0.0)	2.0	(0.0)	1.8	(0.0)	1.8	(0.0)
Germany	2.0	(0.0)	2.0	(0.0)	1.8	(0.0)	1.9	(0.0)	1.5	(0.0)
Ireland	1.9	(0.0)	2.1	(0.0)	1.9	(0.0)	2.0	(0.0)	1.7	(0.0)
Italy	1.7	(0.0)	1.8	(0.0)	1.9	(0.0)	2.1	(0.0)	1.8	(0.0)
Japan	1.9	(0.0)	2.1	(0.0)	1.6	(0.0)	1.4	(0.0)	1.1	(0.0)
Korea	1.9	(0.0)	2.2	(0.0)	1.8	(0.0)	1.9	(0.0)	1.4	(0.0)
Netherlands	2.0	(0.0)	2.0	(0.0)	1.6	(0.0)	1.9	(0.0)	1.5	(0.0)
Norway	2.1	(0.0)	2.0	(0.0)	1.6	(0.0)	1.8	(0.0)	1.6	(0.0)
Poland	1.9	(0.0)	1.9	(0.0)	2.0	(0.0)	1.9	(0.0)	1.6	(0.0)
Slovak Republic	1.8	(0.0)	2.0	(0.0)	2.1	(0.0)	2.1	(0.0)	1.7	(0.0)
Spain	1.9	(0.0)	1.9	(0.0)	2.0	(0.0)	1.9	(0.0)	1.6	(0.0)
Sweden	2.1	(0.0)	1.8	(0.0)	1.7	(0.0)	1.8	(0.0)	1.8	(0.0)
United States	2.1	(0.0)	2.1	(0.0)	2.1	(0.0)	2.1	(0.0)	2.0	(0.0)
Sub-national entities										
Flanders (Belgium)	1.9	(0.0)	2.0	(0.0)	1.7	(0.0)	2.0	(0.0)	1.6	(0.0)
England (UK)	2.1	(0.0)	2.1	(0.0)	1.9	(0.0)	2.0	(0.0)	2.0	(0.0)
Northern Ireland (UK)	2.0	(0.0)	2.1	(0.0)	1.9	(0.0)	2.0	(0.0)	1.7	(0.0)
England/N. Ireland (UK)	2.1	(0.0)	2.1	(0.0)	1.9	(0.0)	2.0	(0.0)	2.0	(0.0)
Average	2.0	(0.0)	2.0	(0.0)	1.9	(0.0)	1.9	(0.0)	1.7	(0.0)
Partners										
Cyprus[1]	1.7	(0.0)	1.8	(0.0)	1.8	(0.0)	1.8	(0.0)	1.7	(0.0)

1. See notes on page 250.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932897857

[Part 1/1]

Table A4.5b Gender differences in the use of information-processing skills at work (adjusted)

	Adjusted differences beween men and women (women minus men)									
	Reading at work		Writing at work		Numeracy at work		ICT at work		Problem solving	
OECD	ß	p-value	ß	p-value	ß	p-value	ß	p-value	ß	p-value
National entities										
Australia	0.0	0.340	0.0	0.358	-0.2	0.000	0.0	0.253	-0.1	0.038
Austria	-0.2	0.000	-0.2	0.000	-0.3	0.000	-0.2	0.000	-0.3	0.000
Canada	-0.1	0.000	-0.1	0.023	-0.2	0.000	-0.1	0.025	-0.2	0.000
Czech Republic	-0.3	0.000	-0.1	0.046	-0.1	0.115	0.0	0.591	-0.4	0.001
Denmark	-0.1	0.004	-0.1	0.094	-0.4	0.000	-0.3	0.000	-0.2	0.000
Estonia	-0.2	0.000	-0.1	0.028	-0.2	0.000	-0.2	0.000	-0.4	0.000
Finland	-0.1	0.031	-0.2	0.000	-0.3	0.000	-0.2	0.000	-0.1	0.005
Germany	-0.1	0.052	-0.1	0.007	-0.2	0.001	-0.1	0.169	-0.2	0.001
Ireland	-0.1	0.035	0.0	0.271	-0.2	0.001	-0.1	0.145	-0.2	0.004
Italy	-0.2	0.003	-0.1	0.165	-0.1	0.038	-0.1	0.072	-0.3	0.000
Japan	-0.2	0.000	-0.1	0.056	-0.2	0.000	-0.3	0.000	-0.3	0.000
Korea	-0.2	0.000	-0.1	0.249	-0.3	0.000	-0.2	0.000	-0.2	0.000
Netherlands	0.0	0.952	0.0	0.391	-0.5	0.000	-0.2	0.000	-0.1	0.174
Norway	-0.1	0.001	-0.1	0.027	-0.4	0.000	-0.2	0.000	-0.2	0.000
Poland	-0.2	0.000	-0.1	0.080	-0.1	0.065	-0.2	0.001	-0.3	0.000
Slovak Republic	-0.1	0.001	-0.1	0.073	-0.1	0.021	-0.1	0.001	-0.5	0.000
Spain	-0.2	0.001	-0.2	0.000	-0.2	0.001	-0.2	0.000	-0.3	0.000
Sweden	-0.1	0.005	0.0	0.423	-0.3	0.000	-0.1	0.000	-0.1	0.003
United States	-0.1	0.005	-0.1	0.119	-0.2	0.000	-0.1	0.021	-0.2	0.000
Sub-national entities										
Flanders (Belgium)	-0.1	0.000	0.0	0.089	-0.2	0.000	-0.1	0.185	-0.2	0.004
England (UK)	-0.1	0.193	0.0	0.401	-0.2	0.000	-0.2	0.003	0.0	0.673
Northern Ireland (UK)	-0.1	0.090	0.1	0.374	-0.2	0.003	-0.1	0.131	-0.2	0.020
England/N. Ireland (UK)	-0.1	0.174	0.0	0.423	-0.2	0.000	-0.2	0.002	0.0	0.743
Average	-0.1	0.049	-0.1	0.044	-0.2	0.007	-0.2	0.034	-0.2	0.036
Partners										
Cyprus[1]	-0.2	0.000	0.0	0.359	-0.1	0.034	-0.1	0.181	-0.2	0.029

1. See notes on page 250.

Note: Results based on OLS regressions including controls for literacy and numeracy proficiency scores, hours worked and occupation dummies (ISCO 1 digit).

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932897876

[Part 1/2]

Table A4.6a Mean use of generic skills at work, by gender

	Men													
	Task discretion		Learning at work		Influencing skills		Co-operative skills		Self-organising skills		Dexterity		Physical skills	
OECD	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities														
Australia	1.9	(0.0)	2.1	(0.0)	2.3	(0.0)	2.7	(0.0)	3.3	(0.0)	3.4	(0.0)	2.5	(0.0)
Austria	2.3	(0.0)	2.0	(0.0)	1.9	(0.0)	2.5	(0.0)	2.8	(0.0)	2.8	(0.0)	2.3	(0.0)
Canada	1.9	(0.0)	2.2	(0.0)	2.1	(0.0)	2.6	(0.0)	3.3	(0.0)	3.1	(0.0)	2.2	(0.0)
Czech Republic	2.2	(0.0)	1.8	(0.0)	1.9	(0.0)	2.4	(0.1)	3.3	(0.1)	2.8	(0.1)	2.4	(0.1)
Denmark	2.4	(0.0)	2.0	(0.0)	2.1	(0.0)	2.5	(0.0)	3.4	(0.0)	2.9	(0.0)	2.3	(0.0)
Estonia	2.1	(0.0)	2.0	(0.0)	2.0	(0.0)	2.3	(0.0)	3.4	(0.0)	3.2	(0.0)	2.4	(0.0)
Finland	2.3	(0.0)	2.0	(0.0)	2.1	(0.0)	2.1	(0.0)	3.2	(0.0)	2.5	(0.0)	1.8	(0.0)
Germany	2.2	(0.0)	1.9	(0.0)	1.8	(0.0)	2.4	(0.0)	3.1	(0.0)	2.9	(0.0)	2.2	(0.0)
Ireland	1.8	(0.0)	2.0	(0.0)	2.1	(0.0)	2.8	(0.0)	3.0	(0.0)	3.2	(0.0)	2.5	(0.1)
Italy	1.7	(0.0)	1.9	(0.0)	1.7	(0.0)	2.5	(0.1)	3.1	(0.1)	2.9	(0.1)	2.3	(0.1)
Japan	2.4	(0.0)	1.8	(0.0)	1.9	(0.0)	2.5	(0.0)	3.0	(0.0)	1.8	(0.0)	1.7	(0.0)
Korea	2.1	(0.0)	1.5	(0.0)	1.9	(0.0)	2.0	(0.0)	2.9	(0.0)	1.8	(0.0)	2.1	(0.0)
Netherlands	2.0	(0.0)	2.0	(0.0)	2.0	(0.0)	2.2	(0.0)	3.1	(0.0)	2.4	(0.0)	2.0	(0.0)
Norway	2.2	(0.0)	2.1	(0.0)	2.1	(0.0)	2.2	(0.0)	3.0	(0.0)	2.2	(0.0)	2.1	(0.0)
Poland	2.0	(0.0)	1.8	(0.0)	1.8	(0.0)	2.7	(0.0)	3.2	(0.0)	3.3	(0.0)	2.6	(0.0)
Slovak Republic	1.8	(0.0)	2.0	(0.0)	1.8	(0.0)	2.6	(0.0)	2.7	(0.0)	3.0	(0.0)	2.4	(0.1)
Spain	1.9	(0.0)	2.4	(0.0)	1.8	(0.0)	2.6	(0.0)	3.2	(0.0)	2.5	(0.0)	2.2	(0.0)
Sweden	2.3	(0.0)	2.1	(0.0)	2.0	(0.0)	2.3	(0.0)	3.2	(0.0)	2.5	(0.0)	2.1	(0.0)
United States	2.0	(0.0)	2.3	(0.0)	2.2	(0.0)	2.8	(0.0)	3.1	(0.0)	3.4	(0.0)	2.6	(0.1)
Sub-national entities														
Flanders (Belgium)	2.2	(0.0)	1.9	(0.0)	2.0	(0.0)	2.5	(0.0)	3.1	(0.0)	2.5	(0.0)	1.9	(0.0)
England (UK)	2.0	(0.0)	2.0	(0.0)	2.1	(0.0)	2.6	(0.0)	3.2	(0.0)	3.2	(0.0)	2.3	(0.0)
Northern Ireland (UK)	1.8	(0.0)	2.0	(0.0)	2.1	(0.0)	2.6	(0.1)	3.1	(0.1)	3.0	(0.1)	2.4	(0.1)
England/N. Ireland (UK)	1.9	(0.0)	2.0	(0.0)	2.1	(0.0)	2.6	(0.0)	3.2	(0.0)	3.2	(0.0)	2.3	(0.0)
Average	2.1	(0.0)	2.0	(0.0)	2.0	(0.0)	2.5	(0.0)	3.1	(0.0)	2.8	(0.0)	2.2	(0.0)
Partners														
Cyprus[1]	1.8	(0.0)	2.0	(0.0)	2.0	(0.0)	2.6	(0.0)	3.0	(0.1)	3.1	(0.0)	2.5	(0.0)

[Part 2/2]

Table A4.6a Mean use of generic skills at work, by gender

	Women													
	Task discretion		Learning at work		Influencing skills		Co-operative skills		Self-organising skills		Dexterity		Physical skills	
OECD	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities														
Australia	1.8	(0.0)	2.2	(0.0)	2.3	(0.0)	2.7	(0.0)	3.3	(0.0)	3.5	(0.0)	2.0	(0.0)
Austria	2.3	(0.0)	1.9	(0.0)	1.8	(0.0)	2.3	(0.0)	2.6	(0.0)	2.9	(0.0)	2.2	(0.0)
Canada	1.9	(0.0)	2.1	(0.0)	2.1	(0.0)	2.5	(0.0)	3.3	(0.0)	3.1	(0.0)	1.8	(0.0)
Czech Republic	2.1	(0.0)	1.8	(0.0)	1.8	(0.0)	2.3	(0.1)	3.1	(0.1)	2.8	(0.1)	1.8	(0.1)
Denmark	2.2	(0.0)	2.0	(0.0)	2.0	(0.0)	2.5	(0.0)	3.3	(0.0)	3.0	(0.0)	2.1	(0.0)
Estonia	1.9	(0.0)	2.0	(0.0)	2.0	(0.0)	2.1	(0.0)	3.4	(0.0)	3.1	(0.0)	1.7	(0.0)
Finland	2.2	(0.0)	2.1	(0.0)	2.3	(0.0)	2.1	(0.0)	3.2	(0.0)	2.7	(0.0)	1.7	(0.0)
Germany	2.2	(0.0)	1.9	(0.0)	1.8	(0.0)	2.1	(0.0)	2.9	(0.0)	3.0	(0.0)	2.1	(0.0)
Ireland	1.6	(0.0)	2.0	(0.0)	2.2	(0.0)	2.8	(0.0)	2.8	(0.1)	3.3	(0.0)	2.0	(0.0)
Italy	1.7	(0.0)	1.9	(0.0)	1.7	(0.0)	2.3	(0.0)	3.3	(0.1)	2.7	(0.1)	1.9	(0.1)
Japan	2.2	(0.0)	1.8	(0.0)	1.5	(0.0)	2.6	(0.0)	2.7	(0.0)	1.7	(0.1)	1.4	(0.1)
Korea	1.8	(0.0)	1.5	(0.0)	1.8	(0.0)	1.9	(0.0)	2.7	(0.0)	1.9	(0.0)	2.1	(0.0)
Netherlands	1.9	(0.0)	1.9	(0.0)	1.9	(0.0)	2.1	(0.0)	3.0	(0.0)	2.4	(0.0)	2.0	(0.0)
Norway	2.0	(0.0)	2.2	(0.0)	2.0	(0.0)	2.3	(0.0)	2.7	(0.0)	2.0	(0.0)	2.1	(0.0)
Poland	1.9	(0.0)	1.8	(0.0)	1.9	(0.0)	2.5	(0.1)	3.3	(0.0)	3.1	(0.0)	1.9	(0.0)
Slovak Republic	1.7	(0.0)	2.1	(0.0)	1.8	(0.0)	2.4	(0.0)	2.8	(0.0)	3.2	(0.0)	1.7	(0.1)
Spain	1.9	(0.0)	2.3	(0.0)	1.8	(0.0)	2.3	(0.0)	3.2	(0.0)	2.2	(0.0)	1.9	(0.1)
Sweden	2.1	(0.0)	2.1	(0.0)	2.1	(0.0)	2.4	(0.0)	3.2	(0.0)	2.6	(0.0)	2.1	(0.0)
United States	1.9	(0.0)	2.2	(0.0)	2.2	(0.0)	2.7	(0.0)	3.1	(0.0)	3.4	(0.0)	2.2	(0.1)
Sub-national entities														
Flanders (Belgium)	2.1	(0.0)	1.9	(0.0)	1.8	(0.0)	2.2	(0.0)	3.3	(0.0)	2.6	(0.0)	1.8	(0.1)
England (UK)	1.8	(0.0)	2.1	(0.0)	2.2	(0.0)	2.6	(0.0)	3.2	(0.0)	3.2	(0.0)	1.9	(0.0)
Northern Ireland (UK)	1.6	(0.0)	1.9	(0.0)	2.2	(0.0)	2.7	(0.0)	3.1	(0.0)	3.1	(0.1)	2.0	(0.1)
England/N. Ireland (UK)	1.8	(0.0)	2.1	(0.0)	2.2	(0.0)	2.6	(0.0)	3.2	(0.0)	3.2	(0.0)	1.9	(0.0)
Average	2.0	(0.0)	2.0	(0.0)	2.0	(0.0)	2.4	(0.0)	3.1	(0.0)	2.8	(0.0)	1.9	(0.0)
Partners														
Cyprus[1]	1.7	(0.0)	2.0	(0.0)	1.9	(0.0)	2.5	(0.0)	3.1	(0.0)	3.0	(0.0)	1.7	(0.1)

1. See notes on page 250.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932897895

[Part 1/1]

Table A4.6b Gender differences in the use of generic skills at work (adjusted)

OECD	Adjusted differences between men and women (women minus men)													
	Task discretion		Learning skills		Influencing skills		Co-operative skills		Self-organising skills		Dexterity		Physical skills	
	ß	S.E.	ß	S.E.	ß	S.E.	ß	S.E.	ß	S.E.	ß	S.E.	ß	S.E.
National entities														
Australia	-0.1	0.034	0.1	0.256	0.0	0.976	0.0	0.774	0.0	0.448	0.3	0.000	0.1	0.412
Austria	-0.1	0.000	-0.1	0.071	-0.1	0.006	0.0	0.387	-0.1	0.085	0.2	0.000	0.0	0.427
Canada	-0.1	0.002	0.0	0.222	-0.1	0.005	0.0	0.894	0.0	0.461	0.1	0.002	-0.1	0.011
Czech Republic	-0.2	0.002	-0.1	0.255	-0.1	0.022	0.0	0.785	-0.3	0.000	0.3	0.000	-0.1	0.128
Denmark	-0.1	0.000	-0.1	0.010	-0.1	0.005	0.1	0.050	0.0	0.453	0.2	0.000	0.2	0.003
Estonia	-0.2	0.000	-0.1	0.036	-0.1	0.000	-0.1	0.056	0.0	0.829	0.2	0.000	-0.3	0.000
Finland	-0.2	0.000	0.0	0.689	0.0	0.578	0.0	0.522	0.0	0.437	0.5	0.000	0.1	0.023
Germany	0.0	0.650	0.0	0.876	0.0	0.603	-0.1	0.255	-0.1	0.167	0.3	0.000	0.0	0.678
Ireland	-0.1	0.021	0.0	0.530	0.0	0.871	0.1	0.517	-0.2	0.066	0.2	0.001	-0.1	0.419
Italy	0.0	0.841	-0.1	0.110	0.0	0.299	-0.1	0.308	0.1	0.215	0.0	0.674	-0.1	0.163
Japan	-0.1	0.045	0.0	0.757	-0.2	0.000	0.2	0.014	0.1	0.183	0.2	0.013	-0.1	0.275
Korea	-0.2	0.000	0.0	0.777	-0.1	0.000	0.0	0.789	-0.1	0.178	0.3	0.000	0.1	0.008
Netherlands	0.0	0.847	0.0	0.994	0.0	0.399	-0.1	0.425	0.1	0.068	0.2	0.012	0.1	0.067
Norway	-0.2	0.000	0.0	0.812	-0.1	0.019	0.0	0.562	0.0	0.702	0.1	0.400	0.1	0.202
Poland	-0.3	0.000	-0.2	0.002	-0.2	0.000	0.0	0.723	-0.1	0.177	0.1	0.018	-0.1	0.322
Slovak Republic	-0.2	0.000	0.0	0.620	-0.2	0.000	-0.2	0.006	-0.2	0.010	0.5	0.000	-0.2	0.012
Spain	0.0	0.776	-0.1	0.137	-0.2	0.001	-0.2	0.005	0.0	0.451	0.0	0.778	0.1	0.386
Sweden	-0.2	0.000	0.0	0.545	0.0	0.616	0.1	0.041	0.1	0.041	0.3	0.000	0.2	0.006
United States	-0.1	0.002	-0.1	0.029	-0.1	0.009	-0.1	0.165	0.0	0.963	0.1	0.116	-0.2	0.004
Sub-national entities														
Flanders (Belgium)	-0.1	0.189	0.0	0.902	-0.1	0.004	-0.1	0.030	0.2	0.004	0.1	0.080	0.0	0.524
England (UK)	-0.1	0.045	0.0	0.304	0.1	0.035	0.1	0.537	0.0	0.406	0.2	0.002	-0.1	0.219
Northern Ireland (UK)	-0.1	0.047	0.0	0.956	0.1	0.368	0.1	0.095	0.2	0.062	0.4	0.002	-0.2	0.104
England/N. Ireland (UK)	-0.1	0.036	0.0	0.303	0.1	0.032	0.1	0.508	0.0	0.354	0.2	0.001	-0.1	0.194
Average	-0.1	0.075	0.0	0.118	-0.1	0.083	0.0	0.104	0.0	0.088	0.2	0.053	0.0	0.062
Partners														
Cyprus[1]	-0.1	0.030	0.0	0.850	-0.1	0.015	-0.1	0.125	0.1	0.098	0.0	0.874	-0.4	0.000

1. See notes on page 250.

Note: Results based on OLS regressions including controls for literacy and numeracy proficiency scores, hours worked and occupation dummies (ISCO 1 digit).

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932897914

[Part 1/1]

Table A4.7 **Gender gap in wages and in the use of problem-solving skills at work**

	Unadjusted			Adjusted		
	Wage gap	Problem-solving gap	Predicted wage gap	Wage gap	Problem-solving gap	Predicted wage gap
OECD	Mean	Mean	Mean	Mean	Mean	Mean
National entities						
Australia	0.13	0.00	0.09	0.16	0.05	0.12
Austria	0.16	0.09	0.17	0.13	0.09	0.13
Canada	0.15	0.07	0.15	0.13	0.08	0.13
Czech Republic	0.19	0.15	0.22	0.15	0.28	0.14
Denmark	0.10	0.04	0.12	0.07	0.09	0.13
Estonia	0.33	0.17	0.23	0.23	0.18	0.13
Finland	0.15	0.05	0.13	0.07	0.07	0.13
Germany	0.15	0.05	0.13	0.12	0.07	0.13
Ireland	0.03	0.03	0.11	0.11	0.06	0.12
Italy	0.05	0.06	0.14	0.11	0.08	0.13
Japan	0.28	0.15	0.22	0.18	0.17	0.13
Korea	0.26	0.15	0.22	0.16	0.05	0.12
Netherlands	0.10	-0.01	0.08	0.14	0.00	0.12
Norway	0.13	0.10	0.17	0.07	0.27	0.14
Poland	0.05	0.03	0.11	0.11	0.10	0.13
Slovak Republic	0.19	0.15	0.21	0.14	0.14	0.13
Spain	0.11	0.12	0.19	0.15	0.17	0.13
Sweden	0.10	0.05	0.13	0.06	0.09	0.13
United States	0.15	0.04	0.13	0.11	0.07	0.13
Sub-national entities						
Flanders (Belgium)	0.09	0.01	0.10	0.09	0.05	0.12
England (UK)	0.15	-0.04	0.05	0.11	0.01	0.12
Northern Ireland (UK)	0.07	0.03	0.12	0.14	0.08	0.13
England/N. Ireland (UK)	0.15	-0.04	0.06	0.12	0.01	0.12
Partners						
Cyprus[1]	0.15	0.02	0.10	0.17	0.03	0.12

1. See notes on page 250.

Note: Predicted wage gap from the regression of wage gap on the gap in the use of problem-solving skills. The gender gap in wages is computed as the percentage difference between men's and women's average hourly wages (including bonuses). The gender gap in the use of problem-solving skills is computed as the percentage difference between men's and women's average use of problem-solving skills. The wage distribution was trimmed to eliminate the 1st and 99th percentiles. Adjusted estimates are based on OLS regression including control for average literacy and numeracy scores, dummies for highest qualification (4), occupations (9) and industry (10). The sample includes only full-time employees.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932897933

[Part 1/3]

Table A4.8a **Mean use of information-processing skills at work, by age group**

	16-24 year-olds									
	Reading at work		Writing at work		Numeracy at work		ICT at work		Problem solving	
OECD	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities										
Australia	1.7	(0.1)	1.6	(0.1)	1.9	(0.0)	1.6	(0.1)	1.7	(0.1)
Austria	1.7	(0.0)	1.7	(0.1)	1.8	(0.0)	1.7	(0.0)	1.5	(0.1)
Canada	1.5	(0.0)	1.5	(0.0)	1.9	(0.0)	1.4	(0.0)	1.3	(0.0)
Czech Republic	1.5	(0.1)	1.7	(0.1)	2.1	(0.1)	1.8	(0.1)	1.7	(0.1)
Denmark	1.3	(0.1)	1.3	(0.1)	1.6	(0.0)	1.4	(0.1)	1.0	(0.1)
Estonia	1.7	(0.0)	1.5	(0.0)	1.8	(0.0)	1.8	(0.1)	1.6	(0.0)
Finland	1.7	(0.1)	1.6	(0.1)	1.8	(0.1)	1.3	(0.0)	1.3	(0.1)
Germany	1.8	(0.0)	1.9	(0.1)	1.8	(0.1)	1.6	(0.1)	1.3	(0.1)
Ireland	1.4	(0.1)	1.6	(0.1)	1.8	(0.1)	1.5	(0.1)	1.2	(0.1)
Italy	1.1	(0.1)	1.3	(0.1)	1.5	(0.1)	1.7	(0.1)	1.3	(0.1)
Japan	1.7	(0.1)	1.8	(0.1)	1.6	(0.0)	1.2	(0.1)	1.1	(0.1)
Korea	1.6	(0.1)	2.0	(0.1)	1.7	(0.1)	1.6	(0.1)	1.3	(0.1)
Netherlands	1.5	(0.0)	1.5	(0.0)	1.6	(0.0)	1.5	(0.1)	1.2	(0.1)
Norway	1.8	(0.0)	1.7	(0.0)	1.6	(0.0)	1.2	(0.0)	1.3	(0.0)
Poland	1.5	(0.0)	1.7	(0.0)	1.8	(0.0)	1.7	(0.0)	1.4	(0.0)
Slovak Republic	1.5	(0.1)	1.7	(0.1)	2.0	(0.1)	2.0	(0.1)	1.6	(0.1)
Spain	1.6	(0.1)	1.6	(0.1)	1.8	(0.1)	1.7	(0.1)	1.4	(0.1)
Sweden	1.6	(0.1)	1.4	(0.1)	1.6	(0.1)	1.3	(0.1)	1.3	(0.1)
United States	1.7	(0.1)	1.8	(0.1)	2.0	(0.1)	1.6	(0.1)	1.7	(0.1)
Sub-national entities										
Flanders (Belgium)	1.5	(0.1)	1.8	(0.1)	1.7	(0.1)	1.9	(0.1)	1.4	(0.1)
England (UK)	1.7	(0.1)	1.7	(0.1)	1.8	(0.1)	1.7	(0.1)	1.7	(0.1)
Northern Ireland (UK)	1.6	(0.1)	1.4	(0.1)	1.8	(0.1)	1.7	(0.1)	1.5	(0.1)
England/N. Ireland (UK)	1.7	(0.1)	1.7	(0.1)	1.8	(0.1)	1.7	(0.1)	1.6	(0.1)
Average	1.6	(0.0)	1.6	(0.0)	1.8	(0.0)	1.6	(0.0)	1.4	(0.0)
Partners										
Cyprus[1]	1.6	(0.1)	1.5	(0.1)	1.7	(0.1)	1.6	(0.1)	1.5	(0.1)

[Part 2/3]

Table A4.8a **Mean use of information-processing skills at work, by age group**

	25-54 year-olds									
	Reading at work		Writing at work		Numeracy at work		ICT at work		Problem solving	
OECD	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities										
Australia	2.3	(0.0)	2.2	(0.0)	2.2	(0.0)	2.2	(0.0)	2.2	(0.0)
Austria	2.1	(0.0)	2.1	(0.0)	1.9	(0.0)	2.0	(0.0)	1.8	(0.0)
Canada	2.2	(0.0)	2.2	(0.0)	2.3	(0.0)	2.2	(0.0)	2.0	(0.0)
Czech Republic	1.9	(0.0)	1.9	(0.0)	2.2	(0.0)	2.1	(0.0)	1.9	(0.0)
Denmark	2.2	(0.0)	2.0	(0.0)	2.0	(0.0)	2.2	(0.0)	2.0	(0.0)
Estonia	2.0	(0.0)	1.8	(0.0)	2.0	(0.0)	2.2	(0.0)	1.8	(0.0)
Finland	2.2	(0.0)	2.1	(0.0)	2.2	(0.0)	2.0	(0.0)	2.0	(0.0)
Germany	2.1	(0.0)	2.1	(0.0)	2.0	(0.0)	2.0	(0.0)	1.8	(0.0)
Ireland	2.1	(0.0)	2.1	(0.0)	2.0	(0.0)	2.1	(0.0)	1.9	(0.0)
Italy	1.7	(0.0)	1.8	(0.0)	2.0	(0.0)	2.2	(0.0)	2.0	(0.0)
Japan	2.2	(0.0)	2.3	(0.0)	1.9	(0.0)	1.7	(0.0)	1.6	(0.0)
Korea	2.2	(0.0)	2.3	(0.0)	2.1	(0.0)	2.2	(0.0)	1.6	(0.0)
Netherlands	2.1	(0.0)	2.2	(0.0)	2.0	(0.0)	2.2	(0.0)	1.8	(0.0)
Norway	2.3	(0.0)	2.2	(0.0)	1.9	(0.0)	2.1	(0.0)	2.0	(0.0)
Poland	1.8	(0.0)	1.9	(0.0)	2.0	(0.0)	2.0	(0.0)	1.7	(0.0)
Slovak Republic	1.8	(0.0)	2.0	(0.0)	2.1	(0.0)	2.1	(0.0)	2.0	(0.0)
Spain	2.0	(0.0)	2.1	(0.0)	2.1	(0.0)	2.1	(0.0)	1.9	(0.0)
Sweden	2.2	(0.0)	1.9	(0.0)	1.9	(0.0)	1.9	(0.0)	2.0	(0.0)
United States	2.2	(0.0)	2.2	(0.0)	2.3	(0.0)	2.2	(0.0)	2.2	(0.0)
Sub-national entities										
Flanders (Belgium)	2.0	(0.0)	2.1	(0.0)	2.0	(0.0)	2.1	(0.0)	1.9	(0.0)
England (UK)	2.2	(0.0)	2.2	(0.0)	2.1	(0.0)	2.3	(0.0)	2.2	(0.0)
Northern Ireland (UK)	2.1	(0.0)	2.1	(0.0)	2.0	(0.0)	2.1	(0.0)	2.1	(0.0)
England/N. Ireland (UK)	2.2	(0.0)	2.2	(0.0)	2.1	(0.0)	2.3	(0.0)	2.2	(0.0)
Average	2.1	(0.0)	2.1	(0.0)	2.1	(0.0)	2.1	(0.0)	1.9	(0.0)
Partners										
Cyprus[1]	1.9	(0.0)	1.9	(0.0)	1.9	(0.0)	1.9	(0.0)	1.9	(0.0)

1. See notes on page 250.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932897952

[Part 3/3]

Table A4.8a **Mean use of information-processing skills at work, by age group**

	55-65 year-olds									
	Reading at work		Writing at work		Numeracy at work		ICT at work		Problem solving	
OECD	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities										
Australia	2.2	(0.0)	2.0	(0.0)	2.1	(0.0)	2.0	(0.0)	1.9	(0.1)
Austria	2.0	(0.1)	1.9	(0.1)	1.9	(0.1)	1.9	(0.0)	1.6	(0.1)
Canada	2.1	(0.0)	2.0	(0.0)	2.1	(0.0)	2.0	(0.0)	1.8	(0.0)
Czech Republic	1.8	(0.1)	1.8	(0.1)	2.0	(0.1)	2.0	(0.1)	1.6	(0.1)
Denmark	2.2	(0.0)	2.0	(0.0)	1.8	(0.0)	2.0	(0.0)	1.8	(0.0)
Estonia	1.8	(0.0)	1.6	(0.0)	1.8	(0.0)	2.0	(0.0)	1.4	(0.0)
Finland	2.2	(0.0)	1.9	(0.0)	2.1	(0.0)	1.8	(0.0)	1.6	(0.0)
Germany	2.1	(0.0)	2.0	(0.0)	1.9	(0.0)	1.9	(0.0)	1.6	(0.1)
Ireland	1.9	(0.0)	1.7	(0.1)	1.7	(0.1)	1.8	(0.1)	1.4	(0.1)
Italy	1.7	(0.1)	1.7	(0.1)	1.7	(0.1)	1.9	(0.1)	1.9	(0.1)
Japan	2.0	(0.1)	2.1	(0.0)	1.7	(0.0)	1.6	(0.1)	1.1	(0.0)
Korea	1.6	(0.0)	1.9	(0.1)	1.5	(0.0)	1.8	(0.1)	1.1	(0.0)
Netherlands	2.1	(0.0)	2.0	(0.0)	1.9	(0.0)	2.1	(0.0)	1.5	(0.1)
Norway	2.2	(0.0)	2.0	(0.0)	1.8	(0.0)	1.9	(0.0)	1.8	(0.0)
Poland	1.6	(0.1)	1.7	(0.1)	1.9	(0.1)	1.8	(0.1)	1.4	(0.1)
Slovak Republic	1.7	(0.1)	1.8	(0.1)	1.9	(0.1)	2.0	(0.1)	1.7	(0.1)
Spain	1.8	(0.1)	1.9	(0.1)	1.8	(0.1)	1.9	(0.1)	1.5	(0.1)
Sweden	2.2	(0.0)	1.8	(0.0)	1.8	(0.0)	1.8	(0.0)	1.8	(0.0)
United States	2.3	(0.0)	2.2	(0.0)	2.2	(0.0)	2.1	(0.1)	2.1	(0.0)
Sub-national entities										
Flanders (Belgium)	2.0	(0.0)	2.0	(0.0)	1.8	(0.1)	2.0	(0.0)	1.6	(0.1)
England (UK)	2.0	(0.1)	2.0	(0.0)	1.9	(0.1)	2.0	(0.0)	1.9	(0.1)
Northern Ireland (UK)	1.9	(0.1)	1.9	(0.1)	1.8	(0.1)	1.8	(0.1)	1.7	(0.1)
England/N. Ireland (UK)	2.0	(0.1)	2.0	(0.0)	1.9	(0.1)	2.0	(0.0)	1.9	(0.1)
Average	2.0	(0.0)	1.9	(0.0)	1.9	(0.0)	1.9	(0.0)	1.6	(0.0)
Partners										
Cyprus[1]	1.6	(0.1)	1.6	(0.1)	1.7	(0.1)	1.6	(0.1)	1.5	(0.1)

1. See notes on page 250.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932897952

[Part 1/2]

Table A4.8b Differences in the use of information-processing skills at work, by age group (adjusted)

OECD	Adjusted differences between younger[2] and prime-age[3] workers (young minus prime age)									
	Reading at work		Writing at work		Numeracy at work		ICT at work		Problem solving	
	ß	p-value	ß	p-value	ß	p-value	ß	p-value	ß	p-value
National entities										
Australia	-0.6	0.000	-0.5	0.000	-0.2	0.000	-0.5	0.000	-0.5	0.000
Austria	-0.2	0.000	-0.3	0.001	0.0	0.837	-0.2	0.004	-0.2	0.004
Canada	-0.6	0.000	-0.6	0.000	-0.3	0.000	-0.6	0.000	-0.6	0.000
Czech Republic	-0.3	0.001	-0.2	0.001	0.1	0.662	-0.3	0.015	0.0	0.946
Denmark	-0.8	0.000	-0.7	0.000	-0.3	0.000	-0.7	0.000	-1.0	0.000
Estonia	-0.3	0.000	-0.3	0.000	-0.1	0.091	-0.4	0.000	-0.2	0.007
Finland	-0.5	0.000	-0.5	0.000	-0.2	0.001	-0.6	0.000	-0.6	0.000
Germany	-0.3	0.000	-0.2	0.002	-0.2	0.020	-0.3	0.000	-0.4	0.000
Ireland	-0.6	0.000	-0.5	0.000	-0.2	0.084	-0.5	0.000	-0.6	0.000
Italy	-0.3	0.038	-0.5	0.002	-0.3	0.040	-0.4	0.072	-0.4	0.014
Japan	-0.4	0.000	-0.5	0.000	-0.3	0.000	-0.4	0.000	-0.3	0.000
Korea	-0.5	0.000	-0.4	0.000	-0.3	0.001	-0.5	0.000	-0.4	0.001
Netherlands	-0.6	0.000	-0.7	0.000	-0.3	0.000	-0.6	0.000	-0.5	0.000
Norway	-0.4	0.000	-0.4	0.000	-0.1	0.008	-0.7	0.000	-0.6	0.000
Poland	-0.2	0.000	-0.1	0.026	-0.1	0.169	-0.2	0.001	-0.1	0.010
Slovak Republic	-0.3	0.000	-0.2	0.032	-0.3	0.002	-0.3	0.003	-0.1	0.171
Spain	-0.3	0.003	-0.3	0.003	-0.1	0.536	-0.3	0.018	-0.4	0.002
Sweden	-0.5	0.000	-0.4	0.000	-0.2	0.007	-0.5	0.000	-0.4	0.000
United States	-0.5	0.000	-0.5	0.000	-0.2	0.041	-0.5	0.000	-0.4	0.000
Sub-national entities										
Flanders (Belgium)	-0.3	0.000	-0.2	0.012	-0.1	0.068	-0.2	0.118	-0.2	0.046
England (UK)	-0.4	0.000	-0.5	0.000	-0.2	0.026	-0.5	0.000	-0.4	0.000
Northern Ireland (UK)	-0.5	0.000	-0.6	0.000	-0.1	0.101	-0.4	0.003	-0.5	0.000
England/N. Ireland (UK)	-0.4	0.000	-0.5	0.000	-0.2	0.022	-0.5	0.000	-0.4	0.000
Average	-0.4	0.002	-0.4	0.002	-0.2	0.058	-0.4	0.007	-0.4	0.046
Partners										
Cyprus[1]	-0.2	0.037	-0.3	0.035	-0.1	0.264	-0.2	0.280	-0.3	0.026

[Part 2/2]

Table A4.8b Differences in the use of information-processing skills at work, by age group (adjusted)

OECD	Adjusted differences between older[4] and prime-age[3] workers (older minus prime age)									
	Reading at work		Writing at work		Numeracy at work		ICT at work		Problem solving	
	ß	p-value	ß	p-value	ß	p-value	ß	p-value	ß	p-value
National entities										
Australia	-0.1	0.194	-0.1	0.054	-0.2	0.008	0.0	0.564	-0.2	0.005
Austria	0.1	0.383	0.0	0.809	0.0	0.895	0.0	0.479	-0.1	0.083
Canada	0.0	0.604	-0.1	0.001	-0.1	0.082	-0.1	0.009	-0.2	0.001
Czech Republic	0.0	0.727	-0.2	0.106	-0.1	0.085	0.0	0.596	-0.2	0.321
Denmark	0.1	0.050	0.0	0.990	-0.1	0.012	0.0	0.289	-0.1	0.003
Estonia	-0.1	0.000	-0.1	0.005	-0.1	0.003	-0.1	0.004	-0.3	0.000
Finland	0.1	0.126	0.0	0.942	0.0	0.810	0.0	0.289	-0.1	0.007
Germany	0.0	0.309	0.0	0.433	-0.1	0.322	0.0	0.627	-0.1	0.146
Ireland	-0.1	0.032	-0.1	0.374	-0.1	0.147	-0.2	0.028	-0.4	0.000
Italy	0.3	0.003	0.1	0.243	-0.1	0.348	-0.1	0.318	0.0	0.950
Japan	-0.1	0.092	-0.1	0.040	-0.1	0.012	0.0	0.845	-0.4	0.000
Korea	-0.3	0.000	-0.2	0.032	-0.4	0.000	-0.3	0.008	-0.4	0.000
Netherlands	0.1	0.172	-0.1	0.123	0.0	0.748	0.0	0.359	-0.2	0.026
Norway	0.0	0.259	-0.1	0.046	0.0	0.442	0.0	0.621	-0.1	0.036
Poland	-0.2	0.066	-0.1	0.362	-0.1	0.421	-0.1	0.178	-0.2	0.008
Slovak Republic	-0.1	0.128	-0.2	0.044	-0.2	0.020	-0.1	0.240	-0.1	0.102
Spain	0.1	0.294	-0.1	0.559	-0.2	0.032	0.0	0.985	-0.2	0.072
Sweden	0.0	0.766	0.0	0.463	-0.1	0.141	0.0	0.425	-0.1	0.017
United States	0.1	0.067	0.0	0.822	-0.1	0.097	-0.1	0.535	-0.1	0.381
Sub-national entities										
Flanders (Belgium)	0.1	0.005	0.0	0.440	0.0	0.760	0.1	0.134	-0.1	0.165
England (UK)	-0.2	0.011	-0.2	0.000	-0.2	0.009	-0.2	0.000	-0.2	0.003
Northern Ireland (UK)	-0.2	0.014	-0.1	0.339	-0.1	0.027	-0.2	0.035	-0.3	0.018
England/N. Ireland (UK)	-0.2	0.009	-0.2	0.000	-0.2	0.007	-0.2	0.000	-0.2	0.003
Average	0.0	0.067	-0.1	0.101	-0.1	0.086	-0.1	0.099	-0.2	0.053
Partners										
Cyprus[1]	-0.3	0.001	-0.1	0.135	-0.2	0.023	-0.3	0.015	-0.4	0.000

1. See notes on page 250.
2. 16-24 year-olds.
3. 25-54 year-olds.
4. 55-65 year-olds.

Note: Results based on OLS regressions including controls for literacy and numeracy proficiency scores and contract type.
Source: Survey of Adult Skills (PIAAC) (2012).
StatLink http://dx.doi.org/10.1787/888932897971

[Part 1/3]

Table A4.9a **Mean use of generic skills at work, by age group**

	16-24 year-olds													
	Task discretion		Learning skills		Influencing skills		Co-operative skills		Self-organising		Dexterity		Physical skills	
OECD	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities														
Australia	1.6	(0.0)	2.4	(0.0)	2.0	(0.0)	2.9	(0.1)	2.6	(0.1)	3.4	(0.1)	2.8	(0.1)
Austria	1.9	(0.0)	2.3	(0.0)	1.5	(0.0)	2.8	(0.1)	2.0	(0.1)	3.0	(0.1)	2.7	(0.1)
Canada	1.7	(0.0)	2.2	(0.0)	1.7	(0.0)	2.8	(0.0)	2.6	(0.1)	3.2	(0.0)	2.5	(0.1)
Czech Republic	2.1	(0.1)	2.2	(0.1)	1.6	(0.1)	2.6	(0.1)	2.9	(0.1)	2.8	(0.1)	2.7	(0.1)
Denmark	1.8	(0.0)	1.9	(0.0)	1.5	(0.0)	2.4	(0.1)	2.4	(0.1)	2.9	(0.1)	2.9	(0.1)
Estonia	1.9	(0.0)	2.0	(0.0)	1.7	(0.0)	2.2	(0.1)	3.2	(0.1)	3.2	(0.1)	2.2	(0.1)
Finland	2.1	(0.0)	2.2	(0.0)	1.9	(0.0)	2.3	(0.1)	2.7	(0.1)	2.6	(0.1)	2.4	(0.1)
Germany	1.8	(0.0)	2.2	(0.0)	1.5	(0.0)	2.6	(0.1)	2.3	(0.1)	3.2	(0.1)	2.6	(0.1)
Ireland	1.3	(0.1)	2.2	(0.1)	1.9	(0.1)	2.9	(0.1)	2.1	(0.1)	3.2	(0.1)	2.7	(0.1)
Italy	1.3	(0.1)	2.2	(0.1)	1.3	(0.1)	2.8	(0.1)	2.8	(0.2)	3.1	(0.2)	2.9	(0.1)
Japan	1.8	(0.0)	2.1	(0.0)	1.4	(0.0)	3.1	(0.1)	2.1	(0.1)	1.9	(0.1)	2.0	(0.1)
Korea	1.4	(0.1)	1.9	(0.1)	1.6	(0.1)	2.1	(0.1)	2.3	(0.1)	1.9	(0.1)	2.1	(0.1)
Netherlands	1.5	(0.0)	2.0	(0.0)	1.6	(0.0)	2.5	(0.1)	2.2	(0.1)	2.3	(0.1)	2.9	(0.1)
Norway	1.8	(0.0)	2.1	(0.0)	1.7	(0.0)	2.4	(0.1)	1.7	(0.1)	2.5	(0.1)	2.8	(0.1)
Poland	1.8	(0.0)	2.0	(0.0)	1.7	(0.0)	2.7	(0.0)	3.1	(0.0)	3.4	(0.0)	2.6	(0.0)
Slovak Republic	1.6	(0.1)	2.1	(0.1)	1.5	(0.1)	2.4	(0.1)	2.3	(0.1)	3.1	(0.1)	2.4	(0.1)
Spain	1.7	(0.1)	2.6	(0.1)	1.6	(0.1)	2.5	(0.1)	2.9	(0.1)	2.6	(0.1)	2.4	(0.1)
Sweden	1.9	(0.0)	2.1	(0.0)	1.7	(0.1)	2.3	(0.1)	2.6	(0.1)	2.9	(0.1)	2.8	(0.1)
United States	1.7	(0.0)	2.3	(0.0)	2.0	(0.1)	3.0	(0.1)	2.5	(0.1)	3.2	(0.1)	2.9	(0.1)
Sub-national entities														
Flanders (Belgium)	1.8	(0.1)	2.3	(0.0)	1.6	(0.0)	2.9	(0.1)	2.6	(0.1)	3.0	(0.1)	2.6	(0.1)
England (UK)	1.6	(0.1)	2.3	(0.1)	2.0	(0.0)	2.8	(0.1)	2.5	(0.1)	3.0	(0.1)	2.7	(0.1)
Northern Ireland (UK)	1.4	(0.1)	2.1	(0.1)	1.9	(0.1)	2.9	(0.1)	2.5	(0.1)	3.1	(0.1)	2.7	(0.1)
England/N. Ireland (UK)	1.6	(0.1)	2.3	(0.1)	2.0	(0.0)	2.8	(0.1)	2.5	(0.1)	3.0	(0.1)	2.7	(0.1)
Average	1.7	(0.0)	2.2	(0.0)	1.7	(0.0)	2.6	(0.0)	2.5	(0.0)	2.9	(0.0)	2.6	(0.0)
Partners														
Cyprus[1]	1.4	(0.1)	2.4	(0.1)	1.8	(0.1)	2.7	(0.1)	2.8	(0.1)	3.2	(0.1)	2.6	(0.1)

[Part 2/3]

Table A4.9a **Mean use of generic skills at work, by age group**

	25-54 year-olds													
	Task discretion		Learning skills		Influencing skills		Co-operative skills		Self-organising		Dexterity		Physical skills	
OECD	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities														
Australia	1.9	(0.0)	2.2	(0.0)	2.4	(0.0)	2.7	(0.0)	3.4	(0.0)	3.5	(0.0)	2.2	(0.0)
Austria	2.4	(0.0)	1.9	(0.0)	1.9	(0.0)	2.4	(0.0)	2.8	(0.0)	2.9	(0.0)	2.2	(0.0)
Canada	1.9	(0.0)	2.2	(0.0)	2.2	(0.0)	2.6	(0.0)	3.4	(0.0)	3.1	(0.0)	1.9	(0.0)
Czech Republic	2.2	(0.0)	1.8	(0.0)	1.9	(0.0)	2.4	(0.0)	3.2	(0.0)	2.8	(0.0)	2.1	(0.0)
Denmark	2.3	(0.0)	2.0	(0.0)	2.1	(0.0)	2.6	(0.0)	3.5	(0.0)	2.9	(0.0)	2.1	(0.0)
Estonia	2.0	(0.0)	2.0	(0.0)	2.0	(0.0)	2.2	(0.0)	3.5	(0.0)	3.2	(0.0)	2.0	(0.0)
Finland	2.3	(0.0)	2.1	(0.0)	2.3	(0.0)	2.1	(0.0)	3.3	(0.0)	2.5	(0.0)	1.7	(0.0)
Germany	2.3	(0.0)	1.9	(0.0)	1.9	(0.0)	2.2	(0.0)	3.1	(0.0)	2.9	(0.0)	2.1	(0.0)
Ireland	1.7	(0.0)	2.0	(0.0)	2.2	(0.0)	2.8	(0.0)	3.0	(0.0)	3.3	(0.0)	2.2	(0.0)
Italy	1.7	(0.0)	1.9	(0.0)	1.7	(0.0)	2.5	(0.0)	3.2	(0.0)	2.8	(0.1)	2.1	(0.1)
Japan	2.3	(0.0)	1.8	(0.0)	1.8	(0.0)	2.6	(0.0)	3.0	(0.0)	1.8	(0.0)	1.5	(0.0)
Korea	2.0	(0.0)	1.5	(0.0)	1.9	(0.0)	1.9	(0.0)	2.9	(0.0)	2.0	(0.0)	2.0	(0.0)
Netherlands	2.0	(0.0)	1.9	(0.0)	2.0	(0.0)	2.1	(0.0)	3.2	(0.0)	2.5	(0.0)	1.9	(0.0)
Norway	2.2	(0.0)	2.2	(0.0)	2.1	(0.0)	2.3	(0.0)	3.0	(0.0)	2.0	(0.0)	2.0	(0.0)
Poland	2.0	(0.0)	1.8	(0.0)	1.9	(0.0)	2.6	(0.0)	3.3	(0.0)	3.2	(0.0)	2.2	(0.0)
Slovak Republic	1.8	(0.0)	2.1	(0.0)	1.9	(0.0)	2.5	(0.0)	2.8	(0.0)	3.1	(0.0)	2.1	(0.0)
Spain	1.9	(0.0)	2.3	(0.0)	1.8	(0.0)	2.5	(0.0)	3.2	(0.0)	2.4	(0.0)	2.1	(0.0)
Sweden	2.2	(0.0)	2.1	(0.0)	2.1	(0.0)	2.4	(0.0)	3.3	(0.0)	2.5	(0.0)	2.0	(0.0)
United States	1.9	(0.0)	2.3	(0.0)	2.3	(0.0)	2.7	(0.0)	3.2	(0.0)	3.4	(0.0)	2.4	(0.0)
Sub-national entities														
Flanders (Belgium)	2.2	(0.0)	1.9	(0.0)	2.0	(0.0)	2.4	(0.0)	3.2	(0.0)	2.5	(0.0)	1.8	(0.0)
England (UK)	1.9	(0.0)	2.0	(0.0)	2.3	(0.0)	2.6	(0.0)	3.4	(0.0)	3.2	(0.0)	2.0	(0.0)
Northern Ireland (UK)	1.8	(0.0)	1.9	(0.0)	2.3	(0.0)	2.7	(0.0)	3.2	(0.0)	3.0	(0.0)	2.2	(0.0)
England/N. Ireland (UK)	1.9	(0.0)	2.0	(0.0)	2.3	(0.0)	2.6	(0.0)	3.4	(0.0)	3.2	(0.0)	2.0	(0.0)
Average	2.0	(0.0)	2.0	(0.0)	2.0	(0.0)	2.4	(0.0)	3.2	(0.0)	2.8	(0.0)	2.0	(0.0)
Partners														
Cyprus[1]	1.8	(0.0)	2.0	(0.0)	2.0	(0.0)	2.6	(0.0)	3.1	(0.0)	3.0	(0.0)	2.0	(0.0)

1. See notes on page 250.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932897990

[Part 3/3]

Table A4.9a Mean use of generic skills at work, by age group

	55-65 year-olds													
	Task discretion		Learning skills		Influencing skills		Co-operative skills		Self-organising		Dexterity		Physical skills	
OECD	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities														
Australia	2.0	(0.0)	1.9	(0.0)	2.2	(0.0)	2.5	(0.1)	3.3	(0.1)	3.4	(0.1)	2.1	(0.1)
Austria	2.5	(0.1)	1.7	(0.0)	1.9	(0.1)	2.2	(0.1)	2.9	(0.1)	2.6	(0.1)	2.1	(0.1)
Canada	2.0	(0.0)	2.0	(0.0)	2.0	(0.0)	2.3	(0.0)	3.3	(0.0)	3.2	(0.0)	1.9	(0.1)
Czech Republic	2.0	(0.1)	1.6	(0.1)	1.8	(0.1)	2.2	(0.1)	3.2	(0.1)	2.6	(0.1)	2.1	(0.1)
Denmark	2.5	(0.0)	1.9	(0.0)	2.1	(0.0)	2.4	(0.0)	3.5	(0.0)	3.0	(0.0)	2.1	(0.0)
Estonia	1.8	(0.0)	1.8	(0.0)	1.8	(0.0)	2.0	(0.0)	3.2	(0.0)	3.1	(0.1)	2.0	(0.1)
Finland	2.3	(0.0)	2.0	(0.0)	2.1	(0.0)	1.9	(0.0)	3.1	(0.0)	2.9	(0.1)	1.7	(0.1)
Germany	2.4	(0.0)	1.7	(0.1)	1.8	(0.0)	2.0	(0.1)	3.2	(0.1)	2.9	(0.1)	2.0	(0.1)
Ireland	1.8	(0.1)	1.7	(0.1)	1.9	(0.1)	2.5	(0.1)	3.0	(0.1)	3.2	(0.1)	2.2	(0.1)
Italy	2.0	(0.1)	1.6	(0.1)	1.7	(0.1)	2.2	(0.1)	3.3	(0.1)	3.0	(0.1)	2.0	(0.1)
Japan	2.5	(0.0)	1.4	(0.0)	1.6	(0.0)	2.2	(0.1)	2.8	(0.1)	1.5	(0.1)	1.6	(0.1)
Korea	2.3	(0.1)	1.1	(0.0)	1.6	(0.0)	1.7	(0.1)	2.4	(0.1)	1.1	(0.1)	2.6	(0.1)
Netherlands	2.0	(0.0)	1.7	(0.0)	1.9	(0.0)	1.9	(0.1)	3.0	(0.1)	2.4	(0.1)	1.8	(0.1)
Norway	2.3	(0.0)	2.0	(0.0)	2.0	(0.0)	2.0	(0.1)	3.1	(0.1)	2.0	(0.1)	1.9	(0.1)
Poland	2.2	(0.1)	1.5	(0.1)	1.7	(0.1)	2.4	(0.1)	3.2	(0.1)	3.0	(0.1)	2.2	(0.1)
Slovak Republic	1.8	(0.1)	1.8	(0.1)	1.7	(0.1)	2.3	(0.1)	2.7	(0.1)	2.9	(0.1)	1.9	(0.1)
Spain	2.1	(0.1)	2.3	(0.1)	1.8	(0.1)	2.2	(0.1)	3.3	(0.1)	2.3	(0.1)	1.9	(0.1)
Sweden	2.4	(0.0)	2.0	(0.0)	2.0	(0.0)	2.1	(0.1)	3.3	(0.1)	2.6	(0.1)	1.9	(0.1)
United States	2.1	(0.1)	2.2	(0.0)	2.3	(0.0)	2.6	(0.1)	3.4	(0.1)	3.5	(0.0)	2.2	(0.1)
Sub-national entities														
Flanders (Belgium)	2.4	(0.1)	1.7	(0.0)	1.9	(0.0)	2.1	(0.1)	3.3	(0.1)	2.4	(0.1)	1.8	(0.1)
England (UK)	2.0	(0.1)	1.7	(0.1)	1.9	(0.0)	2.3	(0.1)	3.2	(0.1)	3.2	(0.1)	2.1	(0.1)
Northern Ireland (UK)	1.7	(0.1)	1.7	(0.1)	2.0	(0.1)	2.5	(0.1)	3.1	(0.1)	2.9	(0.1)	2.1	(0.1)
England/N. Ireland (UK)	1.9	(0.1)	1.7	(0.1)	1.9	(0.0)	2.3	(0.1)	3.2	(0.1)	3.2	(0.1)	2.1	(0.1)
Average	2.2	(0.0)	1.8	(0.0)	1.9	(0.0)	2.2	(0.0)	3.1	(0.0)	2.7	(0.0)	2.0	(0.0)
Partners														
Cyprus[1]	1.8	(0.1)	1.7	(0.1)	1.9	(0.1)	2.4	(0.1)	3.2	(0.1)	3.1	(0.1)	2.4	(0.1)

1. See notes on page 250.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932897990

[Part 1/2]

Table A4.9b Differences in the use of generic skills at work, by age group (adjusted)

OECD	Adjusted differences between younger[2] and prime-age[3] workers (young minus prime age)													
	Task discretion		Learning skills		Influencing skills		Co-operative skills		Self-organising skills		Dexterity		Physical skills	
	ß	p-value	ß	p-value	ß	p-value	ß	p-value	ß	p-value	ß	p-value	ß	p-value
National entities														
Australia	-0.2	0.000	0.2	0.000	-0.4	0.000	0.2	0.044	-0.7	0.000	-0.1	0.082	0.5	0.000
Austria	-0.3	0.000	0.2	0.000	-0.2	0.000	0.3	0.000	-0.5	0.000	0.1	0.284	0.4	0.001
Canada	-0.2	0.000	0.0	0.334	-0.3	0.000	0.2	0.000	-0.6	0.000	0.1	0.114	0.6	0.000
Czech Republic	0.1	0.465	0.4	0.000	-0.3	0.000	0.3	0.057	-0.2	0.187	0.0	0.774	0.6	0.000
Denmark	-0.4	0.000	-0.2	0.000	-0.5	0.000	-0.2	0.002	-0.9	0.000	0.0	0.910	0.8	0.000
Estonia	0.0	0.606	0.1	0.110	-0.2	0.000	0.1	0.343	-0.2	0.005	0.1	0.270	0.2	0.020
Finland	-0.1	0.001	0.1	0.103	-0.4	0.000	0.1	0.214	-0.6	0.000	0.1	0.287	0.6	0.000
Germany	-0.3	0.000	0.2	0.000	-0.3	0.000	0.3	0.006	-0.7	0.000	0.2	0.036	0.5	0.000
Ireland	-0.3	0.000	0.2	0.005	-0.3	0.001	0.2	0.038	-0.7	0.000	-0.1	0.420	0.4	0.003
Italy	-0.2	0.160	0.4	0.000	-0.1	0.583	0.4	0.022	-0.2	0.437	0.1	0.616	0.5	0.012
Japan	-0.4	0.000	0.2	0.000	-0.3	0.000	0.4	0.000	-0.6	0.000	0.1	0.569	0.3	0.002
Korea	-0.3	0.001	0.4	0.000	-0.3	0.000	0.2	0.037	-0.5	0.000	-0.1	0.582	0.1	0.371
Netherlands	-0.3	0.000	0.0	0.981	-0.2	0.000	0.4	0.000	-0.7	0.000	-0.1	0.185	1.0	0.000
Norway	-0.2	0.000	-0.1	0.006	-0.4	0.000	0.1	0.254	-1.2	0.000	0.4	0.000	0.7	0.000
Poland	0.0	0.728	0.2	0.000	-0.1	0.008	0.2	0.001	0.0	0.756	0.3	0.000	0.5	0.000
Slovak Republic	-0.2	0.023	-0.1	0.533	-0.3	0.008	0.0	0.918	-0.4	0.009	0.1	0.356	0.5	0.000
Spain	-0.2	0.045	0.3	0.001	-0.1	0.532	0.3	0.008	-0.3	0.020	0.2	0.163	0.3	0.025
Sweden	-0.2	0.006	-0.1	0.080	-0.3	0.000	0.0	0.918	-0.4	0.000	0.5	0.000	0.9	0.000
United States	-0.1	0.020	0.0	0.842	-0.1	0.139	0.3	0.001	-0.6	0.000	-0.2	0.019	0.6	0.000
Sub-national entities														
Flanders (Belgium)	-0.2	0.000	0.3	0.000	-0.3	0.000	0.5	0.000	-0.4	0.000	0.3	0.000	0.7	0.000
England (UK)	-0.1	0.020	0.3	0.000	-0.2	0.000	0.3	0.003	-0.7	0.000	-0.2	0.049	0.6	0.000
Northern Ireland (UK)	-0.2	0.002	0.1	0.049	-0.4	0.000	0.3	0.019	-0.6	0.000	0.1	0.442	0.6	0.000
England/N. Ireland (UK)	-0.1	0.013	0.3	0.000	-0.2	0.000	0.3	0.002	-0.7	0.000	-0.2	0.054	0.6	0.000
Average	-0.2	0.051	0.1	0.069	-0.3	0.038	0.2	0.066	-0.5	0.043	0.1	0.084	0.5	0.018
Partners														
Cyprus[1]	-0.3	0.002	0.3	0.001	-0.1	0.350	0.1	0.322	-0.1	0.369	0.2	0.104	0.4	0.010

[Part 2/2]

Table A4.9b Differences in the use of generic skills at work, by age group (adjusted)

OECD	Adjusted differences between older[4] and prime-age[3] workers (older minus prime age)													
	Task discretion		Learning skills		Influencing skills		Co-operative skills		Self-organising skills		Dexterity		Physical skills	
	ß	p-value	ß	p-value	ß	p-value	ß	p-value	ß	p-value	ß	p-value	ß	p-value
National entities														
Australia	0.1	0.044	-0.3	0.000	-0.1	0.059	-0.2	0.008	-0.1	0.334	-0.1	0.376	-0.2	0.027
Austria	0.1	0.362	-0.2	0.001	0.0	0.394	-0.3	0.003	0.2	0.199	-0.4	0.002	-0.4	0.008
Canada	0.0	0.282	-0.2	0.000	-0.1	0.206	-0.3	0.000	0.0	0.318	0.0	0.580	-0.2	0.001
Czech Republic	-0.1	0.206	-0.1	0.123	0.0	0.847	-0.2	0.215	0.1	0.469	-0.3	0.059	-0.2	0.217
Denmark	0.2	0.000	-0.1	0.000	0.0	0.785	-0.2	0.000	0.1	0.038	0.0	0.360	-0.2	0.000
Estonia	-0.1	0.002	-0.2	0.000	-0.2	0.000	-0.3	0.000	-0.2	0.002	-0.2	0.008	-0.2	0.003
Finland	0.0	0.496	-0.1	0.009	-0.1	0.284	-0.3	0.000	-0.1	0.338	0.2	0.007	-0.3	0.000
Germany	0.1	0.092	-0.2	0.001	0.0	0.377	-0.3	0.001	0.1	0.074	-0.1	0.166	-0.3	0.001
Ireland	0.2	0.031	-0.5	0.000	-0.2	0.006	-0.4	0.000	0.0	0.669	-0.2	0.123	-0.3	0.029
Italy	0.1	0.129	-0.3	0.001	0.1	0.159	-0.3	0.039	0.2	0.128	0.0	0.965	-0.3	0.051
Japan	0.2	0.003	-0.4	0.000	-0.1	0.011	-0.4	0.000	0.0	0.972	-0.6	0.000	-0.1	0.069
Korea	0.1	0.036	-0.4	0.000	-0.2	0.015	-0.3	0.012	-0.3	0.008	-0.5	0.000	0.1	0.463
Netherlands	0.0	0.645	-0.2	0.001	0.0	0.570	-0.3	0.000	0.0	0.655	-0.2	0.024	-0.4	0.000
Norway	0.1	0.182	-0.1	0.001	-0.1	0.029	-0.3	0.000	0.2	0.072	-0.2	0.007	-0.4	0.000
Poland	0.1	0.092	-0.3	0.004	-0.2	0.003	-0.2	0.175	0.0	0.983	-0.3	0.023	-0.3	0.113
Slovak Republic	0.0	0.764	-0.2	0.003	-0.1	0.240	-0.2	0.035	-0.1	0.341	-0.2	0.172	-0.2	0.088
Spain	0.0	0.743	0.0	0.705	0.1	0.311	-0.3	0.005	0.3	0.002	-0.1	0.370	-0.6	0.000
Sweden	0.1	0.001	-0.1	0.000	-0.1	0.063	-0.2	0.001	0.1	0.462	0.0	0.697	-0.3	0.001
United States	0.0	0.416	-0.1	0.049	0.1	0.168	-0.1	0.303	0.2	0.041	0.1	0.041	-0.1	0.142
Sub-national entities														
Flanders (Belgium)	0.3	0.000	-0.2	0.000	0.0	0.964	-0.3	0.004	0.2	0.035	-0.4	0.000	-0.4	0.000
England (UK)	0.0	0.625	-0.3	0.000	-0.3	0.000	-0.3	0.002	-0.1	0.255	0.0	0.689	0.0	0.762
Northern Ireland (UK)	0.1	0.493	-0.2	0.025	-0.2	0.035	-0.2	0.267	0.0	0.670	0.0	0.792	-0.3	0.086
England/N. Ireland (UK)	0.0	0.647	-0.3	0.000	-0.3	0.000	-0.3	0.001	-0.1	0.253	0.0	0.686	0.0	0.704
Average	0.1	0.078	-0.2	0.034	-0.1	0.086	-0.3	0.020	0.0	0.093	-0.2	0.078	-0.3	0.043
Partners														
Cyprus[1]	0.0	0.629	-0.3	0.000	-0.1	0.181	-0.2	0.025	0.1	0.432	0.0	0.853	0.2	0.131

1. See notes on page 250.
2. 16-24 year-olds.
3. 25-54 year-olds.
4. 55-65 year-olds.

Note: Results based on OLS regressions including controls for literacy and numeracy proficiency scores and contract type.
Source: Survey of Adult Skills (PIAAC) (2012).
StatLink http://dx.doi.org/10.1787/888932898009

[Part 1/1]

Table A4.10 **Mean ICT use at home and at work, by age group**

	16-24 year-olds				25-54 year-olds				55-65 year-olds			
	ICT at work		ICT at home		ICT at work		ICT at home		ICT at work		ICT at home	
OECD	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities												
Australia	1.6	(0.1)	2.2	(0.0)	2.2	(0.0)	2.1	(0.0)	2.0	(0.0)	1.9	(0.0)
Austria	1.7	(0.0)	1.9	(0.0)	2.0	(0.0)	1.9	(0.0)	1.9	(0.0)	1.7	(0.1)
Canada	1.4	(0.0)	2.3	(0.0)	2.2	(0.0)	2.1	(0.0)	2.0	(0.0)	1.9	(0.0)
Czech Republic	1.8	(0.1)	2.4	(0.1)	2.1	(0.0)	2.2	(0.0)	2.0	(0.1)	1.8	(0.1)
Denmark	1.4	(0.1)	2.5	(0.0)	2.2	(0.0)	2.2	(0.0)	2.0	(0.0)	2.1	(0.0)
Estonia	1.8	(0.1)	2.4	(0.0)	2.2	(0.0)	2.0	(0.0)	2.0	(0.0)	1.4	(0.0)
Finland	1.3	(0.0)	2.2	(0.0)	2.0	(0.0)	2.0	(0.0)	1.8	(0.0)	1.6	(0.0)
Germany	1.6	(0.1)	2.2	(0.0)	2.0	(0.0)	1.9	(0.0)	1.9	(0.0)	1.7	(0.1)
Ireland	1.5	(0.1)	2.1	(0.1)	2.1	(0.0)	1.9	(0.0)	1.8	(0.1)	1.6	(0.1)
Italy	1.7	(0.1)	1.6	(0.1)	2.2	(0.0)	1.7	(0.0)	1.9	(0.1)	1.7	(0.1)
Japan	1.2	(0.1)	1.3	(0.1)	1.7	(0.0)	1.4	(0.0)	1.6	(0.1)	1.1	(0.1)
Korea	1.6	(0.1)	1.8	(0.1)	2.2	(0.0)	1.5	(0.0)	1.8	(0.1)	1.1	(0.1)
Netherlands	1.5	(0.1)	2.5	(0.0)	2.2	(0.0)	2.2	(0.0)	2.1	(0.0)	2.1	(0.0)
Norway	1.2	(0.0)	2.3	(0.0)	2.1	(0.0)	2.1	(0.0)	1.9	(0.0)	1.8	(0.0)
Poland	1.7	(0.0)	2.2	(0.0)	2.0	(0.0)	1.8	(0.0)	1.8	(0.1)	1.4	(0.1)
Slovak Republic	2.0	(0.1)	2.4	(0.0)	2.1	(0.0)	2.1	(0.0)	2.0	(0.1)	1.8	(0.1)
Spain	1.7	(0.1)	2.2	(0.1)	2.1	(0.0)	1.9	(0.0)	1.9	(0.1)	1.5	(0.1)
Sweden	1.3	(0.1)	2.2	(0.0)	1.9	(0.0)	2.0	(0.0)	1.8	(0.0)	1.8	(0.0)
United States	1.6	(0.1)	2.4	(0.1)	2.2	(0.0)	2.1	(0.0)	2.1	(0.1)	2.0	(0.1)
Sub-national entities												
Flanders (Belgium)	1.9	(0.1)	2.2	(0.0)	2.1	(0.0)	2.0	(0.0)	2.0	(0.0)	1.9	(0.0)
England (UK)	1.7	(0.1)	2.2	(0.1)	2.3	(0.0)	2.1	(0.0)	2.0	(0.0)	1.8	(0.1)
Northern Ireland (UK)	1.7	(0.1)	2.1	(0.1)	2.1	(0.0)	1.8	(0.0)	1.8	(0.1)	1.6	(0.1)
England/N. Ireland (UK)	1.7	(0.1)	2.2	(0.1)	2.3	(0.0)	2.1	(0.0)	2.0	(0.0)	1.8	(0.1)
Average	1.6	(0.0)	2.2	(0.0)	2.1	(0.0)	2.0	(0.0)	1.9	(0.0)	1.7	(0.0)
Partners												
Cyprus[1]	1.6	(0.1)	1.6	(0.1)	1.9	(0.0)	1.6	(0.0)	1.6	(0.1)	1.1	(0.1)

1. See notes on page 250.

Note: The sample includes only workers.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898028

[Part 1/3]

Table A4.11a Mean use of information-processing skills at work, by educational attainment

	Lower than upper secondary education									
	Reading at work		Writing at work		Numeracy at work		ICT at work		Problem solving	
OECD	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities										
Australia	1.8	(0.0)	1.6	(0.0)	1.9	(0.0)	1.8	(0.1)	1.7	(0.1)
Austria	1.4	(0.1)	1.5	(0.1)	1.5	(0.0)	1.5	(0.1)	1.1	(0.1)
Canada	1.4	(0.0)	1.5	(0.0)	1.8	(0.1)	1.4	(0.1)	1.2	(0.0)
Czech Republic	1.1	(0.1)	1.6	(0.2)	1.7	(0.1)	1.6	(0.2)	1.2	(0.1)
Denmark	1.5	(0.0)	1.5	(0.0)	1.5	(0.0)	1.4	(0.0)	1.1	(0.0)
Estonia	1.2	(0.0)	1.1	(0.0)	1.5	(0.1)	1.6	(0.1)	1.2	(0.1)
Finland	1.5	(0.1)	1.6	(0.1)	1.8	(0.1)	1.4	(0.1)	1.2	(0.1)
Germany	1.4	(0.1)	1.6	(0.1)	1.6	(0.1)	1.5	(0.1)	0.9	(0.1)
Ireland	1.5	(0.1)	1.4	(0.1)	1.6	(0.1)	1.5	(0.1)	1.3	(0.1)
Italy	1.0	(0.1)	1.2	(0.1)	1.5	(0.1)	1.8	(0.1)	1.5	(0.1)
Japan	1.6	(0.1)	1.9	(0.1)	1.6	(0.1)	1.3	(0.1)	0.9	(0.1)
Korea	1.1	(0.1)	1.6	(0.1)	1.3	(0.0)	1.0	(0.1)	0.9	(0.0)
Netherlands	1.5	(0.0)	1.6	(0.0)	1.6	(0.0)	1.7	(0.0)	1.1	(0.0)
Norway	1.9	(0.0)	1.6	(0.0)	1.6	(0.0)	1.5	(0.0)	1.3	(0.0)
Poland	1.0	(0.1)	1.0	(0.1)	1.3	(0.1)	1.0	(0.2)	1.1	(0.1)
Slovak Republic	0.7	(0.1)	1.0	(0.1)	1.5	(0.1)	1.6†	(0.1)	1.0	(0.1)
Spain	1.3	(0.0)	1.5	(0.0)	1.7	(0.0)	1.5	(0.1)	1.4	(0.0)
Sweden	1.8	(0.0)	1.6	(0.0)	1.6	(0.0)	1.4	(0.1)	1.3	(0.1)
United States	1.2	(0.0)	1.5	(0.1)	1.9	(0.1)	1.2	(0.1)	1.4	(0.1)
Sub-national entities										
Flanders (Belgium)	1.3	(0.1)	1.5	(0.1)	1.5	(0.1)	1.6	(0.1)	1.0	(0.1)
England (UK)	1.6	(0.0)	1.7	(0.0)	1.8	(0.1)	1.8	(0.1)	1.4	(0.1)
Northern Ireland (UK)	1.5	(0.1)	1.4	(0.1)	1.6	(0.1)	1.6	(0.1)	1.4	(0.1)
England/N. Ireland (UK)	1.6	(0.0)	1.7	(0.0)	1.8	(0.1)	1.8	(0.1)	1.4	(0.1)
Average	1.4	(0.0)	1.5	(0.0)	1.6	(0.0)	1.5	(0.0)	1.2	(0.0)
Partners										
Cyprus[1]	1.1	(0.1)	1.2	(0.1)	1.4	(0.1)	1.3	(0.2)	1.3	(0.1)

[Part 2/3]

Table A4.11a Mean use of information-processing skills at work, by educational attainment

	Upper secondary education completed									
	Reading at work		Writing at work		Numeracy at work		ICT at work		Problem solving	
OECD	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities										
Australia	2.0	(0.0)	1.9	(0.0)	2.1	(0.0)	1.9	(0.0)	2.0	(0.0)
Austria	2.0	(0.0)	2.0	(0.0)	1.9	(0.0)	1.9	(0.0)	1.7	(0.0)
Canada	1.9	(0.0)	1.9	(0.0)	2.1	(0.0)	1.8	(0.0)	1.7	(0.0)
Czech Republic	1.8	(0.0)	1.8	(0.0)	2.1	(0.0)	1.9	(0.0)	1.8	(0.1)
Denmark	2.0	(0.0)	1.8	(0.0)	1.9	(0.0)	1.9	(0.0)	1.7	(0.0)
Estonia	1.7	(0.0)	1.5	(0.0)	1.9	(0.0)	1.9	(0.0)	1.6	(0.0)
Finland	2.0	(0.0)	1.8	(0.0)	2.0	(0.0)	1.6	(0.0)	1.6	(0.0)
Germany	1.9	(0.0)	1.9	(0.0)	1.8	(0.0)	1.8	(0.0)	1.5	(0.0)
Ireland	1.8	(0.0)	1.9	(0.0)	1.9	(0.0)	1.8	(0.0)	1.6	(0.0)
Italy	1.8	(0.0)	1.9	(0.0)	2.0	(0.0)	2.1	(0.0)	2.1	(0.0)
Japan	1.9	(0.0)	2.1	(0.0)	1.8	(0.0)	1.4	(0.0)	1.2	(0.0)
Korea	1.9	(0.0)	2.0	(0.0)	1.9	(0.0)	1.7	(0.0)	1.3	(0.0)
Netherlands	2.0	(0.0)	2.0	(0.0)	1.8	(0.0)	1.9	(0.0)	1.6	(0.0)
Norway	2.1	(0.0)	2.0	(0.0)	1.8	(0.0)	1.7	(0.0)	1.7	(0.0)
Poland	1.4	(0.0)	1.6	(0.0)	1.7	(0.0)	1.6	(0.0)	1.4	(0.0)
Slovak Republic	1.6	(0.0)	1.7	(0.0)	2.0	(0.0)	1.9	(0.0)	1.8	(0.0)
Spain	1.9	(0.0)	2.0	(0.1)	2.1	(0.1)	2.0	(0.1)	1.8	(0.1)
Sweden	2.0	(0.0)	1.8	(0.0)	1.8	(0.0)	1.8	(0.0)	1.8	(0.0)
United States	2.0	(0.0)	2.0	(0.0)	2.1	(0.0)	1.8	(0.0)	2.0	(0.0)
Sub-national entities										
Flanders (Belgium)	1.7	(0.0)	1.9	(0.0)	1.7	(0.0)	1.8	(0.0)	1.6	(0.0)
England (UK)	2.0	(0.0)	2.0	(0.0)	1.9	(0.0)	2.0	(0.0)	1.9	(0.0)
Northern Ireland (UK)	1.9	(0.0)	1.8	(0.0)	1.9	(0.0)	1.8	(0.1)	1.8	(0.1)
England/N. Ireland (UK)	2.0	(0.0)	2.0	(0.0)	1.9	(0.0)	2.0	(0.0)	1.9	(0.0)
Average	1.9	(0.0)	1.9	(0.0)	1.9	(0.0)	1.8	(0.0)	1.7	(0.0)
Partners										
Cyprus[1]	1.5	(0.0)	1.6	(0.0)	1.8	(0.0)	1.5	(0.0)	1.7	(0.0)

1. See notes on page 250.

Note: Lower than upper secondary education includes ISCED 1, 2 and 3C short. Upper secondary education includes ISCED 3A, 3B, 3C long and 4. Higher than upper secondary education includes ISCED 5A, 5B and 6.

† Cell corresponds to less than 30 observations.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898047

[Part 3/3]

Table A4.11a Mean use of information-processing skills at work, by educational attainment

	Higher than upper secondary education									
	Reading at work		Writing at work		Numeracy at work		ICT at work		Problem solving	
OECD	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities										
Australia	2.6	(0.0)	2.5	(0.0)	2.4	(0.0)	2.4	(0.0)	2.4	(0.0)
Austria	2.5	(0.0)	2.3	(0.0)	2.2	(0.0)	2.2	(0.0)	2.4	(0.0)
Canada	2.4	(0.0)	2.3	(0.0)	2.3	(0.0)	2.3	(0.0)	2.2	(0.0)
Czech Republic	2.5	(0.0)	2.4	(0.1)	2.4	(0.1)	2.4	(0.1)	2.5	(0.1)
Denmark	2.4	(0.0)	2.2	(0.0)	2.1	(0.0)	2.3	(0.0)	2.4	(0.0)
Estonia	2.4	(0.0)	1.9	(0.0)	2.2	(0.0)	2.4	(0.0)	2.0	(0.0)
Finland	2.5	(0.0)	2.3	(0.0)	2.3	(0.0)	2.2	(0.0)	2.2	(0.0)
Germany	2.5	(0.0)	2.3	(0.0)	2.3	(0.0)	2.1	(0.0)	2.3	(0.0)
Ireland	2.3	(0.0)	2.4	(0.0)	2.2	(0.0)	2.3	(0.0)	2.3	(0.0)
Italy	2.5	(0.0)	2.3	(0.1)	2.4	(0.1)	2.4	(0.1)	2.6	(0.1)
Japan	2.4	(0.0)	2.4	(0.0)	2.0	(0.0)	1.9	(0.0)	1.8	(0.0)
Korea	2.5	(0.0)	2.5	(0.0)	2.2	(0.0)	2.4	(0.0)	2.0	(0.0)
Netherlands	2.4	(0.0)	2.4	(0.0)	2.1	(0.0)	2.4	(0.0)	2.2	(0.0)
Norway	2.4	(0.0)	2.3	(0.0)	2.0	(0.0)	2.3	(0.0)	2.3	(0.0)
Poland	2.4	(0.0)	2.2	(0.0)	2.3	(0.0)	2.2	(0.0)	2.2	(0.0)
Slovak Republic	2.5	(0.0)	2.4	(0.0)	2.4	(0.0)	2.4	(0.0)	2.6	(0.0)
Spain	2.4	(0.0)	2.3	(0.0)	2.2	(0.0)	2.2	(0.0)	2.2	(0.0)
Sweden	2.4	(0.0)	2.1	(0.0)	2.0	(0.0)	2.2	(0.0)	2.3	(0.0)
United States	2.5	(0.0)	2.4	(0.0)	2.4	(0.0)	2.4	(0.0)	2.5	(0.0)
Sub-national entities										
Flanders (Belgium)	2.4	(0.0)	2.4	(0.0)	2.2	(0.0)	2.3	(0.0)	2.2	(0.0)
England (UK)	2.4	(0.0)	2.4	(0.0)	2.2	(0.0)	2.4	(0.0)	2.5	(0.0)
Northern Ireland (UK)	2.5	(0.0)	2.5	(0.0)	2.2	(0.0)	2.3	(0.0)	2.4	(0.0)
England/N. Ireland (UK)	2.4	(0.0)	2.4	(0.0)	2.2	(0.0)	2.4	(0.0)	2.5	(0.0)
Average	2.4	(0.0)	2.3	(0.0)	2.2	(0.0)	2.3	(0.0)	2.3	(0.0)
Partners										
Cyprus[1]	2.3	(0.0)	2.1	(0.0)	2.1	(0.0)	2.0	(0.0)	2.0	(0.0)

1. See notes on page 250.

Note: Lower than upper secondary education includes ISCED 1, 2 and 3C short. Upper secondary education includes ISCED 3A, 3B, 3C long and 4. Higher than upper secondary education includes ISCED 5A, 5B and 6.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898047

[Part 1/2]

Table A4.11b Differences in the use of information-processing skills at work, by educational attainment (adjusted)

OECD	Adjusted differences between lower than upper secondary education and upper secondary education (lower than upper secondary minus upper secondary)									
	Reading at work		Writing at work		Numeracy at work		ICT at work		Problem solving	
	ß	p-value	ß	p-value	ß	p-value	ß	p-value	ß	p-value
National entities										
Australia	-0.1	0.019	-0.2	0.002	-0.1	0.325	-0.1	0.241	-0.1	0.231
Austria	-0.3	0.000	-0.2	0.000	-0.2	0.000	-0.2	0.005	-0.1	0.034
Canada	-0.3	0.000	-0.2	0.000	-0.1	0.204	-0.2	0.034	-0.2	0.000
Czech Republic	-0.3	0.002	0.0	0.914	-0.1	0.239	-0.1	0.401	-0.2	0.047
Denmark	-0.3	0.000	-0.2	0.002	-0.2	0.001	-0.3	0.000	-0.3	0.000
Estonia	-0.3	0.000	-0.3	0.000	-0.1	0.092	-0.1	0.638	-0.2	0.012
Finland	-0.4	0.000	-0.2	0.010	-0.1	0.045	-0.1	0.041	-0.2	0.000
Germany	-0.2	0.013	0.0	0.504	0.0	0.740	-0.1	0.147	-0.3	0.001
Ireland	-0.2	0.000	-0.2	0.002	-0.2	0.001	-0.1	0.281	-0.1	0.038
Italy	-0.4	0.000	-0.3	0.000	-0.2	0.010	0.0	0.776	-0.3	0.000
Japan	0.0	0.534	0.0	0.806	0.0	0.781	0.0	0.888	-0.2	0.005
Korea	-0.6	0.000	-0.3	0.000	-0.3	0.000	-0.4	0.000	-0.2	0.007
Netherlands	-0.2	0.000	-0.2	0.000	0.0	0.933	-0.1	0.058	-0.2	0.001
Norway	-0.2	0.000	-0.3	0.000	0.0	0.669	-0.2	0.003	-0.2	0.000
Poland	-0.1	0.088	-0.3	0.015	-0.2	0.006	-0.4	0.039	-0.1	0.335
Slovak Republic	-0.4	0.000	-0.4	0.000	-0.2	0.017	-0.1†	0.326	-0.3	0.005
Spain	-0.3	0.000	-0.3	0.000	-0.2	0.013	-0.3	0.001	-0.2	0.030
Sweden	0.0	0.345	-0.1	0.252	0.0	0.649	-0.1	0.033	-0.3	0.000
United States	-0.6	0.000	-0.3	0.008	-0.1	0.391	-0.3	0.045	-0.3	0.000
Sub-national entities										
Flanders (Belgium)	-0.2	0.003	-0.1	0.044	0.0	0.858	0.0	0.717	-0.3	0.001
England (UK)	-0.2	0.006	-0.2	0.017	0.0	0.950	-0.1	0.387	-0.2	0.005
Northern Ireland (UK)	-0.2	0.007	-0.2	0.007	-0.1	0.092	-0.2	0.028	-0.3	0.021
England/N. Ireland (UK)	-0.2	0.004	-0.2	0.012	0.0	0.994	-0.1	0.348	-0.2	0.003
Average	-0.3	0.031	-0.2	0.064	-0.1	0.106	-0.2	0.081	-0.2	0.020
Partners										
Cyprus[1]	-0.2	0.003	-0.2	0.016	-0.2	0.026	0.0	0.874	-0.3	0.009

[Part 2/2]

Table A4.11b Differences in the use of information-processing skills at work, by educational attainment (adjusted)

OECD	Adjusted differences between higher than upper secondary education and upper secondary education (higher than upper secondary minus upper secondary)									
	Reading at work		Writing at work		Numeracy at work		ICT at work		Problem solving	
	ß	p-value	ß	p-value	ß	p-value	ß	p-value	ß	p-value
National entities										
Australia	0.2	0.000	0.2	0.000	0.1	0.040	0.2	0.000	0.1	0.293
Austria	0.2	0.000	0.1	0.039	0.1	0.024	0.1	0.038	0.2	0.000
Canada	0.2	0.000	0.2	0.000	0.1	0.000	0.2	0.000	0.2	0.000
Czech Republic	0.2	0.000	0.2	0.003	0.0	0.580	0.2	0.000	0.2	0.126
Denmark	0.1	0.000	0.1	0.001	0.1	0.123	0.1	0.002	0.3	0.000
Estonia	0.2	0.000	0.1	0.000	0.0	0.347	0.1	0.001	0.1	0.197
Finland	0.1	0.002	0.1	0.000	0.1	0.016	0.2	0.000	0.1	0.005
Germany	0.3	0.000	0.2	0.000	0.1	0.019	0.1	0.002	0.4	0.000
Ireland	0.2	0.000	0.2	0.000	0.1	0.012	0.3	0.000	0.4	0.000
Italy	0.3	0.000	0.2	0.001	0.2	0.029	0.1	0.444	0.2	0.030
Japan	0.2	0.000	0.1	0.001	0.0	0.196	0.2	0.000	0.2	0.000
Korea	0.3	0.000	0.3	0.000	0.1	0.004	0.4	0.000	0.4	0.000
Netherlands	0.2	0.000	0.2	0.000	0.1	0.079	0.2	0.001	0.2	0.000
Norway	0.0	0.552	0.1	0.008	-0.1	0.094	0.1	0.196	0.2	0.003
Poland	0.4	0.000	0.2	0.000	0.2	0.000	0.4	0.000	0.4	0.000
Slovak Republic	0.3	0.000	0.3	0.000	0.1	0.026	0.3	0.000	0.3	0.000
Spain	0.2	0.001	0.1	0.045	0.0	0.462	0.0	0.465	0.2	0.001
Sweden	0.0	0.207	0.0	0.589	0.0	0.275	0.0	0.965	0.0	0.943
United States	0.1	0.003	0.1	0.005	0.1	0.107	0.3	0.000	0.1	0.165
Sub-national entities										
Flanders (Belgium)	0.2	0.000	0.2	0.000	0.2	0.001	0.2	0.000	0.2	0.000
England (UK)	0.2	0.000	0.2	0.000	0.1	0.011	0.1	0.053	0.2	0.002
Northern Ireland (UK)	0.2	0.001	0.3	0.000	0.1	0.110	0.1	0.040	0.3	0.000
England/N. Ireland (UK)	0.2	0.000	0.2	0.000	0.1	0.009	0.1	0.046	0.2	0.002
Average	0.2	0.028	0.2	0.028	0.1	0.043	0.2	0.056	0.2	0.049
Partners										
Cyprus[1]	0.4	0.000	0.3	0.000	0.1	0.013	0.5	0.000	0.1	0.077

1. See notes on page 250.

Notes: Lower than upper secondary education includes ISCED 1, 2 and 3C short. Upper secondary education includes ISCED 3A, 3B, 3C long and 4. Higher than upper secondary education includes ISCED 5A, 5B and 6. Results based on OLS regressions including controls for literacy and numeracy proficiency scores and occupation dummies (ISCO 1 digit).

† Cell corresponds to less than 30 observations.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898066

[Part 1/3]

Table A4.12a Mean use of generic skills at work, by educational attainment

OECD	Lower than upper secondary education													
	Task discretion		Learning skills		Influencing skills		Co-operative skills		Self-organising skills		Dexterity		Physical skills	
	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities														
Australia	1.7	(0.0)	2.0	(0.0)	1.9	(0.0)	2.7	(0.1)	2.9	(0.1)	3.5	(0.0)	2.7	(0.1)
Austria	2.0	(0.0)	1.9	(0.0)	1.3	(0.0)	2.6	(0.1)	1.9	(0.1)	3.3	(0.1)	3.3	(0.1)
Canada	1.6	(0.0)	2.0	(0.0)	1.7	(0.0)	2.6	(0.1)	2.7	(0.1)	3.3	(0.1)	2.9	(0.1)
Czech Republic	1.6	(0.1)	1.6	(0.1)	1.4	(0.1)	2.6	(0.2)	2.3	(0.2)	3.1	(0.1)	3.2	(0.1)
Denmark	2.1	(0.0)	1.8	(0.0)	1.5	(0.0)	2.4	(0.1)	2.8	(0.1)	3.2	(0.1)	3.0	(0.0)
Estonia	1.7	(0.0)	1.7	(0.0)	1.4	(0.0)	2.4	(0.1)	2.8	(0.1)	3.4	(0.1)	3.2	(0.1)
Finland	2.1	(0.0)	2.0	(0.0)	1.6	(0.1)	2.0	(0.1)	2.5	(0.1)	2.7	(0.1)	2.3	(0.1)
Germany	1.8	(0.1)	1.9	(0.1)	1.3	(0.0)	2.4	(0.1)	2.0	(0.1)	3.4	(0.1)	3.1	(0.1)
Ireland	1.5	(0.1)	1.8	(0.1)	1.8	(0.1)	2.6	(0.1)	2.5	(0.1)	3.2	(0.1)	3.1	(0.1)
Italy	1.6	(0.1)	1.7	(0.1)	1.4	(0.0)	2.5	(0.1)	2.9	(0.1)	3.1	(0.1)	3.0	(0.1)
Japan	2.2	(0.1)	1.6	(0.0)	1.4	(0.0)	2.7	(0.1)	2.3	(0.1)	2.0	(0.1)	2.3	(0.1)
Korea	1.9	(0.1)	1.1	(0.1)	1.3	(0.0)	2.0	(0.1)	2.1	(0.1)	1.0	(0.1)	3.2	(0.0)
Netherlands	1.7	(0.0)	1.8	(0.0)	1.5	(0.0)	2.3	(0.0)	2.3	(0.1)	2.8	(0.1)	2.8	(0.1)
Norway	2.0	(0.0)	2.0	(0.0)	1.7	(0.0)	2.4	(0.0)	2.2	(0.1)	2.5	(0.1)	2.8	(0.1)
Poland	1.8	(0.1)	1.7	(0.1)	1.3	(0.1)	2.8	(0.1)	2.8	(0.1)	3.6	(0.1)	3.5	(0.1)
Slovak Republic	1.2	(0.1)	1.5	(0.1)	1.1	(0.1)	2.4	(0.1)	1.6	(0.1)	2.9	(0.1)	3.4	(0.1)
Spain	1.8	(0.0)	2.1	(0.0)	1.4	(0.0)	2.4	(0.0)	2.9	(0.1)	2.9	(0.1)	2.9	(0.1)
Sweden	2.2	(0.0)	1.9	(0.0)	1.7	(0.0)	2.5	(0.1)	2.9	(0.1)	3.1	(0.1)	2.8	(0.1)
United States	1.6	(0.1)	2.0	(0.1)	1.6	(0.1)	2.9	(0.1)	2.2	(0.1)	3.4	(0.1)	3.3	(0.1)
Sub-national entities														
Flanders (Belgium)	1.9	(0.1)	1.6	(0.0)	1.5	(0.1)	2.3	(0.1)	2.4	(0.1)	3.3	(0.1)	3.0	(0.1)
England (UK)	1.6	(0.1)	1.7	(0.1)	1.8	(0.1)	2.5	(0.1)	2.6	(0.1)	3.1	(0.1)	2.7	(0.1)
Northern Ireland (UK)	1.5	(0.1)	1.7	(0.1)	1.7	(0.1)	2.7	(0.1)	2.7	(0.1)	3.1	(0.1)	2.8	(0.1)
England/N. Ireland (UK)	1.6	(0.1)	1.7	(0.1)	1.8	(0.0)	2.5	(0.1)	2.6	(0.1)	3.1	(0.1)	2.7	(0.1)
Average	1.8	(0.0)	1.8	(0.0)	1.5	(0.0)	2.5	(0.0)	2.5	(0.0)	3.0	(0.0)	3.0	(0.0)
Partners														
Cyprus[1]	1.7	(0.1)	1.7	(0.1)	1.5	(0.0)	2.6	(0.1)	2.8	(0.1)	3.4	(0.1)	3.4	(0.1)

[Part 2/3]

Table A4.12a Mean use of generic skills at work, by educational attainment

OECD	Upper secondary education completed													
	Task discretion		Learning skills		Influencing skills		Co-operative skills		Self-organising skills		Dexterity		Physical skills	
	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities														
Australia	1.8	(0.0)	2.2	(0.0)	2.2	(0.0)	2.7	(0.0)	3.2	(0.0)	3.5	(0.0)	2.6	(0.0)
Austria	2.3	(0.0)	1.9	(0.0)	1.8	(0.0)	2.4	(0.0)	2.7	(0.0)	3.0	(0.0)	2.3	(0.0)
Canada	1.8	(0.0)	2.1	(0.0)	1.9	(0.0)	2.7	(0.0)	3.1	(0.0)	3.3	(0.0)	2.4	(0.0)
Czech Republic	2.1	(0.0)	1.7	(0.0)	1.7	(0.0)	2.4	(0.0)	3.1	(0.0)	2.9	(0.0)	2.4	(0.0)
Denmark	2.3	(0.0)	1.9	(0.0)	1.9	(0.0)	2.5	(0.0)	3.4	(0.0)	3.2	(0.0)	2.5	(0.0)
Estonia	1.9	(0.0)	1.9	(0.0)	1.8	(0.0)	2.3	(0.0)	3.3	(0.0)	3.3	(0.0)	2.5	(0.0)
Finland	2.2	(0.0)	2.1	(0.0)	2.0	(0.0)	2.2	(0.0)	3.1	(0.0)	3.0	(0.0)	2.3	(0.0)
Germany	2.2	(0.0)	1.9	(0.0)	1.7	(0.0)	2.3	(0.0)	2.9	(0.0)	3.2	(0.0)	2.5	(0.0)
Ireland	1.6	(0.0)	1.9	(0.0)	2.0	(0.0)	2.9	(0.0)	2.7	(0.1)	3.5	(0.0)	2.6	(0.1)
Italy	1.7	(0.0)	2.0	(0.0)	1.8	(0.0)	2.5	(0.0)	3.3	(0.0)	2.7	(0.1)	1.8	(0.1)
Japan	2.2	(0.0)	1.7	(0.0)	1.6	(0.0)	2.6	(0.0)	2.7	(0.0)	1.8	(0.1)	1.8	(0.1)
Korea	1.9	(0.0)	1.4	(0.0)	1.7	(0.0)	2.0	(0.0)	2.7	(0.0)	1.6	(0.0)	2.4	(0.0)
Netherlands	1.9	(0.0)	1.9	(0.0)	1.8	(0.0)	2.3	(0.0)	3.0	(0.0)	2.6	(0.0)	2.4	(0.0)
Norway	2.1	(0.0)	2.1	(0.0)	1.9	(0.0)	2.3	(0.0)	2.7	(0.0)	2.4	(0.0)	2.6	(0.0)
Poland	1.9	(0.0)	1.6	(0.0)	1.6	(0.0)	2.7	(0.0)	3.1	(0.0)	3.6	(0.0)	3.0	(0.0)
Slovak Republic	1.7	(0.0)	2.0	(0.0)	1.7	(0.0)	2.6	(0.0)	2.6	(0.0)	3.3	(0.0)	2.5	(0.0)
Spain	1.9	(0.0)	2.4	(0.1)	1.8	(0.0)	2.5	(0.1)	3.2	(0.1)	2.4	(0.1)	2.1	(0.1)
Sweden	2.2	(0.0)	2.0	(0.0)	1.9	(0.0)	2.4	(0.0)	3.1	(0.0)	2.8	(0.0)	2.4	(0.0)
United States	1.8	(0.0)	2.2	(0.0)	2.1	(0.0)	2.9	(0.0)	2.9	(0.0)	3.6	(0.0)	2.8	(0.0)
Sub-national entities														
Flanders (Belgium)	2.1	(0.0)	1.8	(0.0)	1.7	(0.0)	2.5	(0.0)	3.0	(0.0)	3.0	(0.0)	2.4	(0.0)
England (UK)	1.8	(0.0)	2.0	(0.0)	2.0	(0.0)	2.6	(0.0)	3.1	(0.0)	3.3	(0.0)	2.4	(0.1)
Northern Ireland (UK)	1.7	(0.0)	1.9	(0.0)	2.1	(0.0)	2.7	(0.1)	3.0	(0.1)	3.1	(0.1)	2.5	(0.1)
England/N. Ireland (UK)	1.8	(0.0)	2.0	(0.0)	2.0	(0.0)	2.6	(0.0)	3.1	(0.0)	3.3	(0.0)	2.4	(0.1)
Average	2.0	(0.0)	1.9	(0.0)	1.8	(0.0)	2.5	(0.0)	3.0	(0.0)	3.0	(0.0)	2.4	(0.0)
Partners														
Cyprus[1]	1.7	(0.0)	1.9	(0.0)	1.8	(0.0)	2.6	(0.1)	3.0	(0.1)	3.0	(0.1)	2.5	(0.1)

1. See notes on page 250.

Note: Lower than upper secondary education includes ISCED 1, 2 and 3C short. Upper secondary education includes ISCED 3A, 3B, 3C long and 4. Higher than upper secondary education includes ISCED 5A, 5B and 6.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898085

[Part 3/3]

Table A4.12a **Mean use of generic skills at work, by educational attainment**

	Higher than upper secondary education													
	Task discretion		Learning skills		Influencing skills		Co-operative skills		Self-organising skills		Dexterity		Physical skills	
OECD	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities														
Australia	1.9	(0.0)	2.3	(0.0)	2.6	(0.0)	2.6	(0.0)	3.6	(0.0)	3.3	(0.0)	1.6	(0.0)
Austria	2.6	(0.0)	2.1	(0.0)	2.3	(0.0)	2.1	(0.0)	3.3	(0.0)	2.1	(0.1)	1.2	(0.1)
Canada	2.0	(0.0)	2.2	(0.0)	2.3	(0.0)	2.5	(0.0)	3.5	(0.0)	2.9	(0.0)	1.5	(0.0)
Czech Republic	2.4	(0.1)	2.0	(0.0)	2.3	(0.0)	2.1	(0.1)	3.7	(0.0)	2.4	(0.1)	0.8	(0.1)
Denmark	2.4	(0.0)	2.2	(0.0)	2.4	(0.0)	2.5	(0.0)	3.6	(0.0)	2.6	(0.0)	1.5	(0.0)
Estonia	2.1	(0.0)	2.1	(0.0)	2.3	(0.0)	2.1	(0.0)	3.7	(0.0)	2.9	(0.0)	1.3	(0.0)
Finland	2.3	(0.0)	2.1	(0.0)	2.6	(0.0)	2.0	(0.0)	3.5	(0.0)	2.2	(0.0)	1.0	(0.0)
Germany	2.4	(0.0)	2.0	(0.0)	2.1	(0.0)	2.1	(0.0)	3.5	(0.0)	2.4	(0.1)	1.3	(0.1)
Ireland	1.8	(0.0)	2.2	(0.0)	2.5	(0.0)	2.8	(0.0)	3.4	(0.0)	3.1	(0.0)	1.6	(0.1)
Italy	1.9	(0.0)	2.1	(0.1)	2.2	(0.0)	2.2	(0.1)	3.6	(0.1)	2.2	(0.1)	0.7	(0.1)
Japan	2.4	(0.0)	1.9	(0.0)	1.9	(0.0)	2.5	(0.0)	3.1	(0.0)	1.6	(0.0)	1.2	(0.0)
Korea	2.1	(0.0)	1.6	(0.0)	2.2	(0.0)	1.8	(0.0)	3.2	(0.0)	2.4	(0.1)	1.4	(0.0)
Netherlands	2.2	(0.0)	2.0	(0.0)	2.3	(0.0)	1.9	(0.0)	3.6	(0.0)	2.0	(0.1)	1.1	(0.0)
Norway	2.2	(0.0)	2.2	(0.0)	2.3	(0.0)	2.1	(0.0)	3.3	(0.0)	1.6	(0.0)	1.3	(0.0)
Poland	2.2	(0.0)	2.0	(0.0)	2.3	(0.0)	2.4	(0.0)	3.7	(0.0)	2.6	(0.1)	0.9	(0.0)
Slovak Republic	2.1	(0.0)	2.4	(0.0)	2.2	(0.0)	2.3	(0.0)	3.5	(0.0)	2.7	(0.1)	0.6	(0.1)
Spain	2.0	(0.0)	2.5	(0.0)	2.1	(0.0)	2.4	(0.0)	3.6	(0.0)	1.9	(0.1)	1.4	(0.1)
Sweden	2.3	(0.0)	2.2	(0.0)	2.3	(0.0)	2.2	(0.0)	3.5	(0.0)	2.0	(0.0)	1.3	(0.0)
United States	2.1	(0.0)	2.3	(0.0)	2.5	(0.0)	2.5	(0.0)	3.6	(0.0)	3.2	(0.1)	1.8	(0.1)
Sub-national entities														
Flanders (Belgium)	2.4	(0.0)	2.0	(0.0)	2.2	(0.0)	2.2	(0.0)	3.7	(0.0)	1.9	(0.0)	1.0	(0.0)
England (UK)	2.0	(0.0)	2.2	(0.0)	2.5	(0.0)	2.7	(0.0)	3.6	(0.0)	3.1	(0.0)	1.6	(0.1)
Northern Ireland (UK)	1.9	(0.0)	2.1	(0.0)	2.6	(0.0)	2.7	(0.1)	3.6	(0.0)	2.8	(0.1)	1.6	(0.1)
England/N. Ireland (UK)	2.0	(0.0)	2.2	(0.0)	2.5	(0.0)	2.7	(0.0)	3.6	(0.0)	3.1	(0.0)	1.6	(0.1)
Average	2.2	(0.0)	2.1	(0.0)	2.3	(0.0)	2.3	(0.0)	3.5	(0.0)	2.4	(0.0)	1.2	(0.0)
Partners														
Cyprus[1]	1.9	(0.0)	2.1	(0.0)	2.2	(0.0)	2.5	(0.0)	3.3	(0.0)	2.9	(0.1)	1.4	(0.1)

1. See notes on page 250.

Note: Lower than upper secondary education includes ISCED 1, 2 and 3C short. Upper secondary education includes ISCED 3A, 3B, 3C long and 4. Higher than upper secondary education includes ISCED 5A, 5B and 6.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898085

[Part 1/2]

Table A4.12b Differences in the use of generic skills at work, by educational attainment (adjusted)

	Adjusted differences between lower than upper secondary education and upper secondary education (lower than upper secondary minus upper secondary)													
	Task discretion		Learning skills		Influencing skills		Co-operative skills		Self-organising skills		Dexterity		Physical skills	
OECD	ß	p-value	ß	p-value	ß	p-value	ß	p-value	ß	p-value	ß	p-value	ß	p-value
National entities														
Australia	-0.1	0.222	-0.2	0.000	-0.1	0.014	0.0	0.610	-0.1	0.405	0.0	0.779	-0.1	0.101
Austria	-0.2	0.000	0.1	0.047	-0.3	0.000	0.1	0.125	-0.5	0.000	0.0	0.689	0.3	0.000
Canada	0.0	0.326	-0.1	0.057	-0.1	0.077	-0.1	0.030	-0.2	0.002	-0.2	0.006	-0.1	0.144
Czech Republic	-0.4	0.001	-0.1	0.615	-0.1	0.198	0.1	0.619	-0.6	0.001	0.1	0.419	0.3	0.006
Denmark	-0.2	0.001	-0.1	0.043	-0.3	0.000	-0.1	0.312	-0.4	0.000	-0.1	0.342	0.1	0.256
Estonia	0.0	0.963	-0.1	0.022	-0.1	0.000	0.0	0.885	-0.3	0.000	0.0	0.383	0.2	0.007
Finland	0.0	0.743	-0.1	0.131	-0.3	0.000	-0.1	0.271	-0.5	0.000	-0.3	0.002	-0.2	0.005
Germany	-0.3	0.000	0.2	0.003	-0.2	0.000	0.0	0.799	-0.6	0.000	0.0	0.993	0.0	0.793
Ireland	0.0	0.640	-0.1	0.444	-0.1	0.247	-0.3	0.001	0.1	0.544	-0.3	0.000	0.1	0.455
Italy	0.0	0.475	-0.2	0.006	-0.1	0.014	0.0	0.885	0.0	0.495	0.0	0.727	0.3	0.001
Japan	0.1	0.110	0.0	0.701	-0.1	0.069	0.0	0.717	-0.1	0.334	-0.2	0.249	0.0	0.958
Korea	0.1	0.211	-0.3	0.001	-0.2	0.000	-0.2	0.088	-0.4	0.000	-0.3	0.001	0.2	0.001
Netherlands	0.0	0.504	0.0	0.236	-0.2	0.000	0.0	0.497	-0.3	0.000	0.0	0.704	-0.1	0.551
Norway	0.0	0.653	0.0	0.219	-0.2	0.000	0.0	0.619	-0.2	0.010	0.0	0.997	0.1	0.486
Poland	-0.1	0.274	0.2	0.042	-0.1	0.079	0.0	0.750	-0.1	0.341	-0.1	0.052	0.0	0.858
Slovak Republic	-0.3	0.017	-0.3	0.000	-0.3	0.002	-0.2	0.060	-0.6	0.000	-0.2	0.050	0.1	0.250
Spain	0.0	0.396	-0.2	0.013	-0.1	0.002	-0.1	0.522	-0.3	0.004	0.1	0.263	0.1	0.156
Sweden	0.1	0.280	-0.1	0.123	-0.1	0.095	0.0	0.731	-0.1	0.126	-0.1	0.444	-0.1	0.213
United States	0.0	0.527	-0.3	0.001	-0.3	0.000	-0.1	0.393	-0.3	0.002	-0.2	0.018	-0.1	0.264
Sub-national entities														
Flanders (Belgium)	0.0	0.681	-0.1	0.025	-0.1	0.262	-0.2	0.051	-0.3	0.002	0.1	0.517	0.1	0.478
England (UK)	-0.1	0.168	-0.2	0.002	-0.1	0.047	-0.1	0.382	-0.3	0.003	-0.2	0.023	-0.1	0.352
Northern Ireland (UK)	-0.1	0.326	-0.2	0.003	-0.2	0.019	0.0	0.590	-0.1	0.373	-0.1	0.243	-0.1	0.351
England/N. Ireland (UK)	-0.1	0.143	-0.2	0.001	-0.1	0.035	-0.1	0.396	-0.3	0.002	-0.2	0.020	-0.1	0.324
Average	-0.1	0.096	-0.1	0.052	-0.2	0.021	-0.1	0.117	-0.3	0.046	-0.1	0.108	0.0	0.091
Partners														
Cyprus[1]	0.0	0.620	-0.2	0.072	-0.1	0.049	0.0	0.900	0.0	0.882	0.3	0.013	0.3	0.002

[Part 2/2]

Table A4.12b Differences in the use of generic skills at work, by educational attainment (adjusted)

	Adjusted differences between higher than upper secondary education and upper secondary education (higher than upper secondary minus upper secondary)													
	Task discretion		Learning skills		Influencing skills		Co-operative skills		Self-organising skills		Dexterity		Physical skills	
OECD	ß	p-value	ß	p-value	ß	p-value	ß	p-value	ß	p-value	ß	p-value	ß	p-value
National entities														
Australia	-0.1	0.068	0.1	0.002	0.1	0.240	0.0	0.614	0.0	0.473	-0.1	0.177	-0.4	0.000
Austria	0.0	0.254	0.0	0.978	0.3	0.000	-0.2	0.000	0.2	0.009	-0.5	0.000	-0.3	0.000
Canada	0.0	0.148	0.0	0.488	0.1	0.001	-0.1	0.002	0.1	0.074	-0.2	0.000	-0.3	0.000
Czech Republic	0.0	0.555	0.1	0.030	0.2	0.018	-0.1	0.091	0.2	0.041	-0.3	0.029	-0.6	0.000
Denmark	-0.1	0.058	0.1	0.002	0.2	0.000	0.0	0.942	0.0	0.562	-0.3	0.000	-0.3	0.000
Estonia	0.0	0.802	0.0	0.947	0.2	0.000	0.0	0.423	0.0	0.219	-0.1	0.006	-0.3	0.000
Finland	0.0	0.363	0.0	0.656	0.1	0.000	-0.1	0.021	0.2	0.001	-0.1	0.285	-0.2	0.002
Germany	0.1	0.032	0.0	0.986	0.2	0.000	-0.2	0.016	0.2	0.001	-0.3	0.003	-0.2	0.001
Ireland	0.1	0.084	0.1	0.035	0.2	0.000	-0.1	0.263	0.3	0.000	-0.2	0.004	-0.3	0.001
Italy	0.0	0.907	0.1	0.120	0.1	0.030	-0.1	0.131	-0.1	0.456	-0.4	0.001	-0.6	0.000
Japan	0.0	0.270	0.1	0.007	0.1	0.015	0.0	0.651	0.1	0.133	0.0	0.602	-0.1	0.051
Korea	0.1	0.035	0.1	0.013	0.2	0.000	-0.1	0.145	0.3	0.000	0.4	0.000	-0.4	0.000
Netherlands	0.1	0.009	0.0	0.677	0.2	0.000	-0.2	0.001	0.1	0.016	-0.5	0.000	-0.7	0.000
Norway	-0.1	0.122	0.0	0.189	0.1	0.064	0.1	0.068	0.2	0.016	-0.2	0.057	-0.3	0.000
Poland	0.1	0.008	0.1	0.123	0.2	0.000	-0.2	0.036	0.2	0.000	-0.5	0.000	-0.8	0.000
Slovak Republic	0.0	0.543	0.2	0.009	0.2	0.010	-0.2	0.041	0.2	0.012	-0.5	0.000	-0.9	0.000
Spain	0.0	0.952	-0.1	0.168	0.1	0.174	0.0	0.922	0.2	0.003	-0.3	0.010	-0.3	0.004
Sweden	-0.1	0.043	0.0	0.543	0.0	0.309	0.0	0.643	0.0	0.438	-0.2	0.029	0.0	0.526
United States	0.1	0.045	0.0	0.347	0.1	0.105	-0.2	0.046	0.2	0.001	-0.2	0.001	-0.4	0.000
Sub-national entities														
Flanders (Belgium)	0.1	0.039	0.1	0.003	0.1	0.001	-0.2	0.040	0.2	0.002	-0.5	0.000	-0.5	0.000
England (UK)	0.0	0.780	0.2	0.002	0.2	0.000	0.1	0.164	0.1	0.203	-0.1	0.155	-0.1	0.213
Northern Ireland (UK)	0.0	0.869	0.1	0.330	0.2	0.001	0.1	0.147	0.2	0.008	-0.2	0.087	-0.2	0.014
England/N. Ireland (UK)	0.0	0.777	0.2	0.002	0.2	0.000	0.1	0.151	0.1	0.159	-0.1	0.141	-0.1	0.183
Average	0.0	0.094	0.1	0.101	0.2	0.021	-0.1	0.086	0.1	0.049	-0.2	0.034	-0.4	0.027
Partners														
Cyprus[1]	0.1	0.344	0.2	0.002	0.2	0.001	-0.1	0.237	0.0	0.629	0.0	0.810	-0.4	0.000

1. See notes on page 250.

Notes: Lower than upper secondary education includes ISCED 1, 2 and 3C short. Upper secondary education includes ISCED 3A, 3B, 3C long and 4. Higher than upper secondary education includes ISCED 5A, 5B and 6. Results based on OLS regressions including controls for literacy and numeracy proficiency scores and occupation dummies (ISCO 1 digit).

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898104

[Part 1/2]

Table A4.13 **Tertiary gap in wages and in the use of skills at work**

	Unadjusted			Adjusted		
	Wage gap	Reading at work gap	Predicted wage gap	Wage gap	Reading at work gap	Predicted wage gap
OECD	Mean	Mean	Mean	Mean	Mean	Mean
National entities						
Australia	0.33	0.24	0.35	0.11	0.04	0.12
Austria	0.40	0.32	0.38	0.16	0.08	0.12
Canada	0.39	0.24	0.35	0.17	0.07	0.12
Czech Republic	0.45	0.51	0.44	0.17	0.22	0.12
Denmark	0.24	0.27	0.36	0.08	0.05	0.12
Estonia	0.27	0.52	0.45	0.10	0.28	0.12
Finland	0.30	0.28	0.36	0.03	0.02	0.12
Germany	0.52	0.34	0.38	0.16	0.10	0.12
Ireland	0.43	0.31	0.37	0.07	0.07	0.12
Italy	0.49	0.83	0.56	0.12	0.40	0.12
Japan	0.26	0.27	0.36	0.03	0.06	0.12
Korea	0.45	0.41	0.41	0.16	0.14	0.12
Netherlands	0.43	0.32	0.37	0.19	0.10	0.12
Norway	0.23	0.15	0.32	0.06	0.01	0.12
Poland	0.63	0.89	0.58	0.19	0.22	0.12
Slovak Republic	0.59	0.66	0.50	0.20	0.24	0.12
Spain	0.54	0.53	0.45	0.16	0.15	0.12
Sweden	0.16	0.20	0.33	0.02	-0.01	0.12
United States	0.71	0.29	0.36	0.18	0.06	0.12
Sub-national entities						
Flanders (Belgium)	0.30	0.49	0.44	0.06	0.12	0.12
England (UK)	0.45	0.27	0.36	0.17	0.09	0.12
Northern Ireland (UK)	0.39	0.35	0.39	0.07	0.07	0.12
England/N. Ireland (UK)	0.45	0.28	0.36	0.17	0.09	0.12
Partners						
Cyprus[1]	0.39	0.58	0.47	0.05	0.70	0.13

[Part 2/2]

Table A4.13 **Tertiary gap in wages and in the use of skills at work**

	Unadjusted			Adjusted		
	Wage gap	Task discretion gap	Predicted wage gap	Wage gap	Task discretion gap	Predicted wage gap
OECD	Mean	Mean	Mean	Mean	Mean	Mean
National entities						
Australia	0.33	0.04	0.27	0.11	-0.06	0.08
Austria	0.40	0.15	0.39	0.16	0.01	0.11
Canada	0.39	0.12	0.36	0.17	-0.01	0.11
Czech Republic	0.45	0.21	0.46	0.17	0.03	0.13
Denmark	0.24	0.04	0.28	0.08	-0.02	0.10
Estonia	0.27	0.18	0.43	0.10	0.03	0.13
Finland	0.30	0.09	0.32	0.03	0.00	0.11
Germany	0.52	0.13	0.37	0.16	0.01	0.12
Ireland	0.43	0.21	0.46	0.07	0.06	0.14
Italy	0.49	0.22	0.47	0.12	0.01	0.11
Japan	0.26	0.10	0.34	0.03	0.03	0.12
Korea	0.45	0.24	0.49	0.16	0.08	0.15
Netherlands	0.43	0.21	0.46	0.19	0.04	0.13
Norway	0.23	0.08	0.31	0.06	-0.01	0.10
Poland	0.63	0.31	0.57	0.19	0.05	0.14
Slovak Republic	0.59	0.34	0.60	0.20	0.04	0.13
Spain	0.54	0.13	0.37	0.16	0.04	0.13
Sweden	0.16	0.03	0.26	0.02	-0.04	0.09
United States	0.71	0.18	0.42	0.18	0.01	0.12
Sub-national entities						
Flanders (Belgium)	0.30	0.24	0.49	0.06	0.07	0.14
England (UK)	0.45	0.17	0.42	0.17	0.02	0.12
Northern Ireland (UK)	0.39	0.13	0.37	0.07	-0.02	0.10
England/N. Ireland (UK)	0.45	0.17	0.42	0.17	0.02	0.12
Partners						
Cyprus[1]	0.39	0.15	0.39	0.05	0.02	0.12

1. See notes on page 250.

Note: Predicted wage gap from the regression of wage gap on skills use gap. The tertiary gap in wages is computed as the percentage difference between the average hourly wage (including bonuses) of tertiary-educated (ISCED 5 or more) and less-educated (from less than ISCED 1 to ISCED 4) workers. The tertiary gap in skills use is computed as the percentage difference between the skills use of tertiary-educated (ISCED 5 or more) and less-educated (from less than ISCED 1 to ISCED 4) workers. The wage distribution was trimmed to eliminate the 1st and 99th percentiles. Adjusted estimates are based on OLS regressions including controls for average literacy and numeracy scores, dummies for occupations (9) and industry (10). The sample includes full-time employees only.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898123

[Part 1/2]

Table A4.14a **Mean use of information-processing skills at work, by contract type**

	Indefinite contract									
	Reading at work		Writing at work		Numeracy at work		ICT at work		Problem solving	
OECD	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities										
Australia	2.3	(0.0)	2.2	(0.0)	2.2	(0.0)	2.2	(0.0)	2.2	(0.0)
Austria	2.0	(0.0)	2.1	(0.0)	1.9	(0.0)	1.9	(0.0)	1.8	(0.0)
Canada	2.2	(0.0)	2.2	(0.0)	2.2	(0.0)	2.2	(0.0)	2.0	(0.0)
Czech Republic	1.8	(0.0)	2.0	(0.0)	2.1	(0.0)	2.0	(0.0)	1.9	(0.1)
Denmark	2.1	(0.0)	2.0	(0.0)	1.9	(0.0)	2.1	(0.0)	1.9	(0.0)
Estonia	1.9	(0.0)	1.7	(0.0)	2.0	(0.0)	2.2	(0.0)	1.7	(0.0)
Finland	2.2	(0.0)	2.1	(0.0)	2.1	(0.0)	1.9	(0.0)	1.9	(0.0)
Germany	2.1	(0.0)	2.1	(0.0)	2.0	(0.0)	1.9	(0.0)	1.8	(0.0)
Ireland	2.1	(0.0)	2.3	(0.0)	2.1	(0.0)	2.2	(0.0)	1.9	(0.0)
Italy	1.6	(0.0)	1.8	(0.0)	1.9	(0.0)	2.1	(0.0)	2.0	(0.0)
Japan	2.1	(0.0)	2.3	(0.0)	1.9	(0.0)	1.8	(0.0)	1.5	(0.0)
Korea	2.3	(0.0)	2.6	(0.0)	2.2	(0.0)	2.4	(0.0)	1.8	(0.0)
Netherlands	2.1	(0.0)	2.2	(0.0)	1.9	(0.0)	2.1	(0.0)	1.8	(0.0)
Norway	2.2	(0.0)	2.1	(0.0)	1.9	(0.0)	2.0	(0.0)	1.9	(0.0)
Poland	1.9	(0.0)	2.0	(0.0)	2.0	(0.0)	2.0	(0.0)	1.8	(0.0)
Slovak Republic	1.8	(0.0)	2.0	(0.0)	2.1	(0.0)	2.1	(0.0)	1.9	(0.0)
Spain	2.0	(0.0)	2.1	(0.0)	2.1	(0.0)	2.1	(0.0)	1.9	(0.0)
Sweden	2.2	(0.0)	1.9	(0.0)	1.8	(0.0)	1.9	(0.0)	2.0	(0.0)
United States	2.3	(0.0)	2.3	(0.0)	2.3	(0.0)	2.3	(0.1)	2.2	(0.0)
Sub-national entities										
Flanders (Belgium)	1.9	(0.0)	2.1	(0.0)	1.9	(0.0)	2.0	(0.0)	1.8	(0.0)
England (UK)	2.1	(0.0)	2.2	(0.0)	2.1	(0.0)	2.2	(0.0)	2.1	(0.0)
Northern Ireland (UK)	2.1	(0.0)	2.2	(0.0)	2.0	(0.0)	2.1	(0.0)	2.0	(0.0)
England/N. Ireland (UK)	2.1	(0.0)	2.2	(0.0)	2.1	(0.0)	2.2	(0.0)	2.1	(0.0)
Average	2.1	(0.0)	2.1	(0.0)	2.0	(0.0)	2.1	(0.0)	1.9	(0.0)
Partners										
Cyprus[1]	1.8	(0.0)	1.9	(0.0)	1.9	(0.0)	1.9	(0.0)	1.9	(0.0)

[Part 2/2]

Table A4.14a **Mean use of information-processing skills at work, by contract type**

	Fixed-term contract									
	Reading at work		Writing at work		Numeracy at work		ICT at work		Problem solving	
OECD	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities										
Australia	2.4	(0.1)	2.3	(0.1)	2.1	(0.1)	2.1	(0.1)	2.4	(0.1)
Austria	1.9	(0.1)	1.9	(0.1)	1.7	(0.1)	2.0	(0.1)	1.5	(0.1)
Canada	2.0	(0.0)	2.0	(0.0)	2.0	(0.1)	2.0	(0.1)	1.8	(0.1)
Czech Republic	1.7	(0.1)	1.8	(0.1)	1.9	(0.1)	2.0	(0.1)	1.6	(0.1)
Denmark	1.9	(0.1)	1.8	(0.1)	1.7	(0.1)	1.9	(0.1)	1.7	(0.1)
Estonia	1.9	(0.0)	1.7	(0.1)	1.8	(0.0)	2.0	(0.1)	1.6	(0.0)
Finland	2.1	(0.0)	1.9	(0.0)	1.9	(0.0)	1.8	(0.0)	1.8	(0.1)
Germany	1.9	(0.0)	1.9	(0.1)	1.7	(0.1)	1.8	(0.1)	1.4	(0.1)
Ireland	2.0	(0.1)	2.0	(0.1)	1.9	(0.1)	1.9	(0.1)	1.8	(0.1)
Italy	1.3	(0.1)	1.6	(0.1)	1.8	(0.1)	2.0	(0.1)	1.5	(0.1)
Japan	1.9	(0.0)	2.1	(0.0)	1.7	(0.0)	1.4	(0.0)	1.2	(0.0)
Korea	2.0	(0.1)	2.4	(0.0)	1.9	(0.1)	2.1	(0.1)	1.5	(0.1)
Netherlands	1.7	(0.1)	1.8	(0.0)	1.8	(0.1)	1.8	(0.1)	1.4	(0.1)
Norway	2.0	(0.0)	1.9	(0.1)	1.7	(0.0)	1.6	(0.0)	1.5	(0.1)
Poland	1.5	(0.0)	1.9	(0.0)	1.9	(0.1)	1.9	(0.0)	1.5	(0.0)
Slovak Republic	1.5	(0.1)	1.8	(0.1)	2.0	(0.1)	2.1	(0.1)	1.7	(0.1)
Spain	1.5	(0.1)	1.9	(0.1)	1.7	(0.1)	1.8	(0.1)	1.5	(0.1)
Sweden	2.0	(0.1)	1.7	(0.1)	1.7	(0.1)	1.6	(0.1)	1.7	(0.1)
United States	2.6	(0.1)	2.5	(0.1)	2.3	(0.1)	2.1	(0.1)	2.4	(0.1)
Sub-national entities										
Flanders (Belgium)	1.8	(0.1)	1.8	(0.1)	1.9	(0.1)	2.0	(0.1)	1.5	(0.1)
England (UK)	2.2	(0.1)	2.2	(0.1)	2.0	(0.1)	2.0	(0.1)	2.1	(0.1)
Northern Ireland (UK)	1.9	(0.1)	2.0	(0.1)	1.9	(0.1)	1.9	(0.1)	1.6	(0.1)
England/N. Ireland (UK)	2.2	(0.1)	2.2	(0.1)	1.9	(0.1)	2.0	(0.1)	2.1	(0.1)
Average	1.9	(0.0)	2.0	(0.0)	1.8	(0.0)	1.9	(0.0)	1.7	(0.0)
Partners										
Cyprus[1]	1.7	(0.1)	2.0	(0.1)	1.7	(0.1)	1.9	(0.1)	1.7	(0.1)

1. See notes on page 250.

Note: The sample includes only employees.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898142

[Part 1/1]

Table A4.14b Differences in the use of information-processing skills at work, by contract type (adjusted)

OECD	Adjusted differences between workers with an indefinite contract and workers with a fixed-term contract (indefinite minus fixed-term)									
	Reading at work		Writing at work		Numeracy at work		ICT at work		Problem solving	
	ß	p-value	ß	p-value	ß	p-value	ß	p-value	ß	p-value
National entities										
Australia	0.0	0.865	0.0	0.601	0.1	0.047	0.1	0.016	-0.1	0.495
Austria	0.1	0.282	0.1	0.120	0.2	0.024	0.0	0.889	0.3	0.003
Canada	0.1	0.036	0.2	0.000	0.2	0.001	0.2	0.000	0.2	0.001
Czech Republic	0.1	0.085	0.2	0.007	0.2	0.038	0.0	0.812	0.2	0.064
Denmark	0.2	0.003	0.2	0.001	0.1	0.074	0.2	0.001	0.1	0.058
Estonia	0.0	0.661	0.0	0.653	0.2	0.000	0.1	0.055	0.0	0.873
Finland	0.1	0.039	0.1	0.021	0.2	0.000	0.2	0.000	0.0	0.905
Germany	0.2	0.001	0.1	0.385	0.2	0.001	0.1	0.014	0.3	0.001
Ireland	0.0	0.729	0.2	0.016	0.1	0.183	0.1	0.027	0.0	0.683
Italy	0.2	0.011	0.1	0.288	0.0	0.886	0.1	0.574	0.3	0.009
Japan	0.2	0.000	0.1	0.017	0.2	0.000	0.3	0.000	0.2	0.000
Korea	0.2	0.003	0.2	0.008	0.3	0.000	0.4	0.000	0.2	0.005
Netherlands	0.3	0.000	0.3	0.000	0.1	0.267	0.2	0.000	0.3	0.000
Norway	0.2	0.000	0.1	0.010	0.0	0.645	0.2	0.000	0.2	0.008
Poland	0.1	0.012	0.0	0.717	0.0	0.701	0.1	0.308	0.1	0.050
Slovak Republic	0.2	0.003	0.1	0.183	0.0	0.501	0.0	0.522	0.1	0.088
Spain	0.3	0.000	0.2	0.028	0.2	0.000	0.2	0.001	0.3	0.003
Sweden	0.1	0.001	0.1	0.163	0.1	0.180	0.2	0.000	0.1	0.111
United States	-0.2	0.001	-0.2	0.046	0.0	0.822	0.3	0.000	0.0	0.706
Sub-national entities										
Flanders (Belgium)	0.1	0.089	0.3	0.000	0.0	0.733	0.1	0.392	0.3	0.017
England (UK)	-0.2	0.009	0.0	0.788	0.0	0.761	0.1	0.169	0.0	0.526
Northern Ireland (UK)	0.1	0.301	0.1	0.179	0.1	0.162	0.1	0.214	0.3	0.027
England/N. Ireland (UK)	-0.1	0.010	0.0	0.737	0.0	0.816	0.1	0.153	0.0	0.615
Average	0.1	0.064	0.1	0.070	0.1	0.095	0.2	0.073	0.1	0.085
Partners										
Cyprus[1]	0.0	0.802	-0.2	0.035	0.1	0.346	-0.1	0.644	0.2	0.203

1. See notes on page 250.

Note: The sample includes only employees. Results based on OLS regressions including controls for literacy and numeracy proficiency scores and occupation dummies (ISCO 1 digit).

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898161

[Part 1/2]

Table A4.15a **Mean use of generic skills at work, by contract type**

	Indefinite contract													
	Task discretion		Learning skills		Influencing skills		Co-operative skills		Self-organising skills		Dexterity		Physical skills	
OECD	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities														
Australia	1.8	(0.0)	2.2	(0.0)	2.4	(0.0)	2.7	(0.0)	3.3	(0.0)	3.4	(0.0)	2.1	(0.0)
Austria	2.2	(0.0)	1.9	(0.0)	1.9	(0.0)	2.4	(0.0)	2.7	(0.0)	2.9	(0.0)	2.1	(0.0)
Canada	1.9	(0.0)	2.1	(0.0)	2.1	(0.0)	2.6	(0.0)	3.3	(0.0)	3.1	(0.0)	1.8	(0.0)
Czech Republic	2.0	(0.0)	1.8	(0.0)	1.8	(0.0)	2.4	(0.0)	3.1	(0.1)	2.8	(0.1)	2.1	(0.1)
Denmark	2.2	(0.0)	2.0	(0.0)	2.1	(0.0)	2.5	(0.0)	3.4	(0.0)	2.9	(0.0)	2.1	(0.0)
Estonia	1.8	(0.0)	1.9	(0.0)	2.0	(0.0)	2.2	(0.0)	3.4	(0.0)	3.2	(0.0)	2.0	(0.0)
Finland	2.2	(0.0)	2.0	(0.0)	2.3	(0.0)	2.1	(0.0)	3.2	(0.0)	2.6	(0.0)	1.6	(0.0)
Germany	2.2	(0.0)	1.9	(0.0)	1.8	(0.0)	2.3	(0.0)	3.0	(0.0)	2.9	(0.0)	2.0	(0.0)
Ireland	1.6	(0.0)	2.0	(0.0)	2.3	(0.0)	2.9	(0.0)	3.0	(0.1)	3.3	(0.0)	2.0	(0.1)
Italy	1.5	(0.0)	1.9	(0.0)	1.7	(0.0)	2.5	(0.0)	3.2	(0.0)	2.8	(0.1)	2.0	(0.1)
Japan	2.2	(0.0)	1.8	(0.0)	1.8	(0.0)	2.6	(0.0)	2.9	(0.0)	1.7	(0.0)	1.6	(0.0)
Korea	1.8	(0.0)	1.6	(0.0)	2.0	(0.0)	2.0	(0.0)	2.9	(0.0)	2.3	(0.1)	1.7	(0.0)
Netherlands	1.9	(0.0)	1.9	(0.0)	2.0	(0.0)	2.2	(0.0)	3.1	(0.0)	2.4	(0.0)	1.8	(0.0)
Norway	2.1	(0.0)	2.1	(0.0)	2.1	(0.0)	2.3	(0.0)	2.9	(0.0)	2.0	(0.0)	2.0	(0.0)
Poland	1.8	(0.0)	1.7	(0.0)	1.9	(0.0)	2.6	(0.0)	3.3	(0.0)	3.1	(0.0)	1.9	(0.0)
Slovak Republic	1.6	(0.0)	2.1	(0.0)	1.8	(0.0)	2.5	(0.0)	2.7	(0.0)	3.1	(0.0)	2.0	(0.0)
Spain	1.8	(0.0)	2.4	(0.0)	1.8	(0.0)	2.5	(0.0)	3.3	(0.0)	2.2	(0.0)	1.9	(0.0)
Sweden	2.2	(0.0)	2.0	(0.0)	2.1	(0.0)	2.4	(0.0)	3.3	(0.0)	2.5	(0.0)	2.0	(0.0)
United States	2.0	(0.0)	2.2	(0.0)	2.3	(0.0)	2.7	(0.1)	3.2	(0.1)	3.3	(0.1)	2.2	(0.1)
Sub-national entities														
Flanders (Belgium)	2.1	(0.0)	1.9	(0.0)	1.9	(0.0)	2.4	(0.0)	3.2	(0.0)	2.5	(0.0)	1.8	(0.0)
England (UK)	1.8	(0.0)	2.0	(0.0)	2.2	(0.0)	2.6	(0.0)	3.2	(0.0)	3.2	(0.0)	2.0	(0.0)
Northern Ireland (UK)	1.6	(0.0)	1.9	(0.0)	2.3	(0.0)	2.7	(0.0)	3.1	(0.1)	3.0	(0.0)	2.1	(0.0)
England/N. Ireland (UK)	1.8	(0.0)	2.0	(0.0)	2.2	(0.0)	2.6	(0.0)	3.2	(0.0)	3.2	(0.0)	2.0	(0.0)
Average	1.9	(0.0)	2.0	(0.0)	2.0	(0.0)	2.4	(0.0)	3.1	(0.0)	2.8	(0.0)	1.9	(0.0)
Partners														
Cyprus[1]	1.7	(0.0)	1.9	(0.0)	2.0	(0.0)	2.6	(0.0)	3.1	(0.0)	3.0	(0.0)	1.9	(0.0)

[Part 2/2]

Table A4.15a **Mean use of generic skills at work, by contract type**

	Fixed-term contract													
	Task discretion		Learning skills		Influencing skills		Co-operative skills		Self-organising skills		Dexterity		Physical skills	
OECD	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities														
Australia	1.7	(0.1)	2.3	(0.0)	2.5	(0.1)	2.7	(0.1)	3.3	(0.1)	3.4	(0.1)	1.9	(0.1)
Austria	2.0	(0.1)	2.2	(0.1)	1.6	(0.1)	2.5	(0.1)	2.3	(0.1)	2.8	(0.1)	2.4	(0.1)
Canada	1.8	(0.0)	2.2	(0.0)	2.1	(0.1)	2.5	(0.1)	3.0	(0.1)	3.0	(0.1)	2.1	(0.1)
Czech Republic	1.8	(0.1)	1.9	(0.1)	1.8	(0.1)	2.2	(0.1)	3.0	(0.1)	2.8	(0.1)	2.1	(0.2)
Denmark	2.0	(0.0)	2.2	(0.0)	2.0	(0.0)	2.6	(0.1)	2.9	(0.1)	2.8	(0.1)	2.2	(0.1)
Estonia	1.9	(0.0)	2.0	(0.0)	1.9	(0.0)	2.1	(0.1)	3.3	(0.1)	3.1	(0.1)	2.2	(0.1)
Finland	2.2	(0.0)	2.3	(0.0)	2.3	(0.1)	2.1	(0.1)	3.1	(0.1)	2.6	(0.1)	1.9	(0.1)
Germany	1.9	(0.0)	2.1	(0.1)	1.5	(0.0)	2.3	(0.1)	2.6	(0.1)	3.0	(0.1)	2.4	(0.1)
Ireland	1.5	(0.1)	2.1	(0.1)	2.3	(0.1)	2.9	(0.1)	2.7	(0.1)	3.2	(0.1)	2.4	(0.1)
Italy	1.2	(0.1)	2.0	(0.1)	1.5	(0.1)	2.4	(0.1)	2.8	(0.1)	2.6	(0.1)	2.4	(0.2)
Japan	2.1	(0.0)	1.7	(0.0)	1.5	(0.0)	2.6	(0.1)	2.5	(0.1)	1.5	(0.1)	1.5	(0.1)
Korea	1.6	(0.0)	1.5	(0.0)	1.8	(0.0)	1.8	(0.1)	2.7	(0.1)	1.9	(0.1)	2.0	(0.1)
Netherlands	1.6	(0.1)	2.0	(0.0)	1.7	(0.0)	2.2	(0.1)	2.5	(0.1)	2.3	(0.1)	2.3	(0.1)
Norway	1.9	(0.0)	2.3	(0.0)	1.8	(0.0)	2.4	(0.1)	2.2	(0.1)	2.1	(0.1)	2.4	(0.1)
Poland	1.7	(0.0)	1.9	(0.0)	1.8	(0.1)	2.7	(0.1)	2.9	(0.1)	3.4	(0.0)	2.5	(0.1)
Slovak Republic	1.4	(0.1)	2.2	(0.1)	1.7	(0.1)	2.6	(0.1)	2.1	(0.1)	3.1	(0.1)	2.4	(0.1)
Spain	1.6	(0.0)	2.3	(0.1)	1.5	(0.1)	2.4	(0.1)	2.9	(0.1)	2.7	(0.1)	2.7	(0.1)
Sweden	2.0	(0.0)	2.4	(0.1)	2.0	(0.0)	2.5	(0.1)	3.0	(0.1)	2.7	(0.1)	2.4	(0.1)
United States	1.8	(0.0)	2.4	(0.1)	2.8	(0.1)	2.6	(0.1)	3.3	(0.1)	3.4	(0.1)	2.4	(0.1)
Sub-national entities														
Flanders (Belgium)	1.8	(0.1)	2.2	(0.1)	1.7	(0.1)	2.2	(0.1)	2.7	(0.1)	2.6	(0.1)	2.1	(0.1)
England (UK)	1.6	(0.1)	2.3	(0.1)	2.3	(0.1)	2.6	(0.1)	3.1	(0.1)	3.2	(0.1)	2.3	(0.1)
Northern Ireland (UK)	1.5	(0.1)	2.0	(0.1)	2.0	(0.1)	2.6	(0.1)	2.7	(0.1)	3.0	(0.1)	2.3	(0.1)
England/N. Ireland (UK)	1.6	(0.1)	2.3	(0.1)	2.2	(0.1)	2.6	(0.1)	3.1	(0.1)	3.2	(0.1)	2.3	(0.1)
Average	1.8	(0.0)	2.1	(0.0)	1.9	(0.0)	2.4	(0.0)	2.8	(0.0)	2.8	(0.0)	2.2	(0.0)
Partners														
Cyprus[1]	1.6	(0.1)	2.2	(0.1)	2.1	(0.1)	2.5	(0.1)	2.7	(0.2)	3.2	(0.1)	2.4	(0.2)

1. See notes on page 250.

Note: The sample includes only employees.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898180

[Part 1/1]

Table A4.15b Differences in the use of generic skills at work, by contract type (adjusted)

	Adjusted differences in the use of skills between workers with an indefinite contract and workers with a fixed-term contract (indefinite minus fixed-term)													
	Task discretion		Learning skills		Influencing skills		Co-operative skills		Self-organising skills		Dexterity		Physical skills	
OECD	ß	p-value	ß	p-value	ß	p-value	ß	p-value	ß	p-value	ß	p-value	ß	p-value
National entities														
Australia	0.1	0.113	-0.1	0.213	0.0	0.914	0.0	0.917	0.2	0.039	0.0	0.563	0.0	0.859
Austria	0.2	0.000	-0.4	0.000	0.3	0.000	-0.2	0.077	0.4	0.010	0.1	0.448	-0.2	0.063
Canada	0.0	0.470	-0.1	0.138	0.0	0.558	0.1	0.065	0.2	0.002	0.1	0.032	-0.1	0.113
Czech Republic	0.1	0.033	-0.2	0.008	0.1	0.279	0.2	0.073	0.1	0.411	0.0	0.676	0.2	0.169
Denmark	0.2	0.000	-0.2	0.000	0.2	0.002	-0.1	0.278	0.5	0.000	0.1	0.315	0.0	0.584
Estonia	-0.1	0.001	-0.1	0.025	0.0	0.955	0.1	0.412	0.0	0.804	0.1	0.090	-0.1	0.026
Finland	0.0	0.520	-0.3	0.000	0.0	0.919	-0.1	0.433	0.1	0.386	-0.1	0.294	-0.3	0.001
Germany	0.2	0.000	-0.3	0.000	0.3	0.000	0.0	0.770	0.3	0.001	0.0	0.563	-0.2	0.011
Ireland	0.1	0.170	-0.1	0.144	0.0	0.650	-0.1	0.559	0.1	0.318	0.1	0.586	-0.1	0.176
Italy	0.2	0.000	-0.2	0.002	0.2	0.028	0.0	0.743	0.3	0.020	0.3	0.040	-0.1	0.403
Japan	0.1	0.008	0.1	0.022	0.2	0.000	0.0	0.559	0.2	0.004	0.2	0.022	0.2	0.038
Korea	0.1	0.078	0.0	0.916	0.2	0.002	0.2	0.020	0.2	0.038	0.3	0.002	-0.2	0.035
Netherlands	0.2	0.000	-0.2	0.000	0.2	0.000	0.0	0.663	0.5	0.000	0.1	0.139	-0.2	0.007
Norway	0.1	0.003	-0.1	0.009	0.2	0.000	-0.1	0.538	0.4	0.000	0.0	0.948	-0.2	0.039
Poland	0.1	0.114	-0.2	0.001	0.1	0.215	-0.1	0.293	0.2	0.008	-0.1	0.026	-0.2	0.002
Slovak Republic	0.1	0.058	-0.2	0.006	0.0	0.782	0.0	0.609	0.5	0.000	0.0	0.857	-0.1	0.362
Spain	0.2	0.004	0.0	0.812	0.1	0.017	0.1	0.136	0.3	0.001	-0.2	0.030	-0.4	0.000
Sweden	0.2	0.002	-0.4	0.000	0.1	0.204	0.0	0.583	0.2	0.060	-0.1	0.477	-0.2	0.041
United States	0.2	0.001	-0.2	0.025	-0.3	0.000	0.0	0.663	0.0	0.865	-0.1	0.272	-0.3	0.006
Sub-national entities														
Flanders (Belgium)	0.3	0.000	-0.4	0.000	0.2	0.031	0.1	0.288	0.4	0.002	-0.1	0.517	-0.2	0.155
England (UK)	0.1	0.144	-0.3	0.000	0.0	0.915	0.0	0.613	0.0	0.885	0.1	0.599	-0.2	0.108
Northern Ireland (UK)	0.1	0.152	0.0	0.948	0.2	0.024	0.1	0.497	0.3	0.016	0.0	0.947	-0.1	0.642
England/N. Ireland (UK)	0.1	0.124	-0.3	0.000	0.0	0.969	0.0	0.598	0.0	0.785	0.1	0.582	-0.2	0.105
Average	0.1	0.036	-0.2	0.060	0.1	0.107	0.0	0.112	0.2	0.074	0.0	0.100	-0.1	0.058
Partners														
Cyprus[1]	0.1	0.518	-0.2	0.037	-0.1	0.324	0.2	0.261	0.3	0.030	-0.2	0.269	-0.2	0.190

1. See notes on page 250.

Note: The sample includes only employees. Results based on OLS regressions including controls for literacy and numeracy proficiency scores and occupation dummies (ISCO 1 digit).

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898199

[Part 1/2]

Table A4.16 **Gap in wages and in the use of skills at work between types of contract**

	Unadjusted			Adjusted		
	Wage gap	Problem solving gap	Predicted wage gap	Wage gap	Problem solving gap	Predicted wage gap
OECD	Mean	Mean	Mean	Mean	Mean	Mean
National entities						
Australia	-0.08	-0.13	-0.02	-0.03	-0.11	0.07
Austria	0.32	0.13	0.29	0.24	0.08	0.20
Canada	0.13	0.05	0.19	0.16	0.06	0.18
Czech Republic	0.26	0.11	0.26	0.21	0.11	0.22
Denmark	0.11	0.02	0.16	0.08	0.04	0.17
Estonia	-0.03	-0.01	0.13	-0.06	-0.05	0.11
Finland	0.20	-0.02	0.12	0.12	-0.03	0.13
Germany	0.46	0.29	0.48	0.34	0.16	0.25
Ireland	0.13	0.00	0.14	0.19	-0.04	0.12
Italy	0.32	0.15	0.31	0.20	0.03	0.17
Japan	0.18	0.09	0.25	0.10	0.02	0.16
Korea	0.24	0.01	0.15	0.17	-0.01	0.14
Netherlands	0.32	0.09	0.24	0.32	0.05	0.18
Norway	0.23	0.14	0.31	0.12	0.29	0.34
Poland	0.32	0.13	0.29	0.14	0.01	0.15
Slovak Republic	0.24	0.18	0.35	0.16	0.07	0.19
Spain	0.39	0.18	0.35	0.22	0.07	0.19
Sweden	0.24	0.09	0.24	0.14	0.01	0.15
United States	0.07	-0.06	0.07	0.14	-0.02	0.13
Sub-national entities						
Flanders (Belgium)	0.30	0.08	0.23	0.32	0.07	0.19
England (UK)	0.11	-0.02	0.11	0.06	0.00	0.14
Northern Ireland (UK)	0.19	0.18	0.35	0.14	0.16	0.25
England/N. Ireland (UK)	0.12	-0.01	0.12	0.07	0.00	0.15
Partners						
Cyprus[1]	0.34	0.05	0.19	0.45	0.08	0.20

[Part 2/2]

Table A4.16 **Gap in wages and in the use of skills at work between types of contract**

	Unadjusted			Adjusted		
	Wage gap	Task discretion gap	Predicted wage gap	Wage gap	Task discretion gap	Predicted wage gap
OECD	Mean	Mean	Mean	Mean	Mean	Mean
National entities						
Australia	-0.08	0.00	0.08	-0.03	0.01	0.10
Austria	0.32	0.15	0.31	0.24	0.09	0.20
Canada	0.13	0.04	0.14	0.16	0.04	0.13
Czech Republic	0.26	0.13	0.28	0.21	0.07	0.18
Denmark	0.11	0.09	0.21	0.08	0.07	0.18
Estonia	-0.03	-0.02	0.05	-0.06	-0.03	0.04
Finland	0.20	0.02	0.11	0.12	0.00	0.09
Germany	0.46	0.19	0.37	0.34	0.13	0.26
Ireland	0.13	0.10	0.23	0.19	0.07	0.18
Italy	0.32	0.24	0.44	0.20	0.16	0.31
Japan	0.18	0.03	0.13	0.10	0.02	0.11
Korea	0.24	0.03	0.13	0.17	0.02	0.11
Netherlands	0.32	0.07	0.19	0.32	0.08	0.19
Norway	0.23	0.06	0.17	0.12	-0.04	0.03
Poland	0.32	0.13	0.27	0.14	0.05	0.16
Slovak Republic	0.24	0.14	0.30	0.16	0.11	0.23
Spain	0.39	0.14	0.30	0.22	0.09	0.21
Sweden	0.24	0.11	0.25	0.14	0.09	0.21
United States	0.07	0.05	0.15	0.14	0.06	0.16
Sub-national entities						
Flanders (Belgium)	0.30	0.12	0.26	0.32	0.11	0.23
England (UK)	0.11	0.11	0.25	0.06	0.11	0.24
Northern Ireland (UK)	0.19	0.12	0.26	0.14	0.10	0.23
England/N. Ireland (UK)	0.12	0.12	0.26	0.07	0.11	0.23
Partners						
Cyprus[1]	0.34	0.09	0.22	0.45	0.11	0.24

1. See notes on page 250.

Note: Predicted wage gap from the regression of wage gap on skills-use gap. The gap in wages between types of contract is computed as the percentage difference between the average hourly wages (including bonuses) of temporary and permanent workers. The gap in skills use between types of contract is computed as the percentage difference between the skills use of temporary and permanent workers. The wage distribution was trimmed to eliminate the 1st and 99th percentiles. Adjusted estimates are based on OLS regressions including controls for average literacy and numeracy scores, dummies for highest qualification (4), occupations (9) and industry (10). The sample includes only full-time employees.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898218

[Part 1/9]

Table A4.17 **Mean use of information-processing skills at work, by occupation**

	Managers									
	Reading at work		Writing at work		Numeracy at work		ICT at work		Problem solving	
OECD	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities										
Australia	2.6	(0.0)	2.5	(0.0)	2.5	(0.0)	2.5	(0.0)	2.6	(0.0)
Austria	2.6	(0.1)	2.5	(0.1)	2.5	(0.1)	2.4	(0.1)	2.5	(0.1)
Canada	2.5	(0.0)	2.5	(0.0)	2.6	(0.0)	2.6	(0.0)	2.5	(0.0)
Czech Republic	2.5	(0.1)	2.6	(0.1)	2.8	(0.1)	2.7	(0.1)	2.7	(0.1)
Denmark	2.6	(0.0)	2.4	(0.0)	2.5	(0.1)	2.7	(0.1)	2.7	(0.0)
Estonia	2.6	(0.0)	2.1	(0.0)	2.6	(0.0)	2.7	(0.1)	2.4	(0.0)
Finland	2.6	(0.0)	2.5	(0.0)	2.7	(0.0)	2.6	(0.1)	2.4	(0.1)
Germany	2.7	(0.1)	2.5	(0.1)	2.7	(0.1)	2.5	(0.1)	2.7	(0.1)
Ireland	2.5	(0.0)	2.4	(0.1)	2.4	(0.1)	2.5	(0.1)	2.5	(0.1)
Italy	2.3	(0.1)	1.9	(0.1)	2.3	(0.2)	2.4	(0.2)	2.6	(0.2)
Japan	2.8	(0.1)	2.8	(0.1)	2.5	(0.0)	2.4	(0.1)	2.3	(0.1)
Korea	2.7	(0.1)	2.3	(0.1)	2.3	(0.1)	2.5	(0.2)	2.1	(0.1)
Netherlands	2.5	(0.0)	2.4	(0.0)	2.3	(0.0)	2.5	(0.0)	2.2	(0.1)
Norway	2.5	(0.0)	2.4	(0.0)	2.4	(0.0)	2.6	(0.0)	2.4	(0.1)
Poland	2.5	(0.0)	2.3	(0.0)	2.6	(0.1)	2.4	(0.0)	2.5	(0.1)
Slovak Republic	2.5	(0.1)	2.3	(0.1)	2.6	(0.1)	2.5	(0.1)	2.7	(0.1)
Spain	2.6	(0.1)	2.3	(0.1)	2.8	(0.1)	2.5	(0.1)	2.3	(0.1)
Sweden	2.6	(0.0)	2.4	(0.0)	2.4	(0.1)	2.5	(0.0)	2.5	(0.1)
United States	2.6	(0.0)	2.6	(0.1)	2.7	(0.1)	2.8	(0.1)	2.7	(0.1)
Sub-national entities										
Flanders (Belgium)	2.5	(0.0)	2.5	(0.0)	2.6	(0.1)	2.5	(0.0)	2.6	(0.1)
England (UK)	2.5	(0.0)	2.6	(0.0)	2.6	(0.1)	2.7	(0.1)	2.6	(0.1)
Northern Ireland (UK)	2.5	(0.1)	2.5	(0.1)	2.4	(0.1)	2.5	(0.1)	2.5	(0.1)
England/N. Ireland (UK)	2.5	(0.0)	2.6	(0.0)	2.6	(0.1)	2.7	(0.1)	2.6	(0.1)
Average	2.6	(0.0)	2.4	(0.0)	2.6	(0.0)	2.5	(0.0)	2.5	(0.0)
Partners										
Cyprus[1]	2.5	(0.1)	2.2	(0.1)	2.5	(0.1)	2.3	(0.1)	2.4	(0.1)

[Part 2/9]

Table A4.17 **Mean use of information-processing skills at work, by occupation**

	Professionals									
	Reading at work		Writing at work		Numeracy at work		ICT at work		Problem solving	
OECD	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities										
Australia	2.8	(0.0)	2.6	(0.0)	2.4	(0.0)	2.4	(0.0)	2.6	(0.0)
Austria	2.6	(0.0)	2.4	(0.0)	2.1	(0.1)	2.2	(0.0)	2.5	(0.1)
Canada	2.5	(0.0)	2.4	(0.0)	2.3	(0.0)	2.3	(0.0)	2.4	(0.0)
Czech Republic	2.4	(0.0)	2.3	(0.1)	2.2	(0.1)	2.2	(0.0)	2.5	(0.1)
Denmark	2.5	(0.0)	2.2	(0.0)	2.0	(0.0)	2.3	(0.0)	2.4	(0.0)
Estonia	2.6	(0.0)	2.0	(0.0)	2.2	(0.0)	2.4	(0.0)	2.2	(0.0)
Finland	2.6	(0.0)	2.3	(0.0)	2.3	(0.0)	2.3	(0.0)	2.4	(0.0)
Germany	2.7	(0.0)	2.3	(0.0)	2.3	(0.0)	2.2	(0.0)	2.5	(0.0)
Ireland	2.5	(0.0)	2.5	(0.0)	2.1	(0.0)	2.3	(0.0)	2.4	(0.0)
Italy	2.6	(0.0)	2.3	(0.1)	2.3	(0.1)	2.4	(0.1)	2.6	(0.1)
Japan	2.6	(0.0)	2.5	(0.0)	2.0	(0.0)	1.9	(0.0)	2.1	(0.1)
Korea	2.7	(0.0)	2.6	(0.0)	2.2	(0.1)	2.4	(0.1)	2.2	(0.0)
Netherlands	2.5	(0.0)	2.4	(0.0)	2.0	(0.0)	2.3	(0.0)	2.2	(0.0)
Norway	2.5	(0.0)	2.4	(0.0)	1.9	(0.0)	2.2	(0.0)	2.4	(0.0)
Poland	2.5	(0.0)	2.2	(0.0)	2.1	(0.1)	2.1	(0.0)	2.2	(0.1)
Slovak Republic	2.4	(0.0)	2.2	(0.0)	2.3	(0.1)	2.3	(0.0)	2.5	(0.1)
Spain	2.7	(0.0)	2.4	(0.0)	2.1	(0.1)	2.2	(0.0)	2.3	(0.1)
Sweden	2.5	(0.0)	2.1	(0.0)	2.0	(0.0)	2.2	(0.0)	2.4	(0.0)
United States	2.6	(0.0)	2.5	(0.0)	2.3	(0.0)	2.4	(0.0)	2.6	(0.0)
Sub-national entities										
Flanders (Belgium)	2.4	(0.0)	2.4	(0.0)	2.0	(0.0)	2.1	(0.0)	2.2	(0.0)
England (UK)	2.6	(0.0)	2.5	(0.0)	2.1	(0.1)	2.4	(0.0)	2.7	(0.1)
Northern Ireland (UK)	2.8	(0.1)	2.6	(0.1)	2.2	(0.1)	2.4	(0.0)	2.5	(0.1)
England/N. Ireland (UK)	2.6	(0.0)	2.5	(0.0)	2.1	(0.0)	2.4	(0.0)	2.7	(0.0)
Average	2.6	(0.0)	2.3	(0.0)	2.1	(0.0)	2.3	(0.0)	2.4	(0.0)
Partners										
Cyprus[1]	2.4	(0.1)	2.1	(0.0)	2.1	(0.1)	2.0	(0.0)	2.1	(0.1)

1. See notes on page 250.

Note: ISCO 1-digit occupation.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898237

[Part 3/9]

Table A4.17 **Mean use of information-processing skills at work, by occupation**

	Technicians and associate professionals									
	Reading at work		Writing at work		Numeracy at work		ICT at work		Problem solving	
OECD	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities										
Australia	2.5	(0.0)	2.4	(0.0)	2.3	(0.0)	2.3	(0.0)	2.4	(0.1)
Austria	2.3	(0.0)	2.4	(0.0)	2.0	(0.0)	2.0	(0.0)	2.1	(0.0)
Canada	2.2	(0.0)	2.3	(0.0)	2.3	(0.0)	2.1	(0.0)	2.1	(0.0)
Czech Republic	2.3	(0.0)	2.2	(0.1)	2.5	(0.1)	2.4	(0.0)	2.4	(0.1)
Denmark	2.4	(0.0)	2.1	(0.0)	2.1	(0.0)	2.4	(0.0)	2.1	(0.0)
Estonia	2.3	(0.0)	1.9	(0.0)	2.2	(0.0)	2.3	(0.0)	2.0	(0.0)
Finland	2.4	(0.0)	2.3	(0.0)	2.2	(0.0)	2.1	(0.0)	2.1	(0.0)
Germany	2.4	(0.0)	2.3	(0.0)	2.0	(0.0)	1.9	(0.0)	2.1	(0.1)
Ireland	2.3	(0.0)	2.4	(0.0)	2.2	(0.1)	2.3	(0.1)	2.2	(0.1)
Italy	2.2	(0.0)	2.2	(0.0)	2.4	(0.1)	2.4	(0.1)	2.6	(0.1)
Japan	2.4	(0.0)	2.5	(0.0)	2.2	(0.0)	2.0	(0.0)	1.8	(0.0)
Korea	2.4	(0.1)	2.5	(0.1)	2.2	(0.0)	2.2	(0.1)	1.9	(0.1)
Netherlands	2.2	(0.0)	2.3	(0.0)	2.0	(0.0)	2.1	(0.0)	2.0	(0.1)
Norway	2.4	(0.0)	2.3	(0.0)	2.1	(0.0)	2.2	(0.0)	2.2	(0.0)
Poland	2.2	(0.0)	2.2	(0.1)	2.3	(0.1)	2.1	(0.0)	2.1	(0.1)
Slovak Republic	2.2	(0.0)	2.3	(0.0)	2.3	(0.0)	2.2	(0.0)	2.3	(0.1)
Spain	2.1	(0.1)	2.1	(0.1)	2.3	(0.1)	2.1	(0.1)	2.1	(0.1)
Sweden	2.4	(0.0)	2.0	(0.0)	2.1	(0.0)	2.3	(0.0)	2.2	(0.0)
United States	2.4	(0.0)	2.4	(0.1)	2.3	(0.0)	2.3	(0.1)	2.4	(0.1)
Sub-national entities										
Flanders (Belgium)	2.2	(0.0)	2.3	(0.0)	2.1	(0.1)	2.2	(0.0)	2.1	(0.1)
England (UK)	2.4	(0.0)	2.5	(0.0)	2.3	(0.1)	2.4	(0.1)	2.6	(0.1)
Northern Ireland (UK)	2.3	(0.0)	2.5	(0.1)	2.2	(0.1)	2.2	(0.1)	2.4	(0.1)
England/N. Ireland (UK)	2.4	(0.0)	2.5	(0.0)	2.3	(0.1)	2.4	(0.1)	2.6	(0.1)
Average	2.3	(0.0)	2.3	(0.0)	2.2	(0.0)	2.2	(0.0)	2.2	(0.0)
Partners										
Cyprus[1]	2.1	(0.0)	2.1	(0.0)	2.0	(0.1)	1.9	(0.0)	2.2	(0.1)

[Part 4/9]

Table A4.17 **Mean use of information-processing skills at work, by occupation**

	Clerical support workers									
	Reading at work		Writing at work		Numeracy at work		ICT at work		Problem solving	
OECD	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities										
Australia	2.2	(0.1)	2.1	(0.0)	2.2	(0.0)	2.3	(0.1)	2.0	(0.1)
Austria	2.1	(0.0)	2.1	(0.0)	2.1	(0.0)	2.1	(0.0)	1.8	(0.1)
Canada	2.0	(0.0)	2.1	(0.0)	2.1	(0.0)	2.1	(0.0)	1.7	(0.1)
Czech Republic	2.1	(0.1)	2.2	(0.1)	2.4	(0.1)	2.2	(0.1)	1.8	(0.1)
Denmark	2.1	(0.0)	1.9	(0.0)	2.1	(0.1)	2.3	(0.0)	1.6	(0.1)
Estonia	2.0	(0.0)	1.8	(0.0)	2.1	(0.1)	2.2	(0.1)	1.6	(0.1)
Finland	2.2	(0.0)	2.0	(0.0)	2.3	(0.1)	2.1	(0.0)	1.7	(0.1)
Germany	2.2	(0.0)	2.2	(0.0)	2.2	(0.0)	2.1	(0.0)	1.8	(0.1)
Ireland	2.0	(0.0)	2.3	(0.1)	2.2	(0.0)	2.2	(0.0)	1.9	(0.1)
Italy	1.9	(0.1)	1.9	(0.0)	2.0	(0.1)	2.1	(0.1)	2.0	(0.1)
Japan	2.0	(0.0)	2.2	(0.0)	1.9	(0.0)	1.7	(0.0)	1.3	(0.1)
Korea	2.4	(0.0)	2.6	(0.0)	2.4	(0.0)	2.6	(0.1)	1.9	(0.1)
Netherlands	1.9	(0.0)	1.8	(0.0)	1.9	(0.1)	2.1	(0.0)	1.4	(0.1)
Norway	2.1	(0.0)	2.0	(0.1)	1.9	(0.1)	2.0	(0.1)	1.5	(0.1)
Poland	1.9	(0.1)	2.0	(0.1)	2.0	(0.1)	1.9	(0.1)	1.6	(0.1)
Slovak Republic	2.0	(0.1)	2.2	(0.1)	2.3	(0.1)	2.2	(0.1)	1.8	(0.1)
Spain	2.1	(0.0)	2.2	(0.0)	2.3	(0.1)	2.1	(0.0)	1.9	(0.1)
Sweden	2.2	(0.1)	1.7	(0.1)	1.9	(0.1)	2.0	(0.1)	1.6	(0.1)
United States	2.2	(0.1)	2.2	(0.1)	2.2	(0.1)	2.3	(0.1)	2.1	(0.1)
Sub-national entities										
Flanders (Belgium)	1.9	(0.0)	2.0	(0.0)	1.9	(0.1)	2.1	(0.0)	1.7	(0.1)
England (UK)	2.2	(0.0)	2.2	(0.0)	2.1	(0.1)	2.3	(0.0)	2.1	(0.1)
Northern Ireland (UK)	2.2	(0.0)	2.2	(0.0)	2.0	(0.1)	2.2	(0.0)	2.0	(0.1)
England/N. Ireland (UK)	2.2	(0.0)	2.2	(0.0)	2.1	(0.1)	2.3	(0.0)	2.1	(0.1)
Average	2.1	(0.0)	2.1	(0.0)	2.1	(0.0)	2.1	(0.0)	1.8	(0.0)
Partners										
Cyprus[1]	1.8	(0.0)	1.9	(0.1)	2.0	(0.0)	1.9	(0.0)	1.8	(0.1)

1. See notes on page 250.

Note: ISCO 1-digit occupation.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898237

[Part 5/9]

Table A4.17 **Mean use of information-processing skills at work, by occupation**

OECD	Service and sales workers									
	Reading at work		Writing at work		Numeracy at work		ICT at work		Problem solving	
	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities										
Australia	1.8	(0.0)	1.7	(0.1)	1.8	(0.0)	1.3	(0.1)	1.6	(0.1)
Austria	1.7	(0.0)	1.6	(0.1)	1.7	(0.0)	1.4	(0.1)	1.2	(0.1)
Canada	1.6	(0.0)	1.6	(0.0)	1.9	(0.0)	1.3	(0.0)	1.2	(0.0)
Czech Republic	1.7	(0.1)	1.6	(0.1)	1.9	(0.1)	1.7	(0.1)	1.4	(0.1)
Denmark	1.8	(0.0)	1.8	(0.0)	1.6	(0.0)	1.5	(0.0)	1.4	(0.0)
Estonia	1.7	(0.0)	1.4	(0.0)	1.8	(0.0)	1.6	(0.1)	1.3	(0.0)
Finland	2.1	(0.0)	1.9	(0.0)	1.9	(0.0)	1.5	(0.0)	1.6	(0.0)
Germany	1.8	(0.0)	1.8	(0.0)	1.7	(0.0)	1.5	(0.1)	1.3	(0.1)
Ireland	1.5	(0.1)	1.7	(0.1)	1.6	(0.0)	1.4	(0.1)	1.2	(0.1)
Italy	1.3	(0.1)	1.3	(0.1)	1.7	(0.0)	1.6	(0.1)	1.6	(0.1)
Japan	1.9	(0.0)	2.1	(0.0)	1.6	(0.0)	1.2	(0.0)	1.1	(0.0)
Korea	1.8	(0.0)	2.0	(0.0)	1.9	(0.0)	1.6	(0.0)	1.2	(0.0)
Netherlands	1.6	(0.0)	1.8	(0.1)	1.5	(0.0)	1.5	(0.0)	1.1	(0.1)
Norway	1.9	(0.0)	1.8	(0.0)	1.5	(0.0)	1.2	(0.0)	1.3	(0.0)
Poland	1.5	(0.1)	1.8	(0.1)	1.9	(0.1)	1.5	(0.1)	1.3	(0.1)
Slovak Republic	1.5	(0.0)	1.6	(0.1)	2.0	(0.0)	1.7	(0.1)	1.5	(0.1)
Spain	1.6	(0.0)	1.7	(0.1)	1.8	(0.0)	1.6	(0.1)	1.5	(0.1)
Sweden	1.9	(0.0)	1.7	(0.0)	1.4	(0.0)	1.3	(0.0)	1.4	(0.1)
United States	1.8	(0.0)	1.8	(0.0)	1.9	(0.0)	1.5	(0.1)	1.6	(0.1)
Sub-national entities										
Flanders (Belgium)	1.7	(0.0)	1.8	(0.0)	1.5	(0.1)	1.6	(0.1)	1.3	(0.1)
England (UK)	1.8	(0.0)	1.8	(0.0)	1.5	(0.0)	1.4	(0.1)	1.5	(0.1)
Northern Ireland (UK)	1.6	(0.1)	1.6	(0.1)	1.6	(0.1)	1.3	(0.1)	1.3	(0.1)
England/N. Ireland (UK)	1.8	(0.0)	1.8	(0.0)	1.5	(0.0)	1.4	(0.1)	1.5	(0.1)
Average	1.7	(0.0)	1.7	(0.0)	1.7	(0.0)	1.5	(0.0)	1.4	(0.0)
Partners										
Cyprus[1]	1.5	(0.0)	1.5	(0.1)	1.7	(0.1)	1.4	(0.1)	1.5	(0.1)

[Part 6/9]

Table A4.17 **Mean use of information-processing skills at work, by occupation**

OECD	Skilled agricultural, forestry and fishery workers									
	Reading at work		Writing at work		Numeracy at work		ICT at work		Problem solving	
	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities										
Australia	2.0	(0.1)	1.4	(0.1)	2.0	(0.1)	1.7	(0.1)	2.0	(0.1)
Austria	2.0	(0.1)	1.0	(0.1)	1.6	(0.1)	1.2	(0.1)	1.5	(0.1)
Canada	2.1	(0.1)	1.3	(0.1)	2.0	(0.1)	1.3	(0.1)	1.8	(0.1)
Czech Republic	c	c	c	c	c	c	c	c	1.6	(0.5)
Denmark	2.1	(0.1)	1.3	(0.1)	1.9	(0.1)	1.5	(0.1)	1.5	(0.1)
Estonia	1.8	(0.1)	1.4	(0.1)	1.9	(0.1)	1.6	(0.1)	1.5	(0.1)
Finland	2.0	(0.1)	1.4	(0.1)	1.9	(0.1)	1.2	(0.1)	1.5	(0.1)
Germany	2.1	(0.1)	1.6	(0.1)	1.9	(0.1)	1.4	(0.2)	1.5	(0.1)
Ireland	2.0	(0.1)	0.9	(0.1)	1.6	(0.1)	1.0	(0.1)	1.5	(0.1)
Italy	1.1	(0.2)	c	c	1.1	(0.1)	c	c	1.8	(0.2)
Japan	1.7	(0.1)	1.4	(0.1)	1.3	(0.1)	c	c	1.0	(0.2)
Korea	1.5	(0.1)	1.3	(0.1)	1.1	(0.1)	0.8	(0.2)	1.1	(0.1)
Netherlands	2.2	(0.1)	1.4	(0.1)	2.1	(0.1)	1.8	(0.1)	1.6	(0.1)
Norway	2.2	(0.1)	1.5	(0.1)	1.7	(0.1)	1.5	(0.1)	1.7	(0.2)
Poland	1.3	(0.1)	0.4	(0.1)	1.4	(0.1)	1.2	(0.1)	1.5	(0.1)
Slovak Republic	c	c	c	c	c	c	c	c	1.3	(0.3)
Spain	1.2	(0.1)	1.2	(0.1)	1.2	(0.1)	c	c	1.2	(0.1)
Sweden	2.2	(0.1)	1.4	(0.1)	1.9	(0.1)	1.5	(0.2)	1.4	(0.1)
United States	1.8	(0.3)	c	c	c	c	c	c	1.9	(0.2)
Sub-national entities										
Flanders (Belgium)	2.1	(0.2)	1.6	(0.1)	1.8	(0.2)	c	c	1.5	(0.2)
England (UK)	1.9	(0.2)	c	c	c	c	c	c	1.8	(0.2)
Northern Ireland (UK)	2.0	(0.2)	0.9	(0.2)	1.3	(0.1)	c	c	1.7	(0.2)
England/N. Ireland (UK)	1.9	(0.2)	1.2	(0.3)	1.6	(0.2)	1.8	(0.3)	1.8	(0.2)
Average	1.9	(0.0)	1.3	(0.0)	1.7	(0.0)	1.4	(0.0)	1.5	(0.0)
Partners										
Cyprus[1]	c	c	c	c	c	c	c	c	c	c

1. See notes on page 250.

Note: ISCO 1-digit occupation.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898237

[Part 7/9]

Table A4.17 **Mean use of information-processing skills at work, by occupation**

	Craft and related trades workers									
	Reading at work		Writing at work		Numeracy at work		ICT at work		Problem solving	
OECD	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities										
Australia	2.0	(0.1)	1.7	(0.1)	2.0	(0.1)	1.4	(0.1)	2.2	(0.1)
Austria	1.6	(0.0)	1.6	(0.1)	1.7	(0.0)	1.3	(0.1)	1.6	(0.1)
Canada	1.9	(0.0)	1.8	(0.1)	2.1	(0.0)	1.5	(0.1)	1.9	(0.1)
Czech Republic	1.5	(0.1)	1.5	(0.1)	1.9	(0.1)	1.6	(0.1)	1.9	(0.1)
Denmark	1.8	(0.1)	1.7	(0.0)	1.8	(0.0)	1.5	(0.1)	1.7	(0.1)
Estonia	1.4	(0.0)	1.2	(0.0)	1.6	(0.0)	1.3	(0.1)	1.7	(0.0)
Finland	1.8	(0.0)	1.5	(0.0)	2.0	(0.0)	1.3	(0.1)	1.7	(0.0)
Germany	1.8	(0.0)	1.9	(0.0)	1.7	(0.1)	1.6	(0.1)	1.8	(0.1)
Ireland	1.8	(0.1)	1.7	(0.1)	1.8	(0.1)	1.8	(0.1)	1.8	(0.1)
Italy	1.2	(0.1)	1.4	(0.1)	1.6	(0.1)	1.6	(0.1)	2.0	(0.1)
Japan	1.7	(0.1)	2.1	(0.1)	1.8	(0.0)	1.3	(0.1)	1.3	(0.1)
Korea	1.8	(0.1)	2.0	(0.1)	1.9	(0.1)	1.7	(0.1)	1.5	(0.1)
Netherlands	1.5	(0.1)	1.5	(0.1)	1.5	(0.1)	1.4	(0.1)	1.4	(0.1)
Norway	2.1	(0.0)	1.9	(0.1)	1.7	(0.0)	1.6	(0.1)	1.9	(0.1)
Poland	1.0	(0.1)	1.2	(0.1)	1.5	(0.1)	1.4	(0.1)	1.5	(0.1)
Slovak Republic	1.2	(0.1)	1.3	(0.1)	1.6	(0.1)	1.5	(0.1)	1.8	(0.1)
Spain	1.5	(0.1)	1.7	(0.1)	1.9	(0.1)	1.6	(0.1)	2.0	(0.1)
Sweden	1.8	(0.0)	1.6	(0.1)	1.7	(0.1)	1.3	(0.1)	1.8	(0.1)
United States	1.9	(0.0)	1.7	(0.1)	2.1	(0.1)	1.5	(0.1)	2.2	(0.1)
Sub-national entities										
Flanders (Belgium)	1.5	(0.1)	1.6	(0.1)	1.6	(0.1)	1.4	(0.1)	1.7	(0.1)
England (UK)	2.0	(0.0)	1.8	(0.1)	1.9	(0.1)	1.7	(0.1)	2.3	(0.1)
Northern Ireland (UK)	1.7	(0.1)	1.4	(0.1)	1.8	(0.1)	1.5	(0.1)	2.1	(0.1)
England/N. Ireland (UK)	2.0	(0.0)	1.8	(0.1)	1.9	(0.1)	1.7	(0.1)	2.3	(0.1)
Average	1.6	(0.0)	1.6	(0.0)	1.8	(0.0)	1.5	(0.0)	1.8	(0.0)
Partners										
Cyprus[1]	1.3	(0.1)	1.2	(0.1)	1.8	(0.1)	1.4	(0.1)	1.6	(0.1)

[Part 8/9]

Table A4.17 **Mean use of information-processing skills at work, by occupation**

	Plant and machine operators, assemblers									
	Reading at work		Writing at work		Numeracy at work		ICT at work		Problem solving	
OECD	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities										
Australia	1.6	(0.1)	1.5	(0.1)	1.7	(0.1)	1.2	(0.2)	1.5	(0.1)
Austria	1.3	(0.1)	1.6	(0.1)	1.5	(0.1)	1.3	(0.1)	1.0	(0.1)
Canada	1.6	(0.0)	1.8	(0.1)	1.8	(0.1)	1.3	(0.1)	1.3	(0.1)
Czech Republic	1.3	(0.1)	1.3	(0.1)	1.7	(0.1)	1.1	(0.1)	1.3	(0.1)
Denmark	1.6	(0.1)	1.7	(0.1)	1.4	(0.1)	1.2	(0.1)	1.2	(0.1)
Estonia	1.2	(0.0)	1.3	(0.0)	1.5	(0.0)	1.0	(0.1)	1.2	(0.0)
Finland	1.7	(0.0)	1.7	(0.0)	1.8	(0.1)	1.1	(0.1)	1.1	(0.1)
Germany	1.4	(0.1)	1.6	(0.1)	1.6	(0.1)	1.1	(0.1)	1.1	(0.1)
Ireland	1.6	(0.1)	1.6	(0.1)	1.8	(0.1)	1.3	(0.1)	1.3	(0.1)
Italy	0.8	(0.1)	1.0	(0.1)	1.3	(0.1)	1.0	(0.3)	1.4	(0.1)
Japan	1.5	(0.1)	2.0	(0.1)	1.7	(0.1)	1.0	(0.1)	1.1	(0.1)
Korea	1.5	(0.1)	1.9	(0.1)	1.6	(0.1)	1.3	(0.1)	1.2	(0.1)
Netherlands	1.4	(0.1)	1.4	(0.1)	1.5	(0.1)	1.1	(0.1)	1.1	(0.1)
Norway	1.9	(0.1)	1.8	(0.1)	1.5	(0.1)	1.4	(0.1)	1.3	(0.1)
Poland	1.0	(0.1)	1.7	(0.1)	1.5	(0.1)	1.2	(0.1)	1.1	(0.1)
Slovak Republic	1.0	(0.1)	1.3	(0.1)	1.5	(0.1)	1.1	(0.1)	1.4	(0.1)
Spain	1.2	(0.1)	1.7	(0.1)	1.7	(0.1)	1.3	(0.2)	1.6	(0.1)
Sweden	1.6	(0.1)	1.4	(0.1)	1.4	(0.1)	1.0	(0.1)	1.3	(0.1)
United States	1.6	(0.1)	1.6	(0.1)	1.9	(0.1)	1.0	(0.1)	1.4	(0.1)
Sub-national entities										
Flanders (Belgium)	1.2	(0.1)	1.7	(0.1)	1.3	(0.1)	1.0	(0.1)	1.0	(0.1)
England (UK)	1.6	(0.1)	1.6	(0.1)	1.6	(0.1)	1.2	(0.1)	1.2	(0.1)
Northern Ireland (UK)	1.4	(0.1)	1.3	(0.1)	1.5	(0.1)	c	c	1.4	(0.2)
England/N. Ireland (UK)	1.6	(0.1)	1.6	(0.1)	1.6	(0.1)	1.2	(0.1)	1.2	(0.1)
Average	1.4	(0.0)	1.6	(0.0)	1.6	(0.0)	1.2	(0.0)	1.2	(0.0)
Partners										
Cyprus[1]	1.2	(0.1)	1.6	(0.2)	1.5	(0.1)	c	c	1.4	(0.1)

1. See notes on page 250.

Note: ISCO 1-digit occupation.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898237

[Part 9/9]

Table A4.17 **Mean use of information-processing skills at work. by occupation**

	Elementary occupations									
	Reading at work		Writing at work		Numeracy at work		ICT at work		Problem solving	
OECD	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities										
Australia	1.4	(0.1)	1.2	(0.1)	1.6	(0.1)	1.0	(0.1)	1.3	(0.1)
Austria	0.9	(0.1)	1.2	(0.1)	1.3	(0.1)	1.2	(0.1)	0.6	(0.1)
Canada	1.1	(0.0)	1.3	(0.1)	1.5	(0.1)	0.7	(0.1)	1.0	(0.1)
Czech Republic	0.5	(0.1)	0.8	(0.1)	1.2	(0.1)	c	c	0.8	(0.1)
Denmark	1.1	(0.1)	1.2	(0.1)	1.5	(0.1)	1.2	(0.1)	0.7	(0.1)
Estonia	0.7	(0.1)	0.9	(0.1)	1.3	(0.1)	1.0	(0.1)	0.8	(0.1)
Finland	1.2	(0.1)	1.3	(0.1)	1.4	(0.1)	1.1	(0.1)	0.9	(0.1)
Germany	0.7	(0.1)	1.1	(0.1)	1.3	(0.1)	c	c	0.4	(0.0)
Ireland	1.2	(0.1)	1.4	(0.1)	1.5	(0.1)	1.5	(0.1)	1.0	(0.1)
Italy	0.5	(0.1)	0.9	(0.1)	1.1	(0.1)	c	c	1.1	(0.1)
Japan	1.2	(0.1)	1.5	(0.1)	1.2	(0.1)	1.0	(0.2)	0.6	(0.1)
Korea	1.1	(0.1)	1.7	(0.1)	1.5	(0.1)	1.0	(0.1)	0.8	(0.1)
Netherlands	0.8	(0.1)	1.0	(0.1)	1.2	(0.1)	1.1	(0.1)	0.6	(0.0)
Norway	1.3	(0.1)	1.1	(0.1)	1.1	(0.1)	1.2	(0.1)	0.7	(0.1)
Poland	0.8	(0.1)	1.0	(0.1)	1.2	(0.1)	1.2	(0.3)	0.7	(0.1)
Slovak Republic	0.6	(0.1)	1.1	(0.1)	1.4	(0.1)	c	c	0.9	(0.1)
Spain	0.8	(0.1)	1.3	(0.1)	1.3	(0.1)	1.1	(0.2)	0.9	(0.1)
Sweden	1.2	(0.1)	0.9	(0.1)	1.4	(0.1)	0.9	(0.1)	0.7	(0.1)
United States	1.2	(0.1)	1.1	(0.1)	1.6	(0.1)	0.8	(0.1)	1.2	(0.1)
Sub-national entities										
Flanders (Belgium)	0.8	(0.1)	1.2	(0.1)	1.1	(0.1)	1.4	(0.1)	0.6	(0.1)
England (UK)	1.3	(0.1)	1.1	(0.1)	1.5	(0.1)	1.4	(0.1)	1.0	(0.1)
Northern Ireland (UK)	1.1	(0.1)	1.2	(0.1)	1.5	(0.1)	1.1	(0.2)	1.1	(0.1)
England/N. Ireland (UK)	1.3	(0.1)	1.1	(0.1)	1.5	(0.1)	1.4	(0.1)	1.0	(0.1)
Average	1.0	(0.0)	1.2	(0.0)	1.3	(0.0)	1.1	(0.0)	0.8	(0.0)
Partners										
Cyprus[1]	0.8	(0.1)	0.9	(0.1)	1.0	(0.2)	c	c	1.1	(0.1)

1. See notes on page 250.

Note: ISCO 1-digit occupation.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898237

[Part 1/9]

Table A4.18 Mean use of generic skills at work, by occupation

	Managers													
	Task discretion		Learning skills		Influencing skills		Co-operative skills		Self-organising skills		Dexterity		Physical skills	
OECD	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities														
Australia	2.3	(0.0)	2.1	(0.1)	2.9	(0.0)	2.9	(0.0)	3.9	(0.0)	3.3	(0.1)	1.8	(0.1)
Austria	2.9	(0.1)	2.1	(0.1)	2.6	(0.1)	2.4	(0.1)	3.7	(0.1)	2.1	(0.1)	1.2	(0.1)
Canada	2.4	(0.0)	2.2	(0.0)	2.7	(0.0)	2.9	(0.0)	3.7	(0.0)	2.8	(0.1)	1.3	(0.1)
Czech Republic	2.9	(0.1)	2.0	(0.1)	2.6	(0.1)	2.6	(0.1)	3.9	(0.1)	2.5	(0.2)	1.2	(0.1)
Denmark	2.8	(0.1)	2.2	(0.0)	2.9	(0.0)	3.1	(0.1)	3.9	(0.0)	2.2	(0.1)	1.2	(0.1)
Estonia	2.6	(0.0)	2.2	(0.0)	2.7	(0.0)	2.4	(0.1)	3.9	(0.0)	2.7	(0.1)	1.2	(0.1)
Finland	2.7	(0.1)	2.1	(0.1)	2.8	(0.1)	2.4	(0.1)	3.7	(0.1)	1.5	(0.1)	0.6	(0.1)
Germany	2.9	(0.1)	2.0	(0.1)	2.6	(0.1)	2.5	(0.1)	3.8	(0.1)	1.9	(0.2)	0.8	(0.1)
Ireland	2.2	(0.1)	2.1	(0.1)	2.8	(0.1)	3.1	(0.1)	3.6	(0.1)	3.1	(0.1)	2.0	(0.1)
Italy	2.3	(0.1)	2.0	(0.1)	2.4	(0.1)	2.6	(0.2)	3.7	(0.1)	2.5	(0.2)	1.7	(0.2)
Japan	2.9	(0.1)	1.9	(0.1)	2.6	(0.1)	2.6	(0.1)	3.5	(0.1)	1.0	(0.1)	0.7	(0.1)
Korea	2.6	(0.1)	1.4	(0.1)	2.5	(0.1)	2.0	(0.1)	3.3	(0.1)	1.9	(0.2)	1.1	(0.1)
Netherlands	2.5	(0.0)	2.1	(0.0)	2.5	(0.0)	2.2	(0.1)	3.8	(0.0)	2.1	(0.1)	1.5	(0.1)
Norway	2.8	(0.1)	2.2	(0.0)	2.6	(0.0)	2.3	(0.1)	3.7	(0.0)	1.4	(0.1)	1.2	(0.1)
Poland	2.6	(0.1)	1.9	(0.1)	2.6	(0.1)	2.8	(0.1)	3.9	(0.0)	2.4	(0.1)	1.0	(0.1)
Slovak Republic	2.7	(0.1)	2.3	(0.1)	2.5	(0.1)	2.6	(0.1)	3.8	(0.0)	2.8	(0.1)	1.3	(0.1)
Spain	2.6	(0.1)	2.6	(0.1)	2.7	(0.1)	2.8	(0.1)	3.9	(0.1)	2.0	(0.1)	1.9	(0.2)
Sweden	2.7	(0.1)	2.2	(0.1)	2.8	(0.0)	2.4	(0.1)	3.6	(0.1)	1.4	(0.1)	0.9	(0.1)
United States	2.5	(0.1)	2.3	(0.0)	2.8	(0.1)	2.8	(0.1)	3.8	(0.0)	3.1	(0.1)	1.7	(0.1)
Sub-national entities														
Flanders (Belgium)	2.9	(0.1)	2.1	(0.0)	2.6	(0.0)	2.6	(0.1)	3.8	(0.0)	1.6	(0.1)	1.0	(0.1)
England (UK)	2.4	(0.1)	2.1	(0.1)	2.7	(0.1)	2.9	(0.1)	3.8	(0.0)	3.0	(0.1)	1.3	(0.1)
Northern Ireland (UK)	2.1	(0.1)	2.0	(0.1)	2.8	(0.1)	3.0	(0.1)	3.7	(0.1)	2.9	(0.1)	1.6	(0.1)
England/N. Ireland (UK)	2.4	(0.1)	2.1	(0.1)	2.7	(0.1)	2.9	(0.1)	3.8	(0.0)	3.0	(0.1)	1.3	(0.1)
Average	2.6	(0.0)	2.1	(0.0)	2.7	(0.0)	2.6	(0.0)	3.7	(0.0)	2.3	(0.0)	1.3	(0.0)
Partners														
Cyprus[1]	2.3	(0.1)	2.2	(0.1)	2.6	(0.1)	2.8	(0.1)	3.7	(0.1)	2.8	(0.1)	1.7	(0.2)

[Part 2/9]

Table A4.18 Mean use of generic skills at work, by occupation

	Professionals													
	Task discretion		Learning skills		Influencing skills		Co-operative skills		Self-organising skills		Dexterity		Physical skills	
OECD	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities														
Australia	2.0	(0.0)	2.3	(0.0)	2.8	(0.0)	2.5	(0.0)	3.7	(0.0)	3.3	(0.0)	1.4	(0.1)
Austria	2.6	(0.0)	2.2	(0.0)	2.3	(0.0)	2.0	(0.1)	3.3	(0.1)	2.2	(0.1)	1.0	(0.1)
Canada	2.1	(0.0)	2.3	(0.0)	2.5	(0.0)	2.3	(0.0)	3.6	(0.0)	2.7	(0.0)	1.0	(0.0)
Czech Republic	2.3	(0.1)	1.8	(0.0)	2.4	(0.1)	2.0	(0.1)	3.6	(0.1)	2.6	(0.1)	0.9	(0.1)
Denmark	2.4	(0.0)	2.2	(0.0)	2.4	(0.0)	2.5	(0.0)	3.5	(0.0)	2.6	(0.1)	1.5	(0.0)
Estonia	2.1	(0.0)	2.1	(0.0)	2.3	(0.0)	1.8	(0.0)	3.7	(0.0)	2.9	(0.0)	0.7	(0.0)
Finland	2.5	(0.0)	2.1	(0.0)	2.7	(0.0)	1.9	(0.0)	3.6	(0.0)	1.9	(0.1)	0.6	(0.0)
Germany	2.4	(0.0)	2.1	(0.0)	2.2	(0.0)	1.9	(0.0)	3.5	(0.0)	2.2	(0.1)	0.8	(0.1)
Ireland	1.9	(0.0)	2.3	(0.0)	2.7	(0.0)	2.7	(0.1)	3.6	(0.0)	3.1	(0.1)	1.4	(0.1)
Italy	2.0	(0.0)	2.2	(0.1)	2.3	(0.0)	2.1	(0.1)	3.6	(0.1)	2.4	(0.1)	0.8	(0.1)
Japan	2.4	(0.0)	2.0	(0.0)	2.1	(0.0)	2.5	(0.1)	3.4	(0.0)	1.8	(0.1)	1.2	(0.1)
Korea	2.1	(0.0)	1.6	(0.0)	2.3	(0.0)	1.7	(0.1)	3.4	(0.0)	2.7	(0.1)	1.1	(0.1)
Netherlands	2.1	(0.0)	2.1	(0.0)	2.2	(0.0)	1.8	(0.0)	3.6	(0.0)	2.1	(0.1)	1.0	(0.0)
Norway	2.2	(0.0)	2.3	(0.0)	2.5	(0.0)	2.0	(0.0)	3.3	(0.0)	1.6	(0.1)	1.2	(0.1)
Poland	2.1	(0.0)	2.1	(0.0)	2.3	(0.1)	2.2	(0.1)	3.7	(0.0)	2.8	(0.1)	0.7	(0.1)
Slovak Republic	2.1	(0.1)	2.4	(0.0)	2.1	(0.0)	2.2	(0.1)	3.4	(0.1)	2.8	(0.1)	0.6	(0.1)
Spain	2.0	(0.0)	2.7	(0.0)	2.3	(0.1)	2.2	(0.1)	3.7	(0.0)	1.9	(0.1)	1.0	(0.1)
Sweden	2.4	(0.0)	2.3	(0.0)	2.4	(0.0)	2.2	(0.0)	3.6	(0.0)	2.0	(0.1)	1.1	(0.0)
United States	2.1	(0.0)	2.4	(0.0)	2.7	(0.1)	2.4	(0.0)	3.7	(0.0)	3.0	(0.1)	1.6	(0.1)
Sub-national entities														
Flanders (Belgium)	2.3	(0.0)	2.1	(0.0)	2.2	(0.0)	2.1	(0.0)	3.7	(0.0)	2.2	(0.1)	1.1	(0.1)
England (UK)	2.1	(0.0)	2.2	(0.0)	2.6	(0.1)	2.4	(0.1)	3.8	(0.0)	3.1	(0.1)	1.1	(0.1)
Northern Ireland (UK)	1.9	(0.1)	2.2	(0.1)	2.8	(0.1)	2.4	(0.1)	3.7	(0.0)	2.7	(0.1)	1.3	(0.1)
England/N. Ireland (UK)	2.1	(0.0)	2.2	(0.0)	2.6	(0.1)	2.4	(0.1)	3.8	(0.0)	3.1	(0.1)	1.1	(0.1)
Average	2.2	(0.0)	2.2	(0.0)	2.4	(0.0)	2.2	(0.0)	3.6	(0.0)	2.5	(0.0)	1.0	(0.0)
Partners														
Cyprus[1]	1.9	(0.1)	2.1	(0.0)	2.4	(0.1)	2.3	(0.1)	3.4	(0.1)	3.0	(0.1)	1.2	(0.1)

1. See notes on page 250.

Note: ISCO 1-digit occupation.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898256

[Part 3/9]

Table A4.18 **Mean use of generic skills at work, by occupation**

	Technicians and associate professionals													
	Task discretion		Learning skills		Influencing skills		Co-operative skills		Self-organising skills		Dexterity		Physical skills	
OECD	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities														
Australia	2.0	(0.0)	2.2	(0.0)	2.5	(0.0)	2.8	(0.1)	3.7	(0.0)	3.4	(0.1)	1.6	(0.1)
Austria	2.4	(0.0)	2.1	(0.0)	2.0	(0.0)	2.3	(0.0)	3.1	(0.1)	2.7	(0.1)	1.7	(0.1)
Canada	2.0	(0.0)	2.2	(0.0)	2.1	(0.0)	2.6	(0.0)	3.5	(0.0)	3.1	(0.0)	1.6	(0.0)
Czech Republic	2.4	(0.0)	2.0	(0.1)	2.0	(0.0)	2.1	(0.1)	3.7	(0.1)	2.4	(0.1)	1.0	(0.1)
Denmark	2.5	(0.0)	2.1	(0.0)	2.1	(0.0)	2.5	(0.1)	3.5	(0.0)	2.8	(0.1)	1.5	(0.1)
Estonia	2.1	(0.0)	2.1	(0.0)	2.2	(0.0)	2.2	(0.1)	3.7	(0.0)	2.9	(0.1)	1.3	(0.1)
Finland	2.3	(0.0)	2.2	(0.0)	2.5	(0.0)	2.1	(0.0)	3.4	(0.0)	2.5	(0.1)	1.2	(0.1)
Germany	2.3	(0.0)	2.1	(0.0)	1.9	(0.0)	2.2	(0.1)	3.2	(0.1)	2.9	(0.1)	1.5	(0.1)
Ireland	1.8	(0.0)	2.2	(0.1)	2.3	(0.1)	2.8	(0.1)	3.4	(0.1)	3.3	(0.1)	1.6	(0.1)
Italy	1.9	(0.1)	2.1	(0.1)	2.0	(0.0)	2.6	(0.1)	3.6	(0.1)	2.2	(0.1)	0.9	(0.1)
Japan	2.5	(0.0)	1.9	(0.0)	1.9	(0.0)	2.5	(0.1)	3.3	(0.1)	1.5	(0.1)	1.0	(0.1)
Korea	2.2	(0.1)	1.6	(0.1)	2.0	(0.0)	1.9	(0.1)	3.2	(0.1)	2.3	(0.1)	1.5	(0.1)
Netherlands	2.0	(0.0)	2.0	(0.0)	2.0	(0.0)	2.3	(0.1)	3.3	(0.1)	2.5	(0.1)	1.7	(0.1)
Norway	2.2	(0.0)	2.2	(0.0)	2.1	(0.0)	2.1	(0.0)	3.3	(0.1)	1.6	(0.1)	1.3	(0.1)
Poland	2.0	(0.1)	1.9	(0.1)	2.0	(0.1)	2.5	(0.1)	3.5	(0.1)	2.7	(0.1)	0.9	(0.1)
Slovak Republic	1.9	(0.0)	2.2	(0.1)	2.0	(0.0)	2.6	(0.1)	3.2	(0.1)	3.1	(0.1)	1.2	(0.1)
Spain	1.9	(0.1)	2.5	(0.1)	1.9	(0.1)	2.5	(0.1)	3.5	(0.1)	2.0	(0.1)	1.6	(0.1)
Sweden	2.4	(0.0)	2.2	(0.0)	2.2	(0.0)	2.0	(0.1)	3.5	(0.0)	1.9	(0.1)	1.0	(0.1)
United States	2.1	(0.0)	2.3	(0.0)	2.3	(0.0)	2.7	(0.1)	3.5	(0.0)	3.6	(0.0)	2.0	(0.1)
Sub-national entities														
Flanders (Belgium)	2.3	(0.0)	2.0	(0.0)	2.0	(0.0)	2.4	(0.1)	3.5	(0.0)	2.1	(0.1)	1.0	(0.1)
England (UK)	2.1	(0.0)	2.2	(0.1)	2.4	(0.0)	2.8	(0.1)	3.7	(0.0)	3.2	(0.1)	1.6	(0.1)
Northern Ireland (UK)	1.9	(0.1)	2.2	(0.1)	2.4	(0.1)	2.7	(0.1)	3.5	(0.1)	2.9	(0.1)	1.8	(0.1)
England/N. Ireland (UK)	2.1	(0.0)	2.2	(0.1)	2.4	(0.0)	2.8	(0.1)	3.7	(0.0)	3.2	(0.1)	1.6	(0.1)
Average	2.2	(0.0)	2.1	(0.0)	2.1	(0.0)	2.4	(0.0)	3.4	(0.0)	2.6	(0.0)	1.4	(0.0)
Partners														
Cyprus[1]	1.9	(0.1)	2.0	(0.0)	2.0	(0.0)	2.7	(0.1)	3.2	(0.1)	2.8	(0.1)	1.2	(0.1)

[Part 4/9]

Table A4.18 **Mean use of generic skills at work, by occupation**

	Clerical support workers													
	Task discretion		Learning skills		Influencing skills		Co-operative skills		Self-organising skills		Dexterity		Physical skills	
OECD	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities														
Australia	1.8	(0.1)	2.0	(0.1)	1.9	(0.1)	2.4	(0.1)	3.3	(0.1)	3.5	(0.1)	1.1	(0.1)
Austria	2.3	(0.0)	1.9	(0.0)	1.7	(0.0)	2.2	(0.1)	2.9	(0.1)	2.5	(0.1)	1.0	(0.1)
Canada	1.7	(0.0)	2.1	(0.0)	1.7	(0.0)	2.4	(0.0)	3.0	(0.1)	3.1	(0.1)	1.0	(0.1)
Czech Republic	2.1	(0.1)	1.8	(0.1)	1.8	(0.1)	2.2	(0.1)	3.3	(0.1)	2.6	(0.2)	1.2	(0.1)
Denmark	2.2	(0.1)	1.8	(0.0)	1.8	(0.0)	2.2	(0.1)	3.6	(0.1)	2.9	(0.1)	1.1	(0.1)
Estonia	1.7	(0.0)	1.9	(0.1)	1.9	(0.1)	2.0	(0.1)	3.3	(0.1)	3.0	(0.1)	1.3	(0.1)
Finland	2.2	(0.1)	2.1	(0.0)	2.0	(0.1)	1.9	(0.1)	3.0	(0.1)	2.5	(0.1)	0.8	(0.1)
Germany	2.3	(0.0)	1.9	(0.0)	1.7	(0.0)	2.0	(0.1)	3.5	(0.0)	2.7	(0.1)	1.1	(0.1)
Ireland	1.6	(0.0)	2.0	(0.1)	1.9	(0.1)	2.7	(0.1)	3.0	(0.1)	3.4	(0.1)	0.9	(0.1)
Italy	1.6	(0.1)	1.8	(0.1)	1.6	(0.0)	2.4	(0.1)	3.4	(0.1)	2.2	(0.1)	0.7	(0.1)
Japan	2.3	(0.0)	1.6	(0.0)	1.4	(0.0)	2.1	(0.1)	2.8	(0.1)	1.3	(0.1)	0.5	(0.1)
Korea	1.9	(0.0)	1.6	(0.0)	2.1	(0.0)	1.6	(0.0)	3.0	(0.1)	2.4	(0.1)	1.0	(0.1)
Netherlands	1.8	(0.0)	1.8	(0.0)	1.6	(0.1)	1.9	(0.1)	3.1	(0.1)	2.3	(0.1)	1.1	(0.1)
Norway	2.1	(0.1)	2.0	(0.1)	1.6	(0.1)	2.0	(0.1)	2.7	(0.1)	1.9	(0.1)	1.7	(0.1)
Poland	1.7	(0.1)	1.7	(0.1)	1.6	(0.1)	2.4	(0.1)	3.4	(0.1)	3.0	(0.1)	1.3	(0.1)
Slovak Republic	1.7	(0.1)	2.0	(0.1)	1.7	(0.1)	2.4	(0.1)	3.0	(0.1)	3.0	(0.1)	1.0	(0.1)
Spain	1.8	(0.0)	2.2	(0.1)	1.6	(0.0)	2.6	(0.1)	3.2	(0.1)	1.7	(0.1)	1.2	(0.1)
Sweden	2.2	(0.1)	2.0	(0.1)	1.7	(0.1)	2.0	(0.1)	3.2	(0.1)	2.4	(0.1)	1.4	(0.1)
United States	1.7	(0.1)	2.2	(0.1)	1.9	(0.1)	2.6	(0.1)	2.9	(0.1)	3.6	(0.1)	1.4	(0.1)
Sub-national entities														
Flanders (Belgium)	2.1	(0.0)	1.8	(0.0)	1.7	(0.1)	2.4	(0.1)	3.3	(0.1)	2.2	(0.1)	1.2	(0.1)
England (UK)	1.9	(0.1)	1.9	(0.1)	1.9	(0.1)	2.4	(0.1)	3.4	(0.1)	3.4	(0.1)	0.8	(0.1)
Northern Ireland (UK)	1.8	(0.1)	1.9	(0.1)	2.0	(0.0)	2.7	(0.1)	3.1	(0.1)	3.1	(0.1)	1.1	(0.1)
England/N. Ireland (UK)	1.9	(0.1)	1.9	(0.1)	1.9	(0.1)	2.5	(0.1)	3.4	(0.1)	3.4	(0.1)	0.8	(0.1)
Average	1.9	(0.0)	1.9	(0.0)	1.8	(0.0)	2.2	(0.0)	3.2	(0.0)	2.6	(0.0)	1.1	(0.0)
Partners														
Cyprus[1]	1.7	(0.1)	1.9	(0.1)	1.7	(0.1)	2.6	(0.1)	3.2	(0.1)	2.9	(0.1)	1.0	(0.1)

1. See notes on page 250.

Note: ISCO 1-digit occupation.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898256

[Part 5/9]

Table A4.18 **Mean use of generic skills at work, by occupation**

	Service and sales workers													
	Task discretion		Learning skills		Influencing skills		Co-operative skills		Self-organising skills		Dexterity		Physical skills	
OECD	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities														
Australia	1.5	(0.0)	2.2	(0.0)	2.2	(0.0)	2.9	(0.1)	2.8	(0.1)	3.4	(0.1)	2.9	(0.1)
Austria	2.2	(0.0)	1.9	(0.0)	1.8	(0.0)	2.6	(0.1)	2.1	(0.1)	3.3	(0.1)	3.0	(0.1)
Canada	1.7	(0.0)	2.1	(0.0)	1.9	(0.0)	2.7	(0.1)	2.9	(0.0)	3.3	(0.0)	2.7	(0.1)
Czech Republic	2.1	(0.1)	1.8	(0.1)	1.9	(0.0)	2.3	(0.1)	3.2	(0.1)	2.5	(0.1)	2.5	(0.1)
Denmark	2.1	(0.0)	2.0	(0.0)	2.0	(0.0)	2.6	(0.1)	3.0	(0.1)	3.1	(0.1)	3.0	(0.1)
Estonia	1.7	(0.0)	2.1	(0.0)	1.9	(0.0)	2.5	(0.1)	3.3	(0.1)	3.3	(0.1)	2.5	(0.1)
Finland	2.2	(0.0)	2.2	(0.0)	2.3	(0.0)	2.4	(0.0)	3.2	(0.1)	3.0	(0.1)	2.4	(0.1)
Germany	2.1	(0.0)	1.9	(0.0)	1.8	(0.0)	2.5	(0.1)	2.6	(0.1)	3.3	(0.0)	3.0	(0.1)
Ireland	1.4	(0.0)	1.9	(0.1)	2.0	(0.0)	2.8	(0.1)	2.3	(0.1)	3.2	(0.1)	2.8	(0.1)
Italy	1.8	(0.1)	1.9	(0.1)	1.8	(0.1)	2.5	(0.1)	3.2	(0.1)	2.9	(0.1)	2.8	(0.1)
Japan	2.2	(0.0)	1.9	(0.0)	1.6	(0.0)	2.9	(0.0)	2.6	(0.1)	1.6	(0.1)	1.9	(0.1)
Korea	2.0	(0.1)	1.4	(0.0)	1.7	(0.0)	2.1	(0.1)	2.7	(0.1)	1.4	(0.1)	2.4	(0.1)
Netherlands	1.6	(0.0)	1.8	(0.0)	1.7	(0.0)	2.6	(0.1)	2.4	(0.1)	2.6	(0.1)	3.1	(0.1)
Norway	1.9	(0.0)	2.2	(0.0)	1.9	(0.0)	2.6	(0.0)	2.0	(0.1)	2.4	(0.1)	2.9	(0.1)
Poland	2.0	(0.0)	1.8	(0.1)	2.0	(0.0)	2.6	(0.1)	3.1	(0.1)	3.3	(0.1)	2.7	(0.1)
Slovak Republic	1.7	(0.1)	2.0	(0.1)	1.8	(0.1)	2.3	(0.1)	2.5	(0.1)	3.2	(0.1)	2.6	(0.1)
Spain	1.8	(0.0)	2.3	(0.1)	1.7	(0.0)	2.6	(0.1)	3.1	(0.1)	2.4	(0.1)	2.4	(0.1)
Sweden	2.0	(0.0)	2.0	(0.0)	1.9	(0.0)	2.7	(0.1)	2.8	(0.1)	3.1	(0.1)	3.1	(0.1)
United States	1.8	(0.0)	2.2	(0.1)	2.1	(0.0)	3.0	(0.1)	2.6	(0.1)	3.4	(0.1)	3.2	(0.1)
Sub-national entities														
Flanders (Belgium)	2.0	(0.0)	1.8	(0.1)	1.8	(0.0)	2.7	(0.1)	2.9	(0.1)	3.0	(0.1)	2.7	(0.1)
England (UK)	1.6	(0.0)	2.1	(0.0)	2.1	(0.0)	2.8	(0.1)	2.7	(0.1)	3.1	(0.1)	2.9	(0.1)
Northern Ireland (UK)	1.4	(0.0)	1.9	(0.1)	2.1	(0.0)	2.9	(0.1)	2.7	(0.1)	3.0	(0.1)	3.0	(0.1)
England/N. Ireland (UK)	1.6	(0.0)	2.1	(0.0)	2.1	(0.0)	2.8	(0.1)	2.7	(0.1)	3.1	(0.1)	2.9	(0.1)
Average	1.9	(0.0)	2.0	(0.0)	1.9	(0.0)	2.6	(0.0)	2.8	(0.0)	2.9	(0.0)	2.7	(0.0)
Partners														
Cyprus[1]	1.6	(0.0)	2.0	(0.1)	1.9	(0.0)	2.7	(0.1)	2.9	(0.1)	3.0	(0.1)	2.8	(0.1)

[Part 6/9]

Table A4.18 **Mean use of generic skills at work, by occupation**

	Skilled agricultural, forestry and fishery workers													
	Task discretion		Learning skills		Influencing skills		Co-operative skills		Self-organising skills		Dexterity		Physical skills	
OECD	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities														
Australia	2.2	(0.1)	2.0	(0.2)	1.8	(0.1)	2.2	(0.3)	3.4	(0.1)	3.8	(0.1)	3.7	(0.1)
Austria	3.0	(0.1)	1.6	(0.1)	1.3	(0.1)	2.4	(0.2)	3.6	(0.1)	3.5	(0.1)	3.8	(0.0)
Canada	1.9	(0.1)	2.0	(0.1)	1.7	(0.1)	2.4	(0.1)	3.4	(0.1)	3.5	(0.1)	3.5	(0.1)
Czech Republic	2.7	(0.2)	c	c	c	c	c	c	3.9	(0.1)	3.6	(0.2)	3.9	(0.1)
Denmark	2.8	(0.1)	1.7	(0.1)	1.7	(0.1)	2.3	(0.1)	3.6	(0.1)	3.5	(0.1)	3.4	(0.1)
Estonia	2.1	(0.1)	1.7	(0.1)	1.6	(0.1)	2.0	(0.2)	3.4	(0.1)	3.6	(0.1)	3.6	(0.1)
Finland	2.2	(0.1)	1.9	(0.1)	1.4	(0.1)	1.8	(0.2)	3.1	(0.1)	3.2	(0.1)	3.5	(0.1)
Germany	2.8	(0.2)	1.6	(0.1)	1.3	(0.1)	2.3	(0.2)	3.3	(0.2)	3.6	(0.1)	3.7	(0.1)
Ireland	2.2	(0.1)	1.9	(0.1)	1.4	(0.1)	2.2	(0.2)	3.6	(0.1)	3.6	(0.1)	3.6	(0.1)
Italy	2.2	(0.2)	c	c	1.3	(0.1)	c	c	3.1	(0.2)	3.5	(0.2)	3.7	(0.1)
Japan	2.8	(0.2)	1.6	(0.1)	1.2	(0.1)	2.8	(0.2)	2.9	(0.2)	2.4	(0.2)	3.4	(0.1)
Korea	2.7	(0.2)	1.2	(0.1)	1.1	(0.1)	1.6	(0.2)	2.4	(0.2)	0.7	(0.1)	3.3	(0.1)
Netherlands	2.4	(0.2)	1.9	(0.1)	1.8	(0.2)	2.0	(0.2)	3.3	(0.2)	2.6	(0.2)	3.1	(0.2)
Norway	2.7	(0.2)	1.8	(0.1)	1.6	(0.1)	1.8	(0.2)	3.6	(0.1)	3.0	(0.2)	3.7	(0.1)
Poland	2.9	(0.1)	1.6	(0.1)	1.0	(0.1)	2.7	(0.2)	3.7	(0.1)	3.8	(0.0)	3.9	(0.0)
Slovak Republic	c	c	c	c	c	c	c	c	2.7	(0.3)	3.0	(0.3)	3.7	(0.1)
Spain	2.3	(0.1)	2.0	(0.1)	1.1	(0.1)	2.8	(0.2)	3.2	(0.2)	3.3	(0.2)	3.3	(0.1)
Sweden	2.8	(0.1)	2.0	(0.1)	1.6	(0.1)	2.2	(0.2)	3.2	(0.2)	3.3	(0.1)	3.6	(0.1)
United States	2.0	(0.2)	c	c	1.8	(0.2)	c	c	3.0	(0.3)	3.8	(0.1)	3.6	(0.2)
Sub-national entities														
Flanders (Belgium)	2.2	(0.2)	c	c	c	c	c	c	3.2	(0.2)	3.5	(0.2)	3.6	(0.1)
England (UK)	2.1	(0.2)	c	c	c	c	c	c	3.6	(0.2)	3.6	(0.2)	3.7	(0.1)
Northern Ireland (UK)	2.3	(0.2)	c	c	1.4	(0.1)	c	c	3.4	(0.2)	3.2	(0.2)	3.8	(0.1)
England/N. Ireland (UK)	2.1	(0.2)	2.1	(0.3)	1.7	(0.2)	2.2	(0.3)	3.6	(0.2)	3.6	(0.1)	3.7	(0.1)
Average	2.5	(0.0)	1.8	(0.0)	1.5	(0.0)	2.2	(0.1)	3.3	(0.0)	3.3	(0.0)	3.6	(0.0)
Partners														
Cyprus[1]	c	c	c	c	c	c	c	c	c	c	c	c	c	c

1. See notes on page 250.

Note: ISCO 1-digit occupation.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898256

[Part 7/9]

Table A4.18 **Mean use of generic skills at work, by occupation**

	Craft and related trades workers													
	Task discretion		Learning skills		Influencing skills		Co-operative skills		Self-organising skills		Dexterity		Physical skills	
OECD	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities														
Australia	1.8	(0.1)	2.2	(0.1)	2.0	(0.1)	2.8	(0.1)	3.0	(0.1)	3.8	(0.0)	3.5	(0.1)
Austria	2.0	(0.0)	1.9	(0.0)	1.6	(0.1)	2.9	(0.1)	2.2	(0.1)	3.7	(0.0)	3.4	(0.1)
Canada	1.7	(0.0)	2.3	(0.0)	1.8	(0.0)	2.6	(0.0)	2.9	(0.1)	3.8	(0.0)	3.4	(0.1)
Czech Republic	2.1	(0.1)	1.8	(0.1)	1.6	(0.1)	2.9	(0.1)	3.0	(0.1)	3.5	(0.1)	3.5	(0.1)
Denmark	2.2	(0.0)	1.9	(0.0)	1.8	(0.0)	2.6	(0.1)	3.3	(0.1)	3.7	(0.1)	3.5	(0.1)
Estonia	1.9	(0.0)	1.9	(0.0)	1.6	(0.0)	2.6	(0.1)	3.2	(0.1)	3.8	(0.0)	3.4	(0.0)
Finland	2.3	(0.0)	2.0	(0.0)	1.7	(0.0)	2.2	(0.1)	3.0	(0.1)	3.6	(0.0)	2.9	(0.1)
Germany	2.1	(0.0)	1.9	(0.0)	1.5	(0.0)	2.7	(0.1)	2.8	(0.1)	3.7	(0.0)	3.3	(0.1)
Ireland	1.7	(0.1)	1.9	(0.1)	1.8	(0.1)	2.9	(0.1)	2.8	(0.1)	3.7	(0.1)	3.4	(0.1)
Italy	1.7	(0.1)	1.9	(0.1)	1.5	(0.1)	2.8	(0.1)	3.1	(0.1)	3.6	(0.1)	3.3	(0.1)
Japan	2.2	(0.1)	1.7	(0.0)	1.7	(0.0)	2.7	(0.1)	2.8	(0.1)	2.9	(0.1)	2.5	(0.1)
Korea	1.9	(0.1)	1.4	(0.1)	1.7	(0.1)	2.3	(0.1)	2.7	(0.1)	2.3	(0.1)	3.2	(0.1)
Netherlands	1.7	(0.1)	1.9	(0.1)	1.4	(0.1)	2.5	(0.1)	2.4	(0.1)	3.6	(0.1)	3.6	(0.1)
Norway	2.2	(0.0)	2.1	(0.0)	1.9	(0.0)	2.5	(0.1)	2.9	(0.1)	3.4	(0.1)	3.5	(0.1)
Poland	1.7	(0.1)	1.6	(0.0)	1.4	(0.0)	3.1	(0.1)	2.8	(0.1)	3.9	(0.0)	3.7	(0.0)
Slovak Republic	1.5	(0.1)	2.0	(0.1)	1.3	(0.1)	2.9	(0.1)	2.3	(0.1)	3.6	(0.1)	3.6	(0.1)
Spain	2.0	(0.1)	2.5	(0.1)	1.5	(0.1)	2.8	(0.1)	3.2	(0.1)	3.6	(0.1)	3.4	(0.1)
Sweden	2.2	(0.0)	2.0	(0.1)	1.7	(0.0)	2.4	(0.1)	3.1	(0.1)	3.9	(0.0)	3.6	(0.1)
United States	1.9	(0.1)	2.2	(0.1)	1.8	(0.1)	2.8	(0.1)	2.8	(0.1)	3.8	(0.0)	3.5	(0.1)
Sub-national entities														
Flanders (Belgium)	2.0	(0.1)	1.8	(0.0)	1.5	(0.0)	2.8	(0.1)	2.8	(0.1)	3.8	(0.0)	3.3	(0.1)
England (UK)	2.0	(0.1)	2.0	(0.1)	1.9	(0.1)	2.5	(0.1)	3.2	(0.1)	3.9	(0.0)	3.5	(0.1)
Northern Ireland (UK)	1.7	(0.1)	2.0	(0.1)	1.9	(0.1)	2.8	(0.1)	3.2	(0.1)	3.7	(0.1)	3.4	(0.1)
England/N. Ireland (UK)	2.0	(0.1)	2.0	(0.1)	1.9	(0.1)	2.5	(0.1)	3.2	(0.1)	3.9	(0.0)	3.5	(0.1)
Average	1.9	(0.0)	2.0	(0.0)	1.6	(0.0)	2.7	(0.0)	2.9	(0.0)	3.6	(0.0)	3.4	(0.0)
Partners														
Cyprus1	1.7	(0.1)	2.0	(0.1)	1.6	(0.1)	2.8	(0.1)	2.9	(0.1)	3.6	(0.1)	3.6	(0.1)

[Part 8/9]

Table A4.18 **Mean use of generic skills at work, by occupation**

	Plant and machine operators, and assemblers													
	Task discretion		Learning skills		Influencing skills		Co-operative skills		Self-organising skills		Dexterity		Physical skills	
OECD	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities														
Australia	1.3	(0.1)	1.9	(0.1)	1.6	(0.1)	2.6	(0.1)	2.5	(0.1)	3.5	(0.1)	3.2	(0.1)
Austria	1.7	(0.1)	1.7	(0.1)	1.2	(0.1)	2.3	(0.1)	1.6	(0.2)	3.2	(0.1)	3.2	(0.1)
Canada	1.4	(0.1)	1.9	(0.0)	1.5	(0.0)	2.5	(0.1)	2.6	(0.1)	3.6	(0.1)	2.9	(0.1)
Czech Republic	1.6	(0.1)	1.5	(0.1)	1.3	(0.1)	2.4	(0.1)	2.5	(0.1)	3.0	(0.1)	3.2	(0.1)
Denmark	1.8	(0.1)	1.6	(0.1)	1.4	(0.1)	2.2	(0.1)	2.9	(0.1)	3.1	(0.1)	3.0	(0.1)
Estonia	1.5	(0.0)	1.6	(0.0)	1.3	(0.0)	2.3	(0.1)	2.9	(0.1)	3.5	(0.0)	2.9	(0.1)
Finland	1.9	(0.0)	2.0	(0.0)	1.5	(0.0)	1.9	(0.1)	2.6	(0.1)	2.9	(0.1)	2.4	(0.1)
Germany	1.6	(0.1)	1.7	(0.1)	1.2	(0.1)	2.2	(0.1)	2.0	(0.1)	3.5	(0.1)	3.1	(0.1)
Ireland	1.4	(0.1)	1.7	(0.1)	1.7	(0.1)	2.7	(0.1)	2.4	(0.2)	3.4	(0.1)	2.9	(0.1)
Italy	1.0	(0.1)	1.6	(0.1)	1.1	(0.1)	2.3	(0.1)	2.3	(0.2)	3.3	(0.1)	2.8	(0.1)
Japan	1.9	(0.1)	1.5	(0.0)	1.4	(0.1)	2.3	(0.1)	2.2	(0.1)	2.1	(0.1)	2.5	(0.1)
Korea	1.7	(0.1)	1.4	(0.1)	1.4	(0.0)	2.0	(0.1)	2.4	(0.1)	1.3	(0.1)	2.9	(0.1)
Netherlands	1.2	(0.1)	1.7	(0.1)	1.2	(0.1)	2.0	(0.1)	1.7	(0.2)	2.8	(0.2)	2.7	(0.2)
Norway	1.7	(0.1)	1.9	(0.1)	1.5	(0.1)	2.3	(0.1)	2.4	(0.2)	2.8	(0.1)	2.9	(0.1)
Poland	1.4	(0.1)	1.4	(0.1)	1.3	(0.1)	2.5	(0.1)	2.6	(0.1)	3.7	(0.1)	3.4	(0.1)
Slovak Republic	0.9	(0.1)	1.7	(0.1)	0.9	(0.1)	2.3	(0.1)	1.7	(0.1)	3.3	(0.1)	3.3	(0.1)
Spain	1.5	(0.1)	1.9	(0.1)	1.1	(0.1)	2.3	(0.1)	2.6	(0.2)	3.0	(0.1)	2.9	(0.1)
Sweden	1.8	(0.1)	1.7	(0.1)	1.4	(0.0)	2.4	(0.1)	2.6	(0.1)	3.2	(0.1)	2.8	(0.1)
United States	1.3	(0.1)	2.1	(0.1)	1.5	(0.1)	2.6	(0.1)	2.3	(0.1)	3.8	(0.1)	3.3	(0.1)
Sub-national entities														
Flanders (Belgium)	1.5	(0.1)	1.7	(0.1)	1.1	(0.1)	2.3	(0.1)	2.1	(0.1)	3.1	(0.1)	2.9	(0.1)
England (UK)	1.4	(0.1)	1.6	(0.1)	1.4	(0.1)	2.2	(0.1)	2.5	(0.1)	3.3	(0.1)	2.9	(0.1)
Northern Ireland (UK)	1.1	(0.1)	1.5	(0.2)	1.3	(0.1)	2.2	(0.2)	2.3	(0.2)	3.1	(0.2)	3.1	(0.2)
England/N. Ireland (UK)	1.4	(0.1)	1.6	(0.1)	1.4	(0.1)	2.2	(0.1)	2.5	(0.1)	3.3	(0.1)	2.9	(0.1)
Average	1.5	(0.0)	1.7	(0.0)	1.3	(0.0)	2.3	(0.0)	2.4	(0.0)	3.1	(0.0)	3.0	(0.0)
Partners														
Cyprus[1]	1.3	(0.1)	1.6	(0.1)	1.3	(0.1)	1.9	(0.2)	2.1	(0.2)	3.4	(0.2)	3.3	(0.1)

1. See notes on page 250.

Note: ISCO 1-digit occupation.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898256

[Part 9/9]

Table A4.18 Mean use of generic skills at work, by occupation

	Elementary occupations													
	Task discretion		Learning skills		Influencing skills		Co-operative skills		Self-organising skills		Dexterity		Physical skills	
OECD	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities														
Australia	1.6	(0.1)	2.0	(0.1)	1.6	(0.1)	2.8	(0.1)	2.5	(0.1)	3.4	(0.1)	3.6	(0.1)
Austria	1.9	(0.1)	1.4	(0.1)	1.0	(0.1)	2.4	(0.1)	1.8	(0.1)	3.3	(0.1)	3.7	(0.1)
Canada	1.5	(0.0)	1.9	(0.1)	1.3	(0.0)	2.7	(0.1)	2.6	(0.1)	3.5	(0.1)	3.6	(0.0)
Czech Republic	1.7	(0.1)	1.6	(0.2)	0.8	(0.1)	2.6	(0.2)	2.5	(0.2)	2.8	(0.2)	3.4	(0.1)
Denmark	2.1	(0.0)	1.5	(0.0)	1.3	(0.0)	2.3	(0.1)	2.9	(0.1)	3.2	(0.1)	3.4	(0.1)
Estonia	1.6	(0.0)	1.5	(0.1)	1.1	(0.0)	1.9	(0.1)	2.9	(0.1)	3.0	(0.1)	3.4	(0.1)
Finland	2.0	(0.1)	1.9	(0.1)	1.6	(0.1)	2.0	(0.1)	2.5	(0.1)	2.5	(0.1)	3.0	(0.1)
Germany	1.9	(0.1)	1.4	(0.1)	1.0	(0.1)	1.9	(0.1)	2.3	(0.1)	3.3	(0.1)	3.5	(0.1)
Ireland	1.3	(0.1)	1.6	(0.1)	1.6	(0.1)	2.7	(0.1)	2.1	(0.1)	3.2	(0.1)	3.4	(0.1)
Italy	1.3	(0.1)	1.6	(0.1)	1.0	(0.1)	2.4	(0.1)	2.6	(0.1)	2.9	(0.2)	3.4	(0.1)
Japan	1.8	(0.1)	1.5	(0.1)	1.2	(0.1)	2.7	(0.1)	1.9	(0.1)	1.7	(0.1)	2.6	(0.1)
Korea	1.3	(0.1)	1.3	(0.1)	1.3	(0.1)	2.1	(0.1)	2.0	(0.1)	0.9	(0.1)	3.3	(0.1)
Netherlands	1.4	(0.1)	1.4	(0.1)	1.2	(0.1)	2.1	(0.1)	1.8	(0.1)	2.5	(0.1)	3.6	(0.1)
Norway	1.9	(0.1)	1.6	(0.1)	1.3	(0.1)	2.1	(0.1)	2.0	(0.1)	2.2	(0.1)	3.6	(0.1)
Poland	1.6	(0.1)	1.3	(0.1)	1.1	(0.1)	2.5	(0.1)	2.6	(0.1)	3.7	(0.1)	3.7	(0.0)
Slovak Republic	1.3	(0.1)	1.5	(0.1)	0.8	(0.1)	2.7	(0.1)	1.8	(0.1)	2.8	(0.1)	3.6	(0.1)
Spain	1.8	(0.1)	2.0	(0.1)	1.0	(0.1)	2.1	(0.1)	2.8	(0.1)	3.0	(0.1)	3.2	(0.1)
Sweden	2.0	(0.1)	1.6	(0.1)	1.4	(0.1)	2.2	(0.1)	2.6	(0.2)	3.0	(0.2)	3.6	(0.1)
United States	1.6	(0.1)	2.0	(0.1)	1.4	(0.1)	2.9	(0.1)	2.3	(0.1)	3.6	(0.1)	3.6	(0.1)
Sub-national entities														
Flanders (Belgium)	1.8	(0.1)	1.5	(0.1)	1.0	(0.1)	1.9	(0.1)	2.2	(0.1)	3.5	(0.1)	3.6	(0.1)
England (UK)	1.5	(0.1)	1.7	(0.1)	1.5	(0.1)	2.5	(0.1)	2.3	(0.1)	3.1	(0.1)	3.3	(0.1)
Northern Ireland (UK)	1.4	(0.1)	1.6	(0.1)	1.4	(0.1)	2.4	(0.1)	2.2	(0.2)	2.7	(0.1)	3.2	(0.1)
England/N. Ireland (UK)	1.5	(0.1)	1.7	(0.1)	1.5	(0.1)	2.5	(0.1)	2.3	(0.1)	3.1	(0.1)	3.3	(0.1)
Average	1.7	(0.0)	1.6	(0.0)	1.2	(0.0)	2.4	(0.0)	2.3	(0.0)	2.9	(0.0)	3.4	(0.0)
Partners														
Cyprus[1]	1.4	(0.1)	1.6	(0.1)	1.1	(0.1)	2.5	(0.2)	2.6	(0.2)	3.0	(0.1)	3.8	(0.1)

1. See notes on page 250.

Note: ISCO 1-digit occupation.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898256

[Part 1/10]

Table A4.19 Mean use of information-processing skills at work, by industry

OECD	Agriculture/forestry/fishing									
	Reading at work		Writing at work		Numeracy at work		ICT at work		Problem solving	
	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities										
Australia	2.0	(0.1)	1.5	(0.1)	1.9	(0.1)	1.6	(0.1)	1.8	(0.1)
Austria	2.1	(0.1)	1.1	(0.1)	1.7	(0.1)	1.4	(0.1)	1.5	(0.1)
Canada	2.0	(0.1)	1.3	(0.1)	1.9	(0.1)	1.5	(0.1)	1.7	(0.1)
Czech Republic	1.5	(0.2)	1.5	(0.2)	1.6	(0.2)	1.8	(0.1)	1.9	(0.3)
Denmark	2.0	(0.1)	1.5	(0.1)	1.8	(0.1)	1.6	(0.1)	1.4	(0.1)
Estonia	1.6	(0.1)	1.2	(0.1)	1.8	(0.1)	1.6	(0.1)	1.4	(0.1)
Finland	2.1	(0.1)	1.4	(0.1)	1.9	(0.1)	1.3	(0.1)	1.5	(0.1)
Germany	2.1	(0.2)	1.6	(0.1)	1.9	(0.1)	1.5	(0.2)	1.4	(0.1)
Ireland	1.9	(0.1)	1.0	(0.1)	1.6	(0.1)	1.1	(0.2)	1.5	(0.1)
Italy	0.9	(0.2)	0.8	(0.2)	1.0	(0.2)	c	c	1.5	(0.1)
Japan	1.7	(0.1)	1.4	(0.1)	1.3	(0.1)	c	c	1.0	(0.2)
Korea	1.4	(0.1)	1.1	(0.1)	1.0	(0.1)	c	c	0.9	(0.1)
Netherlands	1.9	(0.3)	c	c	c	c	c	c	1.3	(0.2)
Norway	2.1	(0.1)	1.4	(0.1)	1.6	(0.1)	1.5	(0.1)	1.7	(0.1)
Poland	1.3	(0.1)	0.6	(0.1)	1.4	(0.1)	1.3	(0.1)	1.5	(0.1)
Slovak Republic	1.4	(0.1)	1.5	(0.1)	2.0	(0.1)	1.8	(0.2)	1.7	(0.1)
Spain	1.2	(0.2)	1.4	(0.1)	1.6	(0.2)	c	c	1.4	(0.1)
Sweden	2.0	(0.1)	1.4	(0.1)	1.9	(0.1)	1.6	(0.1)	1.5	(0.1)
United States	2.1	(0.2)	c	c	2.2	(0.1)	c	c	1.5	(0.2)
Sub-national entities										
Flanders (Belgium)	2.1	(0.1)	1.5	(0.1)	1.7	(0.1)	c	c	1.5	(0.2)
England (UK)	c	c	c	c	c	c	c	c	1.6	(0.4)
Northern Ireland (UK)	2.0	(0.2)	0.9	(0.2)	1.3	(0.1)	c	c	1.8	(0.2)
England/N. Ireland (UK)	1.9	(0.2)	1.5	(0.2)	1.6	(0.2)	1.8	(0.2)	1.7	(0.4)
Average	1.8	(0.0)	1.3	(0.0)	1.7	(0.0)	1.5	(0.0)	1.5	(0.0)
Partners										
Cyprus[1]	c	c	c	c	c	c	c	c	1.7	(0.2)

[Part 2/10]

Table A4.19 Mean use of information-processing skills at work, by industry

OECD	Manufacturing, mining and quarrying and other industrial activities									
	Reading at work		Writing at work		Numeracy at work		ICT at work		Problem solving	
	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities										
Australia	2.1	(0.1)	2.0	(0.1)	2.3	(0.1)	1.9	(0.1)	2.1	(0.1)
Austria	1.8	(0.0)	2.0	(0.0)	2.1	(0.0)	1.9	(0.1)	1.8	(0.1)
Canada	2.0	(0.0)	2.1	(0.0)	2.4	(0.0)	2.2	(0.0)	2.0	(0.0)
Czech Republic	1.6	(0.0)	1.7	(0.1)	2.1	(0.1)	1.9	(0.1)	1.8	(0.1)
Denmark	2.0	(0.0)	1.9	(0.0)	2.1	(0.0)	2.2	(0.1)	1.9	(0.0)
Estonia	1.5	(0.0)	1.6	(0.0)	1.9	(0.0)	2.0	(0.1)	1.5	(0.0)
Finland	2.0	(0.0)	1.9	(0.0)	2.2	(0.0)	1.9	(0.0)	1.8	(0.0)
Germany	1.9	(0.0)	2.0	(0.0)	2.1	(0.0)	2.0	(0.0)	1.9	(0.0)
Ireland	1.9	(0.1)	2.1	(0.1)	2.2	(0.1)	2.1	(0.1)	1.9	(0.1)
Italy	1.3	(0.1)	1.7	(0.1)	1.9	(0.1)	2.1	(0.1)	1.8	(0.1)
Japan	1.9	(0.0)	2.3	(0.0)	2.1	(0.0)	1.8	(0.0)	1.5	(0.0)
Korea	2.0	(0.0)	2.3	(0.0)	2.2	(0.0)	2.3	(0.1)	1.6	(0.1)
Netherlands	1.9	(0.0)	1.9	(0.0)	2.1	(0.0)	2.1	(0.1)	1.7	(0.1)
Norway	2.2	(0.0)	2.1	(0.0)	2.0	(0.1)	2.1	(0.1)	2.1	(0.1)
Poland	1.4	(0.1)	1.9	(0.1)	1.9	(0.0)	2.0	(0.1)	1.6	(0.1)
Slovak Republic	1.5	(0.0)	1.7	(0.0)	2.0	(0.0)	2.0	(0.1)	1.8	(0.1)
Spain	1.6	(0.1)	2.0	(0.1)	2.1	(0.1)	2.0	(0.1)	1.7	(0.1)
Sweden	2.0	(0.0)	1.8	(0.0)	2.0	(0.0)	1.8	(0.1)	1.8	(0.1)
United States	2.0	(0.0)	2.2	(0.1)	2.3	(0.0)	2.2	(0.1)	2.1	(0.1)
Sub-national entities										
Flanders (Belgium)	1.8	(0.0)	2.0	(0.0)	2.1	(0.1)	1.9	(0.0)	1.8	(0.0)
England (UK)	2.0	(0.1)	2.1	(0.1)	2.3	(0.1)	2.2	(0.1)	2.0	(0.1)
Northern Ireland (UK)	1.8	(0.1)	2.0	(0.1)	2.2	(0.1)	2.0	(0.1)	2.0	(0.1)
England/N. Ireland (UK)	2.0	(0.1)	2.1	(0.1)	2.3	(0.1)	2.2	(0.1)	2.0	(0.1)
Average	1.8	(0.0)	2.0	(0.0)	2.1	(0.0)	2.0	(0.0)	1.8	(0.0)
Partners										
Cyprus[1]	1.6	(0.1)	1.7	(0.1)	2.0	(0.1)	1.7	(0.1)	1.7	(0.1)

1. See notes on page 250.

Note: High-level SNA/ISIC aggregation of industries.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898275

[Part 3/10]

Table A4.19 **Mean use of information-processing skills at work, by industry**

	Construction									
	Reading at work		Writing at work		Numeracy at work		ICT at work		Problem solving	
OECD	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities										
Australia	2.0	(0.1)	1.7	(0.1)	2.2	(0.1)	1.8	(0.1)	2.2	(0.1)
Austria	1.7	(0.1)	1.8	(0.1)	1.9	(0.1)	2.0	(0.1)	1.7	(0.1)
Canada	1.8	(0.0)	1.8	(0.1)	2.3	(0.1)	1.9	(0.1)	1.9	(0.1)
Czech Republic	1.7	(0.1)	1.5	(0.1)	2.1	(0.1)	2.0	(0.1)	2.0	(0.1)
Denmark	1.7	(0.1)	1.5	(0.1)	1.9	(0.1)	1.7	(0.1)	1.5	(0.1)
Estonia	1.7	(0.0)	1.3	(0.1)	2.0	(0.0)	2.2	(0.1)	1.8	(0.1)
Finland	1.9	(0.0)	1.7	(0.1)	2.2	(0.1)	1.8	(0.1)	1.9	(0.1)
Germany	1.9	(0.1)	2.0	(0.1)	2.1	(0.1)	2.0	(0.1)	1.7	(0.1)
Ireland	1.9	(0.1)	1.7	(0.1)	2.1	(0.1)	2.5	(0.1)	2.1	(0.1)
Italy	1.3	(0.1)	1.6	(0.1)	1.8	(0.1)	2.2	(0.2)	2.0	(0.1)
Japan	2.0	(0.1)	2.1	(0.1)	2.1	(0.0)	1.7	(0.1)	1.5	(0.1)
Korea	2.1	(0.1)	2.2	(0.1)	2.1	(0.1)	2.2	(0.1)	1.6	(0.1)
Netherlands	1.8	(0.1)	1.8	(0.1)	2.1	(0.1)	2.1	(0.1)	1.6	(0.1)
Norway	2.1	(0.0)	2.0	(0.1)	1.9	(0.1)	1.9	(0.1)	1.9	(0.1)
Poland	1.2	(0.1)	1.5	(0.1)	1.8	(0.1)	2.2	(0.1)	1.6	(0.1)
Slovak Republic	1.5	(0.1)	1.5	(0.1)	2.0	(0.1)	2.2	(0.1)	2.0	(0.1)
Spain	1.5	(0.1)	1.8	(0.1)	2.1	(0.1)	2.1	(0.1)	2.1	(0.1)
Sweden	1.9	(0.0)	1.6	(0.1)	1.9	(0.1)	1.8	(0.1)	1.9	(0.1)
United States	1.9	(0.1)	1.8	(0.1)	2.4	(0.1)	1.8	(0.1)	2.2	(0.1)
Sub-national entities										
Flanders (Belgium)	1.6	(0.1)	1.8	(0.1)	2.0	(0.1)	2.1	(0.1)	1.8	(0.1)
England (UK)	2.0	(0.1)	1.8	(0.1)	2.0	(0.1)	2.1	(0.1)	2.3	(0.1)
Northern Ireland (UK)	1.8	(0.1)	1.5	(0.1)	2.0	(0.1)	2.1	(0.1)	2.3	(0.1)
England/N. Ireland (UK)	2.0	(0.1)	1.8	(0.1)	2.0	(0.1)	2.1	(0.1)	2.3	(0.1)
Average	1.8	(0.0)	1.7	(0.0)	2.0	(0.0)	2.0	(0.0)	1.9	(0.0)
Partners										
Cyprus[1]	1.6	(0.1)	1.5	(0.1)	1.9	(0.1)	1.8	(0.1)	1.9	(0.1)

[Part 4/10]

Table A4.19 **Mean use of information-processing skills at work, by industry**

	Wholesale and retail trade, transportation and storage, accommodation and food service activities									
	Reading at work		Writing at work		Numeracy at work		ICT at work		Problem solving	
OECD	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities										
Australia	1.9	(0.0)	1.8	(0.0)	2.1	(0.0)	1.8	(0.0)	1.8	(0.1)
Austria	1.9	(0.0)	1.8	(0.0)	1.9	(0.0)	1.8	(0.0)	1.4	(0.0)
Canada	1.8	(0.0)	1.8	(0.0)	2.1	(0.0)	1.7	(0.0)	1.5	(0.0)
Czech Republic	1.8	(0.1)	1.7	(0.1)	2.2	(0.1)	2.0	(0.1)	1.6	(0.1)
Denmark	1.9	(0.0)	1.7	(0.0)	2.0	(0.0)	1.9	(0.1)	1.4	(0.0)
Estonia	1.9	(0.0)	1.6	(0.0)	2.2	(0.0)	2.1	(0.0)	1.6	(0.0)
Finland	2.0	(0.0)	1.8	(0.0)	2.3	(0.0)	1.7	(0.0)	1.6	(0.0)
Germany	1.8	(0.0)	1.7	(0.0)	1.9	(0.0)	1.7	(0.1)	1.3	(0.1)
Ireland	1.7	(0.0)	1.7	(0.1)	2.0	(0.0)	1.7	(0.1)	1.4	(0.1)
Italy	1.4	(0.1)	1.4	(0.0)	1.9	(0.0)	1.9	(0.1)	1.8	(0.1)
Japan	1.9	(0.0)	2.0	(0.0)	1.8	(0.0)	1.4	(0.0)	1.2	(0.0)
Korea	1.8	(0.0)	2.0	(0.1)	1.9	(0.0)	1.8	(0.1)	1.3	(0.0)
Netherlands	1.7	(0.0)	1.6	(0.0)	1.9	(0.0)	1.8	(0.0)	1.3	(0.0)
Norway	2.1	(0.0)	1.8	(0.0)	1.9	(0.0)	1.7	(0.0)	1.5	(0.0)
Poland	1.6	(0.0)	1.8	(0.0)	2.1	(0.0)	1.8	(0.1)	1.5	(0.0)
Slovak Republic	1.6	(0.0)	1.8	(0.0)	2.2	(0.0)	2.0	(0.1)	1.7	(0.1)
Spain	1.6	(0.0)	1.7	(0.0)	2.1	(0.0)	1.8	(0.1)	1.6	(0.1)
Sweden	2.0	(0.0)	1.7	(0.0)	2.0	(0.0)	1.7	(0.0)	1.6	(0.1)
United States	1.9	(0.0)	1.8	(0.1)	2.3	(0.0)	1.6	(0.1)	1.7	(0.1)
Sub-national entities										
Flanders (Belgium)	1.8	(0.0)	1.9	(0.0)	1.9	(0.0)	2.0	(0.0)	1.6	(0.1)
England (UK)	1.6	(0.0)	1.7	(0.0)	1.9	(0.0)	1.7	(0.1)	1.4	(0.0)
Northern Ireland (UK)	1.7	(0.1)	1.5	(0.1)	1.9	(0.1)	1.6	(0.1)	1.5	(0.1)
England/N. Ireland (UK)	1.6	(0.0)	1.6	(0.0)	1.9	(0.0)	1.7	(0.1)	1.4	(0.0)
Average	1.8	(0.0)	1.8	(0.0)	2.0	(0.0)	1.8	(0.0)	1.5	(0.0)
Partners										
Cyprus[1]	1.6	(0.0)	1.6	(0.0)	2.0	(0.0)	1.8	(0.1)	1.6	(0.1)

1. See notes on page 250.

Note: High-level SNA/ISIC aggregation of industries.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898275

[Part 5/10]

Table A4.19 **Mean use of information-processing skills at work, by industry**

	Information and communication									
	Reading at work		Writing at work		Numeracy at work		ICT at work		Problem solving	
OECD	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities										
Australia	2.6	(0.1)	2.4	(0.1)	2.4	(0.1)	2.9	(0.1)	2.8	(0.1)
Austria	2.5	(0.1)	2.5	(0.1)	2.2	(0.1)	2.4	(0.1)	2.5	(0.2)
Canada	2.6	(0.1)	2.4	(0.1)	2.4	(0.1)	2.7	(0.1)	2.6	(0.1)
Czech Republic	2.4	(0.1)	2.5	(0.2)	2.4	(0.1)	2.6	(0.1)	2.6	(0.2)
Denmark	2.4	(0.1)	2.2	(0.1)	2.2	(0.1)	2.8	(0.1)	2.7	(0.1)
Estonia	2.5	(0.1)	2.0	(0.1)	2.1	(0.1)	2.7	(0.1)	2.5	(0.1)
Finland	2.6	(0.0)	2.4	(0.0)	2.3	(0.1)	2.6	(0.1)	2.4	(0.1)
Germany	2.5	(0.1)	2.4	(0.1)	2.3	(0.1)	2.5	(0.1)	2.3	(0.1)
Ireland	2.4	(0.1)	2.5	(0.1)	2.2	(0.1)	2.9	(0.1)	2.7	(0.1)
Italy	2.5	(0.1)	2.2	(0.1)	2.4	(0.2)	2.8	(0.2)	2.6	(0.1)
Japan	2.6	(0.1)	2.6	(0.1)	2.1	(0.1)	2.6	(0.1)	2.1	(0.1)
Korea	2.7	(0.1)	2.9	(0.1)	2.1	(0.1)	3.1	(0.2)	2.4	(0.1)
Netherlands	2.3	(0.1)	2.3	(0.1)	2.3	(0.1)	2.7	(0.1)	2.4	(0.1)
Norway	2.5	(0.0)	2.3	(0.1)	2.2	(0.1)	2.7	(0.1)	2.5	(0.1)
Poland	2.4	(0.1)	2.3	(0.1)	2.0	(0.1)	2.6	(0.1)	2.4	(0.1)
Slovak Republic	2.5	(0.1)	2.4	(0.1)	2.3	(0.1)	2.7	(0.1)	2.9	(0.1)
Spain	2.4	(0.1)	2.3	(0.1)	2.1	(0.1)	2.6	(0.1)	2.5	(0.2)
Sweden	2.6	(0.1)	2.2	(0.1)	2.0	(0.1)	2.7	(0.1)	2.7	(0.1)
United States	2.5	(0.1)	2.3	(0.1)	2.3	(0.1)	3.1	(0.1)	2.8	(0.1)
Sub-national entities										
Flanders (Belgium)	2.5	(0.1)	2.3	(0.1)	2.2	(0.1)	2.7	(0.1)	2.7	(0.1)
England (UK)	2.5	(0.0)	2.5	(0.1)	2.4	(0.1)	2.9	(0.1)	2.6	(0.1)
Northern Ireland (UK)	2.6	(0.1)	2.5	(0.1)	2.2	(0.1)	3.0	(0.2)	2.9	(0.2)
England/N. Ireland (UK)	2.5	(0.0)	2.5	(0.1)	2.4	(0.1)	2.9	(0.1)	2.6	(0.1)
Average	2.5	(0.0)	2.4	(0.0)	2.2	(0.0)	2.7	(0.0)	2.5	(0.0)
Partners										
Cyprus[1]	2.4	(0.2)	2.4	(0.1)	2.0	(0.2)	2.4	(0.2)	2.4	(0.2)

[Part 6/10]

Table A4.19 **Mean use of information-processing skills at work, by industry**

	Financial and insurance activities									
	Reading at work		Writing at work		Numeracy at work		ICT at work		Problem solving	
OECD	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities										
Australia	2.6	(0.1)	2.5	(0.1)	2.5	(0.1)	2.8	(0.1)	2.6	(0.1)
Austria	2.6	(0.0)	2.5	(0.1)	2.5	(0.1)	2.4	(0.1)	2.6	(0.1)
Canada	2.5	(0.0)	2.5	(0.0)	2.7	(0.1)	2.7	(0.1)	2.4	(0.1)
Czech Republic	2.6	(0.1)	2.6	(0.1)	2.9	(0.1)	2.6	(0.1)	2.5	(0.2)
Denmark	2.5	(0.1)	2.1	(0.1)	2.5	(0.1)	2.8	(0.1)	2.4	(0.1)
Estonia	2.5	(0.0)	2.1	(0.0)	2.7	(0.1)	2.7	(0.1)	2.3	(0.1)
Finland	2.5	(0.1)	2.4	(0.1)	2.7	(0.1)	2.7	(0.1)	2.2	(0.1)
Germany	2.6	(0.1)	2.3	(0.1)	2.6	(0.1)	2.3	(0.1)	2.3	(0.1)
Ireland	2.4	(0.1)	2.6	(0.1)	2.7	(0.1)	2.6	(0.1)	2.6	(0.1)
Italy	2.5	(0.1)	2.4	(0.1)	2.8	(0.2)	2.7	(0.2)	2.9	(0.1)
Japan	2.4	(0.1)	2.7	(0.1)	2.0	(0.1)	1.7	(0.1)	1.9	(0.2)
Korea	2.8	(0.1)	2.7	(0.1)	2.5	(0.1)	2.4	(0.1)	2.3	(0.1)
Netherlands	2.4	(0.1)	2.3	(0.1)	2.4	(0.1)	2.7	(0.1)	2.5	(0.1)
Norway	2.4	(0.1)	2.3	(0.1)	2.5	(0.1)	2.9	(0.1)	2.4	(0.1)
Poland	2.2	(0.1)	2.4	(0.1)	2.5	(0.2)	2.5	(0.1)	2.2	(0.1)
Slovak Republic	2.4	(0.1)	2.5	(0.1)	2.7	(0.1)	2.5	(0.1)	2.6	(0.1)
Spain	2.8	(0.1)	2.6	(0.1)	2.8	(0.1)	2.6	(0.1)	2.6	(0.1)
Sweden	2.6	(0.1)	2.1	(0.1)	2.4	(0.1)	2.6	(0.1)	2.5	(0.1)
United States	2.5	(0.0)	2.5	(0.1)	2.6	(0.1)	2.7	(0.1)	2.7	(0.1)
Sub-national entities										
Flanders (Belgium)	2.6	(0.1)	2.4	(0.1)	2.7	(0.1)	2.4	(0.1)	2.5	(0.1)
England (UK)	2.5	(0.1)	2.5	(0.1)	2.8	(0.1)	2.7	(0.1)	2.8	(0.1)
Northern Ireland (UK)	2.6	(0.1)	2.5	(0.1)	2.5	(0.1)	2.5	(0.1)	2.4	(0.2)
England/N. Ireland (UK)	2.5	(0.1)	2.5	(0.1)	2.8	(0.1)	2.7	(0.1)	2.8	(0.1)
Average	2.5	(0.0)	2.4	(0.0)	2.6	(0.0)	2.6	(0.0)	2.5	(0.0)
Partners										
Cyprus[1]	2.2	(0.1)	2.3	(0.1)	2.4	(0.1)	2.2	(0.1)	2.2	(0.1)

1. See notes on page 250.

Note: High-level SNA/ISIC aggregation of industries.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898275

[Part 7/10]

Table A4.19 **Mean use of information-processing skills at work, by industry**

	Real estate activities									
	Reading at work		Writing at work		Numeracy at work		ICT at work		Problem solving	
OECD	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities										
Australia	2.7	(0.1)	2.9	(0.2)	2.7	(0.1)	2.5	(0.1)	2.5	(0.1)
Austria	c	c	c	c	c	c	c	c	c	c
Canada	2.3	(0.1)	2.3	(0.1)	2.5	(0.1)	2.2	(0.1)	2.3	(0.1)
Czech Republic	c	c	c	c	c	c	c	c	c	c
Denmark	2.2	(0.1)	2.1	(0.1)	2.2	(0.1)	2.2	(0.1)	2.0	(0.2)
Estonia	2.0	(0.1)	1.7	(0.1)	2.1	(0.1)	2.1	(0.1)	1.5	(0.1)
Finland	c	c	c	c	c	c	c	c	c	c
Germany	2.3	(0.2)	2.0	(0.2)	2.4	(0.1)	c	c	2.0	(0.2)
Ireland	c	c	c	c	c	c	c	c	c	c
Italy	c	c	c	c	c	c	c	c	c	c
Japan	2.2	(0.1)	1.9	(0.2)	1.7	(0.1)	c	c	1.4	(0.2)
Korea	2.4	(0.1)	2.1	(0.1)	2.1	(0.1)	2.1	(0.1)	1.8	(0.1)
Netherlands	2.5	(0.1)	2.4	(0.1)	2.3	(0.2)	2.7	(0.2)	2.4	(0.2)
Norway	c	c	c	c	c	c	c	c	c	c
Poland	2.1	(0.3)	1.9	(0.2)	c	c	c	c	1.8	(0.3)
Slovak Republic	c	c	c	c	c	c	c	c	c	c
Spain	c	c	c	c	c	c	c	c	c	c
Sweden	2.1	(0.1)	1.9	(0.1)	2.0	(0.1)	1.8	(0.1)	1.9	(0.2)
United States	2.5	(0.2)	2.4	(0.1)	2.6	(0.2)	2.9	(0.2)	2.5	(0.2)
Sub-national entities										
Flanders (Belgium)	c	c	c	c	c	c	c	c	c	c
England (UK)	2.5	(0.2)	2.6	(0.3)	c	c	2.4	(0.2)	2.2	(0.3)
Northern Ireland (UK)	c	c	c	c	c	c	c	c	c	c
England/N. Ireland (UK)	2.5	(0.2)	2.6	(0.3)	2.0	(0.2)	2.4	(0.2)	2.2	(0.3)
Average	2.3	(0.0)	2.2	(0.0)	2.2	(0.0)	2.3	(0.1)	2.0	(0.1)
Partners										
Cyprus[1]	c	c	c	c	c	c	c	c	c	c

[Part 8/10]

Table A4.19 **Mean use of information-processing skills at work, by industry**

	Professional, scientific, technical, administrative and support service activities									
	Reading at work		Writing at work		Numeracy at work		ICT at work		Problem solving	
OECD	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities										
Australia	2.4	(0.1)	2.2	(0.1)	2.3	(0.1)	2.3	(0.1)	2.2	(0.1)
Austria	2.3	(0.1)	2.3	(0.1)	2.3	(0.1)	2.3	(0.0)	1.9	(0.1)
Canada	2.2	(0.0)	2.3	(0.0)	2.4	(0.0)	2.4	(0.0)	2.1	(0.0)
Czech Republic	2.2	(0.1)	2.2	(0.1)	2.5	(0.1)	2.3	(0.1)	2.3	(0.1)
Denmark	2.2	(0.1)	2.1	(0.0)	2.2	(0.1)	2.5	(0.1)	1.9	(0.1)
Estonia	2.1	(0.1)	1.9	(0.0)	2.1	(0.1)	2.4	(0.1)	1.9	(0.1)
Finland	2.2	(0.0)	2.1	(0.0)	2.4	(0.0)	2.2	(0.0)	2.0	(0.0)
Germany	2.3	(0.1)	2.2	(0.0)	2.3	(0.1)	2.3	(0.0)	2.0	(0.1)
Ireland	2.2	(0.1)	2.2	(0.1)	2.2	(0.1)	2.4	(0.1)	1.9	(0.1)
Italy	2.2	(0.1)	2.2	(0.1)	2.3	(0.1)	2.4	(0.1)	2.2	(0.1)
Japan	2.1	(0.1)	2.3	(0.1)	1.9	(0.1)	1.9	(0.1)	1.4	(0.1)
Korea	2.2	(0.1)	2.5	(0.1)	2.4	(0.1)	2.4	(0.1)	1.8	(0.1)
Netherlands	2.2	(0.0)	2.2	(0.1)	2.3	(0.1)	2.4	(0.0)	1.8	(0.1)
Norway	2.2	(0.0)	2.2	(0.0)	2.1	(0.0)	2.3	(0.0)	2.1	(0.1)
Poland	2.1	(0.1)	2.0	(0.1)	2.5	(0.1)	2.3	(0.1)	1.8	(0.1)
Slovak Republic	2.2	(0.1)	2.2	(0.1)	2.3	(0.1)	2.3	(0.1)	2.1	(0.1)
Spain	2.3	(0.1)	2.4	(0.1)	2.5	(0.1)	2.3	(0.1)	2.0	(0.1)
Sweden	2.2	(0.0)	2.0	(0.0)	2.0	(0.0)	2.2	(0.1)	2.0	(0.1)
United States	2.2	(0.1)	2.2	(0.1)	2.3	(0.1)	2.4	(0.1)	2.1	(0.1)
Sub-national entities										
Flanders (Belgium)	2.0	(0.1)	2.1	(0.1)	2.3	(0.1)	2.3	(0.1)	1.8	(0.1)
England (UK)	2.4	(0.1)	2.3	(0.1)	2.4	(0.1)	2.5	(0.1)	2.2	(0.1)
Northern Ireland (UK)	2.3	(0.1)	2.4	(0.1)	2.3	(0.1)	2.5	(0.1)	2.1	(0.1)
England/N. Ireland (UK)	2.3	(0.1)	2.3	(0.1)	2.4	(0.1)	2.5	(0.1)	2.2	(0.1)
Average	2.2	(0.0)	2.2	(0.0)	2.3	(0.0)	2.3	(0.0)	2.0	(0.0)
Partners										
Cyprus[1]	2.2	(0.1)	2.2	(0.1)	2.2	(0.1)	2.2	(0.1)	2.2	(0.1)

1. See notes on page 250.

Note: High-level SNA/ISIC aggregation of industries.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898275

[Part 9/10]

Table A4.19 Mean use of information-processing skills at work, by industry

OECD	Public administration and defence, education, human health and social work activities									
	Reading at work		Writing at work		Numeracy at work		ICT at work		Problem solving	
	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities										
Australia	2.5	(0.0)	2.5	(0.0)	2.0	(0.0)	2.1	(0.0)	2.3	(0.0)
Austria	2.2	(0.0)	2.3	(0.0)	1.6	(0.0)	1.8	(0.0)	1.9	(0.0)
Canada	2.3	(0.0)	2.3	(0.0)	1.9	(0.0)	2.0	(0.0)	2.1	(0.0)
Czech Republic	2.1	(0.1)	2.2	(0.0)	1.9	(0.1)	2.1	(0.1)	2.0	(0.1)
Denmark	2.3	(0.0)	2.1	(0.0)	1.6	(0.0)	1.9	(0.0)	2.0	(0.0)
Estonia	2.3	(0.0)	1.9	(0.0)	1.8	(0.0)	2.1	(0.0)	1.9	(0.0)
Finland	2.4	(0.0)	2.2	(0.0)	1.9	(0.0)	1.8	(0.0)	2.0	(0.0)
Germany	2.3	(0.0)	2.3	(0.0)	1.7	(0.0)	1.7	(0.0)	1.9	(0.0)
Ireland	2.2	(0.0)	2.3	(0.0)	1.7	(0.0)	1.9	(0.0)	1.9	(0.0)
Italy	2.0	(0.1)	2.1	(0.1)	1.8	(0.1)	1.9	(0.1)	2.2	(0.1)
Japan	2.3	(0.0)	2.5	(0.0)	1.7	(0.0)	1.5	(0.0)	1.6	(0.0)
Korea	2.3	(0.0)	2.5	(0.0)	1.9	(0.0)	2.0	(0.0)	1.7	(0.0)
Netherlands	2.2	(0.0)	2.3	(0.0)	1.6	(0.0)	2.0	(0.0)	1.8	(0.0)
Norway	2.3	(0.0)	2.2	(0.0)	1.5	(0.0)	1.8	(0.0)	1.9	(0.0)
Poland	2.3	(0.0)	2.1	(0.0)	1.9	(0.1)	1.9	(0.0)	1.9	(0.0)
Slovak Republic	2.1	(0.0)	2.1	(0.0)	1.9	(0.0)	1.9	(0.0)	2.0	(0.1)
Spain	2.3	(0.0)	2.3	(0.0)	1.8	(0.1)	1.9	(0.0)	2.0	(0.1)
Sweden	2.2	(0.0)	1.9	(0.0)	1.5	(0.0)	1.7	(0.0)	1.9	(0.0)
United States	2.4	(0.0)	2.4	(0.0)	2.0	(0.0)	2.0	(0.0)	2.2	(0.0)
Sub-national entities										
Flanders (Belgium)	2.1	(0.0)	2.2	(0.0)	1.6	(0.0)	1.9	(0.0)	1.8	(0.0)
England (UK)	2.3	(0.0)	2.4	(0.0)	1.8	(0.0)	2.0	(0.0)	2.3	(0.0)
Northern Ireland (UK)	2.2	(0.0)	2.3	(0.0)	1.8	(0.0)	2.0	(0.0)	2.0	(0.1)
England/N. Ireland (UK)	2.3	(0.0)	2.4	(0.0)	1.8	(0.0)	2.0	(0.0)	2.3	(0.0)
Average	2.3	(0.0)	2.2	(0.0)	1.8	(0.0)	1.9	(0.0)	2.0	(0.0)
Partners										
Cyprus[1]	1.9	(0.0)	1.9	(0.0)	1.6	(0.1)	1.6	(0.0)	1.8	(0.1)

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Table A4.19 Mean use of information-processing skills at work, by industry

OECD	Other service activities									
	Reading at work		Writing at work		Numeracy at work		ICT at work		Problem solving	
	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities										
Australia	2.2	(0.1)	2.0	(0.1)	2.1	(0.1)	2.1	(0.1)	1.8	(0.1)
Austria	2.0	(0.1)	1.8	(0.1)	1.6	(0.1)	1.9	(0.1)	1.5	(0.1)
Canada	2.0	(0.0)	1.9	(0.1)	1.9	(0.1)	2.0	(0.1)	1.6	(0.1)
Czech Republic	2.0	(0.1)	2.1	(0.2)	2.2	(0.1)	2.2	(0.2)	1.5	(0.1)
Denmark	2.1	(0.1)	1.8	(0.1)	1.7	(0.1)	2.0	(0.1)	1.7	(0.1)
Estonia	2.1	(0.1)	1.7	(0.1)	1.8	(0.1)	2.3	(0.1)	1.6	(0.1)
Finland	2.2	(0.1)	1.7	(0.1)	1.8	(0.1)	1.8	(0.0)	1.6	(0.1)
Germany	1.9	(0.1)	1.7	(0.1)	1.7	(0.1)	1.7	(0.1)	1.3	(0.1)
Ireland	1.8	(0.1)	1.8	(0.1)	1.6	(0.1)	1.9	(0.2)	1.3	(0.1)
Italy	1.5	(0.1)	1.5	(0.1)	1.5	(0.1)	2.3	(0.2)	1.6	(0.1)
Japan	2.2	(0.1)	2.0	(0.1)	1.7	(0.1)	1.7	(0.1)	1.2	(0.1)
Korea	2.1	(0.1)	2.2	(0.1)	1.6	(0.1)	1.7	(0.1)	1.3	(0.1)
Netherlands	1.9	(0.1)	1.7	(0.1)	1.5	(0.1)	1.9	(0.1)	1.4	(0.1)
Norway	2.1	(0.1)	1.9	(0.1)	1.4	(0.1)	1.8	(0.1)	1.8	(0.1)
Poland	2.0	(0.1)	1.8	(0.1)	1.8	(0.1)	1.8	(0.1)	1.3	(0.1)
Slovak Republic	2.1	(0.1)	1.6	(0.1)	1.9	(0.1)	1.9	(0.1)	1.6	(0.2)
Spain	1.7	(0.1)	1.5	(0.1)	1.6	(0.1)	2.1	(0.2)	1.2	(0.1)
Sweden	2.1	(0.1)	1.8	(0.1)	1.6	(0.1)	1.9	(0.1)	1.7	(0.1)
United States	2.0	(0.1)	1.9	(0.1)	1.9	(0.1)	1.9	(0.1)	1.8	(0.1)
Sub-national entities										
Flanders (Belgium)	2.1	(0.1)	2.0	(0.1)	1.8	(0.1)	2.2	(0.1)	1.4	(0.1)
England (UK)	2.2	(0.1)	1.9	(0.1)	1.8	(0.1)	2.1	(0.1)	1.9	(0.1)
Northern Ireland (UK)	2.1	(0.1)	2.0	(0.1)	1.8	(0.1)	2.0	(0.1)	2.0	(0.2)
England/N. Ireland (UK)	2.2	(0.1)	1.9	(0.1)	1.8	(0.1)	2.1	(0.1)	1.9	(0.1)
Average	2.0	(0.0)	1.8	(0.0)	1.7	(0.0)	2.0	(0.0)	1.5	(0.0)
Partners										
Cyprus[1]	1.6	(0.1)	1.4	(0.1)	1.5	(0.1)	1.6	(0.1)	1.3	(0.1)

1. See notes on page 250.

Note: High-level SNA/ISIC aggregation of industries.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898275

[Part 1/10]

Table A4.20 Mean use of generic skills at work, by industry

	Agriculture/forestry/fishing													
	Task discretion		Learning at work		Influencing skills		Co-operative skills		Self-organising skills		Dexterity		Physical skills	
OECD	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities														
Australia	1.9	(0.1)	2.0	(0.1)	1.7	(0.1)	2.6	(0.2)	3.2	(0.2)	3.7	(0.1)	3.4	(0.1)
Austria	3.0	(0.1)	1.7	(0.1)	1.4	(0.1)	2.3	(0.1)	3.4	(0.1)	3.4	(0.1)	3.6	(0.1)
Canada	1.8	(0.1)	2.0	(0.1)	1.6	(0.1)	2.4	(0.1)	3.2	(0.1)	3.4	(0.1)	3.2	(0.1)
Czech Republic	2.0	(0.2)	1.5	(0.3)	1.1	(0.1)	2.4	(0.4)	3.3	(0.3)	2.5	(0.5)	3.5	(0.1)
Denmark	2.8	(0.1)	1.7	(0.1)	1.7	(0.1)	2.2	(0.1)	3.4	(0.1)	3.2	(0.1)	3.1	(0.1)
Estonia	2.0	(0.1)	1.6	(0.1)	1.4	(0.1)	2.0	(0.1)	3.1	(0.1)	3.4	(0.1)	3.2	(0.1)
Finland	2.3	(0.1)	1.9	(0.1)	1.5	(0.1)	1.6	(0.2)	3.2	(0.1)	3.2	(0.1)	3.1	(0.1)
Germany	2.8	(0.2)	1.7	(0.1)	1.3	(0.1)	2.1	(0.2)	3.3	(0.2)	3.3	(0.2)	3.7	(0.1)
Ireland	2.1	(0.1)	1.9	(0.1)	1.4	(0.1)	2.3	(0.2)	3.5	(0.1)	3.6	(0.1)	3.5	(0.1)
Italy	1.9	(0.2)	1.6	(0.1)	1.2	(0.1)	2.2	(0.2)	2.7	(0.2)	3.4	(0.2)	3.5	(0.1)
Japan	2.7	(0.2)	1.6	(0.1)	1.2	(0.1)	2.8	(0.2)	2.7	(0.2)	2.1	(0.2)	3.3	(0.1)
Korea	2.6	(0.2)	1.1	(0.1)	1.1	(0.1)	1.7	(0.2)	2.2	(0.2)	0.6	(0.1)	3.4	(0.1)
Netherlands	1.7	(0.2)	1.7	(0.2)	c	c	2.1	(0.3)	2.6	(0.3)	3.1	(0.2)	3.3	(0.2)
Norway	2.6	(0.1)	1.9	(0.1)	1.5	(0.1)	1.8	(0.2)	3.3	(0.1)	3.1	(0.2)	3.6	(0.1)
Poland	2.7	(0.1)	1.5	(0.1)	1.1	(0.1)	2.6	(0.2)	3.5	(0.1)	3.7	(0.1)	3.6	(0.1)
Slovak Republic	1.9	(0.1)	1.5	(0.1)	1.5	(0.2)	2.6	(0.2)	2.8	(0.2)	2.9	(0.2)	2.9	(0.2)
Spain	2.0	(0.1)	2.2	(0.1)	1.3	(0.1)	2.8	(0.2)	2.7	(0.2)	3.0	(0.2)	3.3	(0.1)
Sweden	2.9	(0.1)	1.8	(0.1)	1.6	(0.1)	2.2	(0.2)	3.2	(0.2)	3.2	(0.1)	3.3	(0.1)
United States	1.5	(0.2)	c	c	1.8	(0.1)	c	c	2.8	(0.4)	3.4	(0.2)	3.5	(0.3)
Sub-national entities														
Flanders (Belgium)	2.2	(0.2)	c	c	1.6	(0.1)	c	c	3.2	(0.2)	3.8	(0.1)	3.7	(0.1)
England (UK)	2.2	(0.2)	c	c	c	c	c	c	3.0	(0.5)	3.1	(0.5)	3.0	(0.3)
Northern Ireland (UK)	2.1	(0.2)	c	c	1.3	(0.2)	c	c	3.4	(0.2)	3.1	(0.2)	3.7	(0.1)
England/N. Ireland (UK)	2.2	(0.2)	2.1	(0.2)	1.8	(0.2)	2.5	(0.3)	3.0	(0.4)	3.1	(0.4)	3.0	(0.3)
Average	2.3	(0.0)	1.7	(0.0)	1.4	(0.0)	2.3	(0.0)	3.1	(0.0)	3.1	(0.0)	3.4	(0.0)
Partners														
Cyprus[1]	2.4	(0.3)	c	c	c	c	c	c	2.9	(0.3)	2.7	(0.3)	3.5	(0.2)

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Table A4.20 Mean use of generic skills at work, by industry

	Manufacturing, mining and quarrying and other industrial activities													
	Task discretion		Learning at work		Influencing skills		Co-operative skills		Self-organising skills		Dexterity		Physical skills	
OECD	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities														
Australia	1.8	(0.0)	2.1	(0.1)	2.0	(0.1)	2.8	(0.1)	3.0	(0.1)	3.5	(0.1)	2.6	(0.1)
Austria	2.2	(0.0)	1.9	(0.0)	1.7	(0.0)	2.6	(0.1)	2.6	(0.1)	3.0	(0.1)	2.3	(0.1)
Canada	1.8	(0.0)	2.1	(0.0)	1.9	(0.0)	2.6	(0.0)	3.1	(0.1)	3.3	(0.0)	2.3	(0.1)
Czech Republic	1.9	(0.0)	1.8	(0.0)	1.6	(0.0)	2.6	(0.1)	2.9	(0.1)	3.1	(0.1)	2.6	(0.1)
Denmark	2.3	(0.0)	1.9	(0.0)	1.9	(0.0)	2.6	(0.1)	3.5	(0.0)	3.1	(0.1)	2.2	(0.1)
Estonia	1.8	(0.0)	1.8	(0.0)	1.7	(0.0)	2.5	(0.0)	3.2	(0.0)	3.4	(0.0)	2.6	(0.0)
Finland	2.3	(0.0)	2.0	(0.0)	1.9	(0.0)	2.2	(0.1)	2.9	(0.1)	2.6	(0.1)	1.6	(0.1)
Germany	2.1	(0.0)	1.9	(0.0)	1.7	(0.0)	2.4	(0.1)	2.9	(0.1)	3.1	(0.1)	2.3	(0.1)
Ireland	1.6	(0.1)	1.9	(0.1)	2.0	(0.1)	3.0	(0.1)	2.6	(0.1)	3.4	(0.1)	2.4	(0.1)
Italy	1.6	(0.1)	1.8	(0.1)	1.6	(0.0)	2.5	(0.1)	3.0	(0.1)	3.0	(0.1)	2.3	(0.1)
Japan	2.3	(0.0)	1.7	(0.0)	1.7	(0.0)	2.4	(0.1)	2.9	(0.1)	2.2	(0.1)	1.7	(0.1)
Korea	1.8	(0.0)	1.5	(0.0)	1.8	(0.0)	2.1	(0.0)	2.7	(0.1)	2.0	(0.1)	2.3	(0.1)
Netherlands	1.9	(0.0)	2.0	(0.0)	1.8	(0.0)	2.3	(0.1)	2.9	(0.1)	2.7	(0.1)	2.3	(0.1)
Norway	2.2	(0.0)	2.1	(0.0)	2.0	(0.0)	2.4	(0.1)	2.9	(0.1)	2.2	(0.1)	2.1	(0.1)
Poland	1.7	(0.0)	1.6	(0.0)	1.6	(0.0)	2.8	(0.1)	2.9	(0.1)	3.5	(0.0)	2.8	(0.1)
Slovak Republic	1.5	(0.1)	1.9	(0.0)	1.6	(0.1)	2.7	(0.1)	2.3	(0.1)	3.3	(0.0)	2.7	(0.1)
Spain	1.8	(0.1)	2.3	(0.1)	1.5	(0.1)	2.6	(0.1)	3.0	(0.1)	2.9	(0.1)	2.5	(0.1)
Sweden	2.2	(0.0)	1.9	(0.0)	1.8	(0.0)	2.5	(0.1)	3.1	(0.1)	2.8	(0.1)	2.3	(0.1)
United States	1.9	(0.1)	2.2	(0.0)	2.0	(0.1)	2.7	(0.1)	3.1	(0.1)	3.4	(0.1)	2.6	(0.1)
Sub-national entities														
Flanders (Belgium)	2.1	(0.0)	1.8	(0.0)	1.8	(0.0)	2.6	(0.1)	3.0	(0.1)	2.8	(0.1)	2.0	(0.1)
England (UK)	1.8	(0.1)	1.9	(0.1)	2.0	(0.1)	2.6	(0.1)	2.9	(0.1)	3.3	(0.1)	2.4	(0.1)
Northern Ireland (UK)	1.6	(0.1)	1.8	(0.1)	1.9	(0.1)	2.5	(0.1)	3.0	(0.1)	3.0	(0.1)	2.7	(0.1)
England/N. Ireland (UK)	1.8	(0.1)	1.9	(0.1)	2.0	(0.1)	2.6	(0.1)	2.9	(0.1)	3.3	(0.1)	2.4	(0.1)
Average	1.9	(0.0)	1.9	(0.0)	1.8	(0.0)	2.6	(0.0)	2.9	(0.0)	3.0	(0.0)	2.3	(0.0)
Partners														
Cyprus[1]	1.6	(0.1)	2.0	(0.1)	1.7	(0.1)	2.7	(0.1)	2.8	(0.1)	3.3	(0.1)	2.9	(0.1)

1. See notes on page 250.

Note: High-level SNA/ISIC aggregation of industries.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898294

[Part 3/10]

Table A4.20 **Mean use of generic skills at work, by industry**

	Construction													
	Task discretion		Learning at work		Influencing skills		Co-operative skills		Self-organising skills		Dexterity		Physical skills	
OECD	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities														
Australia	1.9	(0.1)	2.2	(0.1)	2.1	(0.1)	2.8	(0.1)	3.4	(0.1)	3.7	(0.1)	3.1	(0.1)
Austria	2.2	(0.1)	1.9	(0.0)	1.7	(0.1)	2.7	(0.1)	2.6	(0.1)	3.2	(0.1)	2.8	(0.1)
Canada	1.9	(0.1)	2.2	(0.1)	2.0	(0.0)	2.8	(0.1)	3.1	(0.1)	3.6	(0.0)	3.0	(0.1)
Czech Republic	2.4	(0.1)	1.7	(0.1)	1.8	(0.1)	2.9	(0.2)	3.3	(0.1)	2.8	(0.2)	3.0	(0.2)
Denmark	2.3	(0.1)	1.8	(0.0)	1.8	(0.1)	2.7	(0.1)	3.4	(0.1)	3.5	(0.1)	3.3	(0.1)
Estonia	2.1	(0.0)	1.9	(0.0)	1.9	(0.1)	2.6	(0.1)	3.4	(0.1)	3.4	(0.1)	2.9	(0.1)
Finland	2.4	(0.1)	2.0	(0.1)	2.0	(0.0)	2.3	(0.1)	3.2	(0.1)	3.2	(0.1)	2.7	(0.1)
Germany	2.2	(0.1)	1.8	(0.1)	1.8	(0.1)	2.7	(0.1)	2.9	(0.1)	3.3	(0.1)	2.9	(0.1)
Ireland	2.0	(0.1)	2.1	(0.1)	1.9	(0.1)	2.9	(0.1)	3.2	(0.1)	3.6	(0.1)	3.2	(0.1)
Italy	1.7	(0.1)	2.0	(0.1)	1.5	(0.1)	3.1	(0.1)	3.0	(0.1)	3.4	(0.1)	3.3	(0.1)
Japan	2.6	(0.1)	1.6	(0.1)	1.8	(0.1)	2.6	(0.1)	3.1	(0.1)	2.1	(0.1)	2.2	(0.1)
Korea	1.8	(0.1)	1.4	(0.1)	1.9	(0.1)	2.4	(0.1)	2.8	(0.1)	1.9	(0.1)	2.5	(0.1)
Netherlands	2.0	(0.1)	1.9	(0.1)	1.8	(0.1)	2.5	(0.1)	3.1	(0.1)	3.1	(0.1)	2.8	(0.1)
Norway	2.3	(0.1)	2.1	(0.0)	1.9	(0.0)	2.4	(0.1)	3.1	(0.1)	2.9	(0.1)	2.8	(0.1)
Poland	1.9	(0.1)	1.8	(0.1)	1.6	(0.1)	3.1	(0.1)	3.1	(0.1)	3.6	(0.1)	3.2	(0.1)
Slovak Republic	2.0	(0.1)	2.0	(0.1)	1.6	(0.1)	2.9	(0.1)	2.8	(0.1)	3.1	(0.1)	3.0	(0.1)
Spain	2.1	(0.1)	2.5	(0.1)	1.7	(0.1)	3.0	(0.1)	3.3	(0.1)	3.0	(0.1)	2.9	(0.1)
Sweden	2.4	(0.1)	1.9	(0.1)	1.9	(0.1)	2.6	(0.1)	3.2	(0.1)	3.4	(0.1)	3.1	(0.1)
United States	1.9	(0.1)	2.3	(0.1)	2.1	(0.1)	3.0	(0.1)	3.0	(0.1)	3.7	(0.1)	3.3	(0.1)
Sub-national entities														
Flanders (Belgium)	2.2	(0.1)	1.8	(0.1)	1.8	(0.1)	2.9	(0.1)	3.0	(0.1)	3.1	(0.1)	2.8	(0.1)
England (UK)	2.2	(0.1)	2.1	(0.1)	2.0	(0.1)	2.6	(0.1)	3.6	(0.1)	3.7	(0.1)	2.9	(0.1)
Northern Ireland (UK)	2.0	(0.1)	2.0	(0.1)	2.1	(0.1)	2.7	(0.2)	3.5	(0.1)	3.5	(0.1)	2.9	(0.2)
England/N. Ireland (UK)	2.2	(0.1)	2.1	(0.1)	2.0	(0.1)	2.6	(0.1)	3.6	(0.1)	3.7	(0.1)	2.9	(0.1)
Average	2.1	(0.0)	2.0	(0.0)	1.8	(0.0)	2.7	(0.0)	3.1	(0.0)	3.2	(0.0)	2.9	(0.0)
Partners														
Cyprus[1]	1.7	(0.1)	2.0	(0.1)	1.7	(0.1)	2.8	(0.1)	2.8	(0.1)	3.5	(0.1)	3.1	(0.1)

[Part 4/10]

Table A4.20 **Mean use of generic skills at work, by industry**

	Wholesale and retail trade, transportation and storage, accommodation and food service activities													
	Task discretion		Learning at work		Influencing skills		Co-operative skills		Self-organising skills		Dexterity		Physical skills	
OECD	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities														
Australia	1.8	(0.0)	2.1	(0.0)	2.2	(0.0)	2.8	(0.0)	3.0	(0.1)	3.4	(0.0)	2.7	(0.1)
Austria	2.2	(0.0)	1.9	(0.0)	1.9	(0.0)	2.5	(0.0)	2.4	(0.1)	3.1	(0.1)	2.6	(0.1)
Canada	1.8	(0.0)	2.1	(0.0)	2.0	(0.0)	2.7	(0.0)	3.0	(0.0)	3.2	(0.0)	2.5	(0.0)
Czech Republic	2.2	(0.1)	1.7	(0.1)	1.8	(0.0)	2.3	(0.1)	3.2	(0.1)	2.6	(0.1)	2.3	(0.1)
Denmark	2.2	(0.0)	1.9	(0.0)	1.9	(0.0)	2.5	(0.1)	3.0	(0.0)	2.9	(0.1)	2.6	(0.1)
Estonia	2.0	(0.0)	2.0	(0.0)	2.0	(0.0)	2.2	(0.0)	3.4	(0.0)	3.1	(0.0)	2.2	(0.1)
Finland	2.2	(0.0)	2.1	(0.0)	2.1	(0.0)	2.1	(0.0)	3.1	(0.0)	2.6	(0.1)	2.0	(0.1)
Germany	2.1	(0.0)	1.8	(0.0)	1.7	(0.0)	2.4	(0.1)	2.6	(0.1)	3.1	(0.1)	2.7	(0.1)
Ireland	1.6	(0.0)	2.0	(0.1)	2.0	(0.0)	3.0	(0.1)	2.6	(0.1)	3.3	(0.1)	2.8	(0.1)
Italy	1.7	(0.1)	1.8	(0.1)	1.7	(0.0)	2.6	(0.1)	3.2	(0.1)	2.9	(0.1)	2.5	(0.1)
Japan	2.2	(0.0)	1.8	(0.0)	1.6	(0.0)	2.6	(0.0)	2.5	(0.1)	1.6	(0.1)	1.7	(0.1)
Korea	2.0	(0.1)	1.4	(0.0)	1.7	(0.0)	2.0	(0.1)	2.8	(0.1)	1.4	(0.1)	2.5	(0.1)
Netherlands	1.7	(0.0)	1.8	(0.0)	1.8	(0.0)	2.4	(0.0)	2.5	(0.1)	2.4	(0.1)	2.7	(0.1)
Norway	2.1	(0.0)	2.1	(0.0)	1.9	(0.0)	2.3	(0.0)	2.5	(0.1)	2.2	(0.1)	2.5	(0.0)
Poland	2.0	(0.0)	1.7	(0.0)	1.9	(0.0)	2.6	(0.1)	3.2	(0.1)	3.3	(0.1)	2.7	(0.1)
Slovak Republic	1.7	(0.1)	2.0	(0.0)	1.8	(0.0)	2.4	(0.1)	2.7	(0.1)	3.3	(0.1)	2.4	(0.1)
Spain	1.9	(0.0)	2.3	(0.1)	1.7	(0.0)	2.5	(0.0)	3.1	(0.1)	2.6	(0.1)	2.5	(0.1)
Sweden	2.2	(0.0)	2.1	(0.0)	2.0	(0.0)	2.3	(0.1)	3.1	(0.1)	2.7	(0.1)	2.4	(0.1)
United States	1.8	(0.0)	2.2	(0.0)	2.1	(0.0)	3.0	(0.1)	2.7	(0.1)	3.6	(0.0)	3.1	(0.1)
Sub-national entities														
Flanders (Belgium)	2.1	(0.0)	1.9	(0.0)	1.8	(0.0)	2.6	(0.1)	2.9	(0.1)	2.7	(0.1)	2.2	(0.1)
England (UK)	1.6	(0.0)	1.9	(0.1)	1.9	(0.0)	2.6	(0.1)	2.6	(0.1)	3.2	(0.1)	2.8	(0.1)
Northern Ireland (UK)	1.6	(0.1)	1.9	(0.1)	1.9	(0.1)	2.8	(0.1)	2.7	(0.1)	3.0	(0.1)	2.8	(0.1)
England/N. Ireland (UK)	1.6	(0.0)	1.9	(0.1)	1.9	(0.0)	2.6	(0.1)	2.6	(0.1)	3.2	(0.1)	2.8	(0.1)
Average	2.0	(0.0)	1.9	(0.0)	1.9	(0.0)	2.5	(0.0)	2.9	(0.0)	2.8	(0.0)	2.5	(0.0)
Partners														
Cyprus[1]	1.8	(0.0)	2.0	(0.1)	1.9	(0.0)	2.6	(0.1)	3.0	(0.1)	3.1	(0.1)	2.5	(0.1)

1. See notes on page 250.

Note: High-level SNA/ISIC aggregation of industries.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898294

[Part 5/10]

Table A4.20 **Mean use of generic skills at work, by industry**

	Information and communication													
	Task discretion		Learning at work		Influencing skills		Co-operative skills		Self-organising skills		Dexterity		Physical skills	
OECD	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities														
Australia	2.1	(0.1)	2.3	(0.1)	2.5	(0.1)	2.7	(0.1)	3.8	(0.1)	3.2	(0.2)	0.8	(0.1)
Austria	2.6	(0.1)	2.3	(0.1)	1.9	(0.1)	2.1	(0.2)	3.2	(0.2)	2.2	(0.2)	0.9	(0.1)
Canada	2.2	(0.0)	2.3	(0.1)	2.2	(0.1)	2.5	(0.1)	3.5	(0.1)	2.6	(0.1)	0.6	(0.1)
Czech Republic	2.4	(0.1)	2.0	(0.1)	2.0	(0.1)	2.2	(0.2)	3.6	(0.2)	2.5	(0.2)	0.7	(0.3)
Denmark	2.6	(0.1)	2.3	(0.1)	2.3	(0.1)	2.5	(0.1)	3.7	(0.0)	2.4	(0.1)	0.9	(0.1)
Estonia	2.4	(0.1)	2.4	(0.1)	2.1	(0.1)	1.8	(0.1)	3.8	(0.1)	2.8	(0.1)	0.4	(0.1)
Finland	2.5	(0.1)	2.2	(0.1)	2.3	(0.1)	2.2	(0.1)	3.4	(0.1)	1.7	(0.2)	0.3	(0.1)
Germany	2.5	(0.1)	2.3	(0.1)	2.0	(0.1)	2.0	(0.1)	3.5	(0.1)	2.0	(0.2)	0.7	(0.1)
Ireland	2.1	(0.1)	2.5	(0.1)	2.4	(0.1)	2.7	(0.1)	3.6	(0.1)	2.9	(0.2)	0.9	(0.1)
Italy	2.1	(0.1)	2.3	(0.1)	1.9	(0.1)	2.5	(0.3)	3.6	(0.1)	2.1	(0.2)	0.5	(0.2)
Japan	2.6	(0.1)	1.9	(0.1)	2.0	(0.1)	2.4	(0.1)	3.4	(0.1)	1.2	(0.1)	0.3	(0.1)
Korea	2.1	(0.1)	1.8	(0.1)	2.1	(0.1)	1.5	(0.2)	3.2	(0.2)	2.7	(0.2)	0.7	(0.1)
Netherlands	2.3	(0.1)	2.2	(0.1)	2.2	(0.1)	1.9	(0.1)	3.7	(0.1)	2.0	(0.2)	0.6	(0.1)
Norway	2.6	(0.1)	2.3	(0.1)	2.2	(0.1)	2.0	(0.1)	3.6	(0.1)	0.9	(0.1)	0.5	(0.1)
Poland	2.4	(0.1)	2.1	(0.1)	2.0	(0.1)	2.5	(0.1)	3.8	(0.0)	2.4	(0.2)	0.6	(0.2)
Slovak Republic	2.3	(0.1)	2.5	(0.1)	2.0	(0.1)	2.5	(0.1)	3.6	(0.1)	2.6	(0.2)	0.6	(0.1)
Spain	2.1	(0.1)	2.6	(0.1)	1.9	(0.1)	2.6	(0.2)	3.3	(0.2)	1.2	(0.2)	0.6	(0.2)
Sweden	2.5	(0.1)	2.2	(0.1)	2.3	(0.1)	2.1	(0.1)	3.7	(0.1)	1.8	(0.2)	0.5	(0.1)
United States	2.1	(0.1)	2.4	(0.1)	2.1	(0.1)	2.7	(0.1)	3.7	(0.1)	3.4	(0.1)	1.2	(0.2)
Sub-national entities														
Flanders (Belgium)	2.3	(0.1)	2.2	(0.1)	2.1	(0.1)	2.2	(0.1)	3.6	(0.1)	1.6	(0.2)	0.5	(0.1)
England (UK)	2.4	(0.1)	2.1	(0.1)	2.1	(0.1)	2.3	(0.2)	3.7	(0.1)	3.3	(0.2)	0.6	(0.1)
Northern Ireland (UK)	2.0	(0.1)	2.6	(0.2)	2.5	(0.2)	2.6	(0.2)	3.7	(0.2)	3.1	(0.3)	0.8	(0.2)
England/N. Ireland (UK)	2.4	(0.1)	2.1	(0.1)	2.1	(0.1)	2.3	(0.1)	3.7	(0.1)	3.3	(0.2)	0.6	(0.1)
Average	2.3	(0.0)	2.2	(0.0)	2.1	(0.0)	2.3	(0.0)	3.6	(0.0)	2.3	(0.0)	0.6	(0.0)
Partners														
Cyprus[1]	1.8	(0.1)	2.3	(0.1)	2.1	(0.1)	2.9	(0.1)	3.1	(0.1)	3.0	(0.2)	0.8	(0.1)

[Part 6/10]

Table A4.20 **Mean use of generic skills at work, by industry**

	Financial and insurance activities													
	Task discretion		Learning at work		Influencing skills		Co-operative skills		Self-organising skills		Dexterity		Physical skills	
OECD	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities														
Australia	2.0	(0.1)	2.4	(0.1)	2.5	(0.1)	2.4	(0.1)	3.5	(0.1)	3.0	(0.2)	0.7	(0.1)
Austria	2.6	(0.1)	2.2	(0.1)	2.2	(0.1)	2.1	(0.1)	3.6	(0.1)	2.1	(0.2)	0.2	(0.0)
Canada	2.1	(0.1)	2.4	(0.1)	2.2	(0.0)	2.3	(0.1)	3.5	(0.1)	2.7	(0.1)	0.2	(0.0)
Czech Republic	2.7	(0.1)	1.9	(0.1)	2.3	(0.1)	2.0	(0.3)	3.8	(0.1)	2.3	(0.3)	0.3	(0.1)
Denmark	2.3	(0.1)	2.1	(0.1)	2.2	(0.1)	2.3	(0.1)	3.9	(0.0)	2.5	(0.2)	0.6	(0.1)
Estonia	1.9	(0.1)	2.3	(0.1)	2.3	(0.1)	2.1	(0.1)	3.7	(0.1)	2.6	(0.2)	0.0	(0.0)
Finland	2.4	(0.1)	2.3	(0.1)	2.4	(0.1)	1.7	(0.1)	3.4	(0.1)	1.8	(0.2)	0.1	(0.1)
Germany	2.5	(0.1)	2.2	(0.1)	2.0	(0.1)	2.1	(0.1)	3.7	(0.1)	2.1	(0.2)	0.2	(0.1)
Ireland	1.7	(0.1)	2.3	(0.1)	2.3	(0.1)	2.8	(0.1)	3.3	(0.1)	3.1	(0.1)	0.3	(0.1)
Italy	1.7	(0.1)	2.1	(0.1)	2.3	(0.1)	2.4	(0.2)	3.6	(0.1)	1.9	(0.2)	0.2	(0.1)
Japan	2.4	(0.1)	2.2	(0.1)	2.2	(0.1)	2.5	(0.1)	3.3	(0.1)	1.3	(0.2)	0.3	(0.1)
Korea	2.3	(0.1)	2.0	(0.1)	2.3	(0.1)	1.5	(0.1)	3.3	(0.1)	2.3	(0.1)	0.7	(0.1)
Netherlands	2.0	(0.1)	2.1	(0.1)	2.0	(0.1)	2.1	(0.1)	3.6	(0.1)	1.5	(0.2)	0.2	(0.1)
Norway	2.2	(0.1)	2.2	(0.1)	2.2	(0.1)	1.7	(0.1)	3.4	(0.1)	0.7	(0.2)	0.1	(0.1)
Poland	2.2	(0.1)	2.0	(0.1)	2.3	(0.1)	2.4	(0.2)	3.7	(0.1)	2.2	(0.2)	0.3	(0.1)
Slovak Republic	2.2	(0.2)	2.3	(0.1)	2.3	(0.1)	2.4	(0.2)	3.4	(0.1)	2.6	(0.2)	0.1	(0.0)
Spain	1.8	(0.1)	2.6	(0.1)	2.4	(0.1)	2.4	(0.2)	3.7	(0.1)	1.0	(0.2)	0.5	(0.1)
Sweden	2.3	(0.1)	2.4	(0.1)	2.3	(0.1)	2.1	(0.2)	3.4	(0.2)	1.2	(0.2)	0.2	(0.1)
United States	2.0	(0.1)	2.4	(0.1)	2.3	(0.1)	2.4	(0.1)	3.6	(0.1)	3.4	(0.1)	0.8	(0.1)
Sub-national entities														
Flanders (Belgium)	2.5	(0.1)	2.2	(0.1)	2.2	(0.1)	2.3	(0.1)	3.7	(0.1)	1.1	(0.2)	0.1	(0.1)
England (UK)	2.2	(0.1)	2.3	(0.1)	2.4	(0.1)	2.9	(0.1)	3.7	(0.1)	2.9	(0.2)	0.5	(0.1)
Northern Ireland (UK)	1.6	(0.2)	2.4	(0.1)	2.3	(0.1)	2.4	(0.2)	3.7	(0.1)	2.9	(0.3)	0.8	(0.2)
England/N. Ireland (UK)	2.2	(0.1)	2.3	(0.1)	2.4	(0.1)	2.9	(0.1)	3.7	(0.1)	2.9	(0.2)	0.5	(0.1)
Average	2.2	(0.0)	2.2	(0.0)	2.3	(0.0)	2.2	(0.0)	3.6	(0.0)	2.1	(0.0)	0.3	(0.0)
Partners														
Cyprus[1]	1.8	(0.1)	2.2	(0.1)	2.2	(0.1)	2.6	(0.1)	3.3	(0.1)	2.9	(0.1)	0.6	(0.1)

1. See notes on page 250.

Note: High-level SNA/ISIC aggregation of industries.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898294

[Part 7/10]

Table A4.20 **Mean use of generic skills at work, by industry**

	Real estate activities													
	Task discretion		Learning at work		Influencing skills		Co-operative skills		Self-organising skills		Dexterity		Physical skills	
OECD	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities														
Australia	2.2	(0.1)	2.3	(0.2)	2.5	(0.1)	2.6	(0.3)	3.7	(0.1)	3.2	(0.2)	1.2	(0.2)
Austria	c	c	c	c	c	c	c	c	c	c	c	c	c	c
Canada	2.3	(0.1)	2.0	(0.1)	2.1	(0.1)	2.2	(0.2)	3.7	(0.1)	2.6	(0.2)	1.3	(0.2)
Czech Republic	c	c	c	c	c	c	c	c	c	c	c	c	c	c
Denmark	2.6	(0.1)	1.8	(0.1)	2.1	(0.1)	2.2	(0.2)	3.9	(0.1)	2.7	(0.3)	1.9	(0.3)
Estonia	2.5	(0.1)	1.5	(0.1)	1.9	(0.1)	1.0	(0.1)	3.3	(0.1)	2.5	(0.2)	1.6	(0.2)
Finland	c	c	c	c	c	c	c	c	c	c	c	c	c	c
Germany	3.1	(0.2)	c	c	1.7	(0.1)	c	c	3.9	(0.1)	2.4	(0.3)	1.1	(0.4)
Ireland	c	c	c	c	c	c	c	c	c	c	c	c	c	c
Italy	c	c	c	c	c	c	c	c	c	c	c	c	c	c
Japan	3.0	(0.1)	c	c	c	c	c	c	3.1	(0.2)	0.5	(0.2)	0.3	(0.1)
Korea	2.5	(0.1)	1.4	(0.1)	1.8	(0.1)	1.5	(0.1)	2.9	(0.1)	1.5	(0.2)	1.0	(0.1)
Netherlands	2.5	(0.1)	1.7	(0.1)	2.2	(0.1)	1.9	(0.2)	3.7	(0.1)	1.6	(0.3)	0.4	(0.2)
Norway	c	c	c	c	c	c	c	c	c	c	c	c	c	c
Poland	2.5	(0.2)	1.4	(0.2)	c	c	2.1	(0.3)	3.7	(0.2)	2.7	(0.3)	1.1	(0.3)
Slovak Republic	c	c	c	c	c	c	c	c	c	c	c	c	c	c
Spain	c	c	c	c	c	c	c	c	c	c	c	c	c	c
Sweden	2.7	(0.1)	1.9	(0.1)	1.8	(0.1)	1.9	(0.2)	3.7	(0.1)	2.0	(0.3)	2.1	(0.3)
United States	2.2	(0.1)	2.1	(0.2)	2.3	(0.1)	2.0	(0.2)	3.6	(0.2)	3.0	(0.2)	1.2	(0.2)
Sub-national entities														
Flanders (Belgium)	c	c	c	c	c	c	c	c	c	c	c	c	c	c
England (UK)	2.3	(0.2)	c	c	2.5	(0.1)	c	c	3.9	(0.1)	3.3	(0.3)	1.6	(0.3)
Northern Ireland (UK)	c	c	c	c	c	c	c	c	c	c	c	c	c	c
England/N. Ireland (UK)	2.3	(0.2)	2.2	(0.3)	2.5	(0.1)	3.0	(0.3)	3.9	(0.1)	3.3	(0.3)	1.6	(0.3)
Average	2.5	(0.0)	1.8	(0.1)	2.1	(0.0)	2.0	(0.1)	3.6	(0.0)	2.3	(0.1)	1.2	(0.1)
Partners														
Cyprus[1]	c	c	c	c	c	c	c	c	c	c	c	c	c	c

[Part 8/10]

Table A4.20 **Mean use of generic skills at work, by industry**

	Professional, scientific, technical, administrative and support service activities													
	Task discretion		Learning at work		Influencing skills		Co-operative skills		Self-organising skills		Dexterity		Physical skills	
OECD	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities														
Australia	2.1	(0.1)	2.1	(0.1)	2.2	(0.1)	2.3	(0.1)	3.5	(0.1)	3.4	(0.1)	1.5	(0.1)
Austria	2.5	(0.1)	1.8	(0.1)	1.8	(0.1)	2.0	(0.1)	3.0	(0.1)	2.4	(0.1)	1.4	(0.1)
Canada	2.1	(0.0)	2.1	(0.0)	2.0	(0.0)	2.3	(0.1)	3.4	(0.0)	2.9	(0.1)	1.4	(0.1)
Czech Republic	2.6	(0.1)	2.0	(0.1)	1.9	(0.1)	1.9	(0.1)	3.6	(0.1)	2.5	(0.2)	1.1	(0.1)
Denmark	2.5	(0.1)	1.9	(0.1)	2.0	(0.1)	2.2	(0.1)	3.5	(0.1)	2.7	(0.1)	1.5	(0.1)
Estonia	2.1	(0.1)	2.0	(0.1)	2.0	(0.1)	1.9	(0.1)	3.5	(0.1)	2.8	(0.1)	1.4	(0.1)
Finland	2.4	(0.0)	2.1	(0.0)	2.1	(0.0)	1.9	(0.1)	3.3	(0.1)	2.1	(0.1)	1.2	(0.1)
Germany	2.4	(0.1)	1.9	(0.0)	1.8	(0.0)	2.0	(0.1)	3.3	(0.1)	2.6	(0.1)	1.5	(0.1)
Ireland	1.9	(0.1)	1.8	(0.1)	2.1	(0.1)	2.3	(0.1)	3.1	(0.1)	3.1	(0.1)	1.6	(0.1)
Italy	1.9	(0.1)	1.9	(0.1)	1.8	(0.1)	1.9	(0.1)	3.5	(0.1)	2.2	(0.1)	1.1	(0.1)
Japan	2.4	(0.1)	1.7	(0.1)	1.7	(0.1)	2.3	(0.1)	3.0	(0.1)	1.4	(0.1)	1.2	(0.1)
Korea	1.9	(0.1)	1.7	(0.1)	1.9	(0.0)	1.7	(0.1)	2.9	(0.1)	2.3	(0.1)	1.6	(0.1)
Netherlands	2.2	(0.1)	1.9	(0.1)	1.9	(0.0)	1.9	(0.1)	3.3	(0.1)	2.1	(0.1)	1.2	(0.1)
Norway	2.2	(0.0)	2.1	(0.0)	1.9	(0.1)	1.9	(0.1)	3.1	(0.1)	1.5	(0.1)	1.4	(0.1)
Poland	2.2	(0.1)	1.9	(0.1)	1.9	(0.1)	2.2	(0.1)	3.2	(0.1)	2.7	(0.1)	1.2	(0.1)
Slovak Republic	2.1	(0.1)	2.2	(0.1)	1.8	(0.1)	2.3	(0.1)	3.1	(0.1)	2.7	(0.1)	1.1	(0.1)
Spain	2.0	(0.1)	2.3	(0.1)	1.8	(0.1)	2.1	(0.1)	3.5	(0.1)	1.8	(0.1)	1.5	(0.1)
Sweden	2.4	(0.0)	2.1	(0.0)	2.0	(0.0)	2.0	(0.1)	3.3	(0.1)	1.8	(0.1)	1.4	(0.1)
United States	2.1	(0.1)	2.2	(0.1)	2.1	(0.1)	2.6	(0.1)	3.2	(0.1)	3.3	(0.1)	2.1	(0.1)
Sub-national entities														
Flanders (Belgium)	2.3	(0.1)	1.9	(0.0)	2.0	(0.1)	1.9	(0.1)	3.5	(0.1)	2.4	(0.1)	1.5	(0.1)
England (UK)	2.1	(0.1)	2.0	(0.1)	2.1	(0.1)	2.3	(0.1)	3.6	(0.1)	2.9	(0.1)	1.2	(0.1)
Northern Ireland (UK)	2.0	(0.1)	1.9	(0.1)	2.2	(0.1)	2.4	(0.1)	3.4	(0.1)	2.9	(0.1)	1.6	(0.2)
England/N. Ireland (UK)	2.1	(0.1)	2.0	(0.1)	2.1	(0.1)	2.3	(0.1)	3.5	(0.1)	2.9	(0.1)	1.2	(0.1)
Average	2.2	(0.0)	2.0	(0.0)	1.9	(0.0)	2.1	(0.0)	3.3	(0.0)	2.5	(0.0)	1.4	(0.0)
Partners														
Cyprus[1]	1.9	(0.1)	2.2	(0.1)	2.0	(0.1)	2.5	(0.1)	3.2	(0.1)	2.8	(0.1)	1.2	(0.1)

1. See notes on page 250.

Note: High-level SNA/ISIC aggregation of industries.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898294

[Part 9/10]

Table A4.20 **Mean use of generic skills at work, by industry**

	Public administration and defence, education, human health and social work activities													
	Task discretion		Learning at work		Influencing skills		Co-operative skills		Self-organising skills		Dexterity		Physical skills	
OECD	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities														
Australia	1.7	(0.0)	2.3	(0.0)	2.7	(0.0)	2.7	(0.0)	3.5	(0.0)	3.4	(0.0)	2.0	(0.0)
Austria	2.3	(0.0)	2.0	(0.0)	2.0	(0.0)	2.3	(0.1)	2.8	(0.1)	2.9	(0.0)	2.1	(0.1)
Canada	1.9	(0.0)	2.2	(0.0)	2.4	(0.0)	2.5	(0.0)	3.5	(0.0)	3.0	(0.0)	1.7	(0.0)
Czech Republic	2.1	(0.1)	1.8	(0.1)	2.2	(0.1)	2.1	(0.1)	3.4	(0.1)	2.6	(0.1)	1.5	(0.1)
Denmark	2.2	(0.0)	2.1	(0.0)	2.3	(0.0)	2.6	(0.0)	3.3	(0.0)	3.0	(0.0)	2.2	(0.0)
Estonia	1.9	(0.0)	2.0	(0.0)	2.3	(0.0)	2.1	(0.0)	3.6	(0.0)	3.1	(0.0)	1.3	(0.0)
Finland	2.1	(0.0)	2.1	(0.0)	2.7	(0.0)	2.2	(0.0)	3.4	(0.0)	2.7	(0.0)	1.6	(0.0)
Germany	2.1	(0.0)	2.0	(0.0)	2.0	(0.0)	2.1	(0.1)	3.0	(0.1)	2.9	(0.1)	1.9	(0.1)
Ireland	1.6	(0.0)	2.1	(0.0)	2.5	(0.0)	2.7	(0.1)	3.0	(0.1)	3.3	(0.1)	2.1	(0.1)
Italy	1.5	(0.0)	2.0	(0.1)	1.9	(0.0)	2.5	(0.1)	3.3	(0.1)	2.6	(0.1)	1.4	(0.1)
Japan	2.1	(0.0)	1.9	(0.0)	1.9	(0.0)	2.7	(0.1)	3.0	(0.1)	1.7	(0.1)	1.6	(0.1)
Korea	1.8	(0.0)	1.5	(0.0)	2.1	(0.0)	1.8	(0.1)	3.0	(0.1)	2.3	(0.1)	1.6	(0.1)
Netherlands	1.9	(0.0)	2.0	(0.0)	2.0	(0.0)	2.0	(0.0)	3.2	(0.0)	2.4	(0.0)	1.9	(0.0)
Norway	2.0	(0.0)	2.2	(0.0)	2.2	(0.0)	2.3	(0.0)	2.7	(0.1)	2.1	(0.1)	2.1	(0.0)
Poland	1.9	(0.0)	1.9	(0.0)	2.3	(0.1)	2.3	(0.1)	3.5	(0.0)	2.8	(0.1)	1.1	(0.1)
Slovak Republic	1.7	(0.0)	2.2	(0.0)	2.1	(0.1)	2.4	(0.1)	3.0	(0.1)	3.0	(0.1)	1.4	(0.1)
Spain	1.8	(0.0)	2.5	(0.0)	2.1	(0.1)	2.5	(0.1)	3.4	(0.0)	2.0	(0.1)	1.6	(0.1)
Sweden	2.1	(0.0)	2.1	(0.0)	2.2	(0.0)	2.5	(0.0)	3.2	(0.0)	2.6	(0.1)	2.1	(0.1)
United States	1.9	(0.0)	2.3	(0.0)	2.5	(0.0)	2.7	(0.1)	3.3	(0.1)	3.3	(0.1)	2.3	(0.1)
Sub-national entities														
Flanders (Belgium)	2.1	(0.0)	1.9	(0.0)	2.0	(0.0)	2.2	(0.0)	3.3	(0.0)	2.5	(0.1)	1.7	(0.1)
England (UK)	1.8	(0.0)	2.2	(0.0)	2.5	(0.0)	2.7	(0.0)	3.5	(0.0)	3.2	(0.0)	2.0	(0.1)
Northern Ireland (UK)	1.6	(0.0)	2.0	(0.0)	2.4	(0.1)	2.7	(0.1)	3.2	(0.0)	2.9	(0.1)	1.9	(0.1)
England/N. Ireland (UK)	1.8	(0.0)	2.2	(0.0)	2.5	(0.0)	2.7	(0.0)	3.5	(0.0)	3.2	(0.0)	2.0	(0.1)
Average	1.9	(0.0)	2.1	(0.0)	2.2	(0.0)	2.4	(0.0)	3.2	(0.0)	2.7	(0.0)	1.8	(0.0)
Partners														
Cyprus[1]	1.6	(0.0)	2.0	(0.0)	2.1	(0.0)	2.5	(0.1)	3.2	(0.1)	2.9	(0.1)	1.8	(0.1)

[Part 10/10]

Table A4.20 **Mean use of generic skills at work, by industry**

	Other service activities													
	Task discretion		Learning at work		Influencing skills		Co-operative skills		Self-organising skills		Dexterity		Physical skills	
OECD	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities														
Australia	1.9	(0.1)	2.0	(0.1)	2.3	(0.1)	2.7	(0.2)	3.3	(0.1)	3.5	(0.1)	2.4	(0.2)
Austria	2.5	(0.1)	2.0	(0.1)	1.8	(0.1)	2.2	(0.1)	2.7	(0.1)	2.6	(0.1)	2.2	(0.1)
Canada	2.2	(0.0)	2.2	(0.1)	2.1	(0.1)	2.4	(0.1)	3.4	(0.1)	3.1	(0.1)	2.2	(0.1)
Czech Republic	2.5	(0.1)	1.5	(0.2)	1.9	(0.1)	1.8	(0.2)	3.6	(0.1)	3.1	(0.2)	2.5	(0.2)
Denmark	2.4	(0.1)	1.9	(0.1)	2.0	(0.1)	2.2	(0.1)	3.3	(0.1)	2.8	(0.1)	2.1	(0.1)
Estonia	2.2	(0.1)	2.1	(0.1)	2.1	(0.1)	2.0	(0.1)	3.5	(0.1)	3.2	(0.1)	1.9	(0.1)
Finland	2.5	(0.1)	2.0	(0.1)	2.2	(0.1)	1.9	(0.1)	3.3	(0.1)	2.7	(0.1)	1.8	(0.1)
Germany	2.4	(0.1)	1.6	(0.1)	1.7	(0.1)	1.9	(0.1)	3.0	(0.1)	3.3	(0.1)	2.7	(0.2)
Ireland	1.8	(0.1)	1.9	(0.1)	2.1	(0.1)	2.7	(0.1)	3.0	(0.1)	3.3	(0.1)	2.5	(0.1)
Italy	1.9	(0.1)	1.9	(0.1)	1.7	(0.1)	1.5	(0.2)	3.3	(0.1)	2.7	(0.2)	2.8	(0.1)
Japan	2.4	(0.1)	1.7	(0.1)	1.6	(0.1)	2.6	(0.1)	2.8	(0.1)	2.0	(0.1)	1.5	(0.1)
Korea	2.0	(0.1)	1.5	(0.1)	1.6	(0.1)	1.8	(0.1)	2.7	(0.1)	2.0	(0.1)	2.2	(0.1)
Netherlands	2.2	(0.1)	1.8	(0.1)	2.0	(0.1)	2.3	(0.1)	3.1	(0.1)	2.6	(0.1)	2.5	(0.1)
Norway	2.5	(0.1)	2.1	(0.1)	2.0	(0.1)	2.1	(0.1)	3.1	(0.1)	2.1	(0.2)	2.0	(0.2)
Poland	2.3	(0.1)	1.9	(0.1)	1.9	(0.1)	2.6	(0.2)	3.3	(0.1)	3.2	(0.1)	2.4	(0.2)
Slovak Republic	2.0	(0.1)	2.1	(0.1)	1.6	(0.1)	2.2	(0.2)	3.0	(0.2)	3.3	(0.2)	1.9	(0.2)
Spain	2.1	(0.1)	2.0	(0.1)	1.7	(0.1)	1.6	(0.1)	3.2	(0.1)	2.8	(0.1)	2.4	(0.1)
Sweden	2.5	(0.1)	2.0	(0.1)	2.0	(0.1)	2.1	(0.1)	3.4	(0.1)	2.5	(0.1)	2.0	(0.2)
United States	2.2	(0.1)	2.0	(0.1)	2.3	(0.1)	2.4	(0.1)	3.0	(0.1)	3.1	(0.1)	2.5	(0.1)
Sub-national entities														
Flanders (Belgium)	2.4	(0.1)	2.0	(0.1)	2.0	(0.1)	2.0	(0.1)	3.2	(0.1)	2.8	(0.1)	2.2	(0.2)
England (UK)	2.2	(0.1)	2.0	(0.1)	2.0	(0.1)	2.2	(0.2)	3.4	(0.1)	3.2	(0.1)	2.3	(0.1)
Northern Ireland (UK)	1.9	(0.1)	1.9	(0.1)	2.3	(0.1)	2.8	(0.1)	3.2	(0.1)	3.2	(0.1)	2.5	(0.2)
England/N. Ireland (UK)	2.2	(0.1)	2.0	(0.1)	2.0	(0.1)	2.3	(0.2)	3.3	(0.1)	3.2	(0.1)	2.3	(0.1)
Average	2.2	(0.0)	1.9	(0.0)	1.9	(0.0)	2.2	(0.0)	3.2	(0.0)	2.9	(0.0)	2.2	(0.0)
Partners														
Cyprus[1]	1.9	(0.1)	1.9	(0.1)	1.9	(0.1)	2.6	(0.2)	3.2	(0.1)	3.1	(0.1)	2.3	(0.2)

1. See notes on page 250.

Note: High-level SNA/ISIC aggregation of industries.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898294

[Part 1/5]

Table A4.21 **Mean use of information-processing skills at work, by establishment size**

	1-10 employees									
	Reading at work		Writing at work		Numeracy at work		ICT at work		Problem solving	
OECD	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities										
Australia	2.1	(0.0)	1.9	(0.0)	2.2	(0.0)	2.0	(0.0)	2.0	(0.0)
Austria	2.1	(0.0)	1.9	(0.0)	1.9	(0.0)	1.9	(0.0)	1.6	(0.0)
Canada	2.1	(0.0)	1.9	(0.0)	2.2	(0.0)	2.0	(0.0)	1.8	(0.0)
Czech Republic	1.9	(0.0)	1.9	(0.0)	2.2	(0.0)	2.2	(0.0)	1.9	(0.1)
Denmark	2.0	(0.0)	1.8	(0.0)	1.9	(0.0)	2.0	(0.0)	1.7	(0.0)
Estonia	1.9	(0.0)	1.6	(0.0)	2.1	(0.0)	2.2	(0.0)	1.6	(0.0)
Finland	2.1	(0.0)	1.8	(0.0)	2.2	(0.0)	1.7	(0.0)	1.7	(0.0)
Germany	2.1	(0.0)	1.9	(0.0)	2.0	(0.0)	1.9	(0.0)	1.6	(0.0)
Ireland	1.9	(0.0)	1.7	(0.0)	1.8	(0.0)	1.9	(0.0)	1.6	(0.0)
Italy	1.6	(0.1)	1.6	(0.0)	1.9	(0.0)	2.2	(0.1)	1.9	(0.0)
Japan	2.0	(0.0)	2.0	(0.0)	1.7	(0.0)	1.5	(0.0)	1.2	(0.0)
Korea	2.0	(0.0)	2.0	(0.0)	1.9	(0.0)	1.8	(0.0)	1.4	(0.0)
Netherlands	2.0	(0.0)	1.9	(0.0)	1.9	(0.0)	2.0	(0.0)	1.5	(0.0)
Norway	2.1	(0.0)	1.8	(0.0)	1.9	(0.0)	1.9	(0.0)	1.7	(0.0)
Poland	1.7	(0.0)	1.5	(0.0)	1.9	(0.0)	1.9	(0.0)	1.6	(0.0)
Slovak Republic	1.9	(0.0)	1.8	(0.0)	2.2	(0.0)	2.1	(0.0)	1.9	(0.0)
Spain	1.8	(0.0)	1.8	(0.0)	2.0	(0.0)	2.1	(0.0)	1.7	(0.0)
Sweden	2.1	(0.0)	1.7	(0.0)	1.9	(0.0)	1.7	(0.0)	1.8	(0.0)
United States	2.1	(0.0)	1.9	(0.0)	2.2	(0.0)	1.9	(0.0)	1.9	(0.0)
Sub-national entities										
Flanders (Belgium)	2.0	(0.0)	2.0	(0.0)	2.0	(0.0)	2.1	(0.0)	1.7	(0.0)
England (UK)	2.0	(0.0)	1.9	(0.0)	1.9	(0.0)	2.1	(0.1)	1.8	(0.1)
Northern Ireland (UK)	2.0	(0.0)	1.7	(0.0)	1.9	(0.0)	1.9	(0.1)	1.8	(0.1)
England/N. Ireland (UK)	2.0	(0.0)	1.9	(0.0)	1.9	(0.0)	2.1	(0.0)	1.8	(0.0)
Average	2.0	(0.0)	1.8	(0.0)	2.0	(0.0)	2.0	(0.0)	1.7	(0.0)
Partners										
Cyprus[1]	1.7	(0.0)	1.6	(0.0)	1.9	(0.0)	1.8	(0.0)	1.6	(0.0)

[Part 2/5]

Table A4.21 **Mean use of information-processing skills at work, by establishment size**

	11-50 employees									
	Reading at work		Writing at work		Numeracy at work		ICT at work		Problem solving	
OECD	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities										
Australia	2.1	(0.0)	2.1	(0.0)	2.1	(0.0)	2.1	(0.0)	2.1	(0.0)
Austria	2.0	(0.0)	2.0	(0.0)	1.9	(0.0)	1.9	(0.0)	1.6	(0.0)
Canada	2.1	(0.0)	2.1	(0.0)	2.2	(0.0)	2.1	(0.0)	1.8	(0.0)
Czech Republic	1.8	(0.1)	1.9	(0.1)	2.1	(0.1)	2.0	(0.1)	1.9	(0.1)
Denmark	2.0	(0.0)	1.9	(0.0)	1.8	(0.0)	1.9	(0.0)	1.7	(0.0)
Estonia	1.9	(0.0)	1.7	(0.0)	2.0	(0.0)	2.1	(0.0)	1.7	(0.0)
Finland	2.1	(0.0)	2.0	(0.0)	2.1	(0.0)	1.8	(0.0)	1.8	(0.0)
Germany	2.0	(0.0)	2.0	(0.0)	1.9	(0.0)	1.9	(0.0)	1.6	(0.0)
Ireland	2.0	(0.0)	2.1	(0.0)	2.0	(0.0)	2.0	(0.0)	1.7	(0.1)
Italy	1.6	(0.1)	1.9	(0.1)	2.0	(0.1)	2.1	(0.1)	2.0	(0.1)
Japan	2.0	(0.0)	2.2	(0.0)	1.8	(0.0)	1.6	(0.0)	1.3	(0.0)
Korea	2.1	(0.0)	2.4	(0.0)	2.1	(0.0)	2.2	(0.1)	1.6	(0.0)
Netherlands	2.0	(0.0)	2.0	(0.0)	1.9	(0.0)	2.0	(0.0)	1.6	(0.0)
Norway	2.1	(0.0)	2.0	(0.0)	1.7	(0.0)	1.8	(0.0)	1.7	(0.0)
Poland	1.8	(0.0)	1.9	(0.0)	1.9	(0.0)	2.0	(0.0)	1.6	(0.0)
Slovak Republic	1.7	(0.0)	1.9	(0.0)	2.1	(0.0)	2.1	(0.1)	1.9	(0.1)
Spain	2.0	(0.0)	2.2	(0.0)	2.0	(0.1)	2.0	(0.0)	1.8	(0.1)
Sweden	2.1	(0.0)	1.9	(0.0)	1.7	(0.0)	1.8	(0.0)	1.8	(0.0)
United States	2.1	(0.0)	2.2	(0.0)	2.2	(0.0)	2.1	(0.1)	2.1	(0.0)
Sub-national entities										
Flanders (Belgium)	1.9	(0.0)	2.1	(0.0)	1.9	(0.0)	2.0	(0.0)	1.8	(0.1)
England (UK)	2.0	(0.0)	2.1	(0.0)	1.9	(0.0)	2.0	(0.1)	2.0	(0.1)
Northern Ireland (UK)	1.9	(0.0)	2.0	(0.0)	2.0	(0.1)	2.0	(0.1)	1.7	(0.1)
England/N. Ireland (UK)	2.0	(0.0)	2.1	(0.0)	1.9	(0.0)	2.0	(0.1)	2.0	(0.1)
Average	2.0	(0.0)	2.0	(0.0)	2.0	(0.0)	2.0	(0.0)	1.8	(0.0)
Partners										
Cyprus[1]	1.8	(0.0)	2.0	(0.0)	1.9	(0.1)	1.8	(0.0)	1.8	(0.1)

1. See notes on page 250.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898313

[Part 3/5]

Table A4.21 **Mean use of information-processing skills at work, by establishment size**

	51-250 employees									
	Reading at work		Writing at work		Numeracy at work		ICT at work		Problem solving	
OECD	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities										
Australia	2.2	(0.0)	2.1	(0.0)	2.1	(0.1)	2.1	(0.1)	2.2	(0.1)
Austria	2.1	(0.0)	2.1	(0.0)	1.9	(0.0)	2.0	(0.0)	1.8	(0.1)
Canada	2.0	(0.0)	2.1	(0.0)	2.2	(0.0)	2.1	(0.0)	1.9	(0.0)
Czech Republic	1.8	(0.1)	1.9	(0.1)	2.1	(0.1)	2.1	(0.1)	1.9	(0.1)
Denmark	2.2	(0.0)	2.0	(0.0)	1.9	(0.0)	2.1	(0.0)	2.0	(0.0)
Estonia	2.0	(0.0)	1.8	(0.0)	1.9	(0.0)	2.2	(0.0)	1.8	(0.0)
Finland	2.2	(0.0)	2.1	(0.0)	2.2	(0.0)	2.1	(0.0)	1.9	(0.0)
Germany	2.0	(0.0)	2.1	(0.0)	1.9	(0.0)	1.9	(0.0)	1.8	(0.0)
Ireland	2.0	(0.1)	2.2	(0.1)	2.1	(0.1)	2.1	(0.1)	2.0	(0.1)
Italy	1.7	(0.1)	1.8	(0.1)	2.0	(0.1)	2.1	(0.1)	2.0	(0.1)
Japan	2.1	(0.0)	2.4	(0.0)	1.9	(0.0)	1.8	(0.0)	1.5	(0.0)
Korea	2.2	(0.1)	2.5	(0.1)	2.0	(0.1)	2.4	(0.1)	1.7	(0.1)
Netherlands	2.1	(0.0)	2.2	(0.0)	1.8	(0.0)	2.1	(0.0)	1.8	(0.0)
Norway	2.2	(0.0)	2.2	(0.0)	1.9	(0.0)	2.0	(0.0)	2.0	(0.0)
Poland	1.8	(0.0)	2.0	(0.0)	2.0	(0.1)	2.0	(0.0)	1.8	(0.1)
Slovak Republic	1.7	(0.0)	2.0	(0.1)	2.0	(0.1)	2.1	(0.0)	1.8	(0.1)
Spain	2.0	(0.0)	2.2	(0.1)	2.2	(0.1)	2.1	(0.0)	1.9	(0.1)
Sweden	2.2	(0.0)	1.9	(0.0)	1.9	(0.0)	1.9	(0.0)	2.0	(0.0)
United States	2.2	(0.0)	2.2	(0.0)	2.2	(0.0)	2.2	(0.0)	2.1	(0.1)
Sub-national entities										
Flanders (Belgium)	1.9	(0.0)	2.1	(0.0)	1.8	(0.0)	2.0	(0.0)	1.7	(0.0)
England (UK)	2.1	(0.0)	2.2	(0.0)	2.1	(0.0)	2.1	(0.0)	2.2	(0.1)
Northern Ireland (UK)	2.1	(0.1)	2.1	(0.1)	2.2	(0.1)	2.1	(0.1)	2.0	(0.1)
England/N. Ireland (UK)	2.1	(0.0)	2.2	(0.0)	2.1	(0.0)	2.1	(0.0)	2.2	(0.1)
Average	2.0	(0.0)	2.1	(0.0)	2.0	(0.0)	2.1	(0.0)	1.9	(0.0)
Partners										
Cyprus[1]	1.8	(0.1)	2.0	(0.1)	2.0	(0.1)	1.9	(0.1)	2.0	(0.1)

[Part 4/5]

Table A4.21 **Mean use of information-processing skills at work, by establishment size**

	251-1 000 employees									
	Reading at work		Writing at work		Numeracy at work		ICT at work		Problem solving	
OECD	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities										
Australia	2.4	(0.0)	2.4	(0.1)	2.2	(0.1)	2.2	(0.1)	2.4	(0.1)
Austria	2.0	(0.0)	2.2	(0.1)	2.0	(0.1)	1.9	(0.0)	2.0	(0.1)
Canada	2.2	(0.0)	2.3	(0.0)	2.2	(0.0)	2.2	(0.0)	2.1	(0.0)
Czech Republic	2.0	(0.1)	2.1	(0.1)	2.1	(0.1)	2.0	(0.1)	2.1	(0.1)
Denmark	2.3	(0.0)	2.1	(0.0)	2.1	(0.1)	2.3	(0.1)	2.1	(0.1)
Estonia	2.0	(0.1)	1.9	(0.1)	2.0	(0.1)	2.3	(0.1)	1.9	(0.1)
Finland	2.3	(0.0)	2.2	(0.0)	2.2	(0.1)	2.1	(0.0)	2.1	(0.1)
Germany	2.2	(0.1)	2.2	(0.0)	2.1	(0.1)	2.0	(0.0)	2.0	(0.1)
Ireland	2.2	(0.0)	2.4	(0.1)	2.1	(0.1)	2.3	(0.1)	2.3	(0.1)
Italy	1.6	(0.1)	1.9	(0.1)	2.0	(0.2)	2.1	(0.1)	2.3	(0.1)
Japan	2.3	(0.1)	2.4	(0.0)	2.1	(0.0)	1.9	(0.0)	1.9	(0.0)
Korea	2.3	(0.1)	2.6	(0.1)	2.2	(0.1)	2.4	(0.1)	1.7	(0.1)
Netherlands	2.1	(0.0)	2.2	(0.0)	2.2	(0.1)	2.2	(0.0)	2.0	(0.1)
Norway	2.3	(0.0)	2.2	(0.0)	1.8	(0.1)	2.2	(0.0)	2.1	(0.1)
Poland	1.8	(0.1)	2.3	(0.1)	2.0	(0.1)	2.0	(0.1)	1.8	(0.1)
Slovak Republic	1.7	(0.1)	2.1	(0.1)	2.1	(0.1)	2.2	(0.1)	1.9	(0.1)
Spain	2.0	(0.1)	2.1	(0.1)	2.0	(0.1)	1.9	(0.1)	2.2	(0.1)
Sweden	2.3	(0.1)	2.0	(0.0)	2.0	(0.1)	2.1	(0.1)	2.1	(0.1)
United States	2.3	(0.0)	2.4	(0.0)	2.2	(0.0)	2.2	(0.1)	2.2	(0.1)
Sub-national entities										
Flanders (Belgium)	2.0	(0.0)	2.2	(0.0)	2.0	(0.1)	2.0	(0.0)	2.0	(0.1)
England (UK)	2.1	(0.0)	2.2	(0.1)	2.2	(0.1)	2.4	(0.1)	2.2	(0.1)
Northern Ireland (UK)	2.2	(0.0)	2.3	(0.1)	2.0	(0.1)	2.1	(0.1)	2.2	(0.1)
England/N. Ireland (UK)	2.1	(0.0)	2.2	(0.0)	2.2	(0.1)	2.4	(0.1)	2.2	(0.1)
Average	2.1	(0.0)	2.2	(0.0)	2.1	(0.0)	2.1	(0.0)	2.1	(0.0)
Partners										
Cyprus[1]	1.8	(0.1)	2.1	(0.1)	2.0	(0.1)	1.9	(0.1)	2.3	(0.1)

1. See notes on page 250.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898313

[Part 5/5]

Table A4.21 **Mean use of information-processing skills at work, by establishment size**

	1 000+ employees									
	Reading at work		Writing at work		Numeracy at work		ICT at work		Problem solving	
OECD	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities										
Australia	2.5	(0.1)	2.5	(0.1)	2.3	(0.1)	2.4	(0.1)	2.5	(0.1)
Austria	2.2	(0.1)	2.3	(0.1)	2.1	(0.1)	2.0	(0.1)	2.2	(0.1)
Canada	2.4	(0.0)	2.4	(0.0)	2.3	(0.0)	2.3	(0.0)	2.4	(0.1)
Czech Republic	1.9	(0.1)	2.0	(0.1)	2.2	(0.1)	2.1	(0.2)	1.8	(0.1)
Denmark	2.4	(0.0)	2.2	(0.1)	2.2	(0.1)	2.4	(0.1)	2.3	(0.1)
Estonia	2.1	(0.1)	2.0	(0.1)	1.9	(0.1)	2.1	(0.1)	1.9	(0.1)
Finland	2.3	(0.1)	2.2	(0.1)	2.1	(0.1)	2.1	(0.1)	2.1	(0.1)
Germany	2.3	(0.1)	2.3	(0.1)	2.2	(0.1)	2.0	(0.1)	2.2	(0.1)
Ireland	2.4	(0.0)	2.5	(0.1)	2.3	(0.1)	2.4	(0.1)	2.4	(0.1)
Italy	1.7	(0.1)	2.1	(0.1)	2.0	(0.2)	2.1	(0.1)	2.1	(0.2)
Japan	2.6	(0.1)	2.6	(0.1)	2.3	(0.1)	2.2	(0.1)	2.3	(0.1)
Korea	2.5	(0.1)	2.6	(0.1)	2.4	(0.1)	2.6	(0.1)	2.2	(0.1)
Netherlands	2.3	(0.0)	2.3	(0.1)	2.0	(0.1)	2.3	(0.0)	2.2	(0.1)
Norway	2.4	(0.0)	2.4	(0.0)	2.0	(0.0)	2.3	(0.0)	2.2	(0.1)
Poland	1.8	(0.1)	2.3	(0.1)	1.9	(0.1)	2.1	(0.1)	2.0	(0.1)
Slovak Republic	1.9	(0.1)	2.0	(0.1)	2.2	(0.1)	2.1	(0.1)	2.3	(0.1)
Spain	2.2	(0.1)	2.3	(0.1)	2.1	(0.1)	2.0	(0.1)	2.5	(0.1)
Sweden	2.3	(0.0)	2.0	(0.0)	2.0	(0.1)	2.1	(0.0)	2.0	(0.1)
United States	2.4	(0.0)	2.4	(0.1)	2.3	(0.1)	2.4	(0.1)	2.5	(0.1)
Sub-national entities										
Flanders (Belgium)	2.1	(0.0)	2.3	(0.0)	2.2	(0.1)	2.2	(0.1)	2.2	(0.1)
England (UK)	2.4	(0.0)	2.5	(0.0)	2.3	(0.1)	2.4	(0.0)	2.7	(0.1)
Northern Ireland (UK)	2.3	(0.1)	2.4	(0.1)	2.1	(0.1)	2.1	(0.1)	2.4	(0.1)
England/N. Ireland (UK)	2.4	(0.0)	2.5	(0.0)	2.3	(0.1)	2.4	(0.0)	2.6	(0.1)
Average	2.2	(0.0)	2.3	(0.0)	2.2	(0.0)	2.2	(0.0)	2.2	(0.0)
Partners										
Cyprus[1]	2.1	(0.2)	2.0	(0.2)	1.6	(0.2)	1.7	(0.2)	2.4	(0.2)

1. See notes on page 250.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898313

[Part 1/5]

Table A4.22 **Mean use of generic skills at work, by establishment size**

	1-10 employees													
	Task discretion		Learning at work		Influencing skills		Co-operative skills		Self-organising skills		Dexterity		Physical skills	
OECD	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities														
Australia	2.0	(0.0)	2.1	(0.0)	2.1	(0.0)	2.5	(0.0)	3.4	(0.0)	3.5	(0.0)	2.5	(0.0)
Austria	2.6	(0.0)	1.9	(0.0)	1.8	(0.0)	2.3	(0.1)	2.9	(0.1)	3.0	(0.0)	2.4	(0.0)
Canada	2.1	(0.0)	2.0	(0.0)	2.0	(0.0)	2.3	(0.0)	3.4	(0.0)	3.2	(0.0)	2.2	(0.0)
Czech Republic	2.5	(0.0)	1.7	(0.1)	1.8	(0.0)	2.1	(0.1)	3.4	(0.1)	2.8	(0.1)	2.3	(0.1)
Denmark	2.5	(0.0)	1.9	(0.0)	2.0	(0.0)	2.3	(0.0)	3.4	(0.0)	3.2	(0.0)	2.6	(0.0)
Estonia	2.2	(0.0)	1.9	(0.0)	1.9	(0.0)	2.0	(0.0)	3.5	(0.0)	3.1	(0.0)	2.2	(0.0)
Finland	2.4	(0.0)	2.0	(0.0)	2.1	(0.0)	1.9	(0.0)	3.3	(0.0)	2.9	(0.0)	2.1	(0.0)
Germany	2.5	(0.0)	1.9	(0.0)	1.8	(0.0)	2.0	(0.1)	3.1	(0.1)	3.1	(0.1)	2.4	(0.1)
Ireland	1.8	(0.0)	1.9	(0.0)	2.0	(0.0)	2.5	(0.1)	3.1	(0.1)	3.3	(0.0)	2.6	(0.1)
Italy	1.9	(0.0)	1.8	(0.0)	1.7	(0.0)	2.3	(0.0)	3.3	(0.0)	2.9	(0.1)	2.4	(0.1)
Japan	2.6	(0.0)	1.7	(0.0)	1.6	(0.0)	2.5	(0.1)	2.8	(0.1)	1.9	(0.1)	1.7	(0.1)
Korea	2.2	(0.0)	1.3	(0.0)	1.8	(0.0)	2.0	(0.0)	2.8	(0.0)	1.7	(0.0)	2.4	(0.0)
Netherlands	2.2	(0.0)	1.9	(0.0)	1.9	(0.0)	2.1	(0.1)	3.1	(0.0)	2.6	(0.1)	2.4	(0.1)
Norway	2.4	(0.0)	2.1	(0.0)	1.9	(0.0)	2.1	(0.0)	2.9	(0.1)	2.4	(0.1)	2.4	(0.1)
Poland	2.4	(0.0)	1.7	(0.0)	1.8	(0.0)	2.5	(0.1)	3.4	(0.0)	3.4	(0.0)	2.7	(0.0)
Slovak Republic	2.2	(0.0)	2.1	(0.0)	1.9	(0.0)	2.3	(0.1)	3.1	(0.0)	3.2	(0.0)	2.3	(0.1)
Spain	2.2	(0.0)	2.3	(0.0)	1.8	(0.0)	2.3	(0.0)	3.4	(0.0)	2.6	(0.0)	2.4	(0.1)
Sweden	2.5	(0.0)	2.0	(0.0)	2.0	(0.0)	2.2	(0.0)	3.3	(0.0)	2.8	(0.1)	2.5	(0.1)
United States	2.1	(0.0)	2.1	(0.0)	2.1	(0.0)	2.5	(0.0)	3.2	(0.0)	3.4	(0.0)	2.7	(0.1)
Sub-national entities														
Flanders (Belgium)	2.5	(0.0)	1.9	(0.0)	1.9	(0.0)	2.3	(0.1)	3.4	(0.0)	2.8	(0.0)	2.2	(0.1)
England (UK)	2.2	(0.0)	1.9	(0.1)	2.0	(0.0)	2.3	(0.1)	3.3	(0.0)	3.2	(0.0)	2.3	(0.1)
Northern Ireland (UK)	1.9	(0.1)	1.9	(0.1)	2.1	(0.1)	2.5	(0.1)	3.3	(0.1)	3.1	(0.1)	2.5	(0.1)
England/N. Ireland (UK)	2.2	(0.0)	1.9	(0.1)	2.0	(0.0)	2.3	(0.1)	3.3	(0.0)	3.2	(0.0)	2.4	(0.1)
Average	2.3	(0.0)	1.9	(0.0)	1.9	(0.0)	2.3	(0.0)	3.2	(0.0)	2.9	(0.0)	2.4	(0.0)
Partners														
Cyprus[1]	1.9	(0.0)	2.0	(0.0)	1.9	(0.0)	2.4	(0.0)	3.1	(0.1)	3.0	(0.0)	2.4	(0.0)

[Part 2/5]

Table A4.22 **Mean use of generic skills at work, by establishment size**

	11-50 employees													
	Task discretion		Learning at work		Influencing skills		Co-operative skills		Self-organising skills		Dexterity		Physical skills	
OECD	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities														
Australia	1.7	(0.0)	2.2	(0.0)	2.4	(0.0)	2.7	(0.1)	3.1	(0.0)	3.4	(0.0)	2.3	(0.1)
Austria	2.2	(0.0)	1.9	(0.0)	1.9	(0.0)	2.4	(0.0)	2.5	(0.0)	2.9	(0.1)	2.3	(0.1)
Canada	1.8	(0.0)	2.2	(0.0)	2.2	(0.0)	2.7	(0.0)	3.2	(0.0)	3.1	(0.0)	2.1	(0.0)
Czech Republic	1.9	(0.0)	1.7	(0.0)	1.9	(0.1)	2.5	(0.1)	3.1	(0.1)	2.8	(0.1)	2.2	(0.1)
Denmark	2.2	(0.0)	2.0	(0.0)	2.0	(0.0)	2.5	(0.0)	3.3	(0.0)	3.0	(0.0)	2.3	(0.0)
Estonia	1.8	(0.0)	2.0	(0.0)	2.0	(0.0)	2.3	(0.0)	3.4	(0.0)	3.2	(0.0)	2.1	(0.0)
Finland	2.2	(0.0)	2.1	(0.0)	2.4	(0.0)	2.1	(0.0)	3.2	(0.0)	2.6	(0.0)	1.8	(0.0)
Germany	2.1	(0.0)	1.9	(0.0)	1.8	(0.0)	2.3	(0.0)	2.8	(0.1)	3.0	(0.1)	2.3	(0.1)
Ireland	1.5	(0.0)	2.0	(0.0)	2.3	(0.0)	2.9	(0.0)	2.8	(0.1)	3.4	(0.1)	2.3	(0.1)
Italy	1.5	(0.0)	1.9	(0.1)	1.7	(0.1)	2.5	(0.1)	3.1	(0.1)	2.8	(0.1)	2.2	(0.1)
Japan	2.1	(0.0)	1.8	(0.0)	1.7	(0.0)	2.7	(0.0)	2.7	(0.0)	1.7	(0.1)	1.7	(0.1)
Korea	1.6	(0.0)	1.6	(0.0)	1.9	(0.0)	1.9	(0.0)	2.8	(0.1)	1.9	(0.1)	2.0	(0.1)
Netherlands	1.8	(0.0)	1.9	(0.0)	1.9	(0.0)	2.2	(0.0)	2.9	(0.1)	2.5	(0.0)	2.1	(0.1)
Norway	2.0	(0.0)	2.1	(0.0)	2.1	(0.0)	2.3	(0.0)	2.6	(0.0)	2.2	(0.1)	2.3	(0.0)
Poland	1.8	(0.0)	1.7	(0.0)	2.0	(0.0)	2.6	(0.1)	3.2	(0.1)	3.1	(0.1)	2.1	(0.1)
Slovak Republic	1.6	(0.0)	2.0	(0.0)	1.9	(0.0)	2.5	(0.1)	2.7	(0.1)	3.1	(0.1)	2.1	(0.1)
Spain	1.7	(0.0)	2.4	(0.1)	1.8	(0.0)	2.5	(0.1)	3.1	(0.1)	2.4	(0.1)	2.0	(0.1)
Sweden	2.1	(0.0)	2.1	(0.0)	2.1	(0.0)	2.4	(0.0)	3.2	(0.0)	2.7	(0.0)	2.2	(0.0)
United States	1.9	(0.0)	2.2	(0.0)	2.3	(0.0)	2.9	(0.1)	3.0	(0.1)	3.5	(0.1)	2.5	(0.1)
Sub-national entities														
Flanders (Belgium)	2.1	(0.0)	1.9	(0.0)	1.9	(0.0)	2.3	(0.1)	3.1	(0.1)	2.6	(0.1)	2.0	(0.1)
England (UK)	1.7	(0.0)	2.0	(0.0)	2.2	(0.0)	2.7	(0.1)	3.1	(0.1)	3.2	(0.1)	2.3	(0.1)
Northern Ireland (UK)	1.6	(0.0)	1.9	(0.1)	2.1	(0.1)	2.8	(0.1)	3.0	(0.1)	3.0	(0.1)	2.3	(0.1)
England/N. Ireland (UK)	1.7	(0.0)	2.0	(0.0)	2.2	(0.0)	2.7	(0.1)	3.1	(0.1)	3.2	(0.1)	2.3	(0.1)
Average	1.9	(0.0)	2.0	(0.0)	2.0	(0.0)	2.5	(0.0)	3.0	(0.0)	2.8	(0.0)	2.2	(0.0)
Partners														
Cyprus[1]	1.7	(0.0)	2.0	(0.0)	2.0	(0.0)	2.6	(0.1)	3.0	(0.1)	3.0	(0.1)	1.9	(0.1)

1. See notes on page 250.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898332

[Part 3/5]

Table A4.22 **Mean use of generic skills at work, by establishment size**

	51-250 employees													
	Task discretion		Learning at work		Influencing skills		Co-operative skills		Self-organising skills		Dexterity		Physical skills	
OECD	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities														
Australia	1.6	(0.0)	2.2	(0.0)	2.4	(0.0)	2.7	(0.1)	3.2	(0.0)	3.4	(0.1)	2.2	(0.1)
Austria	2.2	(0.0)	1.9	(0.0)	1.9	(0.0)	2.4	(0.1)	2.7	(0.1)	2.8	(0.1)	2.0	(0.1)
Canada	1.8	(0.0)	2.1	(0.0)	2.1	(0.0)	2.6	(0.0)	3.2	(0.0)	3.1	(0.0)	2.0	(0.0)
Czech Republic	1.9	(0.0)	1.9	(0.1)	1.8	(0.1)	2.5	(0.1)	3.0	(0.1)	2.8	(0.1)	2.0	(0.1)
Denmark	2.2	(0.0)	2.0	(0.0)	2.1	(0.0)	2.5	(0.0)	3.3	(0.0)	2.9	(0.0)	2.0	(0.1)
Estonia	1.8	(0.0)	2.0	(0.0)	2.1	(0.0)	2.3	(0.0)	3.4	(0.0)	3.1	(0.0)	1.8	(0.1)
Finland	2.1	(0.0)	2.1	(0.0)	2.3	(0.0)	2.2	(0.0)	3.2	(0.0)	2.5	(0.1)	1.4	(0.1)
Germany	2.0	(0.0)	1.9	(0.0)	1.8	(0.0)	2.2	(0.1)	2.9	(0.1)	2.9	(0.1)	2.0	(0.1)
Ireland	1.6	(0.0)	2.0	(0.1)	2.2	(0.1)	2.9	(0.1)	2.8	(0.1)	3.2	(0.1)	2.1	(0.1)
Italy	1.5	(0.1)	1.9	(0.1)	1.7	(0.1)	2.5	(0.1)	3.1	(0.1)	2.7	(0.1)	1.8	(0.1)
Japan	2.1	(0.0)	1.8	(0.0)	1.8	(0.0)	2.6	(0.0)	2.9	(0.1)	1.8	(0.1)	1.6	(0.1)
Korea	1.7	(0.1)	1.6	(0.0)	2.0	(0.0)	1.9	(0.1)	2.8	(0.1)	2.1	(0.1)	1.9	(0.1)
Netherlands	1.8	(0.0)	1.9	(0.0)	2.0	(0.0)	2.2	(0.0)	3.0	(0.1)	2.3	(0.1)	1.9	(0.1)
Norway	2.1	(0.0)	2.1	(0.0)	2.1	(0.0)	2.2	(0.0)	2.9	(0.1)	1.9	(0.1)	1.9	(0.1)
Poland	1.8	(0.0)	1.8	(0.0)	1.9	(0.1)	2.5	(0.1)	3.2	(0.1)	3.1	(0.1)	1.9	(0.1)
Slovak Republic	1.6	(0.0)	2.0	(0.0)	1.7	(0.1)	2.5	(0.1)	2.6	(0.1)	3.0	(0.1)	1.9	(0.1)
Spain	1.7	(0.0)	2.4	(0.0)	1.9	(0.1)	2.6	(0.1)	3.1	(0.1)	2.1	(0.1)	1.9	(0.1)
Sweden	2.1	(0.0)	2.1	(0.0)	2.1	(0.0)	2.4	(0.1)	3.2	(0.1)	2.3	(0.1)	1.8	(0.1)
United States	1.7	(0.0)	2.2	(0.0)	2.3	(0.1)	2.7	(0.1)	2.9	(0.1)	3.5	(0.0)	2.5	(0.1)
Sub-national entities														
Flanders (Belgium)	2.0	(0.0)	1.8	(0.0)	1.9	(0.0)	2.3	(0.0)	3.1	(0.0)	2.4	(0.1)	1.8	(0.1)
England (UK)	1.7	(0.0)	2.1	(0.0)	2.3	(0.0)	2.6	(0.1)	3.2	(0.1)	3.2	(0.1)	2.1	(0.1)
Northern Ireland (UK)	1.6	(0.0)	2.0	(0.1)	2.2	(0.1)	2.5	(0.1)	3.0	(0.1)	2.8	(0.1)	2.1	(0.1)
England/N. Ireland (UK)	1.7	(0.0)	2.1	(0.0)	2.3	(0.0)	2.6	(0.1)	3.2	(0.1)	3.2	(0.1)	2.1	(0.1)
Average	1.9	(0.0)	2.0	(0.0)	2.0	(0.0)	2.5	(0.0)	3.0	(0.0)	2.7	(0.0)	1.9	(0.0)
Partners														
Cyprus[1]	1.6	(0.0)	2.0	(0.1)	2.0	(0.1)	2.8	(0.1)	2.9	(0.1)	3.0	(0.1)	1.8	(0.1)

[Part 4/5]

Table A4.22 **Mean use of generic skills at work, by establishment size**

	251-1 000 employees													
	Task discretion		Learning at work		Influencing skills		Co-operative skills		Self-organising skills		Dexterity		Physical skills	
OECD	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities														
Australia	1.8	(0.0)	2.2	(0.0)	2.4	(0.1)	2.9	(0.1)	3.3	(0.1)	3.4	(0.1)	1.8	(0.1)
Austria	2.1	(0.0)	2.0	(0.0)	1.8	(0.0)	2.5	(0.1)	2.6	(0.1)	2.8	(0.1)	2.0	(0.1)
Canada	1.8	(0.0)	2.2	(0.0)	2.1	(0.0)	2.6	(0.0)	3.2	(0.1)	3.0	(0.1)	1.7	(0.1)
Czech Republic	1.9	(0.1)	1.8	(0.1)	1.9	(0.1)	2.3	(0.1)	3.2	(0.1)	2.6	(0.2)	1.9	(0.1)
Denmark	2.2	(0.0)	2.1	(0.0)	2.1	(0.0)	2.7	(0.1)	3.4	(0.1)	2.7	(0.1)	1.5	(0.1)
Estonia	1.7	(0.0)	2.0	(0.0)	2.0	(0.1)	2.5	(0.1)	3.5	(0.1)	3.3	(0.1)	1.7	(0.1)
Finland	2.2	(0.0)	2.1	(0.0)	2.2	(0.0)	2.3	(0.1)	3.1	(0.1)	2.1	(0.1)	1.2	(0.1)
Germany	2.1	(0.0)	2.0	(0.0)	1.8	(0.0)	2.5	(0.1)	3.1	(0.1)	2.8	(0.1)	1.8	(0.1)
Ireland	1.6	(0.1)	2.1	(0.0)	2.3	(0.1)	3.0	(0.1)	2.9	(0.1)	3.2	(0.1)	1.6	(0.1)
Italy	1.2	(0.1)	2.0	(0.1)	1.7	(0.1)	2.8	(0.1)	3.0	(0.2)	2.6	(0.2)	1.9	(0.2)
Japan	2.2	(0.0)	1.8	(0.0)	1.9	(0.0)	2.6	(0.1)	3.0	(0.1)	1.7	(0.1)	1.4	(0.1)
Korea	1.6	(0.1)	1.5	(0.1)	1.9	(0.1)	2.0	(0.1)	2.7	(0.1)	2.3	(0.1)	1.7	(0.1)
Netherlands	1.9	(0.0)	2.0	(0.0)	2.0	(0.0)	2.2	(0.1)	3.1	(0.1)	2.2	(0.1)	1.4	(0.1)
Norway	2.1	(0.0)	2.2	(0.0)	2.1	(0.0)	2.3	(0.1)	2.9	(0.1)	1.7	(0.1)	1.6	(0.1)
Poland	1.7	(0.1)	1.7	(0.1)	1.9	(0.1)	3.0	(0.1)	3.0	(0.1)	3.2	(0.1)	2.1	(0.1)
Slovak Republic	1.5	(0.1)	2.1	(0.1)	1.8	(0.1)	2.7	(0.1)	2.4	(0.1)	3.2	(0.1)	2.0	(0.1)
Spain	1.8	(0.1)	2.4	(0.1)	1.8	(0.1)	2.7	(0.1)	3.2	(0.1)	2.1	(0.1)	1.8	(0.1)
Sweden	2.2	(0.0)	2.0	(0.1)	2.0	(0.0)	2.4	(0.1)	3.1	(0.1)	2.1	(0.1)	1.5	(0.1)
United States	1.9	(0.0)	2.3	(0.1)	2.2	(0.0)	2.8	(0.1)	3.1	(0.1)	3.4	(0.1)	2.2	(0.1)
Sub-national entities														
Flanders (Belgium)	2.0	(0.0)	1.9	(0.0)	2.0	(0.0)	2.5	(0.1)	3.1	(0.1)	2.4	(0.1)	1.7	(0.1)
England (UK)	1.7	(0.1)	2.2	(0.1)	2.1	(0.1)	2.8	(0.1)	3.1	(0.1)	3.3	(0.1)	1.8	(0.1)
Northern Ireland (UK)	1.6	(0.1)	2.0	(0.1)	2.3	(0.1)	2.7	(0.1)	2.9	(0.1)	3.1	(0.1)	1.9	(0.1)
England/N. Ireland (UK)	1.7	(0.1)	2.2	(0.1)	2.1	(0.1)	2.8	(0.1)	3.1	(0.1)	3.3	(0.1)	1.8	(0.1)
Average	1.9	(0.0)	2.0	(0.0)	2.0	(0.0)	2.6	(0.0)	3.0	(0.0)	2.7	(0.0)	1.7	(0.0)
Partners														
Cyprus[1]	1.6	(0.1)	2.0	(0.1)	1.8	(0.1)	2.8	(0.1)	3.0	(0.1)	3.0	(0.1)	2.0	(0.2)

1. See notes on page 250.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898332

[Part 5/5]

Table A4.22 **Mean use of generic skills at work, by establishment size**

	1 000+ employees													
	Task discretion		Learning at work		Influencing skills		Co-operative skills		Self-organising skills		Dexterity		Physical skills	
OECD	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities														
Australia	1.9	(0.1)	2.3	(0.1)	2.6	(0.1)	3.1	(0.1)	3.5	(0.1)	3.3	(0.1)	1.8	(0.1)
Austria	2.3	(0.1)	2.0	(0.1)	2.0	(0.1)	2.7	(0.1)	2.8	(0.1)	2.7	(0.1)	1.8	(0.1)
Canada	1.9	(0.0)	2.2	(0.0)	2.2	(0.0)	2.7	(0.1)	3.4	(0.1)	2.9	(0.1)	1.4	(0.1)
Czech Republic	2.0	(0.1)	2.1	(0.1)	1.7	(0.1)	2.6	(0.2)	2.8	(0.2)	3.2	(0.2)	1.9	(0.2)
Denmark	2.3	(0.1)	2.1	(0.0)	2.3	(0.0)	2.9	(0.1)	3.4	(0.1)	2.7	(0.1)	1.5	(0.1)
Estonia	1.7	(0.1)	2.1	(0.1)	2.0	(0.1)	2.8	(0.1)	3.5	(0.1)	3.0	(0.1)	1.6	(0.1)
Finland	2.2	(0.1)	2.2	(0.1)	2.3	(0.1)	2.4	(0.1)	3.3	(0.1)	2.3	(0.1)	1.1	(0.1)
Germany	2.2	(0.1)	2.0	(0.1)	1.9	(0.0)	2.5	(0.1)	3.3	(0.1)	2.7	(0.1)	1.5	(0.1)
Ireland	1.7	(0.1)	2.4	(0.1)	2.4	(0.1)	3.0	(0.1)	3.1	(0.1)	3.0	(0.1)	1.7	(0.1)
Italy	1.4	(0.1)	1.9	(0.1)	1.8	(0.1)	2.5	(0.1)	3.3	(0.2)	2.6	(0.2)	1.2	(0.2)
Japan	2.5	(0.1)	2.0	(0.0)	2.1	(0.1)	2.6	(0.1)	3.3	(0.1)	1.3	(0.1)	0.8	(0.1)
Korea	1.7	(0.1)	1.7	(0.1)	2.0	(0.1)	2.1	(0.1)	3.0	(0.1)	2.4	(0.1)	1.4	(0.2)
Netherlands	2.0	(0.1)	2.1	(0.1)	2.1	(0.1)	2.2	(0.1)	3.3	(0.1)	2.3	(0.1)	1.3	(0.1)
Norway	2.1	(0.0)	2.3	(0.0)	2.2	(0.0)	2.3	(0.1)	3.0	(0.1)	1.8	(0.1)	1.5	(0.1)
Poland	1.7	(0.1)	1.9	(0.1)	1.9	(0.1)	2.8	(0.1)	3.4	(0.1)	3.2	(0.1)	2.0	(0.2)
Slovak Republic	1.5	(0.1)	2.2	(0.1)	1.6	(0.1)	2.8	(0.1)	2.4	(0.2)	2.9	(0.1)	2.0	(0.2)
Spain	1.7	(0.1)	2.7	(0.1)	2.0	(0.1)	2.9	(0.1)	3.1	(0.2)	2.2	(0.2)	1.7	(0.2)
Sweden	2.2	(0.1)	2.2	(0.1)	2.1	(0.1)	2.6	(0.1)	3.4	(0.1)	2.3	(0.1)	1.5	(0.1)
United States	1.9	(0.1)	2.4	(0.1)	2.3	(0.1)	2.8	(0.1)	3.3	(0.1)	3.3	(0.1)	1.9	(0.1)
Sub-national entities														
Flanders (Belgium)	2.2	(0.1)	2.1	(0.1)	2.0	(0.1)	2.8	(0.1)	3.2	(0.1)	2.2	(0.1)	1.3	(0.1)
England (UK)	1.9	(0.1)	2.2	(0.1)	2.4	(0.1)	2.9	(0.1)	3.5	(0.1)	3.1	(0.1)	1.5	(0.1)
Northern Ireland (UK)	1.6	(0.1)	1.9	(0.1)	2.3	(0.1)	3.0	(0.1)	3.4	(0.1)	3.1	(0.1)	1.9	(0.2)
England/N. Ireland (UK)	1.9	(0.1)	2.2	(0.1)	2.4	(0.1)	2.9	(0.1)	3.5	(0.1)	3.1	(0.1)	1.5	(0.1)
Average	2.0	(0.0)	2.2	(0.0)	2.1	(0.0)	2.7	(0.0)	3.2	(0.0)	2.6	(0.0)	1.5	(0.0)
Partners														
Cyprus[1]	1.5	(0.2)	2.3	(0.1)	2.6	(0.1)	2.8	(0.2)	3.4	(0.2)	3.3	(0.2)	2.0	(0.3)

1. See notes on page 250.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898332

[Part 1/4]

Distribution of skills use, by proficiency level

Table A4.23 *Median, 25th and 75th percentiles of skills use*

	Reading at work											
	Literacy Level 1 and below						Literacy Level 2					
OECD	25th percentile	S.E.	Median	S.E.	75th percentile	S.E.	25th percentile	S.E.	Median	S.E.	75th percentile	S.E.
National entities												
Australia	1.1	(0.1)	1.9	(0.1)	2.4	(0.1)	1.6	(0.1)	2.2	(0.0)	2.6	(0.0)
Austria	0.8	(0.1)	1.7	(0.1)	2.3	(0.1)	1.4	(0.1)	2.1	(0.0)	2.5	(0.0)
Canada	1.2	(0.1)	1.9	(0.0)	2.4	(0.0)	1.6	(0.0)	2.1	(0.0)	2.5	(0.0)
Czech Republic	0.7	(0.3)	1.7	(0.3)	2.3	(0.1)	1.2	(0.1)	2.0	(0.1)	2.4	(0.1)
Denmark	1.1	(0.1)	1.9	(0.1)	2.4	(0.0)	1.7	(0.1)	2.2	(0.0)	2.5	(0.0)
Estonia	0.9	(0.1)	1.8	(0.1)	2.3	(0.0)	1.2	(0.1)	2.1	(0.0)	2.5	(0.0)
Finland	1.0	(0.3)	2.0	(0.1)	2.4	(0.1)	1.7	(0.1)	2.2	(0.0)	2.5	(0.0)
Germany	0.8	(0.1)	1.8	(0.1)	2.3	(0.1)	1.5	(0.1)	2.2	(0.0)	2.5	(0.0)
Ireland	0.9	(0.2)	1.8	(0.1)	2.3	(0.1)	1.4	(0.1)	2.0	(0.0)	2.4	(0.0)
Italy	0.2	(0.2)	1.3	(0.2)	2.1	(0.1)	0.9	(0.1)	1.7	(0.1)	2.3	(0.1)
Japan	1.2	(0.1)	1.9	(0.1)	2.4	(0.1)	1.4	(0.1)	2.1	(0.1)	2.5	(0.1)
Korea	0.6	(0.2)	1.6	(0.1)	2.2	(0.1)	1.4	(0.0)	2.1	(0.0)	2.5	(0.0)
Netherlands	0.9	(0.2)	1.7	(0.1)	2.2	(0.1)	1.5	(0.1)	2.0	(0.0)	2.4	(0.0)
Norway	1.4	(0.1)	2.0	(0.1)	2.4	(0.1)	1.8	(0.1)	2.3	(0.0)	2.5	(0.0)
Poland	0.5	(0.2)	1.4	(0.1)	2.2	(0.1)	0.9	(0.1)	1.8	(0.1)	2.3	(0.0)
Slovak Republic	0.5	(0.3)	1.6	(0.2)	2.2	(0.1)	1.0	(0.1)	1.8	(0.1)	2.4	(0.0)
Spain	0.7	(0.1)	1.5	(0.1)	2.2	(0.1)	1.3	(0.1)	2.0	(0.1)	2.5	(0.1)
Sweden	1.4	(0.1)	2.0	(0.1)	2.4	(0.0)	1.7	(0.1)	2.2	(0.0)	2.5	(0.0)
United States	1.1	(0.1)	1.9	(0.1)	2.4	(0.1)	1.6	(0.1)	2.2	(0.0)	2.6	(0.0)
Sub-national entities												
Flanders (Belgium)	0.5	(0.1)	1.4	(0.1)	2.2	(0.1)	1.2	(0.1)	1.9	(0.1)	2.4	(0.0)
England (UK)	1.2	(0.1)	1.9	(0.1)	2.4	(0.1)	1.5	(0.1)	2.1	(0.0)	2.5	(0.0)
Northern Ireland (UK)	0.9	(0.2)	1.7	(0.2)	2.2	(0.1)	1.4	(0.1)	2.0	(0.0)	2.4	(0.0)
England/N. Ireland (UK)	1.2	(0.1)	1.9	(0.1)	2.4	(0.1)	1.5	(0.1)	2.1	(0.0)	2.5	(0.0)
Average	0.9	(0.0)	1.7	(0.0)	2.3	(0.0)	1.4	(0.0)	2.1	(0.0)	2.5	(0.0)
Partners												
Cyprus[1]	1.3	(0.2)	1.9	(0.1)	2.4	(0.1)	1.2	(0.1)	1.9	(0.1)	2.3	(0.1)

[Part 2/4]

Distribution of skills use, by proficiency level

Table A4.23 *Median, 25th and 75th percentiles of skills use*

	Reading at work											
	Literacy Level 3						Literacy Levels 4 and 5					
OECD	25th percentile	S.E.	Median	S.E.	75th percentile	S.E.	25th percentile	S.E.	Median	S.E.	75th percentile	S.E.
National entities												
Australia	1.9	(0.0)	2.4	(0.0)	2.7	(0.0)	2.2	(0.1)	2.5	(0.0)	2.7	(0.0)
Austria	1.9	(0.1)	2.3	(0.0)	2.6	(0.0)	2.2	(0.1)	2.4	(0.0)	2.7	(0.1)
Canada	1.9	(0.0)	2.3	(0.0)	2.6	(0.0)	2.1	(0.0)	2.4	(0.0)	2.7	(0.0)
Czech Republic	1.6	(0.1)	2.2	(0.0)	2.5	(0.0)	2.0	(0.1)	2.4	(0.1)	2.6	(0.0)
Denmark	2.0	(0.0)	2.4	(0.0)	2.6	(0.0)	2.1	(0.0)	2.4	(0.0)	2.6	(0.0)
Estonia	1.6	(0.1)	2.3	(0.0)	2.6	(0.0)	2.1	(0.1)	2.4	(0.0)	2.7	(0.0)
Finland	2.0	(0.0)	2.3	(0.0)	2.6	(0.0)	2.2	(0.0)	2.4	(0.0)	2.6	(0.0)
Germany	2.0	(0.0)	2.4	(0.0)	2.7	(0.0)	2.2	(0.0)	2.5	(0.0)	2.7	(0.0)
Ireland	1.8	(0.1)	2.3	(0.0)	2.6	(0.0)	2.0	(0.1)	2.4	(0.0)	2.7	(0.1)
Italy	1.5	(0.1)	2.2	(0.0)	2.6	(0.0)	1.9	(0.2)	2.4	(0.1)	2.7	(0.2)
Japan	1.7	(0.0)	2.2	(0.0)	2.6	(0.0)	1.9	(0.1)	2.4	(0.0)	2.7	(0.0)
Korea	1.9	(0.1)	2.4	(0.0)	2.7	(0.0)	2.1	(0.1)	2.4	(0.1)	2.7	(0.1)
Netherlands	1.8	(0.0)	2.3	(0.0)	2.5	(0.0)	2.1	(0.0)	2.4	(0.0)	2.6	(0.0)
Norway	2.1	(0.0)	2.4	(0.0)	2.6	(0.0)	2.2	(0.0)	2.4	(0.0)	2.6	(0.0)
Poland	1.5	(0.1)	2.2	(0.0)	2.5	(0.0)	2.1	(0.1)	2.4	(0.0)	2.7	(0.0)
Slovak Republic	1.4	(0.1)	2.1	(0.0)	2.5	(0.0)	1.7	(0.1)	2.3	(0.1)	2.6	(0.1)
Spain	1.8	(0.1)	2.3	(0.0)	2.7	(0.0)	2.2	(0.1)	2.5	(0.1)	2.8	(0.1)
Sweden	2.0	(0.0)	2.3	(0.0)	2.6	(0.0)	2.2	(0.0)	2.4	(0.0)	2.6	(0.0)
United States	2.0	(0.0)	2.4	(0.0)	2.7	(0.0)	2.1	(0.1)	2.5	(0.0)	2.7	(0.0)
Sub-national entities												
Flanders (Belgium)	1.8	(0.0)	2.3	(0.0)	2.6	(0.0)	2.1	(0.0)	2.4	(0.0)	2.7	(0.0)
England (UK)	1.9	(0.0)	2.3	(0.0)	2.6	(0.0)	2.2	(0.1)	2.4	(0.0)	2.7	(0.0)
Northern Ireland (UK)	1.8	(0.1)	2.3	(0.0)	2.6	(0.0)	2.1	(0.1)	2.4	(0.0)	2.7	(0.0)
England/N. Ireland (UK)	1.9	(0.0)	2.3	(0.0)	2.6	(0.0)	2.2	(0.1)	2.4	(0.0)	2.7	(0.0)
Average	1.8	(0.0)	2.3	(0.0)	2.6	(0.0)	2.1	(0.0)	2.4	(0.0)	2.7	(0.0)
Partners												
Cyprus[1]	1.3	(0.1)	2.0	(0.0)	2.4	(0.0)	1.7	(0.2)	2.2	(0.2)	2.5	(0.1)

1. See notes on page 250.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898351

[Part 3/4]

Distribution of skills use, by proficiency level

Table A4.23 *Median, 25th and 75th percentiles of skills use*

OECD	Use of numeracy at work											
	Numeracy Level 1 and below						Numeracy Level 2					
	25th percentile	S.E.	Median	S.E.	75th percentile	S.E.	25th percentile	S.E.	Median	S.E.	75th percentile	S.E.
National entities												
Australia	1.3	(0.0)	1.8	(0.1)	2.4	(0.0)	1.5	(0.1)	2.1	(0.1)	2.6	(0.1)
Austria	0.9	(0.2)	1.5	(0.1)	2.1	(0.2)	1.2	(0.1)	1.8	(0.1)	2.3	(0.1)
Canada	1.3	(0.0)	2.0	(0.1)	2.4	(0.0)	1.5	(0.0)	2.2	(0.0)	2.6	(0.1)
Czech Republic	1.2	(0.3)	1.7	(0.2)	2.2	(0.2)	1.4	(0.2)	1.9	(0.1)	2.6	(0.1)
Denmark	1.0	(0.1)	1.5	(0.1)	2.1	(0.1)	1.0	(0.1)	1.7	(0.0)	2.3	(0.0)
Estonia	1.0	(0.0)	1.6	(0.1)	2.2	(0.1)	1.3	(0.0)	1.8	(0.0)	2.4	(0.0)
Finland	1.2	(0.2)	1.7	(0.1)	2.3	(0.1)	1.3	(0.1)	2.0	(0.0)	2.5	(0.0)
Germany	0.8	(0.3)	1.4	(0.2)	2.2	(0.2)	1.2	(0.1)	1.8	(0.1)	2.4	(0.1)
Ireland	1.0	(0.0)	1.7	(0.1)	2.3	(0.1)	1.3	(0.0)	1.9	(0.0)	2.4	(0.0)
Italy	0.7	(0.4)	1.3	(0.1)	2.0	(0.2)	1.2	(0.2)	1.8	(0.1)	2.4	(0.0)
Japan	0.9	(0.2)	1.3	(0.1)	1.8	(0.1)	1.3	(0.1)	1.6	(0.0)	2.0	(0.0)
Korea	1.0	(0.0)	1.7	(0.0)	2.2	(0.1)	1.4	(0.0)	1.9	(0.1)	2.5	(0.1)
Netherlands	0.8	(0.3)	1.3	(0.2)	2.1	(0.2)	1.0	(0.0)	1.7	(0.1)	2.3	(0.0)
Norway	1.0	(0.1)	1.6	(0.1)	2.1	(0.1)	1.1	(0.2)	1.7	(0.0)	2.2	(0.0)
Poland	1.0	(0.1)	1.6	(0.1)	2.1	(0.1)	1.2	(0.1)	1.8	(0.0)	2.3	(0.1)
Slovak Republic	1.1	(0.2)	1.7	(0.2)	2.3	(0.2)	1.3	(0.1)	2.0	(0.1)	2.5	(0.1)
Spain	1.0	(0.1)	1.7	(0.0)	2.3	(0.1)	1.4	(0.1)	2.0	(0.1)	2.4	(0.0)
Sweden	0.9	(0.2)	1.5	(0.2)	2.0	(0.1)	1.0	(0.0)	1.7	(0.0)	2.2	(0.0)
United States	1.3	(0.1)	2.1	(0.1)	2.5	(0.1)	1.6	(0.1)	2.2	(0.1)	2.6	(0.0)
Sub-national entities												
Flanders (Belgium)	0.6	(0.2)	1.3	(0.1)	2.0	(0.2)	1.0	(0.0)	1.7	(0.1)	2.2	(0.1)
England (UK)	1.1	(0.2)	1.7	(0.2)	2.4	(0.1)	1.3	(0.1)	2.0	(0.1)	2.5	(0.1)
Northern Ireland (UK)	1.0	(0.1)	1.6	(0.1)	2.3	(0.2)	1.3	(0.0)	1.9	(0.1)	2.4	(0.0)
England/N. Ireland (UK)	1.1	(0.2)	1.7	(0.2)	2.4	(0.1)	1.3	(0.1)	2.0	(0.1)	2.5	(0.1)
Average	1.0	(0.0)	1.6	(0.0)	2.2	(0.0)	1.3	(0.0)	1.9	(0.0)	2.4	(0.0)
Partners												
Cyprus[1]	1.1	(0.3)	1.7	(0.0)	2.2	(0.2)	1.3	(0.0)	1.8	(0.1)	2.4	(0.1)

[Part 4/4]

Distribution of skills use, by proficiency level

Table A4.23 *Median, 25th and 75th percentiles of skills use*

OECD	Use of numeracy at work											
	Numeracy Level 3						Numeracy Levels 4 and 5					
	25th percentile	S.E.	Median	S.E.	75th percentile	S.E.	25th percentile	S.E.	Median	S.E.	75th percentile	S.E.
National entities												
Australia	1.7	(0.1)	2.3	(0.0)	2.7	(0.0)	2.0	(0.1)	2.5	(0.0)	2.9	(0.1)
Austria	1.4	(0.1)	2.1	(0.0)	2.5	(0.0)	1.8	(0.1)	2.4	(0.0)	2.9	(0.1)
Canada	1.7	(0.0)	2.3	(0.0)	2.7	(0.0)	2.0	(0.1)	2.5	(0.0)	3.0	(0.1)
Czech Republic	1.7	(0.1)	2.3	(0.1)	2.8	(0.0)	1.9	(0.1)	2.5	(0.1)	2.9	(0.1)
Denmark	1.3	(0.1)	2.0	(0.0)	2.5	(0.0)	1.8	(0.1)	2.3	(0.1)	2.8	(0.0)
Estonia	1.5	(0.1)	2.1	(0.0)	2.6	(0.0)	1.9	(0.1)	2.4	(0.1)	2.9	(0.0)
Finland	1.7	(0.0)	2.2	(0.0)	2.7	(0.0)	2.0	(0.0)	2.5	(0.1)	2.9	(0.0)
Germany	1.5	(0.1)	2.2	(0.1)	2.7	(0.0)	1.9	(0.1)	2.4	(0.1)	2.9	(0.1)
Ireland	1.5	(0.1)	2.2	(0.0)	2.7	(0.1)	2.0	(0.1)	2.5	(0.1)	2.9	(0.1)
Italy	1.5	(0.1)	2.2	(0.1)	2.7	(0.1)	1.9	(0.3)	2.5	(0.2)	3.1	(0.1)
Japan	1.3	(0.1)	1.8	(0.1)	2.4	(0.0)	1.7	(0.0)	2.3	(0.1)	2.7	(0.0)
Korea	1.6	(0.1)	2.1	(0.1)	2.7	(0.1)	1.8	(0.1)	2.4	(0.1)	2.9	(0.1)
Netherlands	1.3	(0.1)	2.0	(0.0)	2.5	(0.0)	1.7	(0.1)	2.3	(0.1)	2.8	(0.0)
Norway	1.3	(0.1)	1.9	(0.0)	2.4	(0.0)	1.7	(0.1)	2.2	(0.0)	2.6	(0.0)
Poland	1.5	(0.1)	2.1	(0.1)	2.7	(0.1)	1.9	(0.1)	2.4	(0.1)	3.0	(0.2)
Slovak Republic	1.6	(0.1)	2.3	(0.1)	2.8	(0.1)	1.8	(0.1)	2.4	(0.1)	2.9	(0.1)
Spain	1.5	(0.1)	2.2	(0.1)	2.8	(0.0)	2.0	(0.2)	2.7	(0.2)	3.3	(0.1)
Sweden	1.3	(0.1)	2.0	(0.0)	2.4	(0.0)	1.8	(0.0)	2.3	(0.0)	2.7	(0.0)
United States	1.8	(0.1)	2.3	(0.0)	2.8	(0.1)	1.9	(0.1)	2.4	(0.1)	3.0	(0.1)
Sub-national entities												
Flanders (Belgium)	1.3	(0.0)	2.0	(0.1)	2.5	(0.0)	1.7	(0.1)	2.4	(0.1)	2.9	(0.1)
England (UK)	1.5	(0.1)	2.2	(0.1)	2.6	(0.0)	1.8	(0.1)	2.4	(0.1)	2.9	(0.1)
Northern Ireland (UK)	1.6	(0.1)	2.2	(0.1)	2.7	(0.1)	1.8	(0.1)	2.3	(0.1)	2.8	(0.1)
England/N. Ireland (UK)	1.5	(0.1)	2.2	(0.1)	2.6	(0.0)	1.8	(0.1)	2.4	(0.1)	2.9	(0.1)
Average	1.5	(0.0)	2.1	(0.0)	2.6	(0.0)	1.9	(0.0)	2.4	(0.0)	2.9	(0.0)
Partners												
Cyprus[1]	1.3	(0.1)	2.0	(0.0)	2.6	(0.1)	1.7	(0.1)	2.4	(0.1)	2.8	(0.1)

1. See notes on page 250.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898351

[Part 1/1]

Workers in jobs requiring low or high levels of education

Percentage of workers in jobs requiring primary education (ISCED-1) or less and in jobs requiring tertiary education (ISCED-5 or higher)

Table A4.24

OECD	Education requirement			
	ISCED 1 or lower		ISCED 5 and higher	
	%	S.E.	%	S.E.
National entities				
Australia	11.7	(0.7)	33.9	(0.8)
Austria	4.4	(0.4)	18.5	(0.7)
Canada	5.9	(0.3)	45.2	(0.6)
Czech Republic	2.5	(0.5)	21.5	(0.9)
Denmark	10.1	(0.5)	39.8	(0.7)
Estonia	2.7	(0.2)	38.5	(0.8)
Finland	9.5	(0.5)	46.1	(0.7)
Germany	0.0	(0.0)	32.9	(0.7)
Ireland	12.8	(0.8)	35.9	(0.8)
Italy	9.7	(1.0)	20.7	(0.8)
Japan	1.9	(0.2)	31.3	(0.7)
Korea	14.7	(0.7)	40.4	(0.9)
Netherlands	12.0	(0.5)	36.3	(0.8)
Norway	11.8	(0.6)	39.4	(0.6)
Poland	6.5	(0.5)	34.6	(0.9)
Slovak Republic	3.5	(0.4)	22.7	(0.9)
Spain	25.4	(0.8)	37.2	(0.9)
Sweden	2.9	(0.3)	37.8	(0.6)
United States	5.4	(0.5)	36.0	(0.9)
Sub-national entities				
Flanders (Belgium)	13.4	(0.6)	47.2	(1.1)
England (UK)	22.8	(0.9)	33.1	(1.0)
Northern Ireland (UK)	19.7	(1.0)	31.7	(1.2)
England/N. Ireland (UK)	22.7	(0.8)	33.0	(0.9)
Average	9.0	(0.1)	34.7	(0.2)
Partners				
Cyprus[1]	8.1	(0.6)	45.0	(1.1)

1. See notes on page 250.

Note: Required education is the qualification the worker deems necessary to get his or her job today.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898370

[Part 1/1]

Table A4.25 **Percentage of workers in each category of qualification and skills mismatch**

	Qualification mismatch						Skills mismatch											
							Literacy						Numeracy					
	Over-qualified		Under-qualified		Well-matched		Over-skilled		Under-skilled		Well-matched		Over-skilled		Under-skilled		Well-matched	
OECD	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
National entities																		
Australia	27.8	(0.9)	13.9	(0.6)	58.4	(1.0)	9.1	(0.5)	2.8	(0.3)	88.1	(0.6)	9.4	(0.5)	2.5	(0.3)	88.1	(0.6)
Austria	21.0	(0.8)	14.1	(0.7)	64.9	(0.8)	18.2	(0.8)	1.3	(0.2)	80.5	(0.8)	17.9	(0.8)	1.9	(0.3)	80.2	(0.9)
Canada	26.8	(0.5)	14.7	(0.5)	58.5	(0.6)	6.5	(0.3)	3.6	(0.3)	89.8	(0.4)	7.0	(0.4)	4.1	(0.3)	88.8	(0.4)
Czech Republic	20.6	(1.0)	7.8	(0.7)	71.5	(1.1)	16.2	(1.2)	1.8	(0.3)	82.0	(1.1)	13.5	(1.0)	2.7	(0.4)	83.8	(1.1)
Denmark	18.4	(0.6)	10.0	(0.5)	71.6	(0.7)	7.8	(0.6)	4.1	(0.3)	88.1	(0.6)	6.9	(0.5)	3.6	(0.3)	89.5	(0.5)
Estonia	26.5	(0.6)	12.2	(0.5)	61.3	(0.7)	7.1	(0.4)	4.7	(0.3)	88.2	(0.5)	6.6	(0.4)	3.8	(0.3)	89.5	(0.5)
Finland	16.8	(0.7)	14.3	(0.6)	69.0	(0.8)	6.4	(0.5)	3.7	(0.3)	89.9	(0.5)	7.0	(0.5)	3.5	(0.3)	89.6	(0.5)
Germany	23.2	(0.9)	11.1	(0.6)	65.8	(0.9)	14.5	(0.7)	1.4	(0.2)	84.1	(0.7)	15.3	(0.7)	1.8	(0.3)	82.9	(0.7)
Ireland	27.2	(1.0)	15.7	(0.8)	57.1	(1.1)	15.1	(0.7)	4.5	(0.4)	80.4	(0.8)	13.0	(0.7)	4.5	(0.4)	82.5	(0.8)
Italy	13.3	(0.8)	22.4	(1.1)	64.4	(1.2)	11.7	(0.9)	6.0	(0.7)	82.3	(1.1)	12.6	(1.0)	7.5	(0.7)	80.0	(1.1)
Japan	31.1	(0.7)	8.0	(0.6)	61.0	(0.7)	9.8	(0.6)	3.1	(0.3)	87.1	(0.7)	7.9	(0.5)	3.7	(0.4)	88.4	(0.6)
Korea	21.2	(0.8)	10.7	(0.6)	68.1	(0.8)	10.7	(0.7)	1.8	(0.2)	87.5	(0.7)	13.1	(0.7)	2.6	(0.4)	84.3	(0.8)
Netherlands	14.8	(0.6)	17.6	(0.7)	67.5	(0.8)	6.8	(0.5)	2.7	(0.3)	90.5	(0.6)	5.1	(0.4)	3.0	(0.3)	91.9	(0.5)
Norway	19.8	(0.7)	15.2	(0.6)	65.0	(0.8)	8.8	(0.6)	4.7	(0.4)	86.5	(0.6)	6.4	(0.4)	4.1	(0.4)	89.5	(0.4)
Poland	16.4	(0.8)	9.2	(0.6)	74.4	(1.0)	7.2	(0.5)	2.6	(0.3)	90.2	(0.7)	11.2	(0.6)	1.4	(0.3)	87.4	(0.7)
Slovak Republic	18.0	(0.9)	4.1	(0.4)	77.9	(0.9)	12.1	(0.8)	3.8	(0.4)	84.1	(0.9)	11.9	(0.7)	3.5	(0.4)	84.6	(0.8)
Spain	21.7	(0.8)	9.5	(0.6)	68.7	(0.9)	16.9	(0.8)	2.7	(0.4)	80.5	(0.8)	15.8	(0.8)	3.1	(0.4)	81.0	(0.9)
Sweden	18.7	(0.7)	21.2	(0.8)	60.1	(1.0)	5.8	(0.4)	5.0	(0.5)	89.2	(0.6)	6.1	(0.5)	4.6	(0.4)	89.2	(0.6)
United States	19.7	(0.9)	12.8	(0.8)	67.5	(1.1)	9.0	(0.7)	3.9	(0.5)	87.2	(0.8)	9.4	(0.7)	3.0	(0.4)	87.7	(0.7)
Sub-national entities																		
Flanders (Belgium)	15.8	(0.7)	13.6	(0.6)	70.7	(0.9)	7.9	(0.5)	3.9	(0.4)	88.3	(0.6)	6.7	(0.4)	4.1	(0.4)	89.1	(0.6)
England (UK)	30.2	(0.8)	12.4	(0.7)	57.4	(1.0)	6.9	(0.6)	6.5	(0.6)	86.6	(0.7)	5.6	(0.5)	6.9	(0.6)	87.5	(0.7)
Northern Ireland (UK)	22.0	(1.1)	14.1	(1.0)	63.9	(1.4)	6.9	(0.6)	2.4	(0.4)	90.7	(0.8)	10.5	(0.9)	2.8	(0.5)	86.7	(1.0)
England/N. Ireland (UK)	29.9	(0.8)	12.5	(0.6)	57.6	(1.0)	8.1	(0.6)	6.5	(0.6)	85.4	(0.7)	6.6	(0.6)	6.9	(0.5)	86.5	(0.7)
Average	21.4	(0.2)	12.9	(0.1)	65.8	(0.2)	10.3	(0.1)	3.6	(0.1)	86.2	(0.2)	10.0	(0.1)	3.6	(0.1)	86.4	(0.2)
Partners																		
Cyprus[1]	15.9	(0.8)	15.8	(0.8)	68.3	(1.1)	9.2	(0.7)	7.9	(0.6)	83.0	(0.8)	6.3	(0.5)	5.2	(0.6)	88.6	(0.7)

1. See notes on page 250.

Note: Qualification mismatch is defined relative to the qualification needed to get the job, as reported by the respondents. Over-skilled workers are those whose proficiency score is higher than that corresponding to the 95th percentile of self-reported well-matched workers – i.e. workers who neither feel they have the skills to perform a more demanding job nor feel the need of further training in order to be able to perform their current jobs satisfactorily – in their country and occupation. Under-skilled workers are those whose proficiency score is lower than that corresponding to the 5th percentile of self-reported well-matched workers in their country and occupation.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898389

[Part 1/3]

Table A4.26 **Percentage of workers in each category of skills mismatch, by qualification-mismatch status**

	Over-qualified											
	Literacy mismatch						Numeracy mismatch					
	Over-skilled		Under-skilled		Well-matched		Over-skilled		Under-skilled		Well-matched	
OECD	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
National entities												
Australia	13.8	(1.2)	2.2	(0.5)	83.9	(1.2)	12.9	(1.2)	1.8	(0.4)	85.3	(1.3)
Austria	23.4	(1.8)	1.4	(0.6)	75.2	(1.9)	24.6	(1.9)	2.6	(0.8)	72.8	(2.2)
Canada	10.1	(0.9)	2.6	(0.4)	87.3	(0.9)	8.9	(0.9)	2.8	(0.4)	88.3	(1.0)
Czech Republic	16.8	(2.1)	2.2	(1.0)	81.0	(2.2)	17.2	(2.2)	2.2	(0.9)	80.6	(2.3)
Denmark	13.5	(1.5)	5.0	(0.7)	81.5	(1.6)	9.3	(1.4)	3.9	(0.7)	86.8	(1.4)
Estonia	7.4	(0.7)	3.5	(0.6)	89.1	(0.8)	5.8	(0.7)	2.6	(0.5)	91.5	(0.8)
Finland	10.4	(1.3)	1.5	(0.6)	88.1	(1.3)	11.6	(1.5)	1.9	(0.7)	86.5	(1.6)
Germany	21.9	(1.6)	0.3	(0.2)	77.8	(1.5)	22.8	(1.8)	0.7	(0.6)	76.5	(1.8)
Ireland	25.3	(2.0)	2.4	(0.5)	72.3	(2.0)	21.0	(1.8)	2.3	(0.6)	76.6	(1.9)
Italy	16.4	(2.4)	4.3	(1.4)	79.3	(2.6)	16.2	(2.6)	3.7	(1.2)	80.0	(2.7)
Japan	9.2	(1.0)	1.6	(0.4)	89.2	(1.1)	7.8	(0.9)	2.1	(0.4)	90.2	(1.0)
Korea	11.3	(1.4)	2.2	(0.6)	86.4	(1.5)	13.7	(1.3)	2.9	(0.8)	83.4	(1.6)
Netherlands	16.1	(1.8)	1.8	(0.8)	82.0	(1.9)	11.4	(1.5)	0.3	(0.3)	88.4	(1.5)
Norway	12.5	(1.5)	3.3	(0.8)	84.2	(1.6)	8.0	(1.2)	3.6	(0.9)	88.4	(1.3)
Poland	8.0	(1.3)	3.3	(0.8)	88.6	(1.6)	11.8	(1.5)	3.0	(0.8)	85.1	(1.8)
Slovak Republic	15.4	(1.5)	2.7	(0.9)	81.9	(1.8)	14.4	(1.7)	4.3	(1.1)	81.2	(1.9)
Spain	20.2	(1.7)	2.4	(0.8)	77.4	(1.8)	24.8	(2.3)	1.8	(0.6)	73.5	(2.4)
Sweden	11.2	(1.4)	3.7	(0.9)	85.1	(1.7)	12.5	(1.3)	4.1	(0.9)	83.4	(1.5)
United States	13.0	(1.8)	2.8	(0.7)	84.2	(1.8)	13.4	(1.6)	2.9	(1.0)	83.8	(1.8)
Sub-national entities												
Flanders (Belgium)	11.6	(1.5)	3.3	(0.8)	85.1	(1.8)	10.9	(1.5)	3.4	(0.9)	85.7	(1.7)
England (UK)	6.9	(1.0)	4.1	(0.9)	88.9	(1.3)	4.5	(0.8)	4.2	(0.9)	91.3	(1.1)
Northern Ireland (UK)	10.8	(1.6)	1.2	(0.4)	88.1	(1.6)	18.9	(2.3)	1.2	(0.6)	79.9	(2.3)
England/N. Ireland (UK)	9.8	(1.3)	4.1	(0.9)	86.1	(1.5)	7.3	(1.0)	4.2	(0.8)	88.5	(1.2)
Average	14.2	(0.3)	2.7	(0.2)	83.1	(0.4)	13.6	(0.3)	2.7	(0.2)	83.6	(0.4)
Partners												
Cyprus[1]	15.0	(1.9)	6.2	(1.6)	78.7	(2.1)	8.1	(1.3)	5.0	(1.5)	86.9	(1.9)

[Part 2/3]

Table A4.26 **Percentage of workers in each category of skills mismatch, by qualification-mismatch status**

	Under-qualified											
	Literacy mismatch						Numeracy mismatch					
	Over-skilled		Under-skilled		Well-matched		Over-skilled		Under-skilled		Well-matched	
OECD	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
National entities												
Australia	6.3	(1.5)	3.9	(0.9)	89.8	(1.8)	7.2	(1.5)	4.1	(1.1)	88.6	(2.0)
Austria	18.5	(2.4)	1.9	(0.7)	79.6	(2.4)	18.3	(2.2)	2.9	(0.8)	78.8	(2.2)
Canada	3.6	(0.7)	5.4	(0.7)	91.0	(1.0)	3.6	(0.7)	7.0	(0.9)	89.4	(1.1)
Czech Republic	6.7	(2.1)	2.2	(1.2)	91.1	(2.3)	6.7	(1.9)	2.7	(1.0)	90.6	(2.2)
Denmark	3.6	(0.9)	3.2	(0.8)	93.2	(1.2)	4.7	(1.2)	2.9	(0.7)	92.4	(1.3)
Estonia	3.3	(0.8)	8.0	(1.2)	88.7	(1.4)	5.5	(0.9)	7.3	(1.2)	87.2	(1.4)
Finland	2.9	(0.8)	4.6	(1.2)	92.5	(1.3)	4.6	(1.0)	5.7	(1.2)	89.8	(1.5)
Germany	14.4	(2.1)	2.8	(1.1)	82.8	(2.3)	12.7	(1.9)	3.1	(1.0)	84.2	(2.0)
Ireland	5.3	(1.1)	8.0	(1.2)	86.7	(1.5)	6.8	(1.5)	7.5	(1.2)	85.7	(1.9)
Italy	10.1	(1.7)	7.5	(1.8)	82.5	(2.3)	9.9	(1.6)	6.6	(1.7)	83.5	(2.1)
Japan	4.5	(1.5)	7.3	(1.8)	88.1	(2.4)	4.2	(1.6)	8.7	(2.0)	87.1	(2.6)
Korea	7.5	(1.7)	3.2	(0.9)	89.3	(2.1)	10.0	(2.0)	2.9	(1.1)	87.1	(2.2)
Netherlands	4.2	(0.8)	3.7	(0.9)	92.1	(1.1)	2.1	(0.6)	4.9	(0.9)	93.0	(1.1)
Norway	6.8	(1.2)	3.7	(0.9)	89.5	(1.5)	4.9	(1.1)	3.6	(0.7)	91.5	(1.4)
Poland	6.5	(1.7)	5.3	(1.4)	88.2	(2.2)	11.9	(2.6)	3.4	(1.2)	84.6	(2.9)
Slovak Republic	11.9	(3.7)	2.6	(1.3)	85.5	(4.0)	12.5	(3.4)	0.6	(0.6)	86.8	(3.4)
Spain	18.4	(2.9)	4.2	(1.3)	77.4	(3.2)	17.6	(3.1)	4.6	(1.4)	77.8	(3.3)
Sweden	2.5	(0.6)	7.0	(1.2)	90.6	(1.3)	2.6	(0.7)	6.1	(1.2)	91.3	(1.4)
United States	4.9	(1.1)	8.3	(1.8)	86.9	(1.7)	3.1	(1.2)	6.4	(1.3)	90.6	(1.6)
Sub-national entities												
Flanders (Belgium)	3.9	(1.0)	5.4	(1.1)	90.7	(1.6)	3.6	(1.0)	6.7	(1.3)	89.7	(1.6)
England (UK)	5.0	(1.4)	8.5	(2.0)	86.5	(2.3)	4.0	(1.3)	8.2	(2.0)	87.8	(2.4)
Northern Ireland (UK)	4.1	(1.7)	4.8	(1.5)	91.1	(2.3)	3.4	(1.2)	3.8	(1.6)	92.8	(1.7)
England/N. Ireland (UK)	5.0	(1.4)	8.5	(1.9)	86.6	(2.2)	3.9	(1.3)	8.3	(1.9)	87.8	(2.3)
Average	7.2	(0.4)	5.1	(0.3)	87.8	(0.5)	7.5	(0.4)	5.1	(0.3)	87.5	(0.5)
Partners												
Cyprus[1]	5.6	(1.7)	14.4	(2.1)	80.0	(2.5)	5.5	(1.5)	9.0	(2.0)	85.5	(2.3)

1. See notes on page 250.

Note: Qualification mismatch is defined relative to the qualification needed to get the job, as reported by the respondents.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898408

[Part 3/3]

Table A4.26 **Percentage of workers in each category of skills mismatch, by qualification-mismatch status**

	Well-matched											
	Literacy mismatch						Numeracy mismatch					
	Over-skilled		Under-skilled		Well-matched		Over-skilled		Under-skilled		Well-matched	
OECD	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
National entities												
Australia	7.7	(0.6)	2.7	(0.4)	89.6	(0.7)	8.5	(0.7)	2.4	(0.4)	89.1	(0.8)
Austria	16.4	(0.9)	1.2	(0.3)	82.4	(1.0)	15.6	(0.9)	1.5	(0.3)	82.9	(0.9)
Canada	5.6	(0.4)	3.6	(0.4)	90.7	(0.5)	7.1	(0.4)	4.0	(0.4)	88.9	(0.5)
Czech Republic	17.2	(1.5)	1.7	(0.3)	81.1	(1.5)	13.3	(1.0)	2.8	(0.5)	83.9	(1.2)
Denmark	6.9	(0.6)	4.0	(0.3)	89.1	(0.6)	6.6	(0.5)	3.6	(0.3)	89.8	(0.6)
Estonia	7.7	(0.5)	4.5	(0.4)	87.8	(0.7)	7.2	(0.6)	3.6	(0.3)	89.2	(0.7)
Finland	6.3	(0.5)	3.9	(0.4)	89.8	(0.7)	6.4	(0.5)	3.3	(0.4)	90.3	(0.6)
Germany	11.6	(0.8)	1.4	(0.3)	87.0	(0.9)	12.9	(0.8)	1.8	(0.3)	85.3	(0.8)
Ireland	13.0	(0.8)	4.4	(0.6)	82.6	(1.0)	11.1	(0.8)	4.5	(0.6)	84.4	(1.0)
Italy	11.3	(1.1)	5.8	(0.8)	82.8	(1.4)	12.8	(1.1)	8.4	(0.9)	78.8	(1.3)
Japan	10.6	(0.7)	3.4	(0.4)	86.0	(0.7)	8.4	(0.6)	4.0	(0.5)	87.6	(0.8)
Korea	11.0	(0.7)	1.5	(0.3)	87.5	(0.8)	13.4	(0.8)	2.5	(0.4)	84.1	(0.9)
Netherlands	5.7	(0.5)	2.6	(0.4)	91.8	(0.7)	4.7	(0.5)	3.0	(0.4)	92.4	(0.6)
Norway	8.2	(0.6)	5.3	(0.5)	86.5	(0.7)	6.3	(0.5)	4.3	(0.5)	89.4	(0.6)
Poland	7.2	(0.6)	2.0	(0.4)	90.8	(0.7)	11.1	(0.7)	0.7	(0.3)	88.1	(0.7)
Slovak Republic	11.4	(0.8)	4.1	(0.5)	84.5	(0.9)	11.3	(0.8)	3.5	(0.5)	85.3	(0.9)
Spain	16.0	(1.0)	2.5	(0.4)	81.5	(1.1)	13.1	(0.8)	3.3	(0.5)	83.6	(1.0)
Sweden	5.6	(0.5)	4.5	(0.6)	89.9	(0.8)	5.7	(0.6)	4.1	(0.5)	90.2	(0.8)
United States	8.6	(0.8)	3.3	(0.6)	88.0	(1.0)	9.4	(0.8)	2.3	(0.4)	88.3	(0.8)
Sub-national entities												
Flanders (Belgium)	7.9	(0.6)	3.4	(0.4)	88.7	(0.8)	6.5	(0.5)	3.8	(0.4)	89.7	(0.7)
England (UK)	7.3	(0.7)	7.2	(0.7)	85.4	(0.9)	6.5	(0.7)	7.9	(0.8)	85.6	(1.0)
Northern Ireland (UK)	6.2	(0.8)	2.4	(0.5)	91.4	(1.0)	9.1	(1.0)	3.2	(0.7)	87.7	(1.3)
England/N. Ireland (UK)	7.9	(0.8)	7.2	(0.7)	84.9	(0.9)	6.8	(0.8)	7.9	(0.8)	85.3	(1.0)
Average	9.7	(0.2)	3.5	(0.1)	86.8	(0.2)	9.4	(0.2)	3.6	(0.1)	87.0	(0.2)
Partners												
Cyprus[1]	8.7	(0.8)	6.8	(0.8)	84.6	(1.0)	6.0	(0.6)	4.3	(0.6)	89.7	(0.8)

1. See notes on page 250.

Note: Qualification mismatch is defined relative to the qualification needed to get the job, as reported by the respondents.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898408

[Part 1/1]

Table A4.27 (L) Mean literacy score, adjusted for years of education, gender, age and foreign-born status, by qualification-mismatch status

	Adjusted literacy score					
	Over-qualified		Under-qualified		Well-matched	
OECD	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities						
Australia	173.6	(1.4)	189.2	(1.8)	180.3	(0.8)
Austria	211.6	(1.4)	231.5	(1.6)	215.4	(0.8)
Canada	184.1	(0.9)	199.9	(1.5)	194.7	(0.7)
Czech Republic	206.8	(2.3)	228.2	(3.0)	217.4	(1.1)
Denmark	214.8	(1.4)	232.8	(1.7)	218.5	(0.7)
Estonia	223.2	(1.0)	232.1	(1.6)	229.1	(0.7)
Finland	255.8	(1.7)	260.9	(2.0)	254.8	(0.7)
Germany	201.4	(1.4)	213.4	(2.2)	202.5	(1.0)
Ireland	181.7	(1.6)	189.8	(2.1)	187.6	(1.0)
Italy	200.2	(2.2)	213.9	(2.0)	206.6	(1.4)
Japan	236.5	(0.9)	241.3	(2.6)	239.6	(0.7)
Korea	230.5	(1.2)	243.7	(2.2)	241.9	(0.6)
Netherlands	221.9	(1.8)	235.9	(1.5)	223.9	(0.7)
Norway	201.2	(1.3)	213.1	(1.5)	207.6	(0.7)
Poland	184.7	(1.6)	199.8	(2.5)	194.6	(0.8)
Slovak Republic	227.3	(1.7)	236.7	(3.1)	231.9	(0.8)
Spain	209.4	(1.6)	216.3	(2.6)	213.5	(0.9)
Sweden	220.9	(1.6)	230.8	(1.4)	223.2	(0.9)
United States	168.7	(2.0)	179.5	(3.3)	174.1	(1.0)
Sub-national entities						
Flanders (Belgium)	192.5	(1.7)	217.4	(1.8)	204.2	(0.7)
England (UK)	193.2	(1.9)	203.1	(3.0)	199.6	(1.2)
Northern Ireland (UK)	197.9	(1.6)	209.1	(2.6)	201.9	(1.3)
England/N. Ireland (UK)	193.4	(1.9)	203.3	(2.9)	199.7	(1.2)
Average	206.7	(0.3)	219.5	(0.5)	212.4	(0.2)
Partners						
Cyprus[1]	205.6	(2.0)	207.5	(2.3)	211.2	(0.9)

1. See notes on page 250.

Note: Qualification mismatch is defined relative to the qualification needed to get the job, as reported by the respondents.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898427

[Part 1/4]

Likelihood of over-qualification, by socio-demographic and job characteristics

Table A4.28 *Odds ratios from logit regression, relative to being well-matched*

	Dependent variable: Over-qualified											
	Gender and marital status						Immigrant status					
	Single men (reference)			Married women			Native born (reference)			Foreign born		
OECD	Odds ratio	p-value	n	Odds ratio	p-value	n	Odds ratio	p-value	n	Odds ratio	p-value	n
National entities												
Australia	1.0	a	267	0.6	0.014	892	1.0	a	1 683	1.2	0.097	719
Austria	1.0	a	164	0.8	0.414	717	1.0	a	1 677	2.4	0.000	243
Canada	1.0	a	981	0.6	0.000	3 957	1.0	a	7 856	1.5	0.000	2 101
Czech Republic	1.0	a	230	3.2	0.000	622	1.0	a	1 846	1.4	0.376	54
Denmark	1.0	a	147	0.5	0.004	1 311	1.0	a	2 389	3.7	0.000	532
Estonia	1.0	a	198	0.9	0.615	1 308	1.0	a	2 632	1.4	0.015	358
Finland	1.0	a	73	0.7	0.233	917	1.0	a	1 958	2.6	0.000	84
Germany	1.0	a	155	0.8	0.326	940	1.0	a	1 984	2.0	0.000	220
Ireland	1.0	a	176	0.7	0.041	721	1.0	a	1 376	1.6	0.004	413
Italy	1.0	a	165	0.5	0.017	306	1.0	a	910	4.7	0.000	114
Japan	1.0	a	344	0.6	0.002	817	1.0	a	2 526	c	c	6
Korea	1.0	a	353	1.1	0.535	549	1.0	a	2 082	c	c	22
Netherlands	1.0	a	110	0.4	0.003	780	1.0	a	1 627	2.0	0.001	138
Norway	1.0	a	125	1.0	0.995	899	1.0	a	1 858	2.5	0.000	280
Poland	1.0	a	781	0.7	0.201	750	1.0	a	2 870	c	c	2
Slovak Republic	1.0	a	331	1.1	0.652	791	1.0	a	2 168	1.4	0.426	41
Spain	1.0	a	153	1.2	0.549	511	1.0	a	1 147	2.2	0.004	152
Sweden	1.0	a	111	0.5	0.005	756	1.0	a	1 409	2.3	0.000	234
United States	1.0	a	169	0.8	0.371	545	1.0	a	708	1.1	0.542	97
Sub-national entities												
Flanders (Belgium)	1.0	a	208	0.8	0.282	854	1.0	a	1 890	3.2	0.000	126
England (UK)	1.0	a	167	0.7	0.047	667	1.0	a	1 495	1.6	0.013	236
Northern Ireland (UK)	1.0	a	114	0.6	0.055	482	1.0	a	1 106	1.4	0.133	107
England/N. Ireland (UK)	1.0	a	281	0.7	0.041	1 149	1.0	a	2 601	1.6	0.011	343
Partners												
Cyprus[1]	1.0	a	110	1.1	0.758	647	1.0	a	1 319	1.8	0.002	213

[Part 2/4]

Likelihood of over-qualification, by socio-demographic and job characteristics

Table A4.28 *Odds ratios from logit regression, relative to being well-matched*

	Dependent variable: Over-qualified					
	Establishment size					
	Small (1-10 employees) (reference)			Large (1000+ employees)		
OECD	Odds ratio	p-value	n	Odds ratio	p-value	n
National entities						
Australia	1.0	a	544	0.4	0.000	218
Austria	1.0	a	465	0.7	0.304	153
Canada	1.0	a	2 117	0.6	0.001	893
Czech Republic	1.0	a	569	0.9	0.687	80
Denmark	1.0	a	492	0.4	0.004	271
Estonia	1.0	a	867	0.5	0.008	98
Finland	1.0	a	499	0.4	0.018	91
Germany	1.0	a	482	0.9	0.696	251
Ireland	1.0	a	418	0.5	0.026	146
Italy	1.0	a	338	0.4	0.078	90
Japan	1.0	a	589	0.3	0.000	192
Korea	1.0	a	671	0.3	0.000	201
Netherlands	1.0	a	298	0.5	0.032	169
Norway	1.0	a	373	0.5	0.009	274
Poland	1.0	a	749	0.7	0.301	194
Slovak Republic	1.0	a	515	1.1	0.787	156
Spain	1.0	a	393	0.8	0.647	76
Sweden	1.0	a	322	0.4	0.004	156
United States	1.0	a	166	0.4	0.002	40
Sub-national entities						
Flanders (Belgium)	1.0	a	372	0.5	0.009	176
England (UK)	1.0	a	304	0.3	0.000	258
Northern Ireland (UK)	1.0	a	221	0.5	0.024	163
England/N. Ireland (UK)	1.0	a	525	0.3	0.000	421
Partners						
Cyprus[1]	1.0	a	588	1.0	0.984	41

1. See notes on page 250.

Note: Over-qualification is defined relative to the qualification needed to get the job, as reported by the respondents. Results are adjusted for years of education, age, gender and marital status, foreign-born status, establishment size, hours worked and contract type.

Source: Survey of Adult Skills (PIAAC) (2012).

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[Part 3/4]

Likelihood of over-qualification, by socio-demographic and job characteristics

Table A4.28 *Odds ratios from logit regression, relative to being well-matched*

	Dependent variable: Over-qualified											
	Age											
	16-24 year-olds			25-44 year-olds (reference)			45-54 year-olds			55-64 year-olds		
OECD	Odds ratio	p-value	n	Odds ratio	p-value	n	Odds ratio	p-value	n	Odds ratio	p-value	n
National entities												
Australia	1.6	0.067	253	1.0	a	1 352	1.0	0.697	470	1.0	0.906	327
Austria	1.3	0.170	209	1.0	a	1 029	1.2	0.107	521	0.9	0.715	161
Canada	1.3	0.052	1 062	1.0	a	4 844	1.2	0.046	2 638	1.0	0.935	1 413
Czech Republic	1.1	0.862	175	1.0	a	1 103	0.9	0.634	375	0.8	0.430	247
Denmark	2.7	0.000	115	1.0	a	1 241	1.2	0.320	751	1.2	0.146	814
Estonia	1.0	0.835	202	1.0	a	1 460	1.3	0.006	804	1.1	0.490	524
Finland	0.9	0.522	125	1.0	a	1 013	0.9	0.289	548	0.6	0.007	356
Germany	0.7	0.271	143	1.0	a	1 051	1.0	0.998	693	1.0	0.909	317
Ireland	1.2	0.327	140	1.0	a	1 209	0.6	0.002	314	0.9	0.507	126
Italy	0.9	0.702	50	1.0	a	625	0.7	0.160	252	0.6	0.121	97
Japan	1.1	0.490	189	1.0	a	1 269	1.0	0.718	613	1.1	0.543	461
Korea	1.1	0.615	176	1.0	a	1 294	1.8	0.000	486	2.8	0.000	148
Netherlands	1.1	0.725	157	1.0	a	900	1.1	0.679	466	1.2	0.509	242
Norway	2.3	0.000	153	1.0	a	1 125	0.9	0.587	544	1.0	0.964	316
Poland	1.0	0.798	905	1.0	a	1 467	0.7	0.042	345	0.6	0.045	155
Slovak Republic	1.1	0.673	181	1.0	a	1 172	1.0	0.950	573	1.2	0.347	283
Spain	1.5	0.275	63	1.0	a	819	0.9	0.634	320	0.8	0.478	97
Sweden	0.7	0.345	119	1.0	a	808	1.4	0.053	443	1.1	0.764	273
United States	1.6	0.056	140	1.0	a	400	0.9	0.485	165	1.1	0.636	100
Sub-national entities												
Flanders (Belgium)	1.0	0.897	185	1.0	a	1 110	0.9	0.253	545	0.9	0.733	176
England (UK)	1.4	0.107	199	1.0	a	968	0.9	0.343	372	1.0	0.865	192
Northern Ireland (UK)	0.8	0.457	133	1.0	a	756	0.8	0.300	229	0.9	0.807	95
England/N. Ireland (UK)	1.4	0.109	332	1.0	a	1 724	0.9	0.334	601	1.0	0.840	287
Partners												
Cyprus[1]	1.0	0.880	113	1.0	a	975	1.3	0.147	330	0.8	0.499	114

[Part 4/4]

Likelihood of over-qualification, by socio-demographic and job characteristics

Table A4.28 *Odds ratios from logit regression, relative to being well-matched*

	Dependent variable: Over-qualified											
	Hours worked						Contract type					
	Part time (reference)			Full time			Indefinite (reference)			Fixed term		
OECD	Odds ratio	p-value	n	Odds ratio	p-value	n	Odds ratio	p-value	n	Odds ratio	p-value	n
National entities												
Australia	1.0	a	699	0.4	0.000	1 703	1.0	a	1 690	0.5	0.001	311
Austria	1.0	a	455	0.5	0.000	1 465	1.0	a	1 725	1.2	0.353	135
Canada	1.0	a	1 712	0.5	0.000	8 245	1.0	a	7 671	1.0	0.806	882
Czech Republic	1.0	a	150	0.5	0.066	1 750	1.0	a	1 546	1.3	0.112	334
Denmark	1.0	a	509	0.6	0.000	2 412	1.0	a	2 628	1.1	0.566	247
Estonia	1.0	a	237	0.8	0.241	2 753	1.0	a	2 642	1.1	0.619	300
Finland	1.0	a	200	0.5	0.000	1 842	1.0	a	1 770	1.5	0.016	252
Germany	1.0	a	639	0.5	0.000	1 565	1.0	a	1 903	1.8	0.003	232
Ireland	1.0	a	426	0.6	0.005	1 363	1.0	a	1 297	1.1	0.461	280
Italy	1.0	a	176	0.6	0.025	848	1.0	a	866	1.6	0.026	132
Japan	1.0	a	683	0.5	0.000	1 849	1.0	a	2 003	0.8	0.080	472
Korea	1.0	a	287	0.7	0.049	1 817	1.0	a	1 173	1.1	0.563	391
Netherlands	1.0	a	767	0.6	0.002	998	1.0	a	1 462	2.0	0.001	265
Norway	1.0	a	367	0.7	0.013	1 771	1.0	a	1 934	1.6	0.015	170
Poland	1.0	a	254	0.7	0.141	2 618	1.0	a	1 608	1.1	0.451	1 169
Slovak Republic	1.0	a	116	1.0	0.860	2 093	1.0	a	1 827	1.6	0.002	288
Spain	1.0	a	202	0.7	0.189	1 097	1.0	a	1 070	1.3	0.175	191
Sweden	1.0	a	355	0.7	0.021	1 288	1.0	a	1 448	2.2	0.005	144
United States	1.0	a	126	0.7	0.042	679	1.0	a	256	0.9	0.761	100
Sub-national entities												
Flanders (Belgium)	1.0	a	525	0.8	0.119	1 491	1.0	a	1 877	1.5	0.096	106
England (UK)	1.0	a	470	0.6	0.000	1 261	1.0	a	1 452	0.9	0.585	179
Northern Ireland (UK)	1.0	a	337	0.6	0.005	876	1.0	a	958	1.0	0.992	153
England/N. Ireland (UK)	1.0	a	807	0.6	0.000	2 137	1.0	a	2 410	0.9	0.568	332
Partners												
Cyprus[1]	1.0	a	124	0.9	0.576	1 408	1.0	a	1 179	0.8	0.632	99

1. See notes on page 250.

Note: Over-qualification is defined relative to the qualification needed to get the job, as reported by the respondents. Results are adjusted for years of education, age, gender and marital status, foreign-born status, establishment size, hours worked and contract type.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898446

[Part 1/2]

Likelihood of under-qualification and over-skilling, by age group

Table A4.29 *Odds ratios from logit regression, relative to being well-matched*

	Dependent variable: Under-qualified											
	Age											
	16-24 year-olds			25-44 year-olds (reference)			45-54 year-olds			55-64 year-olds		
OECD	Odds ratio	p-value	n	Odds ratio	p-value	n	Odds ratio	p-value	n	Odds ratio	p-value	n
National entities												
Australia	0.6	0.197	128	1.00	a	1 040	2.3	0.000	401	2.1	0.000	252
Austria	0.5	0.012	161	1.00	a	896	1.6	0.007	474	1.2	0.512	155
Canada	0.5	0.002	635	1.00	a	3 913	1.4	0.017	2 322	1.5	0.011	1 219
Czech Republic	0.7	0.538	139	1.00	a	894	1.7	0.042	323	3.1	0.003	222
Denmark	1.1	0.872	55	1.00	a	1 053	1.2	0.164	649	1.2	0.303	731
Estonia	0.9	0.552	164	1.00	a	1 167	1.0	0.856	577	1.1	0.501	410
Finland	0.4	0.032	97	1.00	a	893	1.6	0.017	527	2.0	0.002	352
Germany	0.6	0.175	108	1.00	a	850	1.5	0.102	583	1.4	0.174	268
Ireland	0.2	0.002	66	1.00	a	918	1.7	0.003	293	2.3	0.001	117
Italy	0.5	0.434	36	1.00	a	525	1.5	0.044	265	2.2	0.003	122
Japan	1.1	0.884	118	1.00	a	858	1.3	0.323	423	1.3	0.195	311
Korea	1.1	0.817	145	1.00	a	1 081	1.0	0.886	363	1.0	0.966	104
Netherlands	0.7	0.223	124	1.00	a	844	1.3	0.057	470	1.6	0.007	251
Norway	0.3	0.002	71	1.00	a	983	2.1	0.000	528	2.4	0.000	314
Poland	1.2	0.393	758	1.00	a	1 218	1.4	0.194	336	2.1	0.012	165
Slovak Republic	0.7	0.650	143	1.00	a	960	1.1	0.714	494	1.7	0.139	238
Spain	c	c	27	1.00	a	564	1.1	0.757	238	3.2	0.000	91
Sweden	0.2	0.000	91	1.00	a	747	1.7	0.001	456	2.7	0.000	309
United States	0.7	0.360	121	1.00	a	633	1.5	0.023	317	2.0	0.011	198
Sub-national entities												
Flanders (Belgium)	0.4	0.010	142	1.00	a	998	1.6	0.002	537	2.5	0.000	179
England (UK)	1.0	0.974	103	1.00	a	664	1.5	0.146	283	2.1	0.011	134
Northern Ireland (UK)	0.5	0.144	87	1.00	a	586	1.7	0.022	193	2.3	0.016	84
England/N. Ireland (UK)	1.0	0.995	190	1.00	a	1 250	1.5	0.131	476	2.1	0.008	218
Partners												
Cyprus[1]	0.5	0.334	87	1.00	a	894	1.3	0.212	316	1.3	0.229	121

[Part 2/2]

Likelihood of under-qualification and over-skilling, by age group

Table A4.29 *Odds ratios from logit regression, relative to being well-matched*

	Dependent variable: Over-skilled											
	Age											
	16-24 year-olds			25-44 year-olds (reference)			45-54 year-olds			55-64 year-olds		
OECD	Odds ratio	p-value	n	Odds ratio	p-value	n	Odds ratio	p-value	n	Odds ratio	p-value	n
National entities												
Australia	1.1	0.711	231	1.00	a	1 293	0.6	0.039	472	0.4	0.002	313
Austria	1.3	0.195	212	1.00	a	1 039	0.7	0.025	555	0.3	0.000	170
Canada	1.6	0.015	985	1.00	a	4 728	0.7	0.079	2 691	0.6	0.023	1 516
Czech Republic	1.0	0.977	169	1.00	a	1 042	0.6	0.037	384	0.4	0.027	250
Denmark	1.4	0.355	103	1.00	a	1 128	0.4	0.001	696	0.2	0.000	771
Estonia	1.4	0.195	212	1.00	a	1 399	0.9	0.434	739	0.4	0.001	505
Finland	1.3	0.567	124	1.00	a	993	0.4	0.003	543	0.1	0.000	349
Germany	1.1	0.711	131	1.00	a	1 011	0.5	0.000	687	0.3	0.000	334
Ireland	1.6	0.083	133	1.00	a	1 228	0.5	0.002	336	0.6	0.065	134
Italy	1.5	0.349	51	1.00	a	653	0.5	0.002	301	0.5	0.068	123
Japan	1.3	0.418	184	1.00	a	1 256	0.7	0.017	615	0.3	0.000	447
Korea	2.2	0.001	179	1.00	a	1 316	0.6	0.028	482	0.4	0.016	159
Netherlands	1.8	0.150	149	1.00	a	926	0.5	0.017	493	0.3	0.002	264
Norway	0.6	0.120	121	1.00	a	934	0.5	0.000	456	0.1	0.000	257
Poland	1.8	0.027	868	1.00	a	1 340	0.4	0.028	331	1.5	0.242	158
Slovak Republic	0.7	0.245	174	1.00	a	1 123	0.5	0.000	541	0.3	0.000	270
Spain	1.3	0.366	57	1.00	a	797	0.7	0.061	328	0.4	0.002	106
Sweden	1.3	0.542	108	1.00	a	785	0.4	0.005	482	0.1	0.000	307
United States	1.8	0.139	148	1.00	a	711	0.7	0.213	344	0.7	0.250	220
Sub-national entities												
Flanders (Belgium)	0.6	0.090	182	1.00	a	1 126	0.5	0.000	567	0.0	0.796	189
England (UK)	0.5	0.068	192	1.00	a	912	0.7	0.255	352	0.5	0.041	171
Northern Ireland (UK)	2.5	0.015	120	1.00	a	737	0.3	0.085	223	0.7	0.552	97
England/N. Ireland (UK)	0.5	0.020	311	1.00	a	1 622	0.7	0.127	558	0.4	0.009	257
Partners												
Cyprus[1]	1.4	0.356	106	1.00	a	920	1.2	0.539	347	0.4	0.024	123

1. See notes on page 250.

Note: Overskilling in literacy. Under-qualification is defined relative to the qualification needed to get the job, as reported by the respondents. Results are adjusted for years of education, age, gender and marital status, foreign-born status, establishment size, hours worked and contract type.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898465

[Part 1/2]

Table A4.30 Mean use of information-processing skills, adjusted for literacy and numeracy proficiency, by qualification-mismatch status

OECD	Reading at work						Writing at work						Numeracy at work					
	Over-qualified		Under-qualified		Well-matched		Over-qualified		Under-qualified		Well-matched		Over-qualified		Under-qualified		Well-matched	
	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities																		
Australia	0.5	(0.0)	1.0	(0.0)	0.9	(0.0)	0.3	(0.0)	0.7	(0.0)	0.7	(0.0)	1.0	(0.0)	1.4	(0.1)	1.3	(0.0)
Austria	-0.4	(0.0)	0.1	(0.0)	-0.1	(0.0)	0.0	(0.0)	0.6	(0.1)	0.3	(0.0)	-0.2	(0.0)	0.2	(0.1)	0.0	(0.0)
Canada	0.4	(0.0)	0.8	(0.0)	0.8	(0.0)	0.7	(0.0)	1.1	(0.0)	1.0	(0.0)	0.9	(0.0)	1.1	(0.0)	1.1	(0.0)
Czech Republic	-0.6	(0.1)	0.2	(0.1)	-0.1	(0.0)	0.1	(0.1)	0.5	(0.1)	0.3	(0.0)	0.1	(0.1)	0.7	(0.1)	0.4	(0.0)
Denmark	0.1	(0.0)	0.7	(0.0)	0.5	(0.0)	0.6	(0.0)	1.1	(0.1)	1.0	(0.0)	0.0	(0.0)	0.4	(0.0)	0.3	(0.0)
Estonia	-0.5	(0.0)	0.1	(0.0)	0.1	(0.0)	-0.2	(0.0)	0.0	(0.0)	0.1	(0.0)	0.0	(0.0)	0.3	(0.0)	0.2	(0.0)
Finland	0.3	(0.0)	0.6	(0.0)	0.7	(0.0)	0.5	(0.0)	0.8	(0.0)	0.9	(0.0)	0.4	(0.0)	0.6	(0.0)	0.6	(0.0)
Germany	-0.4	(0.0)	0.2	(0.1)	0.1	(0.0)	0.5	(0.1)	1.0	(0.1)	0.9	(0.0)	0.0	(0.0)	0.3	(0.1)	0.2	(0.0)
Ireland	-0.1	(0.0)	0.2	(0.1)	0.3	(0.0)	0.2	(0.1)	0.6	(0.1)	0.7	(0.0)	0.5	(0.0)	0.8	(0.1)	0.8	(0.0)
Italy	-1.3	(0.1)	-0.9	(0.1)	-1.1	(0.0)	-0.4	(0.1)	-0.2	(0.1)	-0.3	(0.0)	-0.5	(0.1)	-0.4	(0.1)	-0.4	(0.0)
Japan	0.3	(0.0)	0.7	(0.1)	0.6	(0.0)	1.1	(0.0)	1.4	(0.1)	1.3	(0.0)	0.2	(0.0)	0.4	(0.1)	0.3	(0.0)
Korea	-0.4	(0.0)	0.1	(0.1)	0.1	(0.0)	0.4	(0.1)	0.6	(0.1)	0.7	(0.0)	0.1	(0.0)	0.1	(0.1)	0.2	(0.0)
Netherlands	-0.3	(0.0)	0.3	(0.0)	0.1	(0.0)	0.1	(0.1)	0.7	(0.0)	0.6	(0.0)	-0.4	(0.1)	0.2	(0.0)	0.0	(0.0)
Norway	0.8	(0.0)	1.1	(0.0)	1.1	(0.0)	0.6	(0.0)	0.9	(0.0)	0.9	(0.0)	0.4	(0.0)	0.7	(0.0)	0.5	(0.0)
Poland	-0.9	(0.1)	-0.5	(0.1)	-0.7	(0.0)	0.1	(0.1)	0.4	(0.1)	0.2	(0.0)	-0.1	(0.1)	0.1	(0.1)	0.0	(0.0)
Slovak Republic	-0.8	(0.1)	0.0	(0.1)	-0.4	(0.0)	0.0	(0.1)	0.6	(0.1)	0.3	(0.0)	0.5	(0.1)	0.8	(0.1)	0.7	(0.0)
Spain	-0.8	(0.0)	-0.2	(0.1)	-0.4	(0.0)	0.1	(0.0)	0.4	(0.1)	0.4	(0.0)	0.2	(0.0)	0.4	(0.1)	0.4	(0.0)
Sweden	0.6	(0.0)	1.2	(0.0)	1.0	(0.0)	0.5	(0.0)	1.0	(0.0)	0.8	(0.0)	0.1	(0.0)	0.4	(0.0)	0.2	(0.0)
United States	0.7	(0.1)	0.9	(0.1)	1.0	(0.0)	1.0	(0.1)	1.3	(0.1)	1.3	(0.0)	1.4	(0.1)	1.7	(0.1)	1.5	(0.0)
Sub-national entities																		
Flanders (Belgium)	-0.8	(0.0)	-0.2	(0.0)	-0.3	(0.0)	0.1	(0.0)	0.6	(0.0)	0.5	(0.0)	-0.7	(0.1)	-0.3	(0.1)	-0.5	(0.0)
England (UK)	0.2	(0.0)	0.5	(0.1)	0.5	(0.0)	0.6	(0.0)	1.0	(0.1)	1.0	(0.0)	0.5	(0.0)	0.7	(0.1)	0.6	(0.0)
Northern Ireland (UK)	-0.3	(0.1)	0.1	(0.0)	0.0	(0.0)	-0.3	(0.1)	0.0	(0.1)	0.0	(0.0)	0.2	(0.1)	0.4	(0.1)	0.3	(0.0)
England/N. Ireland (UK)	0.2	(0.0)	0.5	(0.1)	0.5	(0.0)	0.6	(0.0)	1.0	(0.1)	1.0	(0.0)	0.5	(0.0)	0.7	(0.1)	0.6	(0.0)
Average	-0.2	(0.0)	0.3	(0.0)	0.2	(0.0)	0.3	(0.0)	0.7	(0.0)	0.6	(0.0)	0.2	(0.0)	0.5	(0.0)	0.4	(0.0)
Partners																		
Cyprus[1]	0.5	(0.1)	0.9	(0.1)	0.9	(0.0)	0.6	(0.1)	0.6	(0.1)	0.7	(0.0)	0.8	(0.1)	0.9	(0.1)	1.0	(0.0)

[Part 2/2]

Table A4.30 Mean use of information-processing skills, adjusted for literacy and numeracy proficiency, by qualification-mismatch status

OECD	Problem solving at work						ICT at work					
	Over-qualified		Under-qualified		Well-matched		Over-qualified		Under-qualified		Well-matched	
	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities												
Australia	-0.1	(0.0)	0.6	(0.1)	0.4	(0.0)	-0.1	(0.0)	0.5	(0.1)	0.4	(0.0)
Austria	-1.3	(0.0)	-0.6	(0.1)	-0.9	(0.0)	-0.3	(0.0)	0.2	(0.0)	-0.1	(0.0)
Canada	-0.4	(0.0)	0.2	(0.0)	0.1	(0.0)	0.0	(0.0)	0.6	(0.1)	0.6	(0.0)
Czech Republic	-1.3	(0.1)	-0.6	(0.1)	-0.6	(0.1)	0.5	(0.1)	0.8	(0.1)	0.7	(0.0)
Denmark	-1.1	(0.0)	-0.5	(0.1)	-0.5	(0.0)	-0.3	(0.1)	0.2	(0.0)	0.1	(0.0)
Estonia	-0.7	(0.0)	-0.2	(0.0)	-0.2	(0.0)	-0.5	(0.1)	-0.1	(0.1)	-0.1	(0.0)
Finland	-0.5	(0.0)	0.0	(0.1)	0.0	(0.0)	-0.3	(0.0)	0.1	(0.0)	0.1	(0.0)
Germany	-1.4	(0.0)	-0.7	(0.1)	-0.8	(0.0)	0.0	(0.1)	0.3	(0.1)	0.2	(0.0)
Ireland	-0.8	(0.1)	-0.3	(0.1)	-0.2	(0.0)	-0.2	(0.1)	0.2	(0.1)	0.2	(0.0)
Italy	-0.3	(0.1)	0.1	(0.1)	-0.2	(0.0)	0.5	(0.1)	0.7	(0.1)	0.6	(0.0)
Japan	-1.0	(0.0)	-0.7	(0.1)	-0.7	(0.0)	-0.3	(0.1)	0.0	(0.1)	-0.1	(0.0)
Korea	-1.0	(0.0)	-0.5	(0.1)	-0.5	(0.0)	-0.8	(0.1)	-0.4	(0.1)	-0.2	(0.0)
Netherlands	-1.6	(0.1)	-0.7	(0.1)	-1.0	(0.0)	-0.3	(0.1)	0.3	(0.0)	0.1	(0.0)
Norway	-0.7	(0.0)	-0.2	(0.0)	-0.3	(0.0)	-0.3	(0.0)	0.2	(0.0)	0.0	(0.0)
Poland	-0.5	(0.1)	-0.1	(0.1)	-0.2	(0.0)	0.2	(0.1)	0.3	(0.1)	0.3	(0.0)
Slovak Republic	-1.5	(0.1)	-1.0	(0.1)	-1.1	(0.0)	0.7	(0.1)	1.0	(0.1)	0.7	(0.0)
Spain	-0.4	(0.1)	0.1	(0.1)	-0.2	(0.0)	-0.1	(0.0)	0.3	(0.1)	0.1	(0.0)
Sweden	-0.6	(0.1)	-0.1	(0.0)	-0.2	(0.0)	-0.3	(0.1)	0.2	(0.0)	0.0	(0.0)
United States	0.4	(0.1)	0.8	(0.1)	0.8	(0.0)	0.4	(0.1)	1.0	(0.1)	0.8	(0.0)
Sub-national entities												
Flanders (Belgium)	-1.4	(0.1)	-0.6	(0.1)	-0.9	(0.0)	-0.4	(0.1)	0.1	(0.0)	0.0	(0.0)
England (UK)	-0.6	(0.0)	-0.1	(0.1)	-0.2	(0.0)	0.0	(0.1)	0.6	(0.1)	0.4	(0.0)
Northern Ireland (UK)	-0.7	(0.1)	-0.3	(0.1)	-0.4	(0.0)	0.0	(0.1)	0.3	(0.1)	0.2	(0.0)
England/N. Ireland (UK)	-0.6	(0.0)	-0.1	(0.1)	-0.2	(0.0)	0.0	(0.0)	0.5	(0.1)	0.4	(0.0)
Average	-0.8	(0.0)	-0.2	(0.0)	-0.4	(0.0)	-0.1	(0.0)	0.3	(0.0)	0.2	(0.0)
Partners												
Cyprus[1]	0.7	(0.1)	1.0	(0.1)	0.8	(0.0)	0.8	(0.1)	0.9	(0.1)	1.0	(0.0)

1. See notes on page 250.

Note: Results from OLS regressions including literacy and numeracy proficiency scores as controls. Qualification mismatch is defined relative to the qualification needed to get the job, as reported by the respondents.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898484

[Part 1/2]

Table A4.31 Mean use of information-processing skills, adjusted for literacy and numeracy proficiency, by skills-mismatch status

	Reading at work						Writing at work						Numeracy at work					
	Over-skilled		Under-skilled		Well-matched		Over-skilled		Under-skilled		Well-matched		Over-skilled		Under-skilled		Well-matched	
OECD	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities																		
Australia	0.3	(0.1)	1.1	(0.1)	0.9	(0.0)	0.2	(0.1)	1.1	(0.1)	0.6	(0.0)	1.0	(0.1)	1.3	(0.1)	1.3	(0.0)
Austria	-0.5	(0.0)	0.3†	(0.3)	-0.1	(0.0)	0.0	(0.0)	0.5†	(0.4)	0.4	(0.0)	-0.1	(0.0)	0.3†	(0.3)	0.0	(0.0)
Canada	0.3	(0.0)	1.2	(0.1)	0.8	(0.0)	0.6	(0.1)	1.4	(0.1)	1.0	(0.0)	0.9	(0.1)	1.3	(0.1)	1.1	(0.0)
Czech Republic	-0.4	(0.1)	0.2	(0.2)	-0.2	(0.0)	0.1	(0.1)	0.7	(0.3)	0.3	(0.0)	0.4	(0.1)	0.6	(0.2)	0.4	(0.0)
Denmark	0.1	(0.0)	0.8	(0.1)	0.5	(0.0)	0.6	(0.0)	1.2	(0.1)	0.9	(0.0)	0.2	(0.1)	0.5	(0.1)	0.3	(0.0)
Estonia	-0.2	(0.0)	0.4	(0.1)	-0.1	(0.0)	-0.2	(0.0)	0.2	(0.1)	0.0	(0.0)	0.1	(0.0)	0.2	(0.1)	0.2	(0.0)
Finland	0.3	(0.1)	0.9	(0.1)	0.6	(0.0)	0.5	(0.1)	1.1	(0.1)	0.8	(0.0)	0.5	(0.1)	0.6	(0.1)	0.6	(0.0)
Germany	-0.3	(0.0)	0.7	(0.1)	0.1	(0.0)	0.6	(0.0)	1.0	(0.1)	0.9	(0.0)	0.0	(0.0)	0.4†	(0.2)	0.2	(0.0)
Ireland	-0.1	(0.1)	0.6	(0.1)	0.2	(0.0)	0.2	(0.1)	0.9	(0.1)	0.6	(0.0)	0.6	(0.1)	1.0	(0.1)	0.8	(0.0)
Italy	-1.2	(0.1)	-0.6	(0.2)	-1.1	(0.0)	-0.4	(0.1)	-0.2	(0.2)	-0.3	(0.0)	-0.4	(0.1)	-0.2	(0.2)	-0.4	(0.0)
Japan	0.5	(0.1)	0.8	(0.1)	0.5	(0.0)	1.2	(0.0)	1.6	(0.1)	1.3	(0.0)	0.3	(0.1)	0.6	(0.1)	0.3	(0.0)
Korea	-0.4	(0.1)	0.4	(0.2)	0.0	(0.0)	0.4	(0.1)	0.8	(0.2)	0.7	(0.0)	0.0	(0.1)	0.4	(0.1)	0.2	(0.0)
Netherlands	-0.4	(0.1)	0.3	(0.1)	0.1	(0.0)	0.1	(0.1)	0.7	(0.1)	0.6	(0.0)	-0.3	(0.1)	0.0	(0.2)	0.0	(0.0)
Norway	0.8	(0.0)	1.3	(0.1)	1.0	(0.0)	0.6	(0.0)	1.1	(0.1)	0.9	(0.0)	0.4	(0.1)	0.6	(0.1)	0.5	(0.0)
Poland	-1.0	(0.1)	-0.5	(0.2)	-0.7	(0.0)	0.0	(0.1)	0.8	(0.2)	0.2	(0.0)	-0.1	(0.1)	0.4	(0.1)	0.0	(0.0)
Slovak Republic	-0.6	(0.1)	0.1	(0.1)	-0.5	(0.0)	0.2	(0.1)	0.7	(0.1)	0.3	(0.0)	0.7	(0.1)	0.9	(0.1)	0.6	(0.0)
Spain	-0.6	(0.0)	-0.2	(0.2)	-0.4	(0.0)	0.3	(0.0)	0.5	(0.1)	0.3	(0.0)	0.4	(0.1)	0.7	(0.2)	0.3	(0.0)
Sweden	0.7	(0.0)	1.4	(0.1)	1.0	(0.0)	0.5	(0.1)	1.2	(0.1)	0.8	(0.0)	0.1	(0.1)	0.6	(0.1)	0.2	(0.0)
United States	0.5	(0.1)	1.0	(0.2)	1.0	(0.0)	0.8	(0.1)	1.5	(0.2)	1.3	(0.0)	1.3	(0.1)	1.8	(0.2)	1.6	(0.0)
Sub-national entities																		
Flanders (Belgium)	-0.7	(0.0)	0.0	(0.1)	-0.4	(0.0)	0.2	(0.1)	0.7	(0.1)	0.4	(0.0)	-0.5	(0.1)	-0.3	(0.2)	-0.5	(0.0)
England (UK)	0.2	(0.1)	0.9	(0.1)	0.4	(0.0)	0.6	(0.1)	1.5	(0.1)	0.9	(0.0)	0.4	(0.1)	1.0	(0.1)	0.6	(0.0)
Northern Ireland (UK)	-0.5	(0.1)	0.4	(0.1)	0.0	(0.0)	-0.6	(0.1)	0.4	(0.1)	0.0	(0.0)	-0.1	(0.1)	0.5	(0.2)	0.3	(0.0)
England/N. Ireland (UK)	0.2	(0.1)	0.9	(0.1)	0.4	(0.0)	0.6	(0.1)	1.4	(0.1)	0.8	(0.0)	0.3	(0.1)	1.0	(0.1)	0.6	(0.0)
Average	-0.1	(0.0)	0.5	(0.0)	0.2	(0.0)	0.3	(0.0)	0.9	(0.0)	0.6	(0.0)	0.3	(0.0)	0.6	(0.0)	0.4	(0.0)
Partners																		
Cyprus[1]	0.3	(0.1)	1.3	(0.1)	0.9	(0.0)	0.5	(0.1)	1.0	(0.1)	0.7	(0.0)	0.7	(0.1)	1.1	(0.1)	1.0	(0.0)

[Part 2/2]

Table A4.31 Mean use of information-processing skills, adjusted for literacy and numeracy proficiency, by skills-mismatch status

	Problem solving at work						ICT at work					
	Over-skilled		Under-skilled		Well-matched		Over-skilled		Under-skilled		Well-matched	
OECD	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities												
Australia	-0.2	(0.1)	0.5	(0.1)	0.4	(0.0)	-0.1	(0.1)	0.7	(0.1)	0.3	(0.0)
Austria	-1.2	(0.1)	-0.4	(0.2)	-0.9	(0.0)	-0.3	(0.1)	0.6†	(0.2)	-0.1	(0.0)
Canada	-0.6	(0.1)	0.5	(0.1)	0.0	(0.0)	0.0	(0.1)	0.8	(0.1)	0.5	(0.0)
Czech Republic	-1.0	(0.1)	-0.7	(0.2)	-0.7	(0.0)	0.5	(0.1)	0.9†	(0.2)	0.7	(0.0)
Denmark	-1.0	(0.1)	-0.1	(0.1)	-0.6	(0.0)	-0.2	(0.1)	0.3	(0.1)	0.0	(0.0)
Estonia	-0.3	(0.1)	0.1	(0.1)	-0.4	(0.0)	-0.3	(0.1)	0.1	(0.1)	-0.1	(0.0)
Finland	-0.4	(0.1)	0.2	(0.1)	-0.1	(0.0)	-0.2	(0.1)	0.4	(0.1)	0.1	(0.0)
Germany	-1.4	(0.1)	-0.4	(0.2)	-0.9	(0.0)	-0.1	(0.0)	0.7†	(0.1)	0.2	(0.0)
Ireland	-0.8	(0.1)	0.1	(0.1)	-0.3	(0.0)	-0.2	(0.1)	0.4	(0.1)	0.2	(0.0)
Italy	-0.2	(0.1)	0.0	(0.2)	-0.2	(0.0)	0.5	(0.1)	0.4†	(0.2)	0.7	(0.1)
Japan	-0.8	(0.1)	-0.4	(0.1)	-0.8	(0.0)	-0.1	(0.1)	0.5	(0.2)	-0.2	(0.0)
Korea	-0.8	(0.1)	-0.2	(0.2)	-0.6	(0.0)	-0.8	(0.1)	-0.1†	(0.3)	-0.2	(0.0)
Netherlands	-1.6	(0.1)	-0.4	(0.2)	-1.0	(0.0)	-0.3	(0.1)	0.2	(0.1)	0.1	(0.0)
Norway	-0.7	(0.1)	0.0	(0.1)	-0.4	(0.0)	-0.3	(0.0)	0.3	(0.1)	0.0	(0.0)
Poland	-0.4	(0.1)	0.0	(0.2)	-0.2	(0.0)	0.1	(0.1)	0.6†	(0.1)	0.3	(0.0)
Slovak Republic	-1.2	(0.1)	-0.8	(0.2)	-1.2	(0.0)	0.7	(0.0)	1.0	(0.2)	0.7	(0.0)
Spain	-0.2	(0.1)	-0.3	(0.2)	-0.2	(0.0)	0.1	(0.1)	0.4†	(0.2)	0.1	(0.0)
Sweden	-0.7	(0.1)	-0.1	(0.1)	-0.2	(0.0)	-0.4	(0.1)	0.6	(0.1)	0.0	(0.0)
United States	0.3	(0.1)	0.8	(0.2)	0.8	(0.0)	0.3	(0.1)	1.2	(0.3)	0.8	(0.0)
Sub-national entities												
Flanders (Belgium)	-1.2	(0.1)	-0.6	(0.1)	-0.9	(0.0)	-0.2	(0.1)	0.2	(0.1)	0.0	(0.0)
England (UK)	-0.6	(0.1)	0.2	(0.1)	-0.3	(0.0)	0.0	(0.1)	0.9	(0.1)	0.3	(0.0)
Northern Ireland (UK)	-0.7	(0.1)	-0.3	(0.2)	-0.4	(0.0)	-0.2	(0.1)	0.3†	(0.3)	0.2	(0.0)
England/N. Ireland (UK)	-0.6	(0.1)	0.2	(0.1)	-0.3	(0.0)	0.0	(0.1)	0.9	(0.1)	0.3	(0.0)
Average	-0.7	(0.0)	-0.1	(0.0)	-0.4	(0.0)	-0.1	(0.0)	0.5	(0.0)	0.2	(0.0)
Partners												
Cyprus[1]	0.3	(0.1)	1.1	(0.1)	0.8	(0.0)	0.8	(0.1)	1.3	(0.1)	1.0	(0.0)

1. See notes on page 250.

Note: Literacy mismatch. Results from OLS regressions including literacy and numeracy proficiency scores as controls.

† Cell corresponds to less than 30 observations.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898503

[Part 1/1]

Effect of qualification and numeracy mismatch on wages

Table A4.32a *OLS regression coefficients*

	Dependent variable: Log wages							
	Qualification mismatch				Numeracy mismatch			
	Over-qualified (Reference: well-matched)		Under-qualified (Reference: well-matched)		Over-skilled (Reference: well-matched)		Under-skilled (Reference: well-matched)	
OECD	ß	p-value	ß	p-value	ß	p-value	ß	p-value
National entities								
Australia	-0.12	0.000	0.06	0.016	-0.03	0.410	-0.01	0.835
Austria	-0.06	0.038	0.07	0.019	-0.02	0.152	0.02	0.314
Canada	-0.17	0.000	-0.02	0.324	0.00	0.989	0.04	0.330
Czech Republic	-0.02	0.611	0.06	0.207	-0.06	0.104	0.28	0.035
Denmark	-0.12	0.000	0.09	0.000	-0.01	0.658	0.03	0.451
Estonia	-0.18	0.000	0.11	0.002	0.03	0.630	-0.02	0.841
Finland	-0.07	0.001	0.11	0.000	-0.08	0.004	0.02	0.502
Germany	-0.09	0.005	0.09	0.008	-0.03	0.256	0.17	0.021
Ireland	-0.17	0.000	0.08	0.037	-0.05	0.103	-0.15	0.062
Italy	-0.09	0.077	0.08	0.049	-0.06	0.026	0.15	0.086
Japan	-0.15	0.000	0.06	0.157	-0.03	0.605	0.07	0.515
Korea	-0.18	0.000	0.01	0.919	0.00	0.943	-0.05	0.754
Netherlands	-0.12	0.000	0.06	0.009	-0.06	0.168	-0.06	0.148
Norway	-0.12	0.000	0.05	0.014	0.01	0.539	0.07	0.254
Poland	-0.21	0.000	0.16	0.002	-0.10	0.021	0.07	0.389
Slovak Republic	-0.03	0.551	0.05	0.424	0.02	0.562	0.06	0.737
Spain	-0.16	0.000	0.03	0.701	-0.08	0.015	0.36	0.010
Sweden	-0.08	0.000	0.01	0.705	-0.01	0.969	0.03	0.796
United States	-0.18	0.000	0.12	0.053	-0.12	0.052	-0.06	0.420
Sub-national entities								
Flanders (Belgium)	-0.10	0.000	0.00	0.862	-0.06	0.062	0.04	0.669
England (UK)	-0.16	0.000	0.03	0.533	-0.02	0.781	0.11	0.059
Northern Ireland (UK)	-0.16	0.000	-0.01	0.857	-0.04	0.335	0.02	0.784
England/N. Ireland (UK)	-0.16	0.000	0.02	0.561	-0.03	0.471	0.11	0.046
Partners								
Cyprus[1]	-0.18	0.000	-0.03	0.597	-0.08	0.108	0.12	0.031

1. See notes on page 250.

Note: The sample includes only employees. Log hourly wages, including bonuses, in purchasing-power-parity-adjusted USD. The wage distribution was trimmed to eliminate the 1st and 99th percentiles. Qualification mismatch is defined relative to the qualification needed to get the job, as reported by the respondents. Results are adjusted for years of education, age group, gender, marital status, working experience, tenure, foreign-born status, establishment size, contract type, hours worked, public sector dummy, proficiency in numeracy and use of skills at work.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898522

[Part 1/1]

Effect of numeracy mismatch on wages

Table A4.32b *OLS regression coefficients*

	Dependent variable: Log wages			
	Numeracy mismatch			
	Over-skilled (Reference: well-matched)		Under-skilled (Reference: well-matched)	
OECD	ß	p-value	ß	p-value
National entities				
Australia	-0.04	0.249	0.02	0.817
Austria	-0.03	0.058	0.01	0.363
Canada	-0.02	0.600	0.07	0.140
Czech Republic	-0.07	0.080	0.27	0.039
Denmark	-0.01	0.543	0.03	0.350
Estonia	0.04	0.488	0.00	0.863
Finland	-0.09	0.002	0.03	0.419
Germany	-0.05	0.095	0.16	0.039
Ireland	-0.07	0.024	-0.12	0.117
Italy	-0.06	0.028	0.17	0.059
Japan	-0.03	0.499	0.09	0.404
Korea	-0.02	0.738	-0.03	0.862
Netherlands	-0.07	0.083	-0.05	0.203
Norway	0.00	0.548	0.07	0.274
Poland	-0.10	0.015	-0.10	0.666
Slovak Republic	0.02	0.580	0.06	0.757
Spain	-0.10	0.004	0.39	0.007
Sweden	-0.02	0.785	0.02	0.821
United States	-0.14	0.016	0.00	0.889
Sub-national entities				
Flanders (Belgium)	-0.06	0.036	0.04	0.642
England (UK)	-0.01	0.882	0.13	0.032
Northern Ireland (UK)	-0.07	0.098	0.06	0.451
England/N. Ireland (UK)	-0.04	0.294	0.13	0.022
Partners				
Cyprus[1]	-0.11	0.063	0.13	0.026

1. See notes on page 250.

Note: The sample includes only employees. Log hourly wages, including bonuses, in purchasing-power-parity-adjusted USD. The wage distribution was trimmed to eliminate the 1st and 99th percentiles. Results are adjusted for years of education, age group, gender, marital status, working experience, tenure, foreign-born status, establishment size, contract type, hours worked, public sector dummy, proficiency in numeracy and use of skills at work.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898541

[Part 1/1]

Effect of qualification mismatch on wages

Table A4.32c *OLS regression coefficients*

	Dependent variable: Log wages			
	Qualification mismatch			
	Over-qualified (Reference: well-matched)		Under-qualified (Reference: well-matched)	
OECD	ß	p-value	ß	p-value
National entities				
Australia	-0.13	0.000	0.05	0.041
Austria	-0.06	0.031	0.08	0.005
Canada	-0.17	0.000	-0.02	0.455
Czech Republic	-0.01	0.854	0.08	0.069
Denmark	-0.12	0.000	0.08	0.000
Estonia	-0.19	0.000	0.11	0.002
Finland	-0.08	0.000	0.11	0.000
Germany	-0.09	0.003	0.11	0.001
Ireland	-0.19	0.000	0.07	0.040
Italy	-0.09	0.080	0.08	0.031
Japan	-0.16	0.000	0.05	0.184
Korea	-0.17	0.001	0.01	0.829
Netherlands	-0.11	0.000	0.05	0.017
Norway	-0.12	0.000	0.05	0.020
Poland	-0.19	0.000	0.12	0.020
Slovak Republic	-0.05	0.317	0.07	0.243
Spain	-0.18	0.000	0.03	0.716
Sweden	-0.07	0.001	0.02	0.462
United States	-0.16	0.000	0.11	0.059
Sub-national entities				
Flanders (Belgium)	-0.12	0.000	0.01	0.676
England (UK)	-0.16	0.000	0.03	0.478
Northern Ireland (UK)	-0.18	0.000	-0.01	0.838
England/N. Ireland (UK)	-0.16	0.000	0.02	0.499
Partners				
Cyprus[1]	-0.20	0.000	-0.01	0.846

1. See notes on page 250.

Note: The sample includes only employees. Log hourly wages, including bonuses, in purchasing-power-parity-adjusted USD. The wage distribution was trimmed to eliminate the 1st and 99th percentiles. Qualification mismatch is defined relative to the qualification needed to get the job, as reported by the respondents. Results are adjusted for years of education, age group, gender, marital status, working experience, tenure, foreign-born status, establishment size, contract type, hours worked, public sector dummy, proficiency in numeracy and use of skills at work.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898560

[Part 1/2]

Table A5.1 (L) Difference in literacy scores between contrast categories, by socio-demographic characteristics and practice-oriented factors (adjusted)

	Age		Gender		Immigrant and language background		Educational attainment		Parents' educational attainment		Participation in adult education and training	
	Difference between youngest and oldest adults		Difference between men and women		Difference between native born/ native language and foreign born/ foreign language		Difference between adults with tertiary and lower than upper secondary		Difference between adults with at least one parent who attained tertiary and neither parent who attained upper secondary		Difference between adults who participated in adult education and those who did not	
OECD	Score dif.	p-value	Score dif.	p-value	Score dif.	p-value	Score dif.	p-value	Score dif.	p-value	Score dif.	p-value
National entities												
Australia	-7.9	0.036	2.7	0.029	34.7	0.000	24.5	0.000	10.1	0.000	6.7	0.000
Austria	11.7	0.000	-0.9	0.587	29.4	0.000	28.6	0.000	12.2	0.000	4.8	0.011
Canada	-5.7	0.038	2.6	0.001	31.4	0.000	36.0	0.000	10.9	0.000	6.8	0.000
Czech Republic	-1.1	0.767	0.4	0.664	4.9	0.100	33.9	0.000	12.9	0.002	3.6	0.059
Denmark	12.0	0.000	-0.5	0.975	39.9	0.000	26.4	0.000	13.2	0.000	4.8	0.000
Estonia	6.0	0.001	0.0	0.901	14.9	0.000	25.1	0.000	7.4	0.000	4.3	0.000
Finland	26.0	0.000	-1.7	0.098	48.6	0.000	26.7	0.000	15.4	0.000	3.8	0.014
Germany	10.7	0.002	-0.7	0.529	25.3	0.000	31.2	0.000	13.4	0.000	7.2	0.000
Ireland	-0.8	0.588	4.1	0.003	29.6	0.000	32.9	0.000	15.0	0.000	1.9	0.264
Italy	-0.2	0.277	-3.5	0.002	24.9	0.000	21.4	0.000	12.5	0.000	5.2	0.036
Japan	16.5	0.000	-0.4	0.630	c	c	30.0	0.000	8.3	0.000	2.8	0.022
Korea	14.1	0.000	4.0	0.000	48.9	0.000	28.3	0.000	8.3	0.000	6.8	0.000
Netherlands	14.1	0.000	1.0	0.179	35.9	0.000	30.5	0.000	9.4	0.000	-0.8	0.321
Norway	7.0	0.042	2.2	0.042	41.8	0.000	24.9	0.000	14.1	0.000	-0.7	0.875
Poland	-0.1	0.705	-3.7	0.001	c	c	30.1	0.000	15.3	0.000	4.9	0.002
Slovak Republic	-13.6	0.000	-1.5	0.381	-0.8	0.422	28.7	0.000	18.0	0.000	6.9	0.000
Spain	9.1	0.004	3.0	0.018	31.0	0.000	28.2	0.000	11.9	0.000	4.1	0.001
Sweden	9.8	0.007	0.9	0.206	51.7	0.000	32.0	0.000	10.2	0.000	1.8	0.021
United States	-1.9	0.437	1.8	0.103	26.9	0.000	34.8	0.000	21.2	0.000	2.0	0.018
Sub-national entities												
Flanders (Belgium)	11.8	0.000	3.3	0.005	47.3	0.000	35.1	0.000	12.1	0.000	-0.6	0.621
England (UK)	-10.2	0.016	1.1	0.465	33.0	0.000	27.6	0.000	18.7	0.000	4.2	0.029
Northern Ireland (UK)	-1.3	0.282	3.3	0.050	30.8	0.000	31.3	0.000	14.9	0.000	2.8	0.061
England/N. Ireland (UK)	-9.8	0.013	1.2	0.417	33.0	0.000	27.6	0.000	18.6	0.000	4.1	0.024
Average	5.1	0.000	0.7	0.044	30.4	0.000	29.4	0.000	12.9	0.000	3.8	0.000
Partners												
Cyprus[1]	-5.9	0.736	-0.6	0.598	27.0	0.000	28.2	0.000	11.8	0.000	0.8	0.007

1. See notes on page 250.

Source: Survey of Adult Skills (PIAAC) (2012), Table B5.3 in Annex B.

StatLink http://dx.doi.org/10.1787/888932898579

[Part 2/2]

Table A5.1 (L) Difference in literacy scores between contrast categories, by socio-demographic characteristics and practice-oriented factors (adjusted)

OECD	Level of engagement in reading at work: Difference between adults with highest engagement and lowest engagement		Level of engagement in numeracy-related practices at work: Difference between adults with highest engagement and lowest engagement		Level of engagement in ICT-related practices at work: Difference between adults with highest engagement and no engagement		Level of engagement in reading outside work: Difference between adults with highest engagement and lowest engagement		Level of engagement in numeracy-related practices outside work: Difference between adults with highest engagement and lowest engagement		Level of engagement in ICT-related practices outside work: Difference between adults with highest engagement and no engagement	
	Score dif.	p-value	Score dif.	p-value	Score dif.	p-value	Score dif.	p-value	Score dif.	p-value	Score dif.	p-value
National entities												
Australia	-3.5	0.124	-0.1	0.661	14.0	0.000	10.0	0.000	11.5	0.000	26.9	0.000
Austria	-0.7	0.360	1.3	0.804	15.5	0.000	7.1	0.000	8.6	0.000	11.1	0.000
Canada	-3.7	0.015	0.7	0.888	19.9	0.000	11.1	0.000	10.8	0.000	18.5	0.000
Czech Republic	-4.0	0.199	0.9	0.838	10.0	0.001	6.3	0.013	13.5	0.000	9.9	0.000
Denmark	-0.8	0.558	2.6	0.190	15.9	0.000	6.0	0.000	11.1	0.000	24.7	0.000
Estonia	-8.0	0.000	1.4	0.880	16.3	0.000	6.1	0.000	11.8	0.000	6.7	0.006
Finland	-6.0	0.000	1.5	0.080	18.8	0.000	12.1	0.000	11.4	0.000	13.7	0.000
Germany	-4.4	0.044	2.3	0.073	14.5	0.000	11.0	0.000	11.7	0.000	11.7	0.000
Ireland	-0.5	0.407	0.3	0.701	10.0	0.000	8.3	0.000	9.0	0.000	11.8	0.000
Italy	-0.9	0.785	5.5	0.169	12.9	0.000	3.1	0.040	11.4	0.000	7.5	0.001
Japan	-6.5	0.005	4.1	0.048	10.4	0.000	4.5	0.005	7.6	0.001	9.4	0.000
Korea	-0.7	0.524	1.2	0.864	5.7	0.007	4.2	0.000	6.4	0.000	14.2	0.000
Netherlands	-2.6	0.038	0.5	0.624	22.8	0.000	5.6	0.001	9.0	0.000	23.9	0.000
Norway	-5.7	0.001	2.4	0.302	25.0	0.000	12.0	0.000	10.8	0.000	9.2	0.022
Poland	-1.3	0.952	2.7	0.725	9.6	0.000	1.1	0.274	12.6	0.000	18.6	0.000
Slovak Republic	-1.8	0.529	0.2	0.423	3.5	0.183	1.1	0.311	11.2	0.000	6.5	0.000
Spain	-1.3	0.548	4.5	0.002	9.0	0.003	3.7	0.044	8.3	0.000	20.4	0.000
Sweden	-6.4	0.000	7.8	0.000	21.8	0.000	9.0	0.000	8.4	0.000	15.5	0.000
United States	-6.8	0.001	0.9	0.600	20.1	0.000	0.7	0.731	10.5	0.000	25.3	0.000
Sub-national entities												
Flanders (Belgium)	-7.6	0.000	-0.3	0.779	25.7	0.000	3.9	0.038	8.6	0.000	18.8	0.000
England (UK)	-3.2	0.353	1.7	0.966	20.7	0.000	6.9	0.000	6.4	0.004	21.1	0.000
Northern Ireland (UK)	-1.6	0.662	0.1	0.999	18.5	0.000	8.4	0.000	7.7	0.012	4.5	0.236
England/N. Ireland (UK)	-3.2	0.345	1.6	0.972	20.6	0.000	7.0	0.000	6.4	0.003	20.4	0.000
Average	-3.6	0.000	2.0	0.008	15.3	0.000	6.4	0.000	10.0	0.000	15.5	0.000
Partners												
Cyprus[1]	-8.4	0.000	0.8	0.000	7.2	0.000	-0.9	0.000	1.2	0.000	5.4	0.000

1. See notes on page 250.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898579

[Part 1/2]

Relationship between age and literacy proficiency

Table A5.2 (L) *OLS regression weights, foreign-born adults excluded*

	Unadjusted												
	Constant			Age: Linear			Age: Quadratic			Age: Cubic			
OECD	ß	S.E.	p-value	ß	S.E.	p-value	ß	S.E.	p-value	ß	S.E.	p-value	R^2
National entities													
Australia	-0.87	(0.4)	0.007	0.09	(0.0)	0.001	-0.197	(0.0)	0.005	0.11	(0.0)	0.000	0.036
Austria	-1.79	(0.3)	0.000	0.17	(0.0)	0.000	-0.405	(0.0)	0.000	0.27	(0.0)	0.000	0.096
Canada	-2.31	(0.3)	0.000	0.21	(0.0)	0.000	-0.491	(0.0)	0.000	0.34	(0.0)	0.000	0.044
Czech Republic	-1.59	(0.4)	0.000	0.16	(0.0)	0.000	-0.429	(0.0)	0.000	0.33	(0.0)	0.000	0.054
Denmark	-2.28	(0.3)	0.000	0.21	(0.0)	0.000	-0.484	(0.0)	0.000	0.32	(0.0)	0.000	0.096
Estonia	-0.71	(0.3)	0.067	0.09	(0.0)	0.002	-0.261	(0.0)	0.001	0.20	(0.0)	0.000	0.038
Finland	-2.26	(0.3)	0.000	0.24	(0.0)	0.000	-0.548	(0.0)	0.000	0.35	(0.0)	0.000	0.187
Germany	-1.23	(0.4)	0.000	0.12	(0.0)	0.000	-0.294	(0.0)	0.000	0.19	(0.0)	0.000	0.074
Ireland	-2.25	(0.4)	0.000	0.20	(0.0)	0.000	-0.502	(0.0)	0.000	0.37	(0.0)	0.000	0.061
Italy	-0.28	(0.4)	0.699	0.01	(0.0)	0.867	-0.042	(0.0)	0.811	0.01	(0.0)	0.000	0.078
Japan	-0.47	(0.4)	0.129	0.07	(0.0)	0.006	-0.107	(0.0)	0.126	0.00	(0.0)	0.000	0.136
Korea	-0.66	(0.3)	0.002	0.11	(0.0)	0.000	-0.319	(0.0)	0.000	0.23	(0.0)	0.000	0.208
Netherlands	-1.63	(0.4)	0.000	0.18	(0.0)	0.000	-0.417	(0.0)	0.000	0.26	(0.0)	0.000	0.120
Norway	-3.10	(0.3)	0.000	0.27	(0.0)	0.000	-0.608	(0.0)	0.000	0.40	(0.0)	0.000	0.123
Poland	0.06	(0.4)	0.739	0.02	(0.0)	0.184	-0.084	(0.0)	0.070	0.06	(0.0)	0.000	0.062
Slovak Republic	-1.19	(0.3)	0.000	0.11	(0.0)	0.000	-0.281	(0.0)	0.000	0.21	(0.0)	0.000	0.016
Spain	-1.41	(0.3)	0.000	0.10	(0.0)	0.000	-0.227	(0.0)	0.001	0.11	(0.0)	0.000	0.122
Sweden	-2.07	(0.3)	0.000	0.20	(0.0)	0.000	-0.432	(0.0)	0.000	0.26	(0.0)	0.000	0.121
United States	-2.01	(0.4)	0.000	0.17	(0.0)	0.000	-0.432	(0.0)	0.000	0.32	(0.0)	0.000	0.015
Sub-national entities													
Flanders (Belgium)	-1.73	(0.3)	0.000	0.18	(0.0)	0.000	-0.426	(0.0)	0.000	0.28	(0.0)	0.000	0.119
England (UK)	-3.21	(0.4)	0.000	0.27	(0.0)	0.000	-0.648	(0.0)	0.000	0.48	(0.0)	0.000	0.034
Northern Ireland (UK)	-1.85	(0.4)	0.000	0.16	(0.0)	0.000	-0.397	(0.0)	0.000	0.28	(0.0)	0.000	0.034
England/N. Ireland (UK)	-3.16	(0.4)	0.000	0.26	(0.0)	0.000	-0.639	(0.0)	0.000	0.47	(0.0)	0.000	0.033
Average	-1.57	(0.1)	0.000	0.15	(0.0)	0.000	-1.290	(0.0)	0.000	0.24	(0.0)	0.000	0.088
Partners													
Cyprus[1]	-0.97	(0.3)	0.003	0.07	(0.0)	0.011	-0.002	(0.0)	0.050	0.09	(0.0)	0.000	0.017

[Part 2/2]

Relationship between age and literacy proficiency

Table A5.2 (L) *OLS regression weights, foreign-born adults excluded*

	Adjusted for educational attainment and foreign language												
	Constant			Age: Linear			Age: Quadratic			Age: Cubic			
OECD	ß	S.E.	p-value	ß	S.E.	p-value	ß	S.E.	p-value	ß	S.E.	p-value	R^2
National entities													
Australia	1.17	(0.4)	0.005	-0.07	(0.0)	0.052	0.002	(0.0)	0.043	-0.18	(0.0)	0.000	0.200
Austria	0.12	(0.3)	0.110	0.02	(0.0)	0.760	-0.001	(0.0)	0.941	0.04	(0.0)	0.000	0.215
Canada	1.07	(0.3)	0.000	-0.06	(0.0)	0.012	0.001	(0.0)	0.050	-0.09	(0.0)	0.000	0.232
Czech Republic	0.77	(0.4)	0.008	-0.03	(0.0)	0.173	0.000	(0.0)	0.565	0.01	(0.0)	0.000	0.175
Denmark	0.84	(0.3)	0.002	-0.03	(0.0)	0.083	0.001	(0.0)	0.180	-0.06	(0.0)	0.000	0.254
Estonia	1.75	(0.3)	0.000	-0.09	(0.0)	0.000	0.001	(0.0)	0.011	-0.08	(0.0)	0.000	0.160
Finland	0.03	(0.4)	0.758	0.07	(0.0)	0.008	-0.002	(0.0)	0.003	0.12	(0.0)	0.000	0.303
Germany	2.01	(0.5)	0.000	-0.11	(0.0)	0.000	0.002	(0.0)	0.003	-0.18	(0.0)	0.000	0.238
Ireland	0.61	(0.4)	0.136	-0.04	(0.0)	0.372	0.001	(0.0)	0.626	-0.05	(0.0)	0.000	0.257
Italy	2.25	(0.4)	0.000	-0.18	(0.0)	0.000	0.004	(0.0)	0.000	-0.36	(0.0)	0.000	0.207
Japan	1.42	(0.4)	0.000	-0.07	(0.0)	0.006	0.002	(0.0)	0.002	-0.21	(0.0)	0.000	0.241
Korea	2.55	(0.3)	0.000	-0.15	(0.0)	0.000	0.003	(0.0)	0.000	-0.19	(0.0)	0.000	0.323
Netherlands	1.12	(0.3)	0.002	-0.03	(0.0)	0.387	0.001	(0.0)	0.453	-0.09	(0.0)	0.000	0.309
Norway	-0.90	(0.4)	0.000	0.10	(0.0)	0.000	-0.002	(0.0)	0.000	0.14	(0.0)	0.000	0.258
Poland	3.58	(0.4)	0.000	-0.27	(0.0)	0.000	0.006	(0.0)	0.000	-0.46	(0.0)	0.000	0.219
Slovak Republic	1.55	(0.3)	0.000	-0.10	(0.0)	0.000	0.002	(0.0)	0.001	-0.14	(0.0)	0.000	0.164
Spain	0.82	(0.3)	0.005	-0.06	(0.0)	0.022	0.001	(0.0)	0.032	-0.14	(0.0)	0.000	0.319
Sweden	0.47	(0.4)	0.366	0.00	(0.0)	0.640	0.000	(0.0)	0.795	-0.05	(0.0)	0.000	0.270
United States	1.63	(0.4)	0.000	-0.12	(0.0)	0.002	0.002	(0.0)	0.008	-0.18	(0.0)	0.000	0.239
Sub-national entities													
Flanders (Belgium)	0.91	(0.3)	0.001	-0.03	(0.0)	0.099	0.000	(0.0)	0.406	-0.03	(0.0)	0.000	0.317
England (UK)	-1.78	(0.5)	0.000	0.15	(0.0)	0.000	-0.004	(0.0)	0.000	0.27	(0.0)	0.000	0.214
Northern Ireland (UK)	0.14	(0.5)	0.791	0.00	(0.0)	0.982	0.000	(0.0)	0.934	0.00	(0.0)	0.000	0.256
England/N. Ireland (UK)	-1.71	(0.4)	0.000	0.15	(0.0)	0.000	-0.004	(0.0)	0.000	0.26	(0.0)	0.000	0.215
Average	1.05	(0.1)	0.000	-0.05	(0.0)	0.000	0.001	(0.0)	0.000	-0.09	(0.0)	0.000	0.244
Partners													
Cyprus[1]	0.89	(0.3)	0.001	-0.08	(0.0)	0.000	0.002	(0.0)	0.000	-0.18	(0.0)	0.000	0.098

1. See notes on page 250.

Note: A cubic specification of the trend curves is found to be most accurate in reflecting the distribution of scores by age in most countries. Unadjusted and adjusted results account for cross-country differences in average scores by age cohort. Adjusted results also account for educational attainment and language status differences. The reference group on which the constant for adjusted results is based is adults who have attained upper secondary education and whose first or second language learned as a child is the same as the language of the assessment. Foreign-born adults are excluded from the analysis. Estimates for cubic results are multiplied by 10 000.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898598

[Part 1/1]

Table A5.3 (L) **Distribution of literacy proficiency scores, and percentage of adults with at least upper secondary education**

OECD	25th percentile		Mean		75th percentile		Has attained at least upper secondary education		Has attained tertiary level education	
	Score	S.E.	Score	S.E.	Score	S.E.	%	S.E.	%	S.E.
National entities										
Australia	251.2	(1.3)	280.4	(0.9)	314.9	(1.2)	71.2	(0.5)	32.4	(0.5)
Austria	242.0	(1.2)	269.5	(0.7)	300.0	(1.0)	75.8	(0.3)	16.5	(0.1)
Canada	242.5	(1.0)	273.5	(0.6)	308.7	(0.8)	84.4	(0.1)	45.8	(0.3)
Czech Republic	248.6	(1.6)	274.0	(1.0)	302.0	(1.4)	83.8	(0.4)	17.8	(0.2)
Denmark	243.8	(1.0)	270.8	(0.6)	303.4	(0.9)	73.4	(0.5)	34.0	(0.4)
Estonia	248.4	(0.9)	275.9	(0.7)	306.0	(1.0)	81.6	(0.4)	36.4	(0.6)
Finland	258.3	(1.1)	287.5	(0.7)	322.1	(1.0)	80.4	(0.4)	36.4	(0.4)
Germany	238.7	(1.5)	269.8	(0.9)	303.8	(1.2)	81.4	(0.5)	29.2	(0.5)
Ireland	239.2	(1.7)	266.5	(0.9)	298.3	(1.1)	71.2	(0.1)	31.5	(0.3)
Italy	221.8	(1.6)	250.5	(1.1)	282.1	(1.6)	45.9	(0.1)	12.1	(0.1)
Japan	272.2	(1.2)	296.2	(0.7)	323.6	(0.8)	84.1	(0.4)	41.1	(0.2)
Korea	247.7	(0.8)	272.6	(0.6)	301.2	(0.9)	78.1	(0.5)	35.0	(0.0)
Netherlands	255.6	(1.0)	284.0	(0.7)	317.2	(0.9)	67.5	(0.7)	29.9	(0.5)
Norway	251.2	(1.3)	278.4	(0.6)	310.7	(0.8)	71.0	(0.6)	33.9	(0.4)
Poland	236.8	(1.1)	266.9	(0.6)	299.9	(0.9)	84.6	(0.4)	25.7	(0.5)
Slovak Republic	250.2	(1.0)	273.8	(0.6)	301.4	(0.8)	79.2	(0.6)	19.0	(0.6)
Spain	221.7	(1.2)	251.8	(0.7)	286.1	(0.8)	52.1	(0.1)	28.9	(0.0)
Sweden	251.3	(1.3)	279.2	(0.7)	313.4	(1.1)	76.2	(0.4)	28.1	(0.4)
United States	238.3	(1.5)	269.8	(1.0)	304.6	(1.5)	81.6	(0.4)	34.0	(0.4)
Sub-national entities										
Flanders (Belgium)	246.4	(1.2)	275.5	(0.8)	308.9	(1.0)	75.8	(0.5)	33.5	(0.6)
England (UK)	241.3	(1.5)	272.6	(1.1)	307.3	(1.3)	74.9	(0.6)	35.6	(0.6)
Northern Ireland (UK)	238.6	(2.2)	268.7	(1.9)	300.4	(2.2)	65.6	(0.5)	29.0	(0.6)
England/N. Ireland (UK)	241.2	(1.4)	272.5	(1.0)	307.1	(1.3)	74.6	(0.5)	35.4	(0.6)
Average	245.1	(0.3)	273.3	(0.2)	305.5	(0.2)	74.9	(0.1)	30.3	(0.1)
Partners										
Cyprus[1]	243.6	(1.2)	268.8	(0.8)	296.1	(1.1)	64.5	(0.4)	26.1	(0.3)

1. See notes on page 250.

Note: Upper secondary education includes ISCED 3A, 3B, 3C long and 4. Tertiary includes ISCED 5A, 5B and 6. Where possible, foreign qualifications are included as per their closest correspondance to the respective national education systems.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898617

[Part 1/2]

Relationship between age and literacy proficiency, 1994-1998 (International Adult Literacy Survey – IALS)

Table A5.4 (L) *OLS regression weights, foreign-born adults excluded*

	Unadjusted												
	Constant			Age									
				Linear			Quadratic			Cubic			
OECD	ß	S.E.	p-value	ß	S.E.	p-value	ß	S.E.	p-value	ß	S.E.	p-value	R^2
National entities													
Australia	0.52	(0.3)	0.144	-0.04	(0.0)	0.224	0.001	(0.0)	0.276	-0.06	(0.0)	0.000	0.001
Austria	m	m	m	m	m	m	m	m	m	m	m	m	m
Canada	-0.78	(0.9)	0.268	0.10	(0.1)	0.155	-0.002	(0.0)	0.228	0.13	(0.0)	0.000	0.095
Czech Republic	-0.78	(0.5)	0.217	0.09	(0.0)	0.069	-0.002	(0.0)	0.086	0.17	(0.0)	0.000	0.057
Denmark	-1.04	(0.3)	0.000	0.13	(0.0)	0.000	-0.003	(0.0)	0.000	0.19	(0.0)	0.000	0.101
Estonia	m	m	m	m	m	m	m	m	m	m	m	m	m
Finland	0.14	(0.4)	0.830	0.07	(0.0)	0.080	-0.002	(0.0)	0.082	0.09	(0.0)	0.000	0.222
Germany	0.33	(0.5)	0.427	0.00	(0.0)	0.098	0.000	(0.0)	0.203	-0.04	(0.0)	0.000	0.058
Ireland	-0.30	(0.7)	0.373	0.04	(0.1)	0.243	-0.001	(0.0)	0.206	0.06	(0.0)	0.000	0.071
Italy	0.08	(0.6)	0.409	0.00	(0.1)	0.461	0.000	(0.0)	0.586	-0.03	(0.0)	0.000	0.159
Japan	m	m	m	m	m	m	m	m	m	m	m	m	m
Korea	m	m	m	m	m	m	m	m	m	m	m	m	m
Netherlands	-0.29	(0.4)	0.380	0.08	(0.0)	0.014	-0.002	(0.0)	0.015	0.10	(0.0)	0.000	0.224
Norway	-0.14	(0.4)	0.860	0.07	(0.0)	0.114	-0.001	(0.0)	0.256	0.03	(0.0)	0.000	0.146
Poland	0.02	(0.5)	0.975	-0.03	(0.0)	0.331	0.001	(0.0)	0.274	-0.13	(0.0)	0.000	0.128
Slovak Republic	m	m	m	m	m	m	m	m	m	m	m	m	m
Spain	m	m	m	m	m	m	m	m	m	m	m	m	m
Sweden	0.24	(0.3)	0.327	0.05	(0.0)	0.046	-0.001	(0.0)	0.163	0.02	(0.0)	0.000	0.286
United States	-1.67	(0.5)	0.005	0.12	(0.0)	0.011	-0.002	(0.0)	0.063	0.10	(0.0)	0.000	0.027
Sub-national entities													
Flanders (Belgium)	-0.02	(3.1)	0.959	0.06	(0.2)	0.771	-0.002	(0.0)	0.711	0.10	(0.0)	0.000	0.156
England (UK)	m	m	m	m	m	m	m	m	m	m	m	m	m
Northern Ireland (UK)	m	m	m	m	m	m	m	m	m	m	m	m	m
England/N. Ireland (UK)	-1.23	(0.6)	0.113	0.09	(0.0)	0.175	-0.002	(0.0)	0.452	0.06	(0.0)	0.000	0.063
Partners													
Cyprus[1]	m	m	m	m	m	m	m	m	m	m	m	m	m

[Part 2/2]

Relationship between age and literacy proficiency, 1994-1998 (International Adult Literacy Survey – IALS)

Table A5.4 (L) *OLS regression weights, foreign-born adults excluded*

	Adjusted for educational attainment												
	Constant			Age									
				Linear			Quadratic			Cubic			
OECD	ß	S.E.	p-value	ß	S.E.	p-value	ß	S.E.	p-value	ß	S.E.	p-value	R^2
National entities													
Australia	0.71	(0.3)	0.028	-0.04	(0.0)	0.161	0.001	(0.0)	0.182	-0.07	(0.0)	0.000	0.203
Austria	m	m	m	m	m	m	m	m	m	m	m	m	m
Canada	2.16	(0.8)	0.056	-0.13	(0.1)	0.229	0.003	(0.0)	0.286	-0.29	(0.0)	0.000	0.321
Czech Republic	1.30	(0.5)	0.002	-0.05	(0.0)	0.104	0.001	(0.0)	0.164	-0.09	(0.0)	0.000	0.221
Denmark	1.42	(0.3)	0.001	-0.04	(0.0)	0.376	0.001	(0.0)	0.759	-0.07	(0.0)	0.000	0.288
Estonia	m	m	m	m	m	m	m	m	m	m	m	m	m
Finland	2.64	(0.4)	0.000	-0.12	(0.0)	0.003	0.002	(0.0)	0.029	-0.18	(0.0)	0.000	0.368
Germany	0.60	(0.5)	0.944	-0.01	(0.0)	0.147	0.000	(0.0)	0.242	-0.04	(0.0)	0.000	0.134
Ireland	1.59	(0.6)	0.016	-0.11	(0.1)	0.097	0.003	(0.0)	0.117	-0.26	(0.0)	0.000	0.266
Italy	2.89	(0.6)	0.000	-0.20	(0.1)	0.000	0.005	(0.0)	0.000	-0.41	(0.0)	0.000	0.350
Japan	m	m	m	m	m	m	m	m	m	m	m	m	m
Korea	m	m	m	m	m	m	m	m	m	m	m	m	m
Netherlands	1.16	(0.4)	0.005	-0.02	(0.0)	0.444	0.000	(0.0)	0.532	-0.07	(0.0)	0.000	0.387
Norway	1.18	(0.3)	0.000	-0.04	(0.0)	0.095	0.001	(0.0)	0.099	-0.14	(0.0)	0.000	0.288
Poland	2.27	(0.6)	0.000	-0.17	(0.1)	0.001	0.004	(0.0)	0.001	-0.37	(0.0)	0.000	0.308
Slovak Republic	m	m	m	m	m	m	m	m	m	m	m	m	m
Spain	m	m	m	m	m	m	m	m	m	m	m	m	m
Sweden	1.34	(0.3)	0.000	-0.02	(0.0)	0.295	0.000	(0.0)	0.382	-0.06	(0.0)	0.000	0.369
United States	1.42	(0.6)	0.005	-0.10	(0.1)	0.015	0.002	(0.0)	0.029	-0.18	(0.0)	0.000	0.278
Sub-national entities													
Flanders (Belgium)	2.61	(2.5)	0.396	-0.16	(0.2)	0.539	0.004	(0.0)	0.575	-0.30	(0.0)	0.000	0.338
England (UK)	m	m	m	m	m	m	m	m	m	m	m	m	m
Northern Ireland (UK)	m	m	m	m	m	m	m	m	m	m	m	m	m
England/N. Ireland (UK)	0.09	(0.6)	0.487	0.01	(0.0)	0.628	0.000	(0.0)	0.376	-0.08	(0.0)	0.000	0.201
Partners													
Cyprus[1]	m	m	m	m	m	m	m	m	m	m	m	m	m

1. See notes on page 250.

Notes: A cubic specification of the trend curves is found to be most accurate in reflecting the distribution of scores by age in most countries. Unadjusted and adjusted results account for cross-country differences in average scores by age cohort. Adjusted results also account for educational attainment and language status differences. The reference group on which the constant for adjusted results is based is adults who have attained upper secondary education and whose first or second language learned as a child is the same as the language of the assessment. Foreign-born adults are excluded from the analysis. Estimates for cubic results are multiplied by 10 000.

In this table, "m" indicates national entities, sub-national entities and partners that did not participate in IALS.

Source: OECD, IALS Database.

StatLink http://dx.doi.org/10.1787/888932898636

[Part 1/5]

Table A5.5a (L) Distribution of literacy proficiency scores, by educational attainment

	Lower than upper secondary											
	Adults aged 16-19						Adults aged 20-65					
	25th percentile		Mean		75th percentile		25th percentile		Mean		75th percentile	
OECD	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.
National entities												
Australia	245.9	(7.3)	272.3	(4.2)	302.2	(7.5)	221.5	(2.8)	249.2	(1.6)	285.4	(2.4)
Austria	237.5	(4.4)	264.9	(2.7)	293.6	(4.7)	211.5	(3.4)	239.4	(2.0)	270.9	(2.8)
Canada	236.7	(4.8)	263.4	(2.6)	293.6	(3.8)	189.5	(4.1)	220.4	(1.9)	256.4	(2.9)
Czech Republic	250.8	(5.7)	275.4	(3.1)	303.4	(4.6)	215.9	(7.2)	243.6	(3.3)	272.2	(6.7)
Denmark	247.4	(4.4)	269.6	(1.9)	294.7	(2.8)	207.2	(3.4)	236.5	(1.9)	271.1	(2.9)
Estonia	256.5	(4.3)	279.6	(2.1)	306.7	(3.3)	217.3	(3.5)	246.7	(1.9)	279.1	(2.5)
Finland	261.5	(3.4)	287.6	(2.1)	315.9	(4.0)	217.2	(4.3)	246.7	(2.6)	283.5	(3.4)
Germany	243.5	(5.5)	271.9	(2.7)	303.6	(3.6)	194.4	(5.2)	226.7	(3.0)	257.2	(4.8)
Ireland	236.1	(7.4)	262.3	(3.6)	289.3	(5.2)	205.8	(2.8)	232.2	(1.7)	265.4	(2.5)
Italy	238.8	(5.4)	265.1	(3.7)	293.9	(5.2)	204.7	(2.4)	230.6	(1.7)	259.0	(2.2)
Japan	269.4	(3.2)	291.0	(2.6)	314.5	(3.2)	234.8	(3.5)	260.8	(2.5)	291.6	(3.6)
Korea	271.4	(3.3)	290.8	(2.3)	310.6	(3.6)	202.9	(2.4)	229.4	(1.6)	258.6	(2.4)
Netherlands	258.8	(5.2)	281.5	(2.7)	307.0	(4.7)	217.3	(3.0)	247.6	(1.6)	281.9	(2.1)
Norway	242.0	(5.7)	266.3	(2.7)	293.6	(3.2)	224.0	(3.0)	251.7	(1.7)	285.2	(2.9)
Poland	256.4	(3.5)	280.3	(2.4)	307.3	(3.5)	196.0	(4.7)	229.2	(2.4)	264.1	(2.8)
Slovak Republic	249.3	(4.9)	272.1	(2.7)	299.0	(3.9)	209.8	(3.6)	237.4	(1.8)	269.0	(2.6)
Spain	229.1	(3.1)	251.6	(2.3)	278.0	(4.5)	198.2	(1.8)	226.1	(1.3)	258.6	(1.6)
Sweden	243.1	(6.3)	267.5	(3.3)	297.9	(4.4)	214.0	(5.1)	240.0	(2.1)	274.2	(2.5)
United States	233.6	(6.0)	261.3	(3.4)	289.2	(6.3)	180.5	(5.1)	212.6	(2.5)	244.4	(3.8)
Sub-national entities												
Flanders (Belgium)	249.7	(5.7)	273.2	(2.8)	300.1	(4.9)	204.7	(3.7)	233.0	(1.9)	266.1	(2.9)
England (UK)	200.4	(13.5)	228.6	(6.3)	258.7	(13.3)	212.6	(3.7)	240.0	(1.6)	270.5	(2.3)
Northern Ireland (UK)	227.2	(10.6)	247.4	(5.2)	266.8	(6.0)	211.4	(3.8)	238.5	(2.5)	266.8	(2.9)
England/N. Ireland (UK)	203.1	(15.2)	229.6	(6.1)	259.8	(11.9)	212.6	(3.8)	239.9	(1.5)	270.4	(2.2)
Average	245.7	(1.3)	270.4	(0.7)	297.8	(1.1)	208.6	(0.9)	237.1	(0.5)	269.7	(0.7)
Partners												
Cyprus[1]	235.1	(7.1)	261.2	(3.6)	287.3	(4.4)	219.9	(3.7)	248.1	(1.8)	279.0	(2.9)

[Part 2/5]

Table A5.5a (L) Distribution of literacy proficiency scores, by educational attainment

	Upper secondary											
	Adults aged 16-19						Adults aged 20-65					
	25th percentile		Mean		75th percentile		25th percentile		Mean		75th percentile	
OECD	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.
National entities												
Australia	271.0	(7.8)	297.4	(4.2)	325.2	(7.3)	253.8	(2.4)	279.9	(1.5)	310.0	(2.2)
Austria	261.3	(5.7)	286.3	(3.5)	311.0	(7.4)	245.4	(1.8)	270.6	(0.9)	298.1	(1.5)
Canada	255.7	(4.3)	279.7	(2.6)	306.4	(3.8)	239.3	(1.6)	267.5	(1.0)	298.7	(1.4)
Czech Republic	253.8	(8.1)	274.1	(7.1)	298.9	(12.2)	246.9	(1.7)	270.9	(1.0)	296.9	(1.5)
Denmark	261.2	(10.0)	286.8	(5.4)	312.9	(7.1)	243.2	(1.7)	268.4	(1.0)	298.3	(1.7)
Estonia	269.7	(7.9)	293.6	(4.5)	318.3	(5.9)	244.4	(1.4)	271.1	(0.9)	300.3	(1.3)
Finland	274.0	(12.1)	292.7	(5.8)	319.7	(8.9)	253.2	(2.1)	281.7	(1.2)	314.4	(2.0)
Germany	273.3	(11.8)	294.9	(5.4)	321.3	(7.6)	235.9	(1.8)	264.6	(1.1)	295.9	(1.7)
Ireland	249.8	(8.2)	273.3	(4.3)	297.1	(6.3)	243.3	(1.9)	267.0	(1.5)	294.2	(1.5)
Italy	239.4	(15.3)	265.1	(6.1)	289.7	(7.4)	239.0	(1.8)	263.6	(1.3)	291.1	(2.1)
Japan	283.2	(5.9)	304.9	(4.4)	325.7	(6.2)	265.4	(1.4)	288.2	(1.0)	313.6	(1.3)
Korea	274.2	(4.4)	294.8	(3.4)	315.2	(5.0)	246.7	(1.2)	270.4	(0.9)	295.2	(1.3)
Netherlands	284.6	(5.8)	302.8	(3.5)	323.5	(5.7)	261.6	(2.7)	286.5	(1.2)	314.6	(1.4)
Norway	253.2	(8.4)	278.5	(4.9)	305.8	(6.7)	248.4	(1.7)	273.8	(1.3)	302.8	(1.7)
Poland	261.1	(6.1)	286.6	(2.7)	313.0	(3.8)	230.3	(1.7)	257.8	(0.9)	288.1	(1.6)
Slovak Republic	257.0	(8.6)	276.4	(4.1)	299.0	(9.7)	254.1	(1.4)	276.1	(0.8)	300.1	(0.9)
Spain	263.2	(10.5)	284.2	(3.9)	307.3	(4.8)	234.4	(2.4)	260.4	(1.2)	288.2	(1.6)
Sweden	262.2	(8.8)	287.7	(5.0)	313.7	(9.3)	255.2	(2.5)	279.5	(1.1)	308.2	(1.7)
United States	242.5	(9.4)	270.3	(5.3)	296.8	(8.0)	232.7	(1.8)	261.2	(1.2)	291.9	(2.1)
Sub-national entities												
Flanders (Belgium)	262.4	(6.4)	284.6	(3.3)	309.7	(4.8)	241.3	(1.9)	267.9	(1.2)	297.0	(1.5)
England (UK)	249.2	(6.4)	273.6	(3.6)	298.0	(6.3)	244.9	(2.4)	273.3	(1.6)	304.0	(2.2)
Northern Ireland (UK)	261.6	(8.2)	286.2	(3.7)	311.3	(6.0)	246.7	(3.4)	272.5	(2.4)	299.4	(3.5)
England/N. Ireland (UK)	249.8	(5.8)	274.0	(3.5)	298.9	(5.9)	245.0	(2.4)	273.2	(1.5)	303.8	(2.3)
Average	262.0	(1.9)	285.2	(1.0)	310.0	(1.6)	245.7	(0.4)	271.5	(0.2)	300.1	(0.4)
Partners												
Cyprus[1]	246.6	(7.4)	268.7	(3.3)	292.5	(5.8)	243.0	(2.3)	266.7	(1.1)	292.8	(1.6)

1. See notes on page 250.

Note: Lower than upper seconday corresponds to the International Standard Classification of Education (ISCED) categories 1, 2 and 3C short. Upper secondary education includes ISCED 3A, 3B, 3C long and 4. Tertiary-type B corresponds to ISCED 5B. Tertiary-type A corresponds to ISCED 5A and advanced research programmes correspond to ISCED 6. Where possible, foreign qualifications are included as per their closest correspondance to the respective national education systems.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898655

[Part 3/5]

Table A5.5a (L) **Distribution of literacy proficiency scores, by educational attainment**

	Tertiary-type B											
	Adults aged 16-29						Adults aged 30-65					
	25th percentile		Mean		75th percentile		25th percentile		Mean		75th percentile	
OECD	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.
National entities												
Australia	254.4	(10.7)	280.9	(5.6)	308.4	(7.6)	263.7	(3.6)	288.6	(2.6)	317.6	(3.7)
Austria	281.5	(7.5)	301.4	(4.8)	321.6	(6.8)	256.1	(4.3)	280.5	(2.3)	307.1	(3.9)
Canada	264.5	(6.0)	288.7	(2.9)	315.9	(4.3)	248.3	(2.3)	276.7	(1.3)	308.4	(2.1)
Czech Republic	266.2	(13.0)	289.9	(7.2)	309.3	(11.2)	270.4	(12.7)	293.7	(5.2)	316.8	(7.8)
Denmark	270.0	(6.0)	290.8	(4.2)	314.2	(9.2)	265.0	(2.3)	286.0	(1.4)	310.0	(2.1)
Estonia	272.2	(3.5)	292.7	(2.8)	314.7	(3.2)	249.0	(2.6)	273.3	(1.5)	300.1	(1.8)
Finland	w	w	w	w	w	w	269.7	(2.3)	293.7	(1.5)	320.2	(2.0)
Germany	264.1	(9.6)	285.4	(6.2)	311.6	(8.0)	253.8	(4.4)	279.4	(2.5)	307.1	(3.6)
Ireland	253.7	(6.4)	276.5	(3.8)	300.1	(6.8)	253.7	(2.8)	278.7	(2.0)	304.8	(2.7)
Italy	c	c	c	c	c	c	c	c	c	c	c	c
Japan	285.0	(5.8)	305.0	(3.7)	325.7	(5.7)	281.4	(2.1)	303.6	(1.3)	326.9	(2.4)
Korea	270.4	(3.6)	288.9	(2.8)	308.8	(4.4)	260.4	(2.5)	281.2	(1.4)	302.9	(2.8)
Netherlands	c	c	c	c	c	c	270.0	(6.3)	292.5	(3.4)	317.3	(5.5)
Norway	c	c	c	c	c	c	265.2	(6.4)	286.7	(3.2)	315.5	(4.4)
Poland	c	c	c	c	c	c	c	c	c	c	c	c
Slovak Republic	c	c	c	c	c	c	c	c	c	c	c	c
Spain	256.2	(6.6)	275.8	(4.7)	299.4	(7.0)	241.7	(4.6)	265.0	(2.2)	292.4	(3.0)
Sweden	296.4	(9.3)	318.7	(4.5)	341.4	(7.9)	268.8	(4.3)	292.1	(2.5)	320.7	(3.5)
United States	269.5	(9.0)	295.4	(5.4)	319.5	(16.7)	255.8	(5.5)	278.9	(2.7)	304.8	(4.4)
Sub-national entities												
Flanders (Belgium)	290.8	(3.0)	307.7	(2.2)	324.0	(3.4)	271.6	(2.8)	292.6	(1.7)	318.0	(2.3)
England (UK)	243.1	(7.1)	271.5	(5.2)	298.4	(6.9)	252.9	(3.9)	282.2	(2.4)	313.2	(2.9)
Northern Ireland (UK)	250.5	(14.0)	273.0	(5.9)	298.9	(7.6)	254.7	(6.3)	280.1	(3.5)	306.6	(3.9)
England/N. Ireland (UK)	243.3	(6.5)	271.5	(5.0)	298.6	(7.5)	253.0	(4.4)	282.2	(2.4)	313.1	(2.8)
Average	269.2	(2.0)	291.3	(1.2)	314.2	(2.1)	261.0	(1.2)	284.7	(0.6)	311.3	(0.9)
Partners												
Cyprus[1]	243.4	(8.1)	270.7	(4.2)	297.5	(5.6)	249.2	(3.7)	273.4	(2.2)	298.4	(3.2)

[Part 4/5]

Table A5.5a (L) **Distribution of literacy proficiency scores, by educational attainment**

	Tertiary-type A and advanced research programmes											
	Adults aged 16-29						Adults aged 30-65					
	25th percentile		Mean		75th percentile		25th percentile		Mean		75th percentile	
OECD	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.
National entities												
Australia	281.0	(6.2)	306.2	(3.6)	334.8	(5.2)	284.2	(2.0)	308.8	(1.4)	337.7	(1.8)
Austria	298.9	(4.4)	318.0	(3.4)	336.9	(5.1)	280.4	(3.4)	302.4	(1.9)	326.9	(2.5)
Canada	283.4	(4.9)	308.4	(2.4)	336.9	(3.6)	271.0	(2.1)	298.0	(1.1)	328.9	(1.5)
Czech Republic	283.8	(6.9)	304.0	(3.6)	324.9	(5.1)	280.1	(3.9)	302.0	(2.9)	324.7	(3.5)
Denmark	281.8	(5.8)	301.1	(4.0)	331.4	(7.0)	278.4	(1.9)	298.0	(1.5)	325.3	(1.7)
Estonia	289.9	(2.5)	314.3	(2.6)	338.4	(3.8)	270.4	(3.0)	295.9	(1.5)	323.0	(2.0)
Finland	308.7	(5.1)	328.5	(3.9)	354.0	(5.3)	292.8	(2.2)	316.5	(1.7)	345.0	(2.1)
Germany	293.8	(4.6)	313.8	(3.8)	334.5	(4.4)	275.9	(2.8)	299.4	(1.7)	326.1	(2.1)
Ireland	282.5	(4.7)	304.8	(2.6)	327.1	(4.7)	276.1	(2.6)	299.0	(1.7)	323.6	(2.0)
Italy	274.0	(8.7)	292.6	(4.0)	315.8	(7.2)	253.2	(2.9)	279.2	(1.8)	307.7	(2.8)
Japan	309.1	(4.0)	326.4	(1.9)	342.5	(3.4)	299.4	(1.8)	318.6	(1.2)	340.4	(1.9)
Korea	285.1	(3.1)	303.3	(2.1)	323.0	(2.6)	274.0	(2.1)	295.0	(1.5)	317.2	(1.8)
Netherlands	302.4	(3.8)	324.7	(3.0)	348.7	(4.8)	288.3	(2.2)	309.9	(1.4)	336.1	(1.4)
Norway	292.6	(4.0)	309.5	(3.1)	337.1	(3.9)	280.7	(2.0)	301.8	(1.1)	328.5	(1.3)
Poland	274.5	(3.3)	300.2	(1.9)	325.1	(3.1)	270.7	(2.8)	295.7	(1.5)	322.4	(2.5)
Slovak Republic	278.6	(4.5)	299.2	(2.4)	321.5	(3.5)	273.1	(2.5)	293.8	(1.5)	315.6	(2.5)
Spain	270.7	(5.1)	292.9	(2.9)	317.2	(5.0)	263.7	(2.4)	287.0	(1.4)	312.5	(2.5)
Sweden	293.9	(5.8)	316.5	(4.5)	346.4	(6.9)	285.7	(2.3)	307.7	(1.5)	337.1	(1.9)
United States	284.6	(4.6)	308.4	(2.8)	334.0	(4.6)	277.8	(2.5)	301.1	(1.7)	327.6	(2.3)
Sub-national entities												
Flanders (Belgium)	303.2	(4.8)	322.1	(3.9)	342.1	(4.6)	292.5	(2.7)	311.0	(1.7)	333.6	(3.4)
England (UK)	277.8	(7.4)	302.8	(3.9)	331.7	(4.8)	278.1	(2.8)	301.8	(1.8)	330.5	(2.5)
Northern Ireland (UK)	281.9	(8.9)	302.6	(4.2)	324.5	(5.3)	279.6	(3.8)	302.5	(3.2)	328.7	(2.8)
England/N. Ireland (UK)	278.2	(7.6)	302.8	(3.8)	331.6	(5.0)	278.3	(2.6)	301.8	(1.8)	330.4	(2.5)
Average	288.1	(1.1)	309.4	(0.7)	333.5	(1.1)	278.4	(0.6)	301.1	(0.4)	327.2	(0.5)
Partners												
Cyprus[1]	264.0	(3.8)	288.9	(2.3)	314.8	(3.9)	266.6	(2.6)	289.6	(1.5)	314.5	(2.8)

1. See notes on page 250.

Note: Lower than upper seconday corresponds to the International Standard Classification of Education (ISCED) categories 1, 2 and 3C short. Upper secondary education includes ISCED 3A, 3B, 3C long and 4. Tertiary-type B corresponds to ISCED 5B. Tertiary-type A corresponds to ISCED 5A and advanced research programmes correspond to ISCED 6. Where possible, foreign qualifications are included as per their closest correspondance to the respective national education systems.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898655

[Part 5/5]

Table A5.5a (L) **Distribution of literacy proficiency scores, by educational attainment**

	Lower than upper secondary						Upper secondary education					
	Adults aged 16-29						Adults aged 16-29					
	25th percentile		Mean		75th percentile		25th percentile		Mean		75th percentile	
OECD	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.
National entities												
Australia	236.7	(7.7)	265.1	(3.5)	298.4	(6.0)	260.7	(4.4)	287.9	(2.3)	317.5	(3.7)
Austria	228.8	(3.5)	257.8	(2.4)	290.0	(3.3)	263.4	(2.6)	286.2	(1.6)	310.7	(3.4)
Canada	227.4	(4.4)	255.9	(2.4)	287.9	(4.0)	253.0	(2.3)	278.9	(1.6)	308.1	(2.0)
Czech Republic	246.1	(5.5)	271.3	(2.9)	300.9	(4.5)	258.2	(3.8)	282.4	(2.2)	309.3	(3.4)
Denmark	237.8	(3.9)	263.2	(1.9)	291.6	(2.7)	264.4	(3.5)	287.7	(2.0)	316.0	(3.2)
Estonia	245.3	(4.1)	271.2	(1.8)	300.7	(2.6)	265.4	(3.0)	289.9	(1.6)	316.4	(2.0)
Finland	258.7	(4.0)	283.0	(2.3)	313.5	(3.7)	281.7	(2.8)	304.3	(2.1)	329.2	(2.2)
Germany	234.0	(4.1)	265.5	(2.4)	299.2	(3.5)	259.9	(4.3)	286.1	(2.2)	315.3	(2.5)
Ireland	227.5	(8.2)	254.3	(3.2)	285.4	(4.6)	244.6	(4.2)	268.3	(2.1)	294.7	(3.2)
Italy	224.2	(5.3)	252.0	(3.6)	284.4	(5.6)	239.2	(4.6)	265.6	(2.4)	293.5	(2.9)
Japan	261.5	(5.3)	285.8	(2.4)	311.4	(3.3)	280.8	(2.9)	301.0	(2.1)	322.7	(2.7)
Korea	267.1	(3.5)	286.3	(2.4)	308.7	(3.3)	273.0	(2.6)	292.8	(2.0)	314.7	(2.8)
Netherlands	251.1	(3.9)	274.5	(2.3)	302.9	(2.7)	276.6	(3.0)	299.8	(1.8)	324.5	(2.5)
Norway	236.0	(3.7)	262.2	(2.2)	292.4	(2.9)	261.1	(3.7)	284.0	(2.0)	312.0	(2.4)
Poland	246.8	(3.7)	273.4	(2.2)	303.2	(2.9)	248.7	(2.4)	275.0	(1.3)	303.4	(1.7)
Slovak Republic	233.3	(5.7)	260.8	(2.3)	293.2	(3.1)	257.2	(2.8)	279.0	(1.7)	302.8	(2.6)
Spain	219.5	(3.5)	244.2	(2.0)	273.0	(2.5)	252.5	(3.8)	274.9	(2.0)	300.1	(3.6)
Sweden	242.1	(6.1)	265.0	(2.9)	297.4	(3.1)	268.2	(3.2)	290.7	(1.7)	317.3	(2.6)
United States	221.2	(4.7)	251.6	(3.0)	281.6	(4.7)	243.5	(3.2)	270.5	(2.2)	298.8	(3.4)
Sub-national entities												
Flanders (Belgium)	242.1	(5.1)	268.0	(2.6)	297.6	(4.1)	258.5	(2.9)	283.7	(1.7)	312.2	(2.9)
England (UK)	200.0	(7.7)	228.8	(3.1)	259.1	(5.6)	248.8	(4.1)	274.0	(2.6)	303.2	(3.3)
Northern Ireland (UK)	211.1	(7.4)	239.2	(3.9)	266.7	(5.6)	255.6	(4.7)	280.3	(2.9)	308.1	(5.3)
England/N. Ireland (UK)	200.8	(6.2)	229.3	(3.0)	259.5	(5.7)	249.1	(4.2)	274.3	(2.5)	303.4	(3.4)
Average	237.5	(1.1)	263.8	(0.6)	294.0	(0.8)	260.0	(0.7)	284.0	(0.4)	310.6	(0.6)
Partners												
Cyprus[1]	231.4	(7.0)	258.4	(3.5)	286.6	(4.2)	244.4	(4.0)	268.1	(2.1)	294.5	(2.7)

1. See notes on page 250.

Note: Lower than upper seconday corresponds to the International Standard Classification of Education (ISCED) categories 1, 2 and 3C short. Upper secondary education includes ISCED 3A, 3B, 3C long and 4. Tertiary-type B corresponds to ISCED 5B. Tertiary-type A corresponds to ISCED 5A and advanced research programmes correspond to ISCED 6. Where possible, foreign qualifications are included as per their closest correspondance to the respective national education systems.

Source: Survey of Adult Skills (PIAAC) (2012).

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[Part 1/2]

Table A5.5b (L) **Distribution of literacy proficiency scores, by orientation of education**

	Vocational orientation											
	Upper secondary											
	Adults aged 16-29						Adults aged 30-65					
	25th percentile		Mean		75th percentile		25th percentile		Mean		75th percentile	
OECD	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.
National entities												
Australia	250.0	(6.2)	278.1	(3.3)	307.7	(4.4)	249.4	(2.8)	274.8	(1.8)	303.5	(2.3)
Austria	259.7	(2.0)	281.4	(1.8)	304.3	(2.8)	238.9	(1.7)	264.0	(1.0)	290.7	(1.5)
Canada	249.5	(6.1)	275.9	(3.8)	302.8	(6.3)	240.9	(2.5)	268.6	(1.6)	298.0	(2.1)
Czech Republic	254.2	(3.7)	278.5	(2.2)	305.3	(3.1)	244.2	(1.6)	266.8	(1.1)	292.4	(1.9)
Denmark	245.3	(9.2)	269.0	(3.3)	296.6	(6.5)	236.1	(1.8)	259.6	(1.4)	287.3	(1.8)
Estonia	249.2	(5.4)	273.6	(2.6)	298.8	(4.1)	238.6	(2.2)	264.0	(1.2)	292.4	(1.4)
Finland	266.9	(4.5)	289.9	(2.5)	315.6	(4.5)	241.2	(2.4)	268.3	(1.5)	299.2	(2.2)
Germany	248.1	(7.4)	275.5	(3.0)	303.6	(3.8)	231.5	(2.1)	259.0	(1.2)	288.8	(1.8)
Ireland	237.6	(7.2)	261.2	(4.3)	289.4	(5.0)	241.6	(2.8)	266.8	(1.9)	294.1	(2.4)
Italy	219.8	(8.7)	246.1	(5.8)	271.6	(11.4)	231.1	(4.7)	254.5	(2.6)	279.2	(4.1)
Japan	282.2	(6.9)	300.6	(3.5)	321.5	(5.6)	265.1	(3.3)	286.9	(1.9)	310.9	(2.7)
Korea	266.7	(4.2)	282.3	(2.4)	302.1	(3.4)	244.0	(2.8)	266.0	(1.3)	289.4	(2.2)
Netherlands	264.0	(3.1)	286.6	(2.3)	310.8	(3.8)	251.8	(2.2)	276.5	(1.4)	303.9	(1.8)
Norway	249.6	(6.9)	272.5	(3.1)	301.3	(3.5)	241.2	(2.2)	265.2	(1.6)	293.6	(2.0)
Poland	239.1	(3.2)	265.3	(1.8)	293.9	(2.4)	224.7	(1.9)	251.7	(1.2)	281.5	(2.1)
Slovak Republic	240.7	(6.5)	265.4	(3.1)	290.9	(4.9)	244.6	(2.3)	266.6	(1.2)	291.3	(2.0)
Spain	236.8	(10.1)	254.9	(6.8)	272.9	(13.8)	219.1	(7.7)	244.6	(4.9)	271.2	(6.6)
Sweden	261.3	(5.7)	283.8	(3.2)	307.3	(5.6)	249.7	(4.7)	274.0	(2.0)	300.4	(2.4)
United States	244.1	(11.0)	269.3	(5.2)	290.4	(8.4)	236.2	(5.6)	264.6	(2.8)	293.6	(4.3)
Sub-national entities												
Flanders (Belgium)	227.9	(5.2)	251.9	(3.5)	277.5	(5.4)	222.3	(3.4)	247.5	(2.1)	274.5	(2.2)
England (UK)	237.6	(16.4)	268.3	(10.0)	301.2	(11.8)	236.7	(9.0)	264.2	(3.8)	293.7	(6.0)
Northern Ireland (UK)	246.9	(27.7)	262.8	(7.5)	284.2	(17.4)	246.3	(5.2)	272.7	(4.3)	297.1	(7.6)
England/N. Ireland (UK)	238.3	(15.7)	268.1	(9.5)	300.7	(11.6)	237.5	(8.3)	264.5	(3.7)	294.1	(6.5)
Average	249.1	(1.6)	272.8	(0.9)	298.3	(1.4)	239.5	(0.8)	264.5	(0.5)	291.9	(0.7)
Partners												
Cyprus[1]	a	a	a	a	a	a	a	a	a	a	a	a

[Part 2/2]

Table A5.5b (L) **Distribution of literacy proficiency scores, by orientation of education**

	Non-vocational orientation (general)											
	Upper secondary											
	Adults aged 16-29						Adults aged 30-65					
	25th percentile		Mean		75th percentile		25th percentile		Mean		75th percentile	
OECD	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.
National entities												
Australia	266.7	(5.4)	293.2	(3.1)	322.3	(4.8)	256.0	(3.5)	280.7	(2.6)	312.9	(4.1)
Austria	281.7	(8.7)	303.1	(3.5)	326.0	(4.4)	263.8	(7.1)	285.7	(3.6)	312.2	(3.5)
Canada	253.8	(3.1)	279.5	(1.7)	309.1	(2.3)	232.0	(2.2)	260.3	(1.6)	292.6	(2.1)
Czech Republic	283.2	(9.6)	303.9	(5.5)	328.6	(8.2)	267.5	(7.3)	289.0	(4.2)	313.3	(7.9)
Denmark	277.3	(3.7)	298.1	(2.3)	323.2	(3.7)	256.3	(6.3)	279.2	(2.7)	309.6	(5.7)
Estonia	278.5	(3.4)	300.2	(1.8)	322.9	(2.5)	238.9	(3.0)	265.9	(1.7)	295.2	(2.3)
Finland	296.4	(3.1)	317.6	(2.6)	338.8	(3.1)	275.6	(7.6)	298.3	(4.7)	335.0	(5.1)
Germany	287.5	(3.6)	307.5	(2.3)	329.7	(4.1)	223.9	(35.9)	267.3	(14.8)	315.2	(11.1)
Ireland	249.1	(4.0)	271.8	(2.4)	297.3	(3.5)	245.3	(4.0)	267.5	(2.2)	294.2	(3.0)
Italy	c	c	c	c	c	c	c	c	c	c	c	c
Japan	280.2	(3.6)	301.3	(2.3)	323.2	(3.9)	260.6	(2.4)	284.5	(1.6)	311.0	(2.2)
Korea	277.0	(3.5)	297.5	(2.4)	320.2	(3.2)	239.2	(2.4)	260.9	(1.3)	283.9	(1.6)
Netherlands	296.8	(3.6)	317.7	(2.3)	336.1	(3.7)	276.9	(5.7)	298.3	(3.0)	325.1	(4.1)
Norway	270.8	(6.1)	292.4	(2.3)	318.2	(2.8)	257.3	(6.0)	282.3	(2.6)	310.4	(3.3)
Poland	265.8	(2.6)	289.4	(1.4)	314.2	(2.2)	235.5	(5.5)	262.4	(3.0)	288.4	(4.5)
Slovak Republic	263.6	(2.5)	283.7	(1.8)	306.0	(2.6)	261.7	(2.1)	282.7	(1.3)	304.5	(1.8)
Spain	254.3	(4.1)	276.7	(2.1)	301.6	(2.9)	232.0	(2.6)	258.2	(1.6)	286.1	(1.8)
Sweden	279.0	(5.2)	299.5	(2.6)	322.0	(4.4)	257.5	(3.5)	281.4	(2.1)	311.2	(3.3)
United States	240.5	(4.9)	269.2	(3.2)	298.5	(5.0)	221.7	(3.5)	248.0	(1.8)	277.4	(3.0)
Sub-national entities												
Flanders (Belgium)	c	c	c	c	c	c	c	c	c	c	c	c
England (UK)	261.6	(6.6)	284.3	(3.0)	310.1	(4.3)	257.3	(4.3)	285.2	(2.4)	313.4	(4.3)
Northern Ireland (UK)	267.5	(5.7)	291.7	(3.5)	317.3	(4.9)	252.9	(4.6)	276.2	(2.7)	300.5	(3.9)
England/N. Ireland (UK)	261.9	(5.5)	284.5	(2.8)	310.3	(3.9)	257.2	(3.9)	284.9	(2.3)	313.1	(4.1)
Average	271.8	(1.1)	294.0	(0.6)	318.3	(0.9)	250.5	(2.2)	275.7	(1.0)	304.8	(1.0)
Partners												
Cyprus[1]	a	a	a	a	a	a	a	a	a	a	a	a

1. See notes on page 250.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898674

[Part 1/1]

Table A5.6 (L) Mean literacy scores in PISA (2000-09) and in the Survey of Adult Skills (2012) for corresponding cohorts

	Survey of Adult Skills 2012		PISA 2000		Survey of Adult Skills 2012		PISA 2003		Survey of Adult Skills 2012		PISA 2006		Survey of Adult Skills 2012		PISA 2009	
	Adults aged 26-28		Students aged 15		Adults aged 23-25		Students aged 15		Adults aged 20-22		Students aged 15		Adults aged 17-19		Students aged 15	
OECD	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.
National entities																
Australia	288.0	(2.9)	528.3	(3.5)	277.4	(3.4)	525.4	(2.1)	288.7	(3.4)	512.9	(2.1)	287.1	(3.9)	514.9	(2.3)
Austria	282.0	(2.9)	492.1	(2.7)	283.1	(3.0)	490.7	(3.8)	284.3	(2.4)	490.2	(4.1)	273.0	(2.2)	470.3	(2.9)
Canada	286.1	(2.1)	534.3	(1.6)	281.1	(2.3)	527.9	(1.7)	280.3	(2.0)	527.0	(2.4)	271.5	(2.0)	524.2	(1.5)
Czech Republic	285.2	(2.9)	491.6	(2.4)	285.0	(3.6)	488.5	(3.5)	283.9	(3.9)	482.7	(4.2)	277.6	(4.6)	478.2	(2.9)
Denmark	285.6	(3.0)	496.9	(2.4)	279.5	(3.3)	492.3	(2.8)	280.7	(3.0)	494.5	(3.2)	272.5	(2.1)	494.9	(2.1)
Estonia	287.3	(2.7)	m	m	291.7	(2.4)	m	m	288.9	(2.3)	500.7	(2.9)	283.7	(2.0)	501.0	(2.6)
Finland	306.7	(3.0)	546.5	(2.6)	309.2	(3.5)	543.5	(1.6)	302.6	(3.2)	546.9	(2.1)	290.0	(2.8)	535.9	(2.3)
Germany	284.0	(3.6)	484.0	(2.5)	282.6	(3.3)	491.4	(3.4)	282.8	(3.0)	494.9	(4.4)	277.7	(2.8)	497.3	(2.7)
Ireland	276.5	(2.9)	526.7	(3.2)	274.2	(3.3)	515.5	(2.6)	272.3	(3.9)	517.3	(3.5)	268.3	(2.8)	495.6	(3.0)
Italy	265.1	(3.6)	487.5	(2.9)	259.7	(4.6)	475.7	(3.0)	254.1	(5.0)	468.5	(2.4)	266.1	(3.7)	486.1	(1.6)
Japan	310.1	(2.7)	522.2	(5.2)	304.3	(2.8)	498.1	(3.9)	300.3	(2.8)	498.0	(3.6)	296.2	(2.8)	519.9	(3.5)
Korea	294.0	(2.3)	524.8	(2.4)	296.0	(2.6)	534.1	(3.1)	291.6	(2.7)	556.0	(3.8)	291.7	(2.2)	539.3	(3.5)
Netherlands	299.8	(3.4)	m	m	301.0	(3.1)	513.1	(2.9)	299.0	(2.5)	506.7	(2.9)	289.4	(2.5)	508.4	(5.1)
Norway	288.6	(3.6)	505.3	(2.8)	285.9	(3.0)	499.7	(2.8)	278.8	(2.9)	484.3	(3.2)	269.6	(2.8)	503.2	(2.6)
Poland	281.1	(2.2)	479.1	(4.5)	281.3	(1.4)	496.6	(2.9)	281.8	(1.3)	507.6	(2.8)	281.4	(2.2)	500.5	(2.6)
Slovak Republic	279.5	(2.4)	m	m	280.2	(2.9)	469.2	(3.1)	276.8	(2.2)	466.3	(3.1)	273.5	(2.7)	477.4	(2.5)
Spain	262.7	(2.9)	492.6	(2.7)	268.7	(2.7)	480.5	(2.6)	266.1	(2.5)	460.8	(2.2)	260.2	(2.4)	481.0	(2.0)
Sweden	291.4	(3.8)	516.3	(2.2)	295.7	(3.0)	514.3	(2.4)	289.2	(2.9)	507.3	(3.4)	273.5	(3.0)	497.4	(2.9)
United States	280.7	(4.0)	504.4	(7.0)	278.1	(3.5)	495.2	(3.2)	275.6	(3.6)	m	m	263.3	(3.9)	499.8	(3.7)
Sub-national entities																
Flanders (Belgium)	294.1	(3.4)	m	m	291.1	(3.0)	m	m	294.5	(2.7)	522.0	(4.1)	278.0	(2.5)	519.0	m
England (UK)	281.7	(3.8)	m	m	269.6	(4.1)	m	m	270.3	(4.3)	495.6	(2.7)	260.1	(3.8)	495.0	m
Northern Ireland (UK)	270.6	(4.9)	m	m	269.2	(4.2)	m	m	278.1	(4.6)	495.3	(3.5)	274.9	(3.9)	499.0	m
England/N. Ireland (UK)	281.3	(3.7)	m	m	269.5	(3.9)	m	m	270.6	(4.2)	m	m	260.6	(3.7)	m	m
Average	286.2	(0.7)	501.0	(0.7)	284.5	(0.7)	497.0	(0.6)	283.0	(0.7)	494.7	(0.7)	276.4	(0.6)	497.0	(0.6)
Partners																
Cyprus[1]	278.1	(3.1)			270.9	(3.3)	m	m	271.3	(3.2)	m	m	266.5	(2.9)	m	m

1. See notes on page 250.

Note: A three-age band is used in the Survey of Adult Skills to increase size and reliability of estimate.

Source: Survey of Adult Skills (PIAAC) (2012) and OECD, PISA Databases (2000-2009).

StatLink http://dx.doi.org/10.1787/888932898693

[Part 1/3]

Table A5.7 (L) Percentage of adults who participated in adult education and training during year prior to the survey, by level of literacy proficiency

OECD	Job-related adult education and training									
	Below Level 1		Level 1		Level 2		Level 3		Level 4/5	
	Participation rate	S.E.	Participation rate	S.E.	Participation rate	S.E.	Participation rate	S.E.	Participation rate	S.E.
National entities										
Australia	13.6	(3.4)	25.6	(2.9)	37.0	(1.9)	52.8	(1.4)	66.0	(2.2)
Austria	10.8	(4.5)	19.7	(2.5)	31.0	(1.3)	46.8	(1.4)	59.9	(3.9)
Canada	15.0	(2.3)	27.9	(1.7)	39.5	(1.1)	55.0	(1.1)	65.5	(1.7)
Czech Republic	13.3	(6.7)	21.0	(3.6)	31.3	(2.1)	42.7	(2.2)	52.1	(4.7)
Denmark	26.8	(3.4)	32.4	(2.3)	50.9	(1.4)	65.3	(1.4)	77.5	(2.8)
Estonia	13.6	(4.3)	22.6	(2.0)	31.8	(1.4)	42.0	(1.3)	54.2	(2.8)
Finland	22.4	(5.2)	24.9	(3.3)	41.1	(2.0)	58.6	(1.3)	67.7	(1.7)
Germany	9.5	(3.0)	24.1	(2.4)	35.8	(1.7)	53.0	(1.5)	67.4	(2.9)
Ireland	14.3	(3.4)	24.7	(2.4)	35.1	(1.4)	48.7	(1.3)	64.4	(3.0)
Italy	7.9	(2.9)	7.9	(1.5)	12.9	(1.0)	28.9	(2.2)	44.1	(7.4)
Japan	9.6	(8.1)	14.1	(3.0)	20.3	(1.7)	32.0	(1.2)	43.0	(2.0)
Korea	7.8	(3.4)	15.2	(2.0)	27.9	(1.4)	44.6	(1.4)	60.7	(3.4)
Netherlands	21.2	(6.2)	27.4	(3.0)	39.8	(1.8)	56.8	(1.4)	66.2	(2.1)
Norway	31.1	(4.8)	35.9	(3.4)	45.6	(1.6)	60.3	(1.3)	67.5	(1.9)
Poland	7.0	(2.4)	12.8	(1.6)	20.1	(1.4)	33.7	(1.6)	49.8	(2.9)
Slovak Republic	2.8	(2.0)	11.2	(1.8)	18.7	(1.4)	31.4	(1.5)	48.0	(3.7)
Spain	9.3	(2.2)	19.2	(1.8)	29.3	(1.4)	44.4	(1.9)	59.8	(4.3)
Sweden	23.0	(4.1)	27.3	(3.3)	42.5	(1.8)	56.5	(1.5)	66.8	(2.2)
United States	21.5	(4.4)	29.7	(2.4)	41.9	(1.9)	57.5	(1.5)	69.3	(2.4)
Sub-national entities										
Flanders (Belgium)	13.9	(3.6)	16.0	(1.8)	27.5	(1.6)	43.5	(1.5)	52.8	(2.8)
England (UK)	18.7	(4.9)	31.4	(2.9)	39.0	(1.8)	53.4	(1.7)	65.1	(2.9)
Northern Ireland (UK)	11.9	(4.7)	20.3	(2.5)	32.4	(2.2)	47.9	(2.2)	63.1	(3.9)
England/N. Ireland (UK)	18.5	(4.8)	31.0	(2.8)	38.7	(1.7)	53.3	(1.6)	65.0	(2.8)
Average	14.9	(0.9)	22.4	(0.6)	33.3	(0.3)	48.0	(0.3)	60.4	(0.7)
Partners										
Cyprus[1]	15.2	(5.8)	23.2	(3.1)	27.1	(1.4)	33.0	(1.6)	46.4	(4.4)

[Part 2/3]

Table A5.7 (L) Percentage of adults who participated in adult education and training during year prior to the survey, by level of literacy proficiency

OECD	Non-job related adult education and training									
	Below Level 1		Level 1		Level 2		Level 3		Level 4/5	
	Participation rate	S.E.	Participation rate	S.E.	Participation rate	S.E.	Participation rate	S.E.	Participation rate	S.E.
National entities										
Australia	2.9	(1.4)	4.6	(1.2)	5.6	(0.8)	7.2	(0.7)	10.4	(1.2)
Austria	8.2	(3.0)	6.9	(1.5)	7.7	(0.8)	11.3	(1.0)	13.3	(2.5)
Canada	5.7	(1.3)	6.9	(1.0)	8.2	(0.6)	10.3	(0.6)	13.1	(1.3)
Czech Republic	4.5	(4.3)	3.5	(1.0)	5.5	(0.9)	8.4	(1.2)	16.0	(3.6)
Denmark	9.2	(2.0)	8.8	(1.3)	8.3	(0.7)	8.8	(0.7)	7.8	(1.5)
Estonia	4.9	(2.3)	6.6	(1.3)	9.0	(0.7)	13.7	(0.9)	21.9	(1.9)
Finland	11.4	(4.1)	9.7	(1.8)	9.7	(1.1)	11.2	(0.8)	14.6	(1.3)
Germany	5.5	(2.5)	5.1	(1.5)	7.3	(0.8)	9.0	(1.0)	10.6	(1.8)
Ireland	9.9	(2.9)	7.0	(1.4)	7.0	(0.7)	8.3	(0.8)	9.9	(1.8)
Italy	1.8	(1.1)	2.3	(0.7)	4.2	(0.6)	6.7	(1.1)	9.2	(3.8)
Japan	0.0	(0.0)	5.2	(1.8)	5.9	(0.9)	7.1	(0.6)	9.5	(1.1)
Korea	3.6	(1.9)	7.8	(1.4)	11.7	(0.9)	15.2	(0.9)	15.1	(2.4)
Netherlands	15.7	(4.9)	10.0	(1.9)	11.4	(1.2)	12.3	(0.8)	13.5	(1.5)
Norway	15.4	(4.0)	7.1	(1.7)	6.7	(0.8)	8.7	(0.8)	9.0	(1.4)
Poland	1.1	(0.8)	3.6	(0.8)	5.8	(0.6)	8.6	(0.7)	12.7	(2.0)
Slovak Republic	1.8	(1.5)	2.2	(1.0)	3.1	(0.6)	4.2	(0.6)	8.5	(1.9)
Spain	6.1	(1.2)	9.0	(1.1)	10.8	(0.9)	15.6	(1.4)	18.0	(3.6)
Sweden	15.4	(3.2)	11.9	(2.4)	12.6	(1.2)	13.9	(1.0)	15.0	(1.5)
United States	6.0	(2.1)	8.3	(1.7)	8.1	(0.9)	10.9	(1.2)	11.6	(1.8)
Sub-national entities										
Flanders (Belgium)	6.4	(2.9)	8.1	(1.4)	8.2	(1.0)	10.9	(0.8)	12.6	(1.6)
England (UK)	8.0	(3.1)	5.7	(1.2)	6.0	(0.7)	7.5	(0.8)	9.1	(1.5)
Northern Ireland (UK)	8.3	(5.2)	3.8	(1.1)	7.0	(0.9)	9.5	(1.2)	8.9	(2.3)
England/N. Ireland (UK)	8.0	(3.0)	5.6	(1.2)	6.0	(0.7)	7.6	(0.8)	9.1	(1.5)
Average	6.8	(0.6)	6.7	(0.3)	7.8	(0.2)	10.0	(0.2)	12.5	(0.5)
Partners										
Cyprus[1]	7.0	(5.1)	4.5	(1.0)	5.4	(0.8)	7.4	(0.9)	5.8	(1.7)

1. See notes on page 250.

Note: The participation rate in adult education and training is calculated by excluding students who are considered to still be in their first formal cycle of studies. However, youths aged 16-19 who recently completed or are still in a short duration ISCED 3C or below are considered as adult learners. Similarly, youths aged 20-24 who recently completed or are still in ISCED 3A,B,C or below are considered as adult learners.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898712

[Part 3/3]

Table A5.7 (L) Percentage of adults who participated in adult education and training during year prior to the survey, by level of literacy proficiency

OECD	All adult education and training									
	Below Level 1		Level 1		Level 2		Level 3		Level 4/5	
	Participation rate	S.E.	Participation rate	S.E.	Participation rate	S.E.	Participation rate	S.E.	Participation rate	S.E.
National entities										
Australia	18.6	(3.9)	33.7	(3.1)	45.8	(1.7)	62.0	(1.3)	77.2	(2.0)
Austria	22.8	(5.4)	30.1	(2.8)	41.6	(1.4)	60.0	(1.5)	74.1	(3.2)
Canada	23.7	(2.8)	38.2	(1.8)	50.5	(1.1)	67.0	(1.0)	79.4	(1.5)
Czech Republic	28.7	(11.3)	32.8	(4.1)	43.7	(2.0)	55.3	(1.9)	70.0	(4.2)
Denmark	38.9	(3.6)	45.8	(2.1)	62.7	(1.3)	75.6	(1.1)	85.9	(2.2)
Estonia	23.4	(4.6)	36.1	(2.3)	46.3	(1.6)	59.3	(1.2)	77.1	(2.2)
Finland	36.5	(6.5)	39.1	(3.1)	55.0	(1.6)	72.1	(1.1)	83.5	(1.3)
Germany	17.4	(4.4)	34.4	(2.7)	47.7	(1.9)	64.7	(1.5)	79.2	(2.6)
Ireland	28.3	(4.2)	35.3	(2.8)	45.8	(1.3)	59.2	(1.4)	75.3	(2.8)
Italy	14.0	(3.5)	13.5	(1.8)	20.5	(1.3)	39.8	(2.3)	56.3	(6.0)
Japan	17.0	(8.7)	22.6	(3.9)	30.9	(2.0)	43.2	(1.3)	56.0	(2.0)
Korea	14.6	(3.5)	27.1	(2.0)	43.2	(1.4)	61.6	(1.4)	76.4	(2.9)
Netherlands	40.8	(6.1)	42.4	(3.4)	54.7	(1.6)	71.5	(1.2)	80.8	(1.7)
Norway	50.9	(4.6)	48.9	(3.7)	56.4	(1.7)	71.3	(1.2)	77.8	(1.9)
Poland	9.8	(2.8)	20.2	(2.1)	29.4	(1.4)	45.3	(1.6)	64.5	(3.0)
Slovak Republic	6.9	(3.0)	16.1	(2.2)	25.9	(1.4)	40.1	(1.3)	59.7	(3.7)
Spain	18.7	(2.5)	32.9	(1.8)	45.2	(1.2)	63.1	(1.8)	78.7	(3.9)
Sweden	41.7	(4.4)	42.7	(3.7)	58.0	(1.8)	72.1	(1.3)	82.4	(1.9)
United States	31.9	(4.7)	41.9	(2.8)	52.6	(2.0)	69.7	(1.3)	81.5	(2.4)
Sub-national entities										
Flanders (Belgium)	22.5	(4.5)	28.1	(2.1)	39.7	(1.6)	57.5	(1.3)	67.8	(2.4)
England (UK)	29.8	(5.6)	40.5	(3.1)	48.8	(1.7)	63.1	(1.7)	75.3	(2.4)
Northern Ireland (UK)	23.7	(6.6)	28.8	(2.9)	43.4	(2.0)	59.5	(2.0)	73.4	(4.1)
England/N. Ireland (UK)	29.6	(5.4)	40.0	(3.0)	48.6	(1.6)	63.0	(1.6)	75.3	(2.3)
Average	25.6	(1.1)	33.4	(0.6)	45.0	(0.3)	60.6	(0.3)	74.2	(0.6)
Partners										
Cyprus[1]	25.1	(7.7)	29.9	(3.1)	34.1	(1.6)	41.6	(1.7)	52.9	(4.8)

1. See notes on page 250.

Note: The participation rate in adult education and training is calculated by excluding students who are considered to still be in their first formal cycle of studies. However, youths aged 16-19 who recently completed or are still in a short duration ISCED 3C or below are considered as adult learners. Similarly, youths aged 20-24 who recently completed or are still in ISCED 3A,B,C or below are considered as adult learners.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898712

[Part 1/1]

Table A5.8 (L) Likelihood of participating in adult education and training during year prior to the survey, by level of proficiency in literacy (adjusted)

OECD	Below Level 1		Level 1		Level 2		Level 3		Level 4/5	
	Odds ratio	p-value	Odds ratio	p-value	Odds ratio	p-value	Odds ratio	p-value	Odds ratio	p-value
National entities										
Australia	1.0	a	1.6	0.177	2.1	0.012	3.2	0.000	5.0	0.000
Austria	1.0	a	1.4	0.404	1.9	0.064	2.8	0.002	4.0	0.000
Canada	1.0	a	1.5	0.029	2.1	0.000	3.4	0.000	5.2	0.000
Czech Republic	1.0	a	0.9	0.881	1.2	0.789	1.6	0.485	2.1	0.204
Denmark	1.0	a	1.3	0.174	2.0	0.000	2.6	0.000	3.8	0.000
Estonia	1.0	a	1.4	0.305	1.7	0.072	2.3	0.005	3.9	0.000
Finland	1.0	a	1.0	0.988	1.3	0.416	1.7	0.108	2.3	0.021
Germany	1.0	a	2.0	0.073	3.1	0.003	4.8	0.000	7.8	0.000
Ireland	1.0	a	1.1	0.710	1.3	0.291	1.6	0.056	2.4	0.002
Italy	1.0	a	0.8	0.537	1.0	0.962	1.7	0.102	2.1	0.083
Japan	1.0	a	1.2	0.773	1.6	0.476	2.0	0.285	2.7	0.150
Korea	1.0	a	1.6	0.121	2.2	0.009	3.3	0.000	5.3	0.000
Netherlands	1.0	a	0.9	0.627	1.0	0.885	1.4	0.243	1.6	0.115
Norway	1.0	a	1.0	0.890	1.2	0.493	1.6	0.063	1.5	0.072
Poland	1.0	a	1.9	0.087	2.4	0.012	3.4	0.001	4.5	0.000
Slovak Republic	1.0	a	1.4	0.538	1.8	0.233	2.7	0.059	4.8	0.007
Spain	1.0	a	1.6	0.010	2.0	0.000	2.8	0.000	4.6	0.000
Sweden	1.0	a	1.0	0.992	1.5	0.063	2.0	0.004	2.6	0.000
United States	1.0	a	1.2	0.431	1.4	0.183	2.1	0.008	3.1	0.002
Sub-national entities										
Flanders (Belgium)	1.0	a	1.1	0.807	1.3	0.372	1.7	0.064	1.8	0.065
England (UK)	1.0	a	1.3	0.476	1.5	0.178	2.0	0.023	2.9	0.001
Northern Ireland (UK)	1.0	a	0.9	0.786	1.2	0.677	1.5	0.416	2.1	0.194
England/N. Ireland (UK)	1.0	a	1.3	0.485	1.5	0.174	2.0	0.021	2.9	0.001
Average	1.0	a	1.2	0.043	1.5	0.000	2.2	0.000	3.1	0.000
Partners										
Cyprus[1]	1.0	a	1.0	0.994	0.9	0.888	1.1	0.886	1.3	0.646

1. See notes on page 250.

Note: Odds are adjusted for gender, age, educational attainment and labour force status. The participation rate in adult education and training is calculated by excluding students who are considered to still be in their first formal cycle of studies. However, youths aged 16-19 who recently completed or are still in a short duration ISCED 3C or below are considered as adult learners. Similarly, youths aged 20-24 who recently completed or are still in ISCED 3A,B,C or below are considered as adult learners.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898731

[Part 1/1]

Table A5.9 (L) Distribution of literacy proficiency scores, and percentage of adults participating in adult education and training during year prior to the survey

OECD	25th percentile		Mean		75th percentile		Participation rate in adult education and training	
	Score	S.E.	Score	S.E.	Score	S.E.	%	S.E.
National entities								
Australia	251.2	(1.3)	280.4	(0.9)	314.9	(1.2)	55.2	(0.7)
Austria	242.0	(1.2)	269.5	(0.7)	300.0	(1.0)	48.9	(0.7)
Canada	242.5	(1.0)	273.5	(0.6)	308.7	(0.8)	57.8	(0.5)
Czech Republic	248.6	(1.6)	274.0	(1.0)	302.0	(1.4)	49.0	(1.1)
Denmark	243.8	(1.0)	270.8	(0.6)	303.4	(0.9)	66.8	(0.6)
Estonia	248.4	(0.9)	275.9	(0.7)	306.0	(1.0)	53.0	(0.6)
Finland	258.3	(1.1)	287.5	(0.7)	322.1	(1.0)	66.0	(0.6)
Germany	238.7	(1.5)	269.8	(0.9)	303.8	(1.2)	53.7	(1.0)
Ireland	239.2	(1.7)	266.5	(0.9)	298.3	(1.1)	50.7	(0.7)
Italy	221.8	(1.6)	250.5	(1.1)	282.1	(1.6)	24.3	(0.9)
Japan	272.2	(1.2)	296.2	(0.7)	323.6	(0.8)	42.1	(0.7)
Korea	247.7	(0.8)	272.6	(0.6)	301.2	(0.9)	50.0	(0.8)
Netherlands	255.6	(1.0)	284.0	(0.7)	317.2	(0.9)	64.5	(0.6)
Norway	251.2	(1.3)	278.4	(0.6)	310.7	(0.8)	64.8	(0.7)
Poland	236.8	(1.1)	266.9	(0.6)	299.9	(0.9)	35.3	(0.7)
Slovak Republic	250.2	(1.0)	273.8	(0.6)	301.4	(0.8)	33.1	(0.8)
Spain	221.7	(1.2)	251.8	(0.7)	286.1	(0.8)	46.8	(0.7)
Sweden	251.3	(1.3)	279.2	(0.7)	313.4	(1.1)	65.4	(0.7)
United States	238.3	(1.5)	269.8	(1.0)	304.6	(1.5)	59.6	(1.0)
Sub-national entities								
Flanders (Belgium)	246.4	(1.2)	275.5	(0.8)	308.9	(1.0)	48.2	(0.8)
England (UK)	241.3	(1.5)	272.6	(1.1)	307.3	(1.3)	55.7	(0.8)
Northern Ireland (UK)	238.6	(2.2)	268.7	(1.9)	300.4	(2.2)	48.8	(1.0)
England/N. Ireland (UK)	241.2	(1.4)	272.5	(1.0)	307.1	(1.3)	55.5	(0.8)
Average	245.1	(0.3)	273.3	(0.2)	305.5	(0.2)	51.9	(0.2)
Partners								
Cyprus[1]	243.6	(1.2)	268.8	(0.8)	296.1	(1.1)	37.6	(0.9)

1. See notes on page 250.

Note: The participation rate in adult education and training is calculated by excluding students who are considered to still be in their first formal cycle of studies. However, youths aged 16-19 who recently completed or are still in a short duration ISCED 3C or below are considered as adult learners. Similarly, youths aged 20-24 who recently completed or are still in ISCED 3A,B,C or below are considered as adult learners.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898750

[Part 1/1]

Relationship between reading at work and literacy proficiency

Table A5.10 *Adjusted OLS regression weights, adults employed in year prior to survey*

	Adults aged 30-65															
				Level of engagement in reading at work (quintiles)												
	Constant			No practice and first quintile			Second quintile			Fourth quintile			Fifth quintile			
OECD	ß	S.E.	p-value	ß	S.E.	p-value	ß	S.E.	p-value	ß	S.E.	p-value	ß	S.E.	p-value	R^2
National entities																
Australia	290.45	(2.5)	0.000	-28.76	(3.4)	0.000	-11.23	(2.6)	0.000	1.35	(2.5)	0.905	1.05	(2.8)	0.805	0.264
Austria	276.97	(2.2)	0.000	-21.48	(3.0)	0.000	-6.88	(3.0)	0.026	2.29	(2.5)	0.468	4.85	(2.8)	0.037	0.256
Canada	277.14	(1.8)	0.000	-26.36	(2.3)	0.000	-10.84	(2.1)	0.000	5.24	(1.8)	0.004	2.40	(2.0)	0.299	0.255
Czech Republic	269.33	(2.5)	0.000	-8.68	(3.1)	0.002	3.16	(3.4)	0.512	10.65	(3.3)	0.001	3.98	(4.1)	0.308	0.182
Denmark	272.94	(1.6)	0.000	-20.64	(2.4)	0.000	-10.43	(2.2)	0.000	2.07	(1.9)	0.079	2.42	(1.8)	0.096	0.264
Estonia	269.01	(2.0)	0.000	-8.80	(2.1)	0.000	-0.78	(2.5)	0.552	9.80	(2.3)	0.000	2.40	(2.4)	0.000	0.123
Finland	281.43	(1.9)	0.000	-22.04	(3.8)	0.000	-4.14	(2.3)	0.115	5.00	(2.1)	0.012	5.76	(2.4)	0.001	0.206
Germany	270.73	(2.1)	0.000	-23.59	(3.0)	0.000	-7.33	(2.8)	0.024	4.96	(2.6)	0.156	4.41	(2.4)	0.041	0.268
Ireland	277.53	(2.3)	0.000	-17.72	(3.3)	0.000	-6.48	(2.8)	0.003	-1.97	(2.7)	0.186	3.61	(2.9)	0.163	0.247
Italy	269.76	(3.0)	0.000	-13.74	(4.0)	0.001	-1.99	(3.8)	0.931	7.71	(3.7)	0.003	4.53	(3.8)	0.039	0.222
Japan	287.98	(2.1)	0.000	-6.72	(2.4)	0.013	0.09	(2.6)	0.506	3.65	(2.5)	0.012	3.90	(2.5)	0.098	0.172
Korea	267.23	(1.6)	0.000	-12.87	(2.4)	0.000	-6.14	(2.2)	0.002	4.68	(2.0)	0.020	4.59	(1.9)	0.019	0.297
Netherlands	293.72	(1.9)	0.000	-27.23	(3.3)	0.000	-9.55	(2.4)	0.000	0.86	(2.0)	0.971	0.37	(2.8)	0.806	0.327
Norway	277.76	(2.1)	0.000	-23.96	(3.8)	0.000	-7.09	(2.9)	0.031	4.50	(2.1)	0.040	4.88	(2.2)	0.031	0.260
Poland	265.64	(2.4)	0.000	-17.90	(2.8)	0.000	-6.88	(3.8)	0.005	3.15	(3.1)	0.581	3.70	(3.8)	0.302	0.255
Slovak Republic	279.33	(2.0)	0.000	-9.08	(2.7)	0.000	1.41	(3.0)	0.644	5.36	(2.8)	0.108	0.29	(2.8)	0.546	0.143
Spain	266.43	(2.8)	0.000	-20.06	(2.9)	0.000	-5.98	(3.3)	0.033	2.13	(3.6)	0.640	4.19	(3.5)	0.271	0.277
Sweden	287.52	(1.8)	0.000	-20.88	(3.9)	0.000	-10.19	(2.6)	0.000	2.84	(2.0)	0.207	2.11	(2.5)	0.223	0.304
United States	268.75	(2.0)	0.000	-18.13	(3.7)	0.000	-5.53	(2.8)	0.004	5.01	(2.8)	0.329	0.65	(2.4)	0.979	0.348
Sub-national entities																
Flanders (Belgium)	274.89	(2.1)	0.000	-22.32	(2.8)	0.000	-4.48	(2.4)	0.042	0.07	(2.2)	0.756	2.02	(2.6)	0.512	0.297
England (UK)	283.14	(2.5)	0.000	-26.05	(3.8)	0.000	-13.30	(3.3)	0.000	1.73	(3.1)	0.924	0.75	(2.7)	0.788	0.216
Northern Ireland (UK)	277.23	(3.8)	0.000	-21.01	(4.1)	0.000	-6.07	(3.4)	0.012	4.24	(3.8)	0.276	4.25	(3.9)	0.390	0.263
England/N. Ireland (UK)	282.99	(2.4)	0.000	-25.93	(3.7)	0.000	-13.11	(3.2)	0.000	1.80	(3.0)	0.899	0.84	(2.6)	0.769	0.218
Average	276.55	(0.5)	0.000	-18.90	(0.7)	0.000	-5.92	(0.6)	0.000	3.86	(0.6)	0.000	3.00	(0.6)	0.000	0.247
Partners																
Cyprus[1]	263.96	(2.4)	0.000	4.35	(2.9)	0.052	3.52	(2.9)	0.195	5.38	(3.7)	0.166	0.12	(3.1)	0.736	0.098

1. See notes on page 250.

Note: Results are adjusted for educational attainment and language background. Reference group for level of engagement in reading at work variable is the third quintile. The reference group on which the constant for adjusted results is based is adults who have attained upper secondary education, are native-born, and whose first or second language learned as a child is the same as the language of the assessment. No practice of reading is combined with the lowest quintile of practice, which generally reflects reading at work rarely or less than once a month, whereas highest practice reflects reading multiple types of texts daily or weekly.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898769

[Part 1/1]

Relationship between numeracy-related practices at work and numeracy proficiency

Table A5.11 *Adjusted OLS regression weights, adults employed in year prior to survey*

	Adults aged 30-65															
	Constant			Level of engagement in numeracy-related practices at work (quintiles)												
				No practice and first quintile			Second quintile			Fourth quintile			Fifth quintile			
OECD	ß	S.E.	p-value	ß	S.E.	p-value	ß	S.E.	p-value	ß	S.E.	p-value	ß	S.E.	p-value	R^2
National entities																
Australia	281.29	(2.7)	0.000	-25.87	(2.7)	0.000	-15.88	(3.1)	0.000	1.63	(2.9)	0.702	9.93	(3.1)	0.001	0.258
Austria	288.18	(2.3)	0.000	-20.17	(2.9)	0.000	-9.28	(3.0)	0.000	4.09	(3.5)	0.968	17.16	(3.7)	0.000	0.287
Canada	265.57	(2.1)	0.000	-21.52	(2.3)	0.000	-9.42	(2.8)	0.000	4.66	(2.3)	0.057	13.29	(2.8)	0.000	0.244
Czech Republic	273.45	(2.9)	0.000	-11.75	(3.7)	0.000	-4.68	(3.9)	0.186	5.87	(3.9)	0.189	11.93	(3.8)	0.003	0.245
Denmark	287.33	(2.0)	0.000	-21.09	(2.3)	0.000	-12.03	(2.7)	0.000	5.07	(2.4)	0.024	13.37	(2.2)	0.000	0.293
Estonia	275.47	(1.9)	0.000	-18.69	(2.0)	0.000	-11.63	(2.3)	0.000	6.37	(2.3)	0.004	13.29	(2.3)	0.000	0.182
Finland	277.37	(2.4)	0.000	-22.83	(3.0)	0.000	-8.06	(3.5)	0.000	6.46	(2.7)	0.037	13.01	(3.0)	0.000	0.238
Germany	279.73	(2.5)	0.000	-27.34	(2.8)	0.000	-12.74	(3.5)	0.000	6.55	(3.2)	0.012	9.34	(3.0)	0.001	0.340
Ireland	267.88	(2.8)	0.000	-19.78	(2.9)	0.000	-8.59	(3.5)	0.021	4.03	(3.6)	0.108	11.50	(3.8)	0.001	0.258
Italy	277.81	(2.9)	0.000	-23.72	(3.2)	0.000	-11.65	(4.0)	0.001	4.59	(3.9)	0.265	13.32	(3.5)	0.001	0.253
Japan	290.14	(2.1)	0.000	-20.78	(2.3)	0.000	-12.65	(2.4)	0.000	6.67	(2.7)	0.009	12.09	(2.6)	0.000	0.256
Korea	257.40	(2.2)	0.000	-10.71	(2.4)	0.000	-2.73	(2.5)	0.541	5.00	(2.8)	0.016	7.71	(2.7)	0.000	0.314
Netherlands	291.34	(2.3)	0.000	-18.91	(2.4)	0.000	-3.97	(2.8)	0.205	6.97	(3.2)	0.019	14.99	(2.7)	0.000	0.330
Norway	288.64	(2.5)	0.000	-25.28	(2.5)	0.000	-8.15	(2.9)	0.002	8.46	(2.8)	0.012	11.98	(3.3)	0.002	0.329
Poland	263.58	(3.3)	0.000	-17.61	(3.7)	0.000	-11.87	(3.7)	0.001	1.46	(4.2)	0.687	11.18	(3.7)	0.001	0.234
Slovak Republic	284.46	(2.4)	0.000	-11.61	(2.9)	0.000	-2.32	(3.1)	0.195	6.39	(3.5)	0.087	8.07	(3.5)	0.027	0.203
Spain	261.20	(2.7)	0.000	-16.44	(3.0)	0.000	-4.26	(3.6)	0.472	3.22	(3.3)	0.203	15.91	(3.3)	0.000	0.299
Sweden	290.78	(2.2)	0.000	-20.20	(2.7)	0.000	-6.88	(2.8)	0.006	10.67	(3.2)	0.004	18.43	(3.0)	0.000	0.334
United States	255.16	(3.1)	0.000	-23.93	(3.8)	0.000	-7.39	(3.7)	0.022	-0.25	(3.4)	0.550	4.58	(3.5)	0.129	0.345
Sub-national entities																
Flanders (Belgium)	283.23	(2.2)	0.000	-20.17	(2.2)	0.000	-5.56	(3.0)	0.093	5.91	(3.1)	0.010	14.33	(2.9)	0.000	0.304
England (UK)	274.67	(2.9)	0.000	-22.65	(3.2)	0.000	-10.40	(3.7)	0.003	5.94	(3.0)	0.093	10.41	(3.3)	0.004	0.222
Northern Ireland (UK)	274.99	(3.6)	0.000	-22.05	(4.1)	0.000	-10.66	(4.3)	0.014	-0.72	(4.7)	0.899	5.61	(4.1)	0.073	0.274
England/N. Ireland (UK)	274.68	(2.8)	0.000	-22.64	(3.2)	0.000	-10.41	(3.6)	0.003	5.77	(2.9)	0.092	10.26	(3.2)	0.003	0.223
Average	276.89	(0.5)	0.000	-20.05	(0.6)	0.000	-8.58	(0.7)	0.000	5.22	(0.7)	0.000	12.18	(0.7)	0.000	0.275
Partners																
Cyprus[1]	268.64	(3.0)	0.000	-8.12	(3.4)	0.001	-3.92	(3.8)	0.339	7.67	(4.0)	0.019	8.99	(3.8)	0.002	0.168

1. See notes on page 250.

Note: Results are adjusted for educational attainment and language background. Reference group for the level of engagement in numeracy-related practices at work variable is the third quintile. The reference group on which the constant for adjusted results is based is adults who have attained upper secondary education, are native-born, and whose first or second language learned as a child is the same as the language of the assessment. No engagement in numeracy-related practices is combined with the lowest quintile of practice, which generally reflects numeracy practice at work rarely or less than once a month, whereas highest practice reflects engagement in multiple types of numeracy-related activities daily or weekly.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898788

[Part 1/1]

Relationship between ICT-related practices at work and literacy proficiency

Table A5.12 *Adjusted OLS regression weights, adults employed in year prior to survey*

	Adults aged 30-65																		
	Constant			No engagement in ICT-related practices at work			Level of engagement in ICT-related practices at work (quintiles)												
							First quintile			Second quintile			Fourth quintile			Fifth quintile			
OECD	ß	S.E.	p-value	ß	S.E.	p-value	ß	S.E.	p-value	ß	S.E.	p-value	ß	S.E.	p-value	ß	S.E.	p-value	R^2
National entities																			
Australia	295.91	(2.2)	0.000	-30.38	(2.8)	0.000	-17.84	(2.9)	0.000	-9.25	(2.7)	0.003	5.90	(2.5)	0.148	6.35	(2.6)	0.006	0.295
Austria	281.81	(2.0)	0.000	-26.27	(2.6)	0.000	-15.07	(3.1)	0.000	-8.58	(2.7)	0.000	4.16	(2.7)	0.077	12.36	(2.4)	0.000	0.298
Canada	282.90	(2.0)	0.000	-30.12	(2.5)	0.000	-15.99	(2.4)	0.000	-9.30	(2.3)	0.000	7.91	(2.3)	0.000	8.28	(2.4)	0.000	0.294
Czech Republic	276.33	(2.8)	0.000	-15.55	(3.4)	0.000	-6.18	(4.8)	0.331	-2.13	(4.0)	0.928	2.80	(3.9)	0.394	5.37	(4.5)	0.050	0.196
Denmark	275.95	(1.8)	0.000	-25.43	(2.3)	0.000	-14.78	(2.7)	0.000	-6.10	(2.3)	0.004	4.86	(2.1)	0.003	8.99	(2.0)	0.000	0.292
Estonia	281.73	(2.2)	0.000	-21.02	(2.5)	0.000	-20.10	(2.9)	0.000	-7.82	(3.1)	0.001	5.59	(3.4)	0.152	9.40	(2.7)	0.000	0.165
Finland	295.18	(2.5)	0.000	-32.53	(3.2)	0.000	-18.69	(3.1)	0.000	-11.51	(2.5)	0.000	5.24	(2.5)	0.007	1.58	(3.1)	0.265	0.237
Germany	280.00	(2.4)	0.000	-30.12	(2.8)	0.000	-18.69	(3.3)	0.000	-6.71	(3.1)	0.042	3.32	(2.8)	0.213	11.07	(3.2)	0.000	0.299
Ireland	282.72	(2.6)	0.000	-19.27	(3.1)	0.000	-14.70	(3.7)	0.000	-10.85	(3.0)	0.000	2.71	(3.1)	0.500	3.38	(2.9)	0.078	0.262
Italy	276.85	(3.1)	0.000	-22.37	(3.8)	0.000	-10.83	(4.0)	0.008	-10.28	(4.7)	0.017	-1.24	(3.7)	0.710	3.76	(3.9)	0.215	0.234
Japan	298.68	(2.3)	0.000	-19.98	(2.6)	0.000	-11.30	(2.6)	0.000	-5.59	(2.8)	0.041	3.59	(2.7)	0.193	1.10	(3.2)	0.908	0.205
Korea	275.74	(2.6)	0.000	-20.12	(2.8)	0.000	-11.09	(3.0)	0.000	-5.85	(2.8)	0.023	3.95	(2.8)	0.128	4.23	(3.0)	0.104	0.309
Netherlands	296.40	(2.0)	0.000	-34.32	(3.1)	0.000	-23.33	(3.3)	0.000	-11.66	(2.5)	0.000	4.61	(2.2)	0.043	6.59	(2.4)	0.010	0.370
Norway	285.43	(1.6)	0.000	-33.31	(3.1)	0.000	-20.72	(2.7)	0.000	-5.92	(1.9)	0.004	6.95	(2.2)	0.000	8.67	(2.3)	0.000	0.306
Poland	275.71	(3.4)	0.000	-26.25	(3.6)	0.000	-12.57	(4.4)	0.002	-7.86	(4.3)	0.076	2.94	(4.2)	0.307	0.89	(4.9)	0.794	0.266
Slovak Republic	283.69	(2.4)	0.000	-11.67	(2.7)	0.000	-7.16	(3.5)	0.066	-2.24	(3.5)	0.770	2.89	(3.3)	0.320	2.62	(3.5)	0.367	0.145
Spain	266.83	(2.7)	0.000	-21.25	(2.6)	0.000	-8.78	(3.5)	0.012	-3.35	(3.2)	0.217	9.16	(2.8)	0.000	10.71	(3.1)	0.001	0.291
Sweden	292.77	(2.3)	0.000	-31.63	(3.3)	0.000	-12.98	(3.1)	0.000	-12.32	(2.6)	0.000	7.50	(2.8)	0.002	7.72	(2.9)	0.007	0.351
United States	278.73	(3.3)	0.000	-33.10	(3.7)	0.000	-15.24	(4.0)	0.000	-3.64	(3.7)	0.522	2.82	(4.0)	0.400	4.86	(3.4)	0.098	0.397
Sub-national entities																			
Flanders (Belgium)	281.47	(2.2)	0.000	-30.92	(2.8)	0.000	-17.58	(3.2)	0.000	-10.22	(3.0)	0.000	8.02	(2.4)	0.001	6.75	(3.0)	0.041	0.344
England (UK)	288.63	(2.7)	0.000	-32.62	(3.5)	0.000	-24.18	(3.5)	0.000	-8.96	(3.7)	0.008	7.76	(3.2)	0.007	5.90	(3.2)	0.015	0.275
Northern Ireland (UK)	283.48	(3.3)	0.000	-23.85	(4.4)	0.000	-18.58	(4.4)	0.000	-6.57	(3.8)	0.000	4.79	(4.0)	0.107	4.12	(3.7)	0.161	0.282
England/N. Ireland (UK)	288.50	(2.6)	0.000	-32.39	(3.4)	0.000	-24.02	(3.3)	0.000	-8.90	(3.6)	0.006	7.67	(3.1)	0.006	5.87	(3.1)	0.012	0.275
Average	283.49	(0.5)	0.000	-26.10	(0.7)	0.000	-15.13	(0.7)	0.000	-7.62	(0.7)	0.000	4.83	(0.7)	0.000	6.22	(0.7)	0.000	0.278
Partners																			
Cyprus[1]	273.98	(3.3)	0.000	-7.51	(3.8)	0.033	-8.62	(3.9)	0.008	-7.12	(3.9)	0.077	-2.21	(4.1)	0.245	0.01	(4.5)	0.929	0.099

1. See notes on page 250.

Note: Results are adjusted for educational attainment and language background. Reference group for the level of engagement in ICT-related practices at work variable is the third quintile. The reference group on which the constant for adjusted results is based is adults who have attained upper secondary education, are native-born, and whose first or second language learned as a child is the same as the language of the assessment. The lowest quintile of use generally reflects use of ICTs at work rarely or less than once a month, whereas highest practice reflects engagement in multiple types of ICT-related activities daily or weekly.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898807

[Part 1/1]

Table A5.13 (L) **Distribution of literacy proficiency scores, and percentage of adults who worked in high-skilled occupations during previous five years**

OECD	25th percentile		Mean		75th percentile		Percentage of workers in professional, managerial and technical occupations	
	Score	S.E.	Score	S.E.	Score	S.E.	%	S.E.
National entities								
Australia	251.2	(1.3)	280.4	(0.9)	314.9	(1.2)	42.7	(0.8)
Austria	242.0	(1.2)	269.5	(0.7)	300.0	(1.0)	39.9	(0.8)
Canada	242.5	(1.0)	273.5	(0.6)	308.7	(0.8)	50.4	(0.5)
Czech Republic	248.6	(1.6)	274.0	(1.0)	302.0	(1.4)	34.3	(0.9)
Denmark	243.8	(1.0)	270.8	(0.6)	303.4	(0.9)	42.5	(0.6)
Estonia	248.4	(0.9)	275.9	(0.7)	306.0	(1.0)	41.4	(0.6)
Finland	258.3	(1.1)	287.5	(0.7)	322.1	(1.0)	38.3	(0.6)
Germany	238.7	(1.5)	269.8	(0.9)	303.8	(1.2)	36.9	(0.7)
Ireland	239.2	(1.7)	266.5	(0.9)	298.3	(1.1)	35.0	(0.8)
Italy	221.8	(1.6)	250.5	(1.1)	282.1	(1.6)	30.1	(0.7)
Japan	272.2	(1.2)	296.2	(0.7)	323.6	(0.8)	34.4	(0.8)
Korea	247.7	(0.8)	272.6	(0.6)	301.2	(0.9)	27.9	(0.6)
Netherlands	255.6	(1.0)	284.0	(0.7)	317.2	(0.9)	50.2	(0.6)
Norway	251.2	(1.3)	278.4	(0.6)	310.7	(0.8)	44.4	(0.6)
Poland	236.8	(1.1)	266.9	(0.6)	299.9	(0.9)	35.2	(0.7)
Slovak Republic	250.2	(1.0)	273.8	(0.6)	301.4	(0.8)	39.1	(0.8)
Spain	221.7	(1.2)	251.8	(0.7)	286.1	(0.8)	29.8	(0.7)
Sweden	251.3	(1.3)	279.2	(0.7)	313.4	(1.1)	42.6	(0.5)
United States	238.3	(1.5)	269.8	(1.0)	304.6	(1.5)	43.8	(0.8)
Sub-national entities								
Flanders (Belgium)	246.4	(1.2)	275.5	(0.8)	308.9	(1.0)	46.0	(0.8)
England (UK)	241.3	(1.5)	272.6	(1.1)	307.3	(1.3)	37.5	(0.8)
Northern Ireland (UK)	238.6	(2.2)	268.7	(1.9)	300.4	(2.2)	34.1	(1.0)
England/N. Ireland (UK)	241.2	(1.4)	272.5	(1.0)	307.1	(1.3)	37.4	(0.8)
Average	245.1	(0.3)	273.3	(0.2)	305.5	(0.2)	39.2	(0.2)
Partners								
Cyprus[1]	243.6	(1.2)	268.8	(0.8)	296.1	(1.1)	37.7	(0.7)

1. See notes on page 250.

Note: Includes all adults who worked during the previous five years. Professional, managerial and technical occupations correspond to the International Standard Classification of Occupations (ISCO) categories 1, 2 and 3.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898826

[Part 1/1]

Relationship between reading outside of work and literacy proficiency

Table A5.14 *Adjusted OLS regression weights*

	Adults aged 30-65															
	Constant			Level of engagement in reading outside work (quintiles)												
				No practice and first quintile			Second quintile			Fourth quintile			Fifth quintile			
OECD	ß	S.E.	p-value	ß	S.E.	p-value	ß	S.E.	p-value	ß	S.E.	p-value	ß	S.E.	p-value	R^2
National entities																
Australia	288.49	(1.7)	0.000	-34.08	(2.6)	0.000	-10.95	(2.5)	0.000	6.83	(1.9)	0.000	7.69	(2.0)	0.000	0.275
Austria	275.57	(1.4)	0.000	-22.92	(2.3)	0.000	-7.10	(1.8)	0.000	6.58	(1.9)	0.000	11.10	(1.9)	0.000	0.257
Canada	277.04	(1.2)	0.000	-32.81	(1.7)	0.000	-11.72	(1.6)	0.000	6.22	(1.4)	0.000	10.32	(1.3)	0.000	0.273
Czech Republic	278.70	(1.8)	0.000	-23.21	(2.6)	0.000	-7.91	(2.6)	0.006	1.81	(2.8)	0.405	6.97	(3.5)	0.002	0.188
Denmark	275.99	(1.4)	0.000	-33.06	(2.6)	0.000	-8.54	(1.6)	0.000	3.64	(1.8)	0.122	7.91	(2.0)	0.000	0.272
Estonia	279.42	(1.4)	0.000	-27.04	(1.6)	0.000	-10.84	(1.7)	0.000	5.20	(1.4)	0.000	10.32	(1.9)	0.000	0.157
Finland	284.75	(1.8)	0.000	-37.83	(3.5)	0.000	-13.08	(2.1)	0.000	7.25	(1.9)	0.001	11.89	(1.9)	0.000	0.235
Germany	272.54	(1.7)	0.000	-36.21	(2.7)	0.000	-15.91	(2.1)	0.000	4.96	(2.0)	0.043	9.65	(2.0)	0.000	0.258
Ireland	271.75	(1.7)	0.000	-20.78	(2.5)	0.000	-4.62	(1.8)	0.001	4.87	(2.0)	0.006	11.44	(1.9)	0.000	0.271
Italy	276.53	(2.6)	0.000	-21.87	(2.6)	0.000	-6.16	(2.8)	0.008	0.74	(3.5)	0.831	1.62	(3.7)	0.654	0.223
Japan	295.20	(1.4)	0.000	-16.89	(1.9)	0.000	-4.54	(1.9)	0.036	1.88	(2.0)	0.332	2.29	(2.1)	0.406	0.177
Korea	281.05	(1.3)	0.000	-25.59	(1.9)	0.000	-7.31	(1.8)	0.000	4.22	(1.8)	0.007	1.76	(1.9)	0.419	0.257
Netherlands	295.00	(1.5)	0.000	-31.18	(2.5)	0.000	-9.89	(1.9)	0.000	3.35	(1.8)	0.091	3.77	(1.9)	0.061	0.328
Norway	277.92	(1.6)	0.000	-34.31	(3.5)	0.000	-10.27	(2.3)	0.000	4.54	(1.8)	0.003	10.10	(1.7)	0.000	0.274
Poland	269.16	(1.8)	0.000	-24.42	(2.1)	0.000	-5.71	(2.4)	0.036	5.55	(2.1)	0.000	11.92	(2.4)	0.000	0.221
Slovak Republic	283.90	(1.5)	0.000	-21.24	(1.8)	0.000	-3.36	(1.7)	0.068	2.71	(1.9)	0.031	-0.65	(2.6)	0.957	0.197
Spain	269.11	(1.7)	0.000	-24.10	(1.9)	0.000	-7.79	(1.9)	0.000	2.13	(2.1)	0.250	6.54	(2.4)	0.003	0.293
Sweden	289.64	(1.6)	0.000	-33.34	(2.9)	0.000	-12.40	(1.9)	0.000	4.99	(2.1)	0.001	5.09	(1.9)	0.004	0.347
United States	268.77	(1.7)	0.000	-28.11	(2.7)	0.000	-8.31	(2.1)	0.000	2.63	(2.1)	0.256	3.41	(2.1)	0.146	0.314
Sub-national entities																
Flanders (Belgium)	276.74	(1.5)	0.000	-24.82	(1.9)	0.000	-7.47	(1.8)	0.000	3.08	(1.6)	0.024	4.02	(2.0)	0.028	0.278
England (UK)	277.68	(2.4)	0.000	-28.50	(3.3)	0.000	-9.75	(2.3)	0.000	3.88	(2.5)	0.144	7.14	(2.2)	0.001	0.257
Northern Ireland (UK)	279.27	(2.6)	0.000	-20.00	(2.9)	0.000	-9.79	(2.7)	0.000	3.02	(2.5)	0.130	5.43	(2.6)	0.068	0.275
England/N. Ireland (UK)	277.72	(2.3)	0.000	-28.08	(3.2)	0.000	-9.75	(2.2)	0.000	3.86	(2.4)	0.130	7.11	(2.2)	0.001	0.257
Average	279.29	(0.4)	0.000	-27.71	(0.5)	0.000	-8.75	(0.4)	0.000	4.14	(0.4)	0.000	6.87	(0.5)	0.000	0.255
Partners																
Cyprus[1]	271.02	(2.1)	0.000	-5.11	(2.4)	0.011	-0.48	(2.6)	0.864	-2.44	(3.0)	0.436	1.14	(2.6)	0.936	0.106

1. See notes on page 250.

Note: Results are adjusted for educational attainment and language background. Reference group for the level of engagement in reading outside work variable is the third quintile. The reference group on which the constant for adjusted results is based is adults who have attained upper secondary education, are native-born, and whose first or second language learned as a child is the same as the language of the assessment. No practice of reading is combined with the lowest quintile of practice, which generally reflects reading outside work rarely or less than once a month, whereas highest practice reflects reading multiple types of texts daily or weekly.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898845

[Part 1/1]

Relationship between numeracy-related practices outside of work and numeracy proficiency

Table A5.15 *Adjusted OLS regression weights*

	Adults aged 30-65															
	Constant			Level of engagement in numeracy-related practices outside work (quintiles)												
				No practice and first quintile			Second quintile			Fourth quintile			Fifth quintile			
OECD	ß	S.E.	p-value	ß	S.E.	p-value	ß	S.E.	p-value	ß	S.E.	p-value	ß	S.E.	p-value	R^2
National entities																
Australia	277.91	(2.3)	0.000	-30.13	(3.0)	0.000	-10.56	(2.5)	0.000	5.86	(2.4)	0.006	20.70	(2.7)	0.000	0.273
Austria	281.90	(1.8)	0.000	-18.88	(2.2)	0.000	-7.54	(2.3)	0.003	9.02	(2.2)	0.000	22.12	(2.2)	0.000	0.283
Canada	265.98	(1.6)	0.000	-27.59	(1.9)	0.000	-10.63	(1.9)	0.000	6.99	(1.5)	0.000	23.63	(1.8)	0.000	0.271
Czech Republic	271.52	(1.9)	0.000	-16.54	(2.8)	0.000	-11.59	(3.0)	0.000	6.06	(2.3)	0.000	16.71	(2.6)	0.000	0.246
Denmark	286.28	(1.6)	0.000	-24.18	(2.2)	0.000	-12.47	(1.8)	0.000	6.97	(1.9)	0.000	15.24	(1.9)	0.000	0.302
Estonia	270.90	(1.3)	0.000	-20.77	(1.7)	0.000	-9.88	(1.6)	0.000	7.98	(1.6)	0.000	23.63	(1.5)	0.000	0.202
Finland	270.27	(1.7)	0.000	-27.21	(3.0)	0.000	-11.80	(2.5)	0.000	11.89	(2.1)	0.000	28.64	(2.0)	0.000	0.284
Germany	273.40	(2.2)	0.000	-26.75	(2.6)	0.000	-12.03	(2.6)	0.000	10.54	(2.3)	0.000	27.85	(2.1)	0.000	0.330
Ireland	262.36	(2.4)	0.000	-18.39	(2.4)	0.000	-6.08	(2.7)	0.018	7.14	(2.9)	0.009	18.98	(3.0)	0.000	0.266
Italy	276.68	(2.8)	0.000	-22.76	(3.2)	0.000	-11.46	(3.3)	0.000	6.95	(3.7)	0.100	14.45	(3.7)	0.000	0.249
Japan	291.16	(2.1)	0.000	-16.23	(2.2)	0.000	-10.87	(2.2)	0.000	6.07	(2.9)	0.067	16.22	(3.3)	0.000	0.217
Korea	263.35	(1.4)	0.000	-14.35	(1.7)	0.000	-6.03	(1.5)	0.000	5.86	(1.8)	0.000	23.29	(2.1)	0.000	0.282
Netherlands	297.42	(2.0)	0.000	-25.17	(2.2)	0.000	-10.67	(2.5)	0.000	5.23	(2.5)	0.037	14.07	(2.4)	0.000	0.351
Norway	283.73	(2.3)	0.000	-24.68	(2.5)	0.000	-8.44	(2.4)	0.000	9.70	(2.1)	0.000	18.33	(2.7)	0.000	0.321
Poland	256.82	(1.9)	0.000	-23.35	(2.7)	0.000	-6.98	(2.2)	0.000	8.18	(2.6)	0.001	23.53	(2.4)	0.000	0.241
Slovak Republic	281.72	(1.7)	0.000	-21.58	(2.6)	0.000	-8.00	(2.2)	0.000	10.06	(2.2)	0.000	15.75	(2.3)	0.000	0.268
Spain	262.51	(1.9)	0.000	-20.12	(2.0)	0.000	-6.11	(2.2)	0.001	0.01	(2.4)	0.728	16.17	(2.1)	0.000	0.309
Sweden	290.23	(1.8)	0.000	-27.45	(2.4)	0.000	-10.10	(2.1)	0.000	7.77	(2.3)	0.004	15.03	(2.8)	0.000	0.354
United States	247.32	(2.3)	0.000	-26.50	(2.9)	0.000	-11.49	(3.1)	0.000	6.38	(2.7)	0.010	16.06	(2.8)	0.000	0.334
Sub-national entities																
Flanders (Belgium)	281.29	(1.8)	0.000	-18.68	(2.0)	0.000	-10.13	(2.0)	0.000	6.78	(2.0)	0.000	23.83	(2.1)	0.000	0.310
England (UK)	275.13	(2.1)	0.000	-30.33	(2.5)	0.000	-15.02	(2.5)	0.000	1.92	(3.0)	0.164	7.70	(3.3)	0.007	0.266
Northern Ireland (UK)	269.42	(2.6)	0.000	-15.80	(3.1)	0.000	-4.57	(3.0)	0.129	11.64	(3.5)	0.000	16.63	(3.9)	0.000	0.302
England/N. Ireland (UK)	274.96	(2.0)	0.000	-29.84	(2.4)	0.000	-14.73	(2.4)	0.000	2.19	(2.9)	0.131	7.96	(3.2)	0.004	0.267
Average	274.65	(0.4)	0.000	-22.91	(0.5)	0.000	-9.89	(0.5)	0.000	7.03	(0.5)	0.000	19.15	(0.6)	0.000	0.284
Partners																
Cyprus[1]	263.56	(2.2)	0.000	-2.58	(2.3)	0.399	1.83	(2.5)	0.529	6.20	(3.4)	0.022	17.71	(2.9)	0.000	0.165

1. See notes on page 250.

Note: Results are adjusted for educational attainment and language background. Reference group for the level of engagement in numeracy-related practices outside work variable is the third quintile. The reference group on which the constant for adjusted results is based is adults who have attained upper secondary education, are native-born, and whose first or second language learned as a child is the same as the language of the assessment. No engagement in numeracy-related practices outside work is combined with the lowest quintile of practice, which generally reflects numeracy practice outside work rarely or less than once a month, whereas highest practice reflects engagement in multiple types of numeracy-related activities daily or weekly.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898864

[Part 1/1]

Relationship between ICT-related practices outside of work and literacy proficiency

Table A5.16 *Adjusted OLS regression weights*

	Adults aged 30-65																		
	Constant			No engagement in ICT-related practices outside work			Level of engagement in ICT-related practices outside work (quintiles)												
							First quintile			Second quintile			Fourth quintile			Fifth quintile			
OECD	ß	S.E.	p-value	ß	S.E.	p-value	ß	S.E.	p-value	ß	S.E.	p-value	ß	S.E.	p-value	ß	S.E.	p-value	R^2
National entities																			
Australia	292.61	(2.1)	0.000	-41.11	(2.4)	0.000	-19.15	(2.4)	0.000	-7.35	(2.4)	0.001	7.06	(2.5)	0.008	12.52	(2.3)	0.000	0.313
Austria	284.24	(1.7)	0.000	-32.82	(2.3)	0.000	-21.86	(2.2)	0.000	-9.69	(1.9)	0.000	3.50	(2.0)	0.034	9.08	(2.1)	0.000	0.302
Canada	283.89	(1.2)	0.000	-39.30	(2.0)	0.000	-28.44	(1.9)	0.000	-12.21	(1.5)	0.000	5.32	(1.5)	0.002	8.76	(1.4)	0.000	0.305
Czech Republic	275.37	(2.0)	0.000	-20.36	(2.8)	0.000	-17.23	(3.3)	0.000	-3.78	(2.8)	0.073	7.03	(3.0)	0.006	11.49	(2.8)	0.000	0.205
Denmark	275.02	(1.7)	0.000	-45.62	(3.0)	0.000	-25.62	(2.2)	0.000	-6.24	(2.1)	0.002	7.41	(1.8)	0.000	12.89	(1.7)	0.000	0.320
Estonia	281.64	(1.3)	0.000	-27.79	(2.1)	0.000	-20.37	(1.8)	0.000	-11.77	(1.6)	0.000	8.16	(1.8)	0.000	12.19	(1.8)	0.000	0.179
Finland	292.91	(1.8)	0.000	-48.73	(3.2)	0.000	-27.40	(2.3)	0.000	-12.02	(2.1)	0.000	8.30	(2.1)	0.000	10.96	(2.4)	0.000	0.275
Germany	280.12	(1.8)	0.000	-40.48	(3.0)	0.000	-26.67	(2.4)	0.000	-12.21	(2.4)	0.000	7.95	(2.3)	0.001	6.69	(2.2)	0.008	0.298
Ireland	278.57	(1.8)	0.000	-23.06	(2.3)	0.000	-16.96	(2.3)	0.000	-6.05	(1.9)	0.010	3.33	(2.6)	0.070	8.16	(2.6)	0.000	0.272
Italy	276.41	(2.7)	0.000	-26.66	(3.4)	0.000	-18.54	(2.9)	0.000	-8.70	(3.2)	0.010	-1.61	(3.2)	0.874	2.49	(3.3)	0.399	0.233
Japan	303.63	(1.7)	0.000	-28.94	(2.0)	0.000	-13.41	(2.1)	0.000	-3.47	(1.9)	0.052	0.81	(2.4)	0.554	-0.36	(3.1)	0.264	0.214
Korea	287.61	(1.7)	0.000	-41.88	(2.2)	0.000	-19.38	(1.5)	0.000	-5.48	(1.9)	0.002	2.35	(2.1)	0.104	5.05	(2.3)	0.003	0.312
Netherlands	291.14	(1.8)	0.000	-43.32	(3.1)	0.000	-28.22	(2.7)	0.000	-8.07	(2.1)	0.000	8.95	(1.9)	0.000	13.27	(2.1)	0.000	0.377
Norway	282.49	(1.6)	0.000	-32.59	(3.6)	0.000	-25.11	(2.4)	0.000	-7.67	(1.9)	0.000	5.44	(1.8)	0.004	10.24	(2.0)	0.000	0.289
Poland	278.17	(2.0)	0.000	-37.69	(2.4)	0.000	-20.47	(2.4)	0.000	-8.44	(2.6)	0.000	3.60	(2.4)	0.292	7.19	(2.4)	0.003	0.255
Slovak Republic	283.47	(1.8)	0.000	-19.06	(2.2)	0.000	-9.03	(2.3)	0.000	-1.31	(2.0)	0.343	2.44	(2.4)	0.171	4.64	(2.3)	0.046	0.195
Spain	270.63	(1.8)	0.000	-30.78	(2.1)	0.000	-16.74	(2.5)	0.000	-8.62	(2.4)	0.001	8.00	(2.5)	0.000	10.87	(2.4)	0.000	0.331
Sweden	294.60	(1.7)	0.000	-42.71	(2.9)	0.000	-26.69	(2.7)	0.000	-12.31	(2.0)	0.000	1.62	(2.2)	0.461	7.71	(2.0)	0.000	0.383
United States	276.49	(2.4)	0.000	-39.22	(2.9)	0.000	-20.16	(2.8)	0.000	-7.09	(2.7)	0.013	7.41	(2.3)	0.001	5.32	(2.6)	0.030	0.378
Sub-national entities																			
Flanders (Belgium)	277.05	(1.6)	0.000	-36.99	(2.4)	0.000	-22.57	(2.4)	0.000	-8.81	(2.0)	0.000	6.83	(1.8)	0.000	11.09	(1.9)	0.000	0.333
England (UK)	282.41	(2.1)	0.000	-33.11	(2.9)	0.000	-22.10	(2.6)	0.000	-9.51	(2.5)	0.001	4.99	(2.6)	0.015	6.95	(2.6)	0.000	0.276
Northern Ireland (UK)	281.22	(3.0)	0.000	-19.50	(3.0)	0.000	-15.76	(2.9)	0.000	-2.65	(3.1)	0.405	4.52	(3.3)	0.228	5.42	(3.6)	0.191	0.281
England/N. Ireland (UK)	282.37	(2.0)	0.000	-32.48	(2.8)	0.000	-21.89	(2.5)	0.000	-9.31	(2.4)	0.000	4.99	(2.6)	0.013	6.91	(2.5)	0.000	0.276
Average	283.26	(0.4)	0.000	-34.84	(0.6)	0.000	-21.23	(0.5)	0.000	-8.12	(0.5)	0.000	5.19	(0.5)	0.000	8.44	(0.5)	0.000	0.288
Partners																			
Cyprus[1]	274.95	(2.3)	0.000	-9.75	(2.6)	0.000	-8.77	(2.6)	0.002	-5.35	(2.9)	0.082	2.41	(3.1)	0.630	-4.55	(3.0)	0.035	0.110

1. See notes on page 250.

Note: Results are adjusted for educational attainment and language background. Reference group for the level of engagement in ICT-related practices outside work variable is the third quintile. The reference group on which the constant for adjusted results is based is adults who have attained upper secondary education, are native-born, and whose first or second language learned as a child is the same as the language of the assessment. The lowest quintile of use generally reflects use of ICTs outside work rarely or less than once a month, whereas highest practice reflects engagement in multiple types of ICT-related activities daily or weekly.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898883

[Part 1/1]

Table A6.1 (L) Distribution of workers' proficiency in literacy, percentage

OECD	Proficiency levels													
	Below Level 1		Level 1		Level 2		Level 3		Level 4		Level 5		Missing	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
National entities														
Australia	1.8	(0.3)	8.1	(0.6)	28.4	(0.8)	42.2	(1.0)	17.9	(0.8)	1.5	(0.3)	0.2	(0.1)
Austria	1.8	(0.3)	11.3	(0.6)	36.2	(1.0)	41.2	(1.0)	9.2	(0.6)	0.3	(0.1)	0.0	(0.0)
Canada	2.7	(0.2)	11.2	(0.4)	31.0	(0.7)	39.6	(0.8)	14.4	(0.6)	1.1	(0.2)	0.0	(0.0)
Czech Republic	1.2	(0.4)	9.1	(0.9)	37.1	(2.0)	43.0	(1.9)	9.1	(0.9)	0.5	(0.3)	0.0	(0.0)
Denmark	2.6	(0.2)	9.5	(0.6)	33.0	(0.9)	43.3	(1.0)	11.1	(0.6)	0.5	(0.2)	0.0	(0.0)
Estonia	1.5	(0.2)	9.9	(0.6)	33.2	(0.7)	42.1	(1.0)	12.4	(0.6)	0.9	(0.2)	0.0	(0.0)
Finland	1.4	(0.3)	5.8	(0.5)	24.3	(0.9)	43.4	(0.9)	22.5	(0.7)	2.5	(0.4)	0.0	(0.0)
Germany	2.3	(0.3)	12.5	(0.7)	34.0	(1.1)	39.4	(1.1)	11.3	(0.7)	0.6	(0.2)	0.0	(0.0)
Ireland	2.8	(0.4)	10.5	(0.8)	36.1	(1.1)	39.8	(1.2)	10.2	(0.8)	0.6	(0.2)	0.0	(0.0)
Italy	5.0	(0.7)	20.7	(1.4)	40.6	(1.3)	29.5	(1.4)	4.2	(0.5)	0.1	(0.1)	0.0	(0.0)
Japan	0.5	(0.1)	4.1	(0.4)	21.9	(0.8)	49.8	(1.0)	22.5	(0.8)	1.2	(0.3)	0.0	(0.0)
Korea	2.0	(0.3)	10.8	(0.6)	38.5	(1.1)	41.2	(1.1)	7.4	(0.6)	0.2	(0.1)	0.0	(0.0)
Netherlands	1.7	(0.3)	7.3	(0.6)	24.7	(0.8)	45.5	(0.9)	19.3	(0.7)	1.5	(0.3)	0.0	(0.0)
Norway	2.3	(0.3)	7.6	(0.5)	29.1	(0.8)	45.0	(1.0)	15.2	(0.7)	0.7	(0.2)	0.0	(0.0)
Poland	2.8	(0.4)	13.2	(0.9)	35.8	(1.3)	36.8	(1.1)	10.6	(0.7)	0.9	(0.2)	0.0	(0.0)
Slovak Republic	0.8	(0.2)	7.1	(0.6)	35.3	(1.4)	48.2	(1.3)	8.4	(0.7)	0.2	(0.1)	0.0	(0.0)
Spain	4.6	(0.5)	17.7	(0.9)	39.3	(1.0)	32.3	(1.0)	6.0	(0.5)	0.2	(0.1)	0.0	(0.0)
Sweden	1.9	(0.3)	7.4	(0.5)	27.5	(1.2)	44.5	(1.1)	17.3	(0.8)	0.0	(0.0)	0.0	(0.0)
United States	3.6	(0.5)	12.3	(0.8)	31.9	(1.4)	38.6	(1.3)	12.8	(0.8)	0.0	(0.0)	0.0	(0.0)
Sub-national entities														
Flanders (Belgium)	2.0	(0.3)	9.6	(0.7)	30.1	(1.1)	43.0	(1.2)	14.7	(0.8)	0.6	(0.2)	0.0	(0.0)
England (UK)	2.2	(0.4)	10.7	(0.8)	32.1	(1.1)	39.2	(1.1)	14.7	(0.9)	1.0	(0.2)	0.0	(0.0)
Northern Ireland (UK)	1.7	(0.6)	11.8	(1.0)	35.0	(1.9)	39.2	(2.1)	11.7	(0.8)	0.6	(0.3)	0.0	(0.0)
England/N. Ireland (UK)	2.2	(0.4)	10.7	(0.8)	32.2	(1.1)	39.2	(1.1)	14.6	(0.9)	1.0	(0.2)	0.0	(0.0)
Average	2.3	(0.1)	10.3	(0.2)	32.4	(0.2)	41.3	(0.2)	12.9	(0.2)	0.7	(0.0)	0.0	(0.0)
Partners														
Cyprus[1]	1.6	(0.4)	10.8	(0.7)	39.3	(1.5)	40.5	(1.4)	7.6	(0.7)	0.3	(0.1)	0.0	(0.0)

1. See notes on page 250.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898902

[Part 1/1]

Table A6.1 (N) Distribution of workers' proficiency in numeracy, percentage

OECD	Proficiency levels													
	Below Level 1		Level 1		Level 2		Level 3		Level 4		Level 5		Missing	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
National entities														
Australia	3.7	(0.4)	12.3	(0.6)	32.4	(1.0)	36.1	(1.0)	13.5	(0.7)	1.8	(0.3)	0.2	(0.1)
Austria	2.5	(0.3)	9.6	(0.6)	32.2	(1.1)	40.1	(1.1)	14.3	(0.7)	1.3	(0.2)	0.0	(0.0)
Canada	4.0	(0.3)	14.7	(0.5)	32.0	(0.6)	34.9	(0.8)	12.9	(0.5)	1.5	(0.2)	0.0	(0.0)
Czech Republic	1.3	(0.5)	8.8	(1.1)	33.9	(1.5)	42.7	(1.5)	12.2	(1.0)	1.2	(0.4)	0.0	(0.0)
Denmark	2.3	(0.3)	8.2	(0.5)	28.6	(0.8)	41.4	(0.9)	17.5	(0.7)	2.0	(0.3)	0.0	(0.0)
Estonia	1.6	(0.2)	10.1	(0.6)	34.7	(0.7)	40.3	(0.8)	12.3	(0.5)	1.0	(0.2)	0.0	(0.0)
Finland	1.7	(0.3)	7.3	(0.6)	27.7	(0.8)	41.0	(1.0)	19.7	(0.7)	2.7	(0.4)	0.0	(0.0)
Germany	2.9	(0.4)	11.7	(0.7)	30.7	(1.0)	38.2	(1.0)	15.0	(0.8)	1.5	(0.3)	0.0	(0.0)
Ireland	4.5	(0.5)	15.1	(1.0)	38.2	(1.1)	32.7	(1.0)	8.7	(0.8)	0.8	(0.2)	0.0	(0.0)
Italy	5.9	(0.7)	20.6	(1.2)	38.4	(1.3)	28.9	(1.2)	5.9	(0.6)	0.3	(0.1)	0.0	(0.0)
Japan	1.0	(0.2)	6.4	(0.5)	26.7	(0.8)	44.8	(1.0)	19.2	(0.8)	1.9	(0.3)	0.0	(0.0)
Korea	3.7	(0.4)	14.6	(0.7)	40.2	(1.2)	34.7	(1.1)	6.5	(0.6)	0.3	(0.1)	0.0	(0.0)
Netherlands	2.2	(0.3)	7.8	(0.6)	27.3	(0.9)	43.0	(1.2)	18.0	(0.8)	1.6	(0.3)	0.0	(0.0)
Norway	3.2	(0.4)	8.3	(0.5)	27.5	(0.9)	40.6	(0.9)	18.4	(0.8)	2.1	(0.3)	0.0	(0.0)
Poland	4.0	(0.5)	15.2	(0.7)	37.0	(1.1)	33.4	(1.3)	9.5	(0.8)	0.9	(0.2)	0.0	(0.0)
Slovak Republic	1.2	(0.3)	6.8	(0.5)	30.9	(1.1)	45.6	(1.4)	14.5	(0.9)	1.0	(0.3)	0.0	(0.0)
Spain	5.9	(0.5)	18.0	(0.9)	40.5	(1.2)	30.0	(1.2)	5.5	(0.6)	0.2	(0.1)	0.0	(0.0)
Sweden	2.5	(0.4)	8.4	(0.7)	27.0	(1.1)	40.3	(1.3)	19.5	(0.8)	0.0	(0.0)	0.0	(0.0)
United States	7.5	(0.6)	17.9	(0.8)	33.4	(1.2)	30.5	(1.0)	9.8	(0.7)	0.0	(0.0)	0.0	(0.0)
Sub-national entities														
Flanders (Belgium)	2.1	(0.3)	8.5	(0.6)	27.4	(1.0)	40.8	(1.2)	19.0	(0.8)	2.1	(0.3)	0.0	(0.0)
England (UK)	4.0	(0.5)	15.4	(1.0)	33.5	(1.3)	33.7	(1.2)	12.2	(1.0)	1.2	(0.3)	0.0	(0.0)
Northern Ireland (UK)	3.3	(0.7)	15.5	(1.4)	36.1	(1.4)	34.4	(1.6)	9.8	(0.9)	1.0	(0.3)	0.0	(0.0)
England/N. Ireland (UK)	3.9	(0.5)	15.4	(1.0)	33.6	(1.2)	33.7	(1.2)	12.2	(0.9)	1.2	(0.2)	0.0	(0.0)
Average	3.2	(0.1)	11.7	(0.2)	32.4	(0.2)	37.8	(0.2)	13.5	(0.2)	1.2	(0.1)	0.0	(0.0)
Partners														
Cyprus[1]	2.6	(0.4)	12.2	(1.0)	38.0	(1.3)	37.1	(1.4)	9.5	(0.7)	0.6	(0.2)	0.0	(0.0)

1. See notes on page 250.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898902

[Part 1/1]

Table A6.1 (P) Distribution of workers'proficiency in problem solving in technology-rich environments, percentage

	Proficiency levels											
	No computer experience /Failed ICT core		Below level 1		Level 1		Level 2		Level 3		Refusals	
OECD	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
National entities												
Australia	4.9	(0.4)	8.9	(0.7)	30.4	(0.9)	35.5	(1.1)	7.0	(0.6)	13.2	(0.7)
Austria	9.7	(0.5)	10.0	(0.8)	33.4	(1.3)	31.6	(1.0)	4.6	(0.5)	10.8	(0.5)
Canada	8.0	(0.3)	14.3	(0.5)	31.1	(0.7)	31.9	(0.6)	7.8	(0.5)	6.8	(0.3)
Czech Republic	8.5	(0.6)	14.2	(1.1)	29.8	(1.5)	27.5	(1.3)	7.3	(0.9)	12.7	(1.1)
Denmark	5.7	(0.3)	12.6	(0.6)	34.4	(0.9)	35.6	(0.8)	6.9	(0.5)	4.8	(0.3)
Estonia	8.9	(0.4)	15.1	(0.7)	31.2	(0.8)	24.3	(0.8)	4.7	(0.6)	15.8	(0.5)
Finland	5.6	(0.4)	10.4	(0.6)	31.2	(0.9)	35.6	(0.9)	9.1	(0.7)	8.0	(0.4)
Germany	9.6	(0.7)	14.4	(0.9)	31.9	(1.0)	31.5	(1.0)	7.3	(0.6)	5.4	(0.5)
Ireland	11.5	(0.6)	11.9	(0.9)	31.5	(1.2)	25.1	(1.0)	3.7	(0.5)	16.3	(0.9)
Italy	m	m	m	m	m	m	m	m	m	m	m	m
Japan	19.1	(0.8)	7.7	(0.7)	20.3	(0.9)	27.9	(0.9)	9.5	(0.6)	15.5	(1.0)
Korea	23.8	(0.7)	10.9	(0.6)	31.0	(1.1)	25.3	(1.0)	3.1	(0.4)	5.8	(0.4)
Netherlands	4.6	(0.3)	10.4	(0.6)	34.4	(0.8)	39.3	(1.0)	8.2	(0.5)	3.2	(0.3)
Norway	5.4	(0.4)	10.5	(0.7)	33.1	(0.9)	38.6	(1.0)	6.9	(0.5)	5.4	(0.4)
Poland	19.7	(0.7)	13.5	(0.9)	20.9	(1.0)	16.8	(1.0)	4.5	(0.5)	24.6	(0.9)
Slovak Republic	17.2	(0.8)	9.5	(0.6)	31.9	(1.0)	25.2	(0.9)	3.6	(0.4)	12.5	(0.6)
Spain	m	m	m	m	m	m	m	m	m	m	m	m
Sweden	4.4	(0.4)	12.3	(0.6)	31.8	(1.0)	37.3	(1.0)	9.6	(0.7)	4.6	(0.3)
United States	7.7	(0.5)	16.1	(1.0)	35.3	(1.3)	29.3	(1.1)	6.0	(0.6)	5.5	(0.6)
Sub-national entities												
Flanders (Belgium)	7.9	(0.4)	15.2	(0.7)	33.7	(1.1)	32.1	(1.1)	6.5	(0.5)	4.5	(0.4)
England (UK)	6.9	(0.5)	13.6	(0.9)	34.6	(1.3)	33.5	(1.2)	7.1	(0.6)	4.4	(0.5)
Northern Ireland (UK)	12.2	(0.8)	15.1	(1.7)	36.5	(1.7)	29.9	(1.6)	4.8	(0.8)	1.6	(0.3)
England/N. Ireland (UK)	7.1	(0.5)	13.6	(0.9)	34.7	(1.2)	33.4	(1.1)	7.0	(0.6)	4.3	(0.5)
Average	10.0	(0.1)	12.2	(0.2)	31.2	(0.2)	30.7	(0.2)	6.5	(0.1)	9.5	(0.1)
Partners												
Cyprus[1]	m	m	m	m	m	m	m	m	m	m	m	m

1. See notes on page 250.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898902

[Part 1/1]

Table A6.2 (L) Mean literacy proficiency, by labour force status

	Employed		Unemployed		Out of the labour force	
OECD	Mean	S.E.	Mean	S.E.	Mean	S.E.
National entities						
Australia	286.0	(0.9)	275.3	(4.0)	262.9	(2.3)
Austria	273.7	(0.9)	259.2	(3.8)	257.6	(1.6)
Canada	278.3	(0.6)	265.1	(2.8)	256.7	(1.5)
Czech Republic	276.6	(1.1)	265.9	(4.2)	269.7	(1.7)
Denmark	276.6	(0.7)	265.4	(3.4)	252.2	(1.5)
Estonia	279.3	(0.8)	264.7	(2.4)	267.9	(1.6)
Finland	294.5	(0.9)	287.9	(3.9)	268.2	(1.5)
Germany	274.2	(1.0)	255.4	(3.3)	256.7	(1.7)
Ireland	273.7	(1.1)	258.2	(2.6)	254.4	(1.5)
Italy	254.4	(1.4)	243.3	(2.9)	246.1	(1.5)
Japan	297.7	(0.7)	311.8	(5.7)	290.8	(1.4)
Korea	272.0	(0.7)	283.3	(4.0)	273.1	(1.4)
Netherlands	289.8	(0.8)	274.0	(5.3)	263.6	(1.8)
Norway	283.4	(0.7)	264.1	(4.6)	259.2	(1.9)
Poland	271.7	(0.8)	261.6	(2.7)	258.8	(1.1)
Slovak Republic	279.4	(0.9)	263.2	(2.6)	265.7	(1.3)
Spain	259.8	(0.9)	242.9	(2.2)	239.4	(1.3)
Sweden	286.8	(0.8)	257.1	(4.1)	258.4	(1.7)
United States	274.3	(1.2)	260.0	(2.6)	256.7	(2.2)
Sub-national entities						
Flanders (Belgium)	281.0	(1.0)	269.3	(5.4)	262.2	(1.3)
England (UK)	278.9	(1.1)	252.9	(3.2)	258.4	(1.8)
Northern Ireland (UK)	275.8	(2.2)	262.2	(5.1)	253.3	(2.4)
England/N. Ireland (UK)	278.8	(1.1)	253.1	(3.1)	258.2	(1.8)
Average	278.2	(0.2)	265.8	(0.8)	260.9	(0.4)
Partners						
Cyprus[1]	272.3	(1.0)	262.2	(3.1)	263.4	(1.3)

1. See notes on page 250.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898921

[Part 1/4]

Table A6.3 (L) **Percentage of adults in each labour market status, by level of proficiency in literacy**

OECD	Literacy Level 1 and below					
	Employed		Unemployed		Out of the labour force	
	%	S.E.	%	S.E.	%	S.E.
National entities						
Australia	56.8	(1.9)	5.5	(1.2)	37.7	(2.0)
Austria	61.7	(2.0)	4.8	(0.9)	33.5	(1.9)
Canada	63.5	(1.2)	5.3	(0.6)	31.2	(1.3)
Czech Republic	56.9	(3.8)	5.9	(1.6)	37.2	(4.0)
Denmark	56.4	(1.6)	6.1	(0.8)	37.5	(1.6)
Estonia	62.8	(2.0)	8.4	(1.1)	28.8	(1.9)
Finland	47.4	(2.5)	4.6	(1.1)	48.0	(2.6)
Germany	62.7	(1.9)	6.5	(1.0)	30.8	(1.8)
Ireland	46.4	(2.2)	11.1	(1.3)	42.5	(2.3)
Italy	51.9	(1.9)	10.3	(1.2)	37.8	(1.8)
Japan	67.4	(4.1)	1.2	(0.9)	31.4	(4.0)
Korea	67.0	(2.1)	1.8	(0.6)	31.3	(2.2)
Netherlands	57.5	(2.5)	5.4	(1.4)	37.1	(2.5)
Norway	62.5	(2.5)	5.0	(1.3)	32.5	(2.4)
Poland	52.5	(2.1)	7.6	(1.1)	39.9	(2.0)
Slovak Republic	41.3	(2.7)	12.7	(1.4)	46.0	(2.6)
Spain	46.9	(1.4)	17.1	(1.1)	36.1	(1.3)
Sweden	51.7	(2.2)	9.2	(1.4)	39.1	(2.2)
United States	64.4	(2.3)	9.8	(1.1)	25.8	(2.1)
Sub-national entities						
Flanders (Belgium)	55.0	(2.0)	2.2	(0.6)	42.8	(2.0)
England (UK)	55.3	(2.2)	10.5	(1.2)	34.3	(2.1)
Northern Ireland (UK)	50.6	(2.5)	7.2	(1.3)	42.2	(2.2)
England/N. Ireland (UK)	55.1	(2.1)	10.4	(1.2)	34.5	(2.1)
Average	56.6	(0.5)	7.2	(0.2)	36.3	(0.5)
Partners						
Cyprus[1]	53.6	(2.4)	9.2	(1.6)	37.2	(2.3)

[Part 2/4]

Table A6.3 (L) **Percentage of adults in each labour market status, by level of proficiency in literacy**

OECD	Literacy Level 2					
	Employed		Unemployed		Out of the labour force	
	%	S.E.	%	S.E.	%	S.E.
National entities						
Australia	70.2	(1.4)	4.7	(0.7)	25.1	(1.3)
Austria	70.3	(1.3)	3.6	(0.5)	26.0	(1.2)
Canada	73.6	(1.0)	5.1	(0.5)	21.3	(0.8)
Czech Republic	64.6	(1.6)	5.8	(0.7)	29.6	(1.6)
Denmark	71.2	(1.0)	5.0	(0.6)	23.9	(1.0)
Estonia	69.6	(1.0)	7.0	(0.5)	23.5	(0.9)
Finland	64.3	(1.5)	4.3	(0.7)	31.3	(1.6)
Germany	74.5	(1.2)	4.6	(0.6)	20.9	(1.2)
Ireland	58.6	(1.2)	10.5	(0.9)	30.9	(1.2)
Italy	54.0	(1.4)	9.7	(1.0)	36.3	(1.4)
Japan	68.9	(1.6)	0.9	(0.5)	30.2	(1.5)
Korea	69.8	(1.1)	2.5	(0.4)	27.7	(1.0)
Netherlands	69.6	(1.4)	4.8	(0.7)	25.6	(1.3)
Norway	74.4	(1.3)	3.8	(0.7)	21.8	(1.2)
Poland	60.1	(1.5)	7.4	(0.7)	32.5	(1.5)
Slovak Republic	59.2	(1.4)	7.6	(0.7)	33.2	(1.3)
Spain	58.3	(1.2)	13.8	(1.0)	27.9	(1.1)
Sweden	69.7	(1.5)	6.1	(0.8)	24.2	(1.4)
United States	68.8	(1.4)	9.3	(0.8)	21.9	(1.4)
Sub-national entities						
Flanders (Belgium)	67.6	(1.3)	2.4	(0.4)	30.0	(1.2)
England (UK)	67.8	(1.4)	7.8	(0.8)	24.4	(1.3)
Northern Ireland (UK)	63.2	(1.5)	5.7	(0.7)	31.1	(1.4)
England/N. Ireland (UK)	67.7	(1.4)	7.7	(0.8)	24.6	(1.2)
Average	66.9	(0.3)	6.0	(0.2)	27.1	(0.3)
Partners						
Cyprus[1]	61.4	(1.6)	7.1	(1.0)	31.5	(1.5)

1. See notes on page 250.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898940

[Part 3/4]

Table A6.3 (L) **Percentage of adults in each labour market status, by level of proficiency in literacy**

OECD	Literacy Level 3					
	Employed		Unemployed		Out of the labour force	
	%	S.E.	%	S.E.	%	S.E.
National entities						
Australia	77.1	(1.1)	4.5	(0.6)	18.3	(0.9)
Austria	79.7	(1.2)	3.0	(0.5)	17.3	(1.2)
Canada	79.8	(0.7)	4.1	(0.4)	16.1	(0.7)
Czech Republic	67.5	(1.4)	3.8	(0.6)	28.6	(1.3)
Denmark	79.4	(0.8)	4.9	(0.5)	15.8	(0.8)
Estonia	74.3	(0.9)	5.5	(0.4)	20.2	(0.8)
Finland	74.8	(1.0)	4.4	(0.5)	20.8	(1.0)
Germany	80.4	(1.1)	3.4	(0.5)	16.1	(1.1)
Ireland	67.3	(1.3)	8.1	(0.8)	24.7	(1.2)
Italy	62.4	(1.8)	7.3	(1.0)	30.3	(1.6)
Japan	73.5	(0.9)	2.1	(0.4)	24.4	(0.9)
Korea	66.3	(1.1)	3.1	(0.5)	30.6	(1.1)
Netherlands	81.6	(0.9)	3.2	(0.5)	15.2	(0.8)
Norway	83.4	(0.8)	2.9	(0.4)	13.7	(0.8)
Poland	64.5	(1.1)	6.2	(0.6)	29.3	(1.2)
Slovak Republic	65.9	(1.2)	6.0	(0.6)	28.1	(1.1)
Spain	67.3	(1.3)	11.6	(1.0)	21.1	(1.2)
Sweden	78.8	(1.0)	4.2	(0.6)	17.0	(0.9)
United States	79.2	(1.1)	6.9	(0.7)	13.9	(1.1)
Sub-national entities						
Flanders (Belgium)	73.6	(1.0)	1.9	(0.3)	24.5	(0.9)
England (UK)	76.4	(1.2)	4.4	(0.5)	19.2	(1.0)
Northern Ireland (UK)	74.5	(1.4)	4.4	(0.9)	21.1	(1.2)
England/N. Ireland (UK)	76.3	(1.2)	4.4	(0.5)	19.3	(1.0)
Average	74.0	(0.2)	4.8	(0.1)	21.2	(0.2)
Partners						
Cyprus[1]	64.9	(1.7)	6.3	(0.9)	28.8	(1.6)

[Part 4/4]

Table A6.3 (L) **Percentage of adults in each labour market status, by level of proficiency in literacy**

OECD	Literacy Level 4 or 5					
	Employed		Unemployed		Out of the labour force	
	%	S.E.	%	S.E.	%	S.E.
National entities						
Australia	82.3	(1.8)	3.6	(1.0)	14.1	(1.6)
Austria	81.3	(2.0)	2.4	(1.0)	16.3	(1.9)
Canada	84.9	(1.1)	3.1	(0.6)	12.0	(1.1)
Czech Republic	72.6	(3.4)	2.8	(1.2)	24.6	(3.1)
Denmark	84.1	(2.1)	3.7	(1.4)	12.1	(1.9)
Estonia	81.4	(1.5)	3.2	(0.8)	15.5	(1.4)
Finland	79.2	(1.1)	4.7	(0.6)	16.1	(1.1)
Germany	82.4	(2.0)	1.7	(0.6)	15.8	(1.8)
Ireland	77.2	(2.9)	4.3	(1.2)	18.5	(2.7)
Italy	71.5	(5.5)	4.9	(2.6)	23.6	(5.8)
Japan	75.3	(1.6)	3.2	(0.7)	21.5	(1.7)
Korea	63.2	(3.2)	5.0	(1.5)	31.8	(2.9)
Netherlands	85.3	(1.4)	3.4	(0.7)	11.2	(1.1)
Norway	89.7	(1.3)	1.5	(0.6)	8.7	(1.2)
Poland	72.5	(2.1)	5.5	(1.2)	22.0	(1.8)
Slovak Republic	69.8	(3.2)	5.8	(1.5)	24.4	(3.1)
Spain	75.1	(3.1)	8.2	(2.0)	16.7	(2.7)
Sweden	85.8	(1.5)	2.5	(0.7)	11.7	(1.3)
United States	82.5	(1.7)	4.0	(0.8)	13.5	(1.6)
Sub-national entities						
Flanders (Belgium)	82.1	(1.7)	1.6	(0.7)	16.3	(1.6)
England (UK)	83.4	(1.8)	3.1	(0.7)	13.4	(1.7)
Northern Ireland (UK)	81.4	(2.6)	5.2	(2.0)	13.4	(2.3)
England/N. Ireland (UK)	83.4	(1.8)	3.2	(0.7)	13.4	(1.7)
Average	79.1	(0.5)	3.7	(0.3)	17.1	(0.5)
Partners						
Cyprus[1]	75.6	(4.2)	6.1	(1.7)	18.4	(4.1)

1. See notes on page 250.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898940

[Part 1/2]

Distribution of wages among employees, by level of proficiency in literacy

Table A6.4 (L) *Hourly wages, including bonuses, in PPP-adjusted USD*

OECD	Literacy Level 1 and below			Literacy Level 2		
	25th percentile	50th percentile	75th percentile	25th percentile	50th percentile	75th percentile
National entities						
Australia	11.0	13.9	18.0	12.1	14.8	19.3
Austria	10.7	13.3	17.3	12.4	16.0	20.8
Canada	10.2	13.7	18.7	10.9	15.8	22.8
Czech Republic	5.0	6.5	9.1	5.9	7.5	9.6
Denmark	15.8	19.5	24.1	17.4	21.7	25.9
Estonia	4.4	6.3	9.4	5.0	7.1	10.5
Finland	12.1	15.1	18.4	13.5	16.4	20.3
Germany	9.1	12.8	18.3	10.7	15.7	21.7
Ireland	11.1	14.5	19.6	11.9	16.7	23.0
Italy	8.9	11.8	16.1	10.4	13.2	18.0
Japan	7.3	9.5	14.4	7.8	10.2	16.1
Korea	6.2	8.9	15.5	7.3	11.9	20.1
Netherlands	11.9	15.1	19.5	13.0	17.5	22.9
Norway	15.4	18.5	22.0	17.1	20.9	25.6
Poland	4.5	6.2	8.5	4.9	6.9	9.8
Slovak Republic	3.9	5.2	7.5	4.7	6.5	9.0
Spain	8.0	10.0	13.7	8.9	12.1	17.7
Sweden	12.8	14.8	17.1	14.2	16.4	19.3
United States	8.9	11.8	16.6	10.1	15.0	22.3
Sub-national entities						
Flanders (Belgium)	13.2	16.4	20.5	15.4	19.1	23.7
England (UK)	9.1	11.2	15.0	9.8	13.1	18.3
Northern Ireland (UK)	8.9	10.4	14.0	9.6	12.5	16.9
England/N. Ireland (UK)	9.1	11.2	15.0	9.8	13.0	18.3
Average	9.5	12.1	16.2	10.6	14.0	18.9
Partners						
Cyprus[1]	8.4	11.3	17.7	9.3	12.8	18.9

[Part 2/2]

Distribution of wages among employees, by level of proficiency in literacy

Table A6.4 (L) *Hourly wages, including bonuses, in PPP-adjusted USD*

OECD	Literacy Level 3			Literacy Level 4 or 5		
	25th percentile	50th percentile	75th percentile	25th percentile	50th percentile	75th percentile
National entities						
Australia	13.0	16.9	23.2	15.1	20.8	28.9
Austria	14.0	18.6	24.5	16.3	21.8	30.5
Canada	13.2	19.6	27.7	16.3	24.2	32.8
Czech Republic	6.6	8.6	10.8	7.9	10.2	13.7
Denmark	19.1	23.8	29.0	20.1	25.7	33.0
Estonia	5.8	8.2	12.1	6.9	10.5	15.6
Finland	13.9	17.5	23.2	15.5	20.0	25.8
Germany	12.6	18.7	26.3	14.8	23.8	32.7
Ireland	14.2	20.5	30.1	15.6	24.3	35.3
Italy	11.8	15.5	20.9	13.2	18.2	24.2
Japan	8.6	12.8	19.4	10.0	15.3	24.4
Korea	9.2	14.3	23.3	11.3	18.2	28.2
Netherlands	14.8	20.3	27.7	17.0	23.4	30.7
Norway	19.1	23.5	28.9	21.1	25.8	33.0
Poland	5.9	8.5	12.5	7.8	11.3	16.7
Slovak Republic	5.7	7.8	10.9	6.4	8.7	13.0
Spain	10.4	14.9	21.5	13.7	18.5	25.7
Sweden	14.8	17.4	21.6	15.8	19.3	25.2
United States	12.7	19.5	29.8	16.0	26.3	42.8
Sub-national entities						
Flanders (Belgium)	17.3	21.5	27.4	18.3	23.3	30.2
England (UK)	11.8	16.6	23.7	15.3	21.8	31.6
Northern Ireland (UK)	10.8	15.3	21.9	12.1	18.2	26.4
England/N. Ireland (UK)	11.8	16.6	23.6	15.2	21.7	31.5
Average	12.1	16.4	22.6	14.0	19.6	27.3
Partners						
Cyprus[1]	10.6	14.8	23.3	12.2	18.2	27.8

1. See notes on page 250.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898959

[Part 1/1]

Effect of education and literacy proficiency on the likelihood of adults participating in the labour market

Table A6.5 (L) *Odds ratios, adults not in formal education*

OECD	Dependent variable: Participation in the labour market			
	Years of education		Proficiency (literacy)	
	Odds ratio	p-value	Odds ratio	p-value
National entities				
Australia	1.166	0.000	1.004	0.001
Austria	1.154	0.000	1.005	0.009
Canada	1.132	0.000	1.005	0.000
Czech Republic	1.126	0.000	1.003	0.187
Denmark	1.184	0.000	1.008	0.000
Estonia	1.238	0.000	1.003	0.009
Finland	1.079	0.000	1.009	0.000
Germany	1.157	0.000	1.005	0.005
Ireland	1.167	0.000	1.005	0.001
Italy	1.135	0.000	1.002	0.260
Japan	1.018	0.500	1.000	0.884
Korea	1.022	0.163	1.000	0.781
Netherlands	1.170	0.000	1.002	0.193
Norway	1.213	0.000	1.008	0.000
Poland	1.211	0.000	1.003	0.002
Slovak Republic	1.278	0.000	1.006	0.000
Spain	1.123	0.000	1.001	0.297
Sweden	1.132	0.000	1.012	0.000
United States	1.146	0.000	1.004	0.007
Sub-national entities				
Flanders (Belgium)	1.183	0.000	1.005	0.001
England (UK)	1.055	0.053	1.005	0.001
Northern Ireland (UK)	1.140	0.000	1.005	0.014
England/N. Ireland (UK)	1.057	0.038	1.005	0.001
Partners				
Cyprus[1]	1.168	0.000	1.001	0.632

1. See notes on page 250.

Note: Results are adjusted for gender, age, marital status and foreign-born status.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898978

[Part 1/1]

Effect of education and literacy proficiency on the likelihood of adults being employed

Table A6.6 (L) *Odds ratio, adults not in formal education, relative to being unemployed*

OECD	Dependent variable: Employed			
	Years of education		Proficiency (literacy)	
	Odds ratio	p-value	Odds ratio	p-value
National entities				
Australia	1.111	0.082	1.003	0.298
Austria	1.172	0.008	1.002	0.502
Canada	1.098	0.005	1.002	0.234
Czech Republic	1.346	0.003	1.004	0.295
Denmark	1.174	0.000	1.001	0.660
Estonia	1.242	0.000	1.002	0.169
Finland	1.116	0.014	0.999	0.802
Germany	1.126	0.038	1.006	0.012
Ireland	1.139	0.000	1.004	0.007
Italy	1.100	0.000	1.003	0.148
Japan	1.114	0.141	0.982	0.003
Korea	0.979	0.551	0.997	0.480
Netherlands	1.141	0.015	1.003	0.436
Norway	1.174	0.012	1.007	0.062
Poland	1.202	0.000	1.001	0.464
Slovak Republic	1.355	0.000	1.005	0.019
Spain	1.116	0.000	1.004	0.007
Sweden	1.161	0.021	1.008	0.003
United States	1.139	0.000	1.004	0.061
Sub-national entities				
Flanders (Belgium)	1.202	0.000	1.000	0.922
England (UK)	1.178	0.000	1.007	0.005
Northern Ireland (UK)	1.052	0.489	1.004	0.303
England/N. Ireland (UK)	1.173	0.000	1.007	0.004
Partners				
Cyprus[1]	1.143	0.000	1.003	0.323

1. See notes on page 250.

Note: Results are adjusted for gender, age, marital status and foreign-born status.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932898997

[Part 1/1]

Effect of years of education and literacy proficiency on wages

Table A6.7 (L) *OLS regression coefficients*

OECD	Dependent variable: Log wage			
	Years of education		Proficiency (literacy)	
	ß	p-value	ß	p-value
National entities				
Australia	0.055	0.000	0.002	0.000
Austria	0.056	0.000	0.002	0.000
Canada	0.055	0.000	0.002	0.000
Czech Republic	0.057	0.000	0.001	0.000
Denmark	0.043	0.000	0.001	0.000
Estonia	0.062	0.000	0.001	0.000
Finland	0.049	0.000	0.001	0.000
Germany	0.072	0.000	0.002	0.000
Ireland	0.057	0.000	0.002	0.000
Italy	0.041	0.000	0.001	0.008
Japan	0.055	0.000	0.002	0.000
Korea	0.063	0.000	0.001	0.002
Netherlands	0.057	0.000	0.002	0.000
Norway	0.043	0.000	0.001	0.000
Poland	0.082	0.000	0.002	0.000
Slovak Republic	0.081	0.000	0.002	0.000
Spain	0.058	0.000	0.001	0.000
Sweden	0.026	0.000	0.001	0.000
United States	0.076	0.000	0.003	0.000
Sub-national entities				
Flanders (Belgium)	0.044	0.000	0.001	0.000
England (UK)	0.056	0.000	0.003	0.000
Northern Ireland (UK)	0.067	0.000	0.002	0.000
England/N. Ireland (UK)	0.057	0.000	0.003	0.000
Partners				
Cyprus[1]	0.074	0.000	0.001	0.000

1. See notes on page 250.

Notes: Log hourly wages, including bonuses, in PPP-adjusted USD. The wage distribution was trimmed to eliminate the 1st and 99th percentiles. Results are adjusted for age, gender, foreign-born status and tenure. The regression sample includes only employees.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932899016

[Part 1/1]

Effect of literacy proficiency on wages, by level of education

Table A6.8 (L) *OLS regression coefficients*

OECD	Effect of proficiency on log wages		
	Lower than upper secondary education	Upper secondary education	Tertiary education
	ß	ß	ß
National entities			
Australia	0.001	0.001	0.002
Austria	0.001	0.002	0.003
Canada	0.001	0.002	0.003
Czech Republic	0.002	0.002	0.002
Denmark	0.001	0.001	0.002
Estonia	0.001	0.001	0.003
Finland	0.001	0.001	0.002
Germany	0.001	0.002	0.003
Ireland	0.001	0.001	0.002
Italy	0.000	0.002	0.001
Japan	0.002	0.001	0.003
Korea	0.000	0.001	0.003
Netherlands	0.002	0.001	0.002
Norway	0.001	0.001	0.001
Poland	0.002	0.002	0.002
Slovak Republic	0.002	0.002	0.002
Spain	0.001	0.002	0.002
Sweden	0.001	0.001	0.001
United States	0.002	0.003	0.004
Sub-national entities			
Flanders (Belgium)	0.001	0.002	0.001
England (UK)	0.002	0.002	0.004
Northern Ireland (UK)	0.001	0.002	0.002
England/N. Ireland (UK)	0.002	0.002	0.004
Partners			
Cyprus[1]	0.002	0.001	0.002

1. See notes on page 250.

Notes: Log hourly wages, including bonuses, in PPP-adjusted USD. The wage distribution was trimmed to eliminate the 1st and 99th percentiles. Results are adjusted for age, gender, foreign-born status and tenure. The regression sample includes only employees.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932899035

[Part 1/1]

Table A6.9 (L) **Likelihood of adults scoring at or below Level 1 in literacy reporting low levels of trust and political efficacy, fair or poor health, or of not participating in volunteer activities (adjusted)**

OECD	Low levels of trust		Non-participation in volunteer activities		Low levels of political efficacy		Fair or poor health	
	Odds ratio	p-value	Odds ratio	p-value	Odds ratio	p-value	Odds ratio	p-value
National entities								
Australia	2.8	0.000	3.4	0.000	2.5	0.000	2.3	0.000
Austria	2.3	0.000	1.5	0.033	1.9	0.000	3.5	0.000
Canada	2.0	0.000	3.5	0.000	2.4	0.000	2.3	0.000
Czech Republic	2.3	0.007	2.1	0.010	2.2	0.003	2.2	0.170
Denmark	2.6	0.000	2.1	0.000	1.9	0.000	2.9	0.000
Estonia	1.2	0.195	2.3	0.000	2.9	0.000	1.9	0.000
Finland	1.5	0.019	2.1	0.000	1.7	0.002	1.8	0.008
Germany	2.4	0.000	2.7	0.000	4.5	0.000	4.7	0.000
Ireland	1.8	0.004	2.0	0.000	1.6	0.016	1.8	0.034
Italy	1.7	0.066	1.6	0.064	2.6	0.000	1.4	0.476
Japan	1.0	0.906	1.6	0.019	1.6	0.018	1.5	0.079
Korea	1.0	0.969	2.5	0.000	2.1	0.000	1.8	0.002
Netherlands	2.1	0.000	2.1	0.000	2.5	0.000	2.0	0.000
Norway	2.6	0.000	2.1	0.000	2.3	0.000	1.7	0.037
Poland	2.0	0.000	1.6	0.004	1.9	0.000	2.5	0.004
Slovak Republic	1.2	0.409	1.7	0.011	2.1	0.000	1.9	0.052
Spain	1.2	0.258	2.0	0.008	1.4	0.054	3.1	0.002
Sweden	2.3	0.000	2.7	0.000	2.2	0.000	3.0	0.000
United States	1.7	0.001	3.1	0.000	2.6	0.000	4.2	0.000
Sub-national entities								
Flanders (Belgium)	1.4	0.027	2.6	0.000	2.3	0.000	1.7	0.022
England (UK)	2.4	0.000	3.3	0.000	2.8	0.000	3.0	0.000
Northern Ireland (UK)	1.6	0.056	2.0	0.002	2.0	0.001	3.4	0.000
England/N. Ireland (UK)	2.4	0.000	3.2	0.000	2.8	0.000	3.1	0.000
Average	2.1	0.000	2.5	0.000	2.5	0.000	2.1	0.000
Partners								
Cyprus[1]	0.8	0.506	0.9	0.673	2.7	0.019	2.1	0.069

1. See notes on page 250.

Note: Odds ratios are adjusted for age, gender, educational attainment and immigrant and language background. Reference group is Level 4/5. Adults with missing data on the proficiency scale are included in the analysis as a separate category for which a coefficient is estimated but not reported.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932899054

[Part 1/1]

Table A6.10 (L) **Likelihood of adults reporting low levels of trust, by level of proficiency in literacy (adjusted)**

OECD	Level 1 or below		Level 2		Level 3		Level 4/5
	Odds ratio	p-value	Odds ratio	p-value	Odds ratio	p-value	Odds ratio
National entities							
Australia	2.8	0.000	2.0	0.000	1.4	0.002	1.0
Austria	2.3	0.000	2.1	0.000	1.5	0.022	1.0
Canada	2.0	0.000	1.7	0.000	1.2	0.015	1.0
Czech Republic	2.3	0.007	2.3	0.002	1.5	0.096	1.0
Denmark	2.6	0.000	2.0	0.000	1.2	0.251	1.0
Estonia	1.2	0.195	1.4	0.004	1.1	0.206	1.0
Finland	1.5	0.019	1.3	0.006	1.2	0.069	1.0
Germany	2.4	0.000	2.1	0.000	1.4	0.034	1.0
Ireland	1.8	0.004	1.7	0.002	1.3	0.098	1.0
Italy	1.7	0.066	1.5	0.183	1.1	0.621	1.0
Japan	1.0	0.906	1.1	0.293	1.1	0.487	1.0
Korea	1.0	0.969	1.0	0.890	1.1	0.378	1.0
Netherlands	2.1	0.000	1.8	0.000	1.3	0.004	1.0
Norway	2.6	0.000	1.9	0.000	1.3	0.028	1.0
Poland	2.0	0.000	1.9	0.000	1.5	0.002	1.0
Slovak Republic	1.2	0.409	1.7	0.008	1.4	0.087	1.0
Spain	1.2	0.258	1.2	0.235	1.1	0.787	1.0
Sweden	2.3	0.000	1.9	0.000	1.3	0.034	1.0
United States	1.7	0.001	1.7	0.000	1.4	0.003	1.0
Sub-national entities							
Flanders (Belgium)	1.4	0.027	1.3	0.116	1.2	0.290	1.0
England (UK)	2.4	0.000	2.0	0.000	1.5	0.010	1.0
Northern Ireland (UK)	1.6	0.056	1.6	0.019	1.2	0.322	1.0
England/N. Ireland (UK)	2.4	0.000	2.0	0.000	1.5	0.008	1.0
Average	2.1	0.000	1.8	0.000	1.4	0.000	1.0
Partners							
Cyprus[1]	0.8	0.506	0.8	0.534	0.9	0.778	1.0

1. See notes on page 250.

Note: Odds ratios are adjusted for age, gender, educational attainment and immigrant and language background. Reference group is Level 4/5. Adults with missing data on the proficiency scale are included in the analysis as a separate category for which a coefficient is estimated but not reported.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932899073

[Part 1/1]

Table A6.11a (L) **Likelihood of adults participating in volunteer activities, by level of proficiency in literacy (adjusted)**

OECD	Level 1 or below	Level 2		Level 3		Level 4/5	
	Odds ratio	Odds ratio	p-value	Odds ratio	p-value	Odds ratio	p-value
National entities							
Australia	1.0	1.7	0.000	2.6	0.000	3.4	0.000
Austria	1.0	1.4	0.028	1.6	0.000	1.5	0.033
Canada	1.0	1.6	0.000	2.6	0.000	3.5	0.000
Czech Republic	1.0	1.4	0.185	1.8	0.027	2.1	0.010
Denmark	1.0	1.5	0.000	1.9	0.000	2.1	0.000
Estonia	1.0	1.3	0.068	1.5	0.001	2.3	0.000
Finland	1.0	1.3	0.059	1.7	0.000	2.1	0.000
Germany	1.0	1.5	0.005	2.3	0.000	2.7	0.000
Ireland	1.0	1.4	0.004	1.8	0.000	2.0	0.000
Italy	1.0	1.3	0.056	1.6	0.005	1.6	0.064
Japan	1.0	1.2	0.227	1.4	0.075	1.6	0.019
Korea	1.0	1.6	0.005	2.0	0.001	2.5	0.000
Netherlands	1.0	1.3	0.065	1.8	0.000	2.1	0.000
Norway	1.0	1.6	0.000	2.0	0.000	2.1	0.000
Poland	1.0	1.1	0.584	1.3	0.046	1.6	0.004
Slovak Republic	1.0	1.3	0.077	1.5	0.007	1.7	0.011
Spain	1.0	1.3	0.055	1.6	0.003	2.0	0.008
Sweden	1.0	1.4	0.049	1.8	0.001	2.7	0.000
United States	1.0	1.4	0.011	2.1	0.000	3.1	0.000
Sub-national entities							
Flanders (Belgium)	1.0	1.5	0.004	2.0	0.000	2.6	0.000
England (UK)	1.0	1.4	0.030	2.2	0.000	3.3	0.000
Northern Ireland (UK)	1.0	1.1	0.626	1.7	0.002	2.0	0.002
England/N. Ireland (UK)	1.0	1.4	0.027	2.2	0.000	3.2	0.000
Average	1.0	1.5	0.000	1.9	0.000	2.5	0.000
Partners							
Cyprus[1]	1.0	1.0	0.765	1.1	0.566	0.9	0.673

1. See notes on page 250.

Note: Odds ratios are adjusted for age, gender, educational attainment and immigrant and language background. Reference group is Level 1 or below. Adults with missing data on the proficiency scale are included in the analysis as a separate category for which a coefficient is estimated but not reported.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932899092

[Part 1/1]

Table A6.11b (L) **Likelihood of adults not participating in volunteer activities, by level of proficiency in literacy (adjusted)**

OECD	Level 1 or below		Level 2		Level 3		Level 4/5
	Odds ratio	p-value	Odds ratio	p-value	Odds ratio	p-value	Odds ratio
National entities							
Australia	3.4	0.000	1.9	0.000	1.3	0.007	1.0
Austria	1.5	0.033	1.1	0.601	0.9	0.549	1.0
Canada	3.5	0.000	2.2	0.000	1.4	0.003	1.0
Czech Republic	2.1	0.010	1.5	0.088	1.2	0.473	1.0
Denmark	2.1	0.000	1.4	0.013	1.1	0.516	1.0
Estonia	2.3	0.000	1.8	0.000	1.5	0.000	1.0
Finland	2.1	0.000	1.6	0.000	1.2	0.078	1.0
Germany	2.7	0.000	1.8	0.000	1.2	0.296	1.0
Ireland	2.0	0.000	1.4	0.048	1.1	0.435	1.0
Italy	1.6	0.064	1.3	0.366	1.0	0.980	1.0
Japan	1.6	0.019	1.2	0.052	1.1	0.324	1.0
Korea	2.5	0.000	1.6	0.007	1.3	0.070	1.0
Netherlands	2.1	0.000	1.5	0.000	1.1	0.207	1.0
Norway	2.1	0.000	1.4	0.010	1.0	0.683	1.0
Poland	1.6	0.004	1.5	0.010	1.2	0.223	1.0
Slovak Republic	1.7	0.011	1.3	0.165	1.1	0.378	1.0
Spain	2.0	0.008	1.5	0.064	1.2	0.288	1.0
Sweden	2.7	0.000	1.9	0.000	1.5	0.002	1.0
United States	3.1	0.000	2.2	0.000	1.5	0.017	1.0
Sub-national entities							
Flanders (Belgium)	2.6	0.000	1.7	0.000	1.3	0.022	1.0
England (UK)	3.3	0.000	2.3	0.000	1.5	0.002	1.0
Northern Ireland (UK)	2.0	0.002	1.8	0.002	1.2	0.294	1.0
England/N. Ireland (UK)	3.2	0.000	2.3	0.000	1.5	0.001	1.0
Average	2.5	0.000	1.7	0.000	1.3	0.000	1.0
Partners							
Cyprus[1]	0.9	0.673	0.9	0.506	0.8	0.400	1.0

1. See notes on page 250.

Note: Odds ratios are adjusted for age, gender, educational attainment and immigrant and language background. Reference group is Level 4/5. Adults with missing data on the proficiency scale are included in the analysis as a separate category for which a coefficient is estimated but not reported.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932899111

[Part 1/1]

Table A6.12 (L) **Likelihood of adults reporting low levels of political efficacy, by level of proficiency in literacy (adjusted)**

OECD	Level 1 or below		Level 2		Level 3		Level 4/5
	Odds ratio	p-value	Odds ratio	p-value	Odds ratio	p-value	Odds ratio
National entities							
Australia	2.5	0.000	2.0	0.000	1.5	0.000	1.0
Austria	1.9	0.000	1.7	0.000	1.2	0.210	1.0
Canada	2.4	0.000	1.9	0.000	1.3	0.003	1.0
Czech Republic	2.2	0.003	2.1	0.001	1.4	0.067	1.0
Denmark	1.9	0.000	1.5	0.027	1.1	0.667	1.0
Estonia	2.9	0.000	2.7	0.000	1.7	0.000	1.0
Finland	1.7	0.002	1.5	0.003	1.2	0.067	1.0
Germany	4.5	0.000	2.8	0.000	1.5	0.013	1.0
Ireland	1.6	0.016	1.5	0.013	1.2	0.169	1.0
Italy	2.6	0.000	1.8	0.015	1.4	0.199	1.0
Japan	1.6	0.018	1.7	0.000	1.4	0.000	1.0
Korea	2.1	0.000	1.8	0.004	1.3	0.201	1.0
Netherlands	2.5	0.000	1.9	0.000	1.3	0.015	1.0
Norway	2.3	0.000	1.9	0.000	1.4	0.052	1.0
Poland	1.9	0.000	1.8	0.000	1.4	0.056	1.0
Slovak Republic	2.1	0.000	1.9	0.000	1.6	0.007	1.0
Spain	1.4	0.054	1.4	0.023	1.3	0.071	1.0
Sweden	2.2	0.000	2.0	0.000	1.3	0.018	1.0
United States	2.6	0.000	2.2	0.000	1.5	0.028	1.0
Sub-national entities							
Flanders (Belgium)	2.3	0.000	1.9	0.000	1.5	0.001	1.0
England (UK)	2.8	0.000	2.1	0.000	1.5	0.002	1.0
Northern Ireland (UK)	2.0	0.001	1.5	0.025	1.3	0.141	1.0
England/N. Ireland (UK)	2.8	0.000	2.1	0.000	1.5	0.001	1.0
Average	2.5	0.000	2.1	0.000	1.5	0.000	1.0
Partners							
Cyprus[1]	2.7	0.019	1.9	0.131	1.4	0.439	1.0

1. See notes on page 250.

Note: Odds ratios are adjusted for age, gender, educational attainment and immigrant and language background. Reference group is Level 4/5. Adults with missing data on the proficiency scale are included in the analysis as a separate category for which a coefficient is estimated but not reported.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932899130

[Part 1/1]

Table A6.13 (L) **Likelihood of adults reporting fair or poor health, by level of proficiency in literacy (adjusted)**

OECD	Level 1 or below		Level 2		Level 3		Level 4/5
	Odds ratio	p-value	Odds ratio	p-value	Odds ratio	p-value	Odds ratio
National entities							
Australia	2.3	0.000	1.5	0.017	1.2	0.255	1.0
Austria	3.5	0.000	2.1	0.013	1.6	0.135	1.0
Canada	2.3	0.000	1.6	0.021	1.2	0.307	1.0
Czech Republic	2.2	0.170	2.3	0.158	2.0	0.226	1.0
Denmark	2.9	0.000	1.7	0.018	1.2	0.363	1.0
Estonia	1.9	0.000	1.5	0.003	1.2	0.224	1.0
Finland	1.8	0.008	1.4	0.037	1.1	0.517	1.0
Germany	4.7	0.000	2.6	0.032	1.8	0.218	1.0
Ireland	1.8	0.034	1.0	0.910	0.9	0.759	1.0
Italy	1.4	0.476	1.3	0.594	1.3	0.614	1.0
Japan	1.5	0.079	1.2	0.087	1.0	0.747	1.0
Korea	1.8	0.002	1.4	0.026	1.2	0.306	1.0
Netherlands	2.0	0.000	1.2	0.278	1.2	0.430	1.0
Norway	1.7	0.037	1.3	0.189	1.0	0.963	1.0
Poland	2.5	0.004	1.5	0.219	1.2	0.566	1.0
Slovak Republic	1.9	0.052	1.4	0.221	1.0	0.905	1.0
Spain	3.1	0.002	1.7	0.107	1.6	0.212	1.0
Sweden	3.0	0.000	1.7	0.022	1.4	0.142	1.0
United States	4.2	0.000	2.4	0.000	1.6	0.091	1.0
Sub-national entities							
Flanders (Belgium)	1.7	0.022	1.4	0.108	1.1	0.742	1.0
England (UK)	3.0	0.000	1.9	0.006	1.5	0.171	1.0
Northern Ireland (UK)	3.4	0.000	2.2	0.007	1.7	0.067	1.0
England/N. Ireland (UK)	3.1	0.000	1.9	0.005	1.5	0.158	1.0
Average	2.1	0.000	1.5	0.000	1.2	0.000	1.0
Partners							
Cyprus[1]	2.1	0.069	1.5	0.295	1.1	0.793	1.0

1. See notes on page 250.

Note: Odds ratios are adjusted for age, gender, educational attainment and immigrant and language background. Reference group is Level 4/5. Adults with missing data on the proficiency scale are included in the analysis as a separate category for which a coefficient is estimated but not reported.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932899149

[Part 1/4]

Table A6.14 (L) **Likelihood of adults reporting positive social outcomes, by level of education and proficiency in literacy (adjusted marginal probabilities)**

OECD	Higher levels of trust					
	Level 2 or below, lower than upper secondary	Level 2 or below, upper secondary	Level 2 or below, tertiary	Level 3 or higher, lower than upper secondary	Level 3 or higher, upper secondary	Level 3 or higher, tertiary
National entities						
Australia	0.4877	0.5487	0.6813	0.6181	0.6518	0.7848
Austria	0.4450	0.4771	0.5656	0.5327	0.6160	0.7227
Canada	0.4485	0.4981	0.5514	0.6064	0.5669	0.6955
Czech Republic	0.5421	0.5058	0.5874	0.6194	0.5117	0.8011
Denmark	0.4090	0.5154	0.7059	0.5643	0.6231	0.7723
Estonia	0.4530	0.3924	0.5462	0.4556	0.4059	0.6309
Finland	0.5078	0.5873	0.7234	0.5398	0.6056	0.7660
Germany	0.4580	0.4402	0.6179	0.6281	0.5873	0.7509
Ireland	0.5141	0.5710	0.6585	0.5910	0.6193	0.7496
Italy	0.5400	0.7017	0.7304	0.6426	0.7605	0.8341
Japan	0.4624	0.4527	0.5200	0.4847	0.4632	0.6198
Korea	0.5485	0.5656	0.7162	0.5303	0.5739	0.7045
Netherlands	0.4797	0.6357	0.7023	0.6417	0.7003	0.8187
Norway	0.4861	0.5145	0.6835	0.5687	0.6299	0.7915
Poland	0.4709	0.4943	0.6494	0.5972	0.5672	0.7295
Slovak Republic	0.4933	0.5091	0.6682	0.4564	0.5576	0.6605
Spain	0.4792	0.5553	0.6524	0.5453	0.6050	0.7212
Sweden	0.4620	0.5178	0.6642	0.5688	0.6205	0.7695
United States	0.4873	0.5013	0.6266	0.4928	0.5572	0.7299
Sub-national entities						
Flanders (Belgium)	0.5242	0.6000	0.7678	0.5203	0.6568	0.8255
England (UK)	0.4587	0.5373	0.6827	0.5041	0.6747	0.7719
Northern Ireland (UK)	0.5063	0.6937	0.6725	0.4521	0.7236	0.8019
England/N. Ireland (UK)	0.4600	0.5432	0.6830	0.5022	0.6766	0.7732
Average	0.4813	0.5214	0.6646	0.5893	0.6134	0.7632
Partners						
Cyprus[1]	0.5751	0.6145	0.7676	0.4389	0.6801	0.7354

[Part 2/4]

Table A6.14 (L) **Likelihood of adults reporting positive social outcomes, by level of education and proficiency in literacy (adjusted marginal probabilities)**

OECD	Higher levels of political efficacy					
	Level 2 or below, lower than upper secondary	Level 2 or below, upper secondary	Level 2 or below, tertiary	Level 3 or higher, lower than upper secondary	Level 3 or higher, upper secondary	Level 3 or higher, tertiary
National entities						
Australia	0.5056	0.6093	0.6728	0.6922	0.7320	0.8262
Austria	0.4742	0.5998	0.7039	0.6801	0.7064	0.7963
Canada	0.4858	0.5416	0.6176	0.6508	0.6763	0.7460
Czech Republic	0.5575	0.5082	0.6504	0.5237	0.5909	0.6624
Denmark	0.4468	0.5130	0.6012	0.5782	0.6029	0.6889
Estonia	0.5256	0.5644	0.6498	0.6028	0.7089	0.7756
Finland	0.4939	0.6027	0.7184	0.5731	0.6825	0.7910
Germany	0.5306	0.5732	0.6619	0.6320	0.7036	0.7859
Ireland	0.4894	0.6076	0.7399	0.5355	0.6812	0.7704
Italy	0.5089	0.6442	0.7739	0.6695	0.6958	0.7706
Japan	0.5643	0.5750	0.6792	0.6875	0.7030	0.7941
Korea	0.4464	0.4319	0.5047	0.6021	0.5535	0.6167
Netherlands	0.4819	0.5482	0.6983	0.5917	0.6624	0.7993
Norway	0.4677	0.5771	0.6951	0.6381	0.6895	0.8268
Poland	0.4999	0.5803	0.6993	0.5903	0.6412	0.7836
Slovak Republic	0.5323	0.6459	0.7172	0.6612	0.7010	0.8301
Spain	0.5028	0.5541	0.6322	0.5461	0.6228	0.6714
Sweden	0.4354	0.4520	0.5849	0.5443	0.6074	0.6892
United States	0.4423	0.5268	0.6000	0.5480	0.6152	0.7131
Sub-national entities						
Flanders (Belgium)	0.5371	0.5973	0.6974	0.6138	0.6719	0.7896
England (UK)	0.4832	0.5787	0.6529	0.6386	0.6764	0.7709
Northern Ireland (UK)	0.5366	0.6383	0.7196	0.5016	0.6829	0.8208
England/N. Ireland (UK)	0.4847	0.5813	0.6557	0.6351	0.6778	0.7732
Average	0.4932	0.5681	0.6707	0.6288	0.6698	0.7757
Partners						
Cyprus[1]	0.5232	0.5934	0.7261	0.6466	0.7476	0.8205

1. See notes on page 250.

Note: Marginal probabilities are adjusted for age, gender and immigrant and language background. Adults with missing data on the proficiency scale are included in the analysis as a separate category for which a coefficient is estimated but not reported.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932899168

[Part 3/4]

Table A6.14 (L) **Likelihood of adults reporting positive social outcomes, by level of education and proficiency in literacy (adjusted marginal probabilities)**

OECD	Participation in volunteer activities					
	Level 2 or below, lower than upper secondary	Level 2 or below, upper secondary	Level 2 or below, tertiary	Level 3 or higher, lower than upper secondary	Level 3 or higher, upper secondary	Level 3 or higher, tertiary
National entities						
Australia	0.4767	0.5500	0.6468	0.6205	0.6825	0.7552
Austria	0.5800	0.6690	0.7842	0.6898	0.7000	0.7575
Canada	0.4289	0.4292	0.5596	0.6632	0.5933	0.6875
Czech Republic	0.5472	0.6023	0.6244	0.6982	0.6817	0.7554
Denmark	0.5431	0.6232	0.6848	0.6670	0.7019	0.7298
Estonia	0.5582	0.6925	0.7851	0.6928	0.7356	0.8299
Finland	0.5542	0.6146	0.7090	0.6785	0.6981	0.7530
Germany	0.4977	0.6321	0.7537	0.7811	0.7740	0.8040
Ireland	0.5144	0.6386	0.7103	0.6191	0.6812	0.7640
Italy	0.4747	0.5505	0.6393	0.5033	0.6515	0.6956
Japan	0.5758	0.6801	0.7407	0.6693	0.7008	0.7367
Korea	0.5028	0.5115	0.6632	0.7532	0.6002	0.6835
Netherlands	0.4718	0.5096	0.5956	0.5609	0.6288	0.6798
Norway	0.5368	0.6370	0.6962	0.6995	0.7097	0.7290
Poland	0.4418	0.4589	0.6973	0.6469	0.5019	0.7352
Slovak Republic	0.5062	0.6070	0.7609	0.5990	0.6353	0.7717
Spain	0.5052	0.6978	0.7465	0.5989	0.7288	0.7786
Sweden	0.5552	0.5954	0.6869	0.5965	0.7077	0.7296
United States	0.4873	0.6004	0.7753	0.7416	0.7287	0.8329
Sub-national entities						
Flanders (Belgium)	0.5425	0.6343	0.7486	0.6851	0.7324	0.8055
England (UK)	0.4850	0.6680	0.7380	0.7034	0.7744	0.8418
Northern Ireland (UK)	0.5659	0.7445	0.7950	0.6410	0.8021	0.8805
England/N. Ireland (UK)	0.4878	0.6695	0.7390	0.7000	0.7743	0.8423
Average	0.5153	0.5973	0.7092	0.6658	0.6899	0.7723
Partners						
Cyprus[1]	0.5430	0.5556	0.5875	0.5595	0.5188	0.6550

[Part 4/4]

Table A6.14 (L) **Likelihood of adults reporting positive social outcomes, by level of education and proficiency in literacy (adjusted marginal probabilities)**

OECD	Good, very good or excellent health					
	Level 2 or below, lower than upper secondary	Level 2 or below, upper secondary	Level 2 or below, tertiary	Level 3 or higher, lower than upper secondary	Level 3 or higher, upper secondary	Level 3 or higher, tertiary
National entities						
Australia	0.5218	0.6005	0.7093	0.6172	0.6626	0.7687
Austria	0.4939	0.6109	0.6990	0.5752	0.7287	0.8332
Canada	0.5021	0.6414	0.7151	0.6493	0.6928	0.8155
Czech Republic	0.4611	0.7011	0.8380	0.5241	0.7106	0.8944
Denmark	0.5308	0.6847	0.7721	0.6656	0.7902	0.8717
Estonia	0.5266	0.6600	0.8112	0.6058	0.7427	0.8477
Finland	0.4347	0.4835	0.6587	0.4674	0.5622	0.7478
Germany	0.5457	0.6727	0.7318	0.6712	0.7733	0.8633
Ireland	0.5281	0.6866	0.7657	0.6901	0.7164	0.8246
Italy	0.6328	0.7459	0.8240	0.6436	0.7690	0.7818
Japan	0.4991	0.5768	0.6225	0.5951	0.6058	0.6737
Korea	0.6125	0.7123	0.7777	0.7432	0.7686	0.8125
Netherlands	0.5573	0.6134	0.7162	0.5430	0.6971	0.7849
Norway	0.5542	0.6790	0.8123	0.6218	0.7352	0.8309
Poland	0.5353	0.7097	0.8664	0.6764	0.7692	0.8830
Slovak Republic	0.5469	0.7556	0.8808	0.7231	0.8131	0.9102
Spain	0.5654	0.6532	0.7252	0.7062	0.7275	0.7753
Sweden	0.6015	0.7244	0.8006	0.6492	0.8045	0.8776
United States	0.5423	0.7046	0.8476	0.7558	0.8176	0.9265
Sub-national entities						
Flanders (Belgium)	0.5372	0.6299	0.7056	0.5900	0.7109	0.7916
England (UK)	0.4980	0.6652	0.6834	0.6495	0.7348	0.7892
Northern Ireland (UK)	0.5454	0.6898	0.7403	0.6415	0.7754	0.8518
England/N. Ireland (UK)	0.4998	0.6667	0.6859	0.6490	0.7370	0.7920
Average	0.5381	0.6390	0.7163	0.6241	0.7076	0.7899
Partners						
Cyprus[1]	0.6300	0.7758	0.8710	0.7494	0.8377	0.8973

1. See notes on page 250.

Note: Marginal probabilities are adjusted for age, gender and immigrant and language background. Adults with missing data on the proficiency scale are included in the analysis as a separate category for which a coefficient is estimated but not reported.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932899168

[Part 1/1]

Table A6.15 (N) **GDP per capita (2011) and percentage of adults at or below Level 2 or at Level 4 or higher in numeracy**

OECD	GDP per capita, at constant 2005 prices and PPPs	Percentage of adults scoring at or below Level 2	Percentage of adults scoring at Level 4 or 5
	USD	%	%
National entities			
Australia	37 257	52.19	13.30
Austria	36 131	47.40	13.62
Canada	35 753	54.22	12.55
Czech Republic	24 102	47.58	11.44
Denmark	32 611	44.96	16.61
Estonia	18 126	50.47	11.17
Finland	32 036	42.15	19.44
Germany	34 581	49.34	14.26
Ireland	36 506	63.19	7.53
Italy	27 053	70.47	4.51
Japan	30 761	36.20	18.85
Korea	27 554	58.26	6.83
Netherlands	37 119	41.37	16.98
Norway	46 734	43.01	17.37
Poland	17 968	61.13	8.41
Slovak Republic	20 932	45.94	12.64
Spain	26 981	70.71	4.06
Sweden	35 123	43.36	18.59
United States	42 385	61.35	8.48
Sub-national entities			
Flanders (Belgium)	33 230	41.06	16.99
England (UK)	m	57.43	11.34
Northern Ireland (UK)	m	60.26	8.50
England/N. Ireland (UK)	32 890	57.53	11.25
Average	31 706	51.52	12.61
Partners			
Cyprus[1]	m	47.25	6.64

1. See notes on page 250.

Source: Survey of Adult Skills (PIAAC) (2012) and National Accounts at a Glance.

StatLink http://dx.doi.org/10.1787/888932899187

[Part 1/1]

Inequality in the distribution of income and literacy skills

Table A6.16 (L) *The Gini coefficient of income and alternative measures of skills inequality based on literacy proficiency*

OECD	Gini coefficient of income	Gini coefficient of literacy skills	9th/1st decile of income	9th/1st decile of literacy proficiency
National entities				
Australia	0.3359	0.0989	4.5460	1.56
Austria	0.2608	0.0909	3.2049	1.52
Canada	0.3235	0.1037	4.1769	1.60
Czech Republic	0.2561	0.0837	2.9077	1.46
Denmark	0.2478	0.0972	2.7899	1.55
Estonia	0.3151	0.0901	4.2791	1.51
Finland	0.2595	0.0973	3.1616	1.55
Germany	0.2954	0.0995	3.5449	1.59
Ireland	0.2933	0.0987	3.7022	1.56
Italy	0.3366	0.0999	4.3012	1.59
Japan	0.3293	0.0747	5.0243	1.41
Korea	0.3150	0.0848	4.8173	1.48
Netherlands	0.2937	0.0952	3.3431	1.55
Norway	0.2501	0.0936	2.9756	1.53
Poland	0.3145	0.1010	3.9721	1.59
Slovak Republic	0.2566	0.0818	3.1216	1.45
Spain	0.3170	0.1093	4.5513	1.66
Sweden	0.2593	0.0989	3.1655	1.57
United States	0.3782	0.1027	5.9020	1.62
Sub-national entities				
Flanders (Belgium)	0.2592	0.0960	3.3238	1.56
England (UK)	m	0.0997	m	1.59
Northern Ireland (UK)	m	0.0965	m	1.57
England/N. Ireland (UK)	0.3446	0.0996	4.5585	1.59
Average	0.3139	0.0972	4.2613	1.55
Partners				
Cyprus[1]	m	0.0844	m	1.48

1. See notes on page 250.

Source: Survey of Adult Skills (PIAAC) (2012) and OECD.Stat "Country statistical profiles".

StatLink http://dx.doi.org/10.1787/888932906274



Annex B

OECD SKILLS OUTLOOK ADDITIONAL TABLES

All tables in Annex B are available on line

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Notes regarding Cyprus

Note by Turkey: The information in this document with reference to "Cyprus" relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Turkey recognises the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of the United Nations, Turkey shall preserve its position concerning the "Cyprus issue".

Note by all the European Union Member States of the OECD and the European Union: The Republic of Cyprus is recognised by all members of the United Nations with the exception of Turkey. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus.

A note regarding Israel

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

[Part 1/1]

Table B1.1 **Trends in mobile phone and Internet subscriptions, 1999-2009 and relative to 1999 proportions**

	Number of subscriptions (in millions)		Relative proportions in 1999 (in percentage)	
	Mobile	Internet	Mobile	Internet
1999	11.06	3.40	0	0
2000	15.71	4.84	42	42
2001	18.81	5.99	70	76
2002	20.25	7.20	83	112
2003	22.34	7.58	102	123
2004	25.20	7.67	128	126
2005	27.85	8.16	152	140
2006	30.74	8.17	178	140
2007	33.77	8.62	205	153
2008	35.76	8.92	223	162
2009	36.97	9.23	234	171

Note: Internet subscriptions exclude mobile phone access to the Internet.
Source: OECD Telecommunications Database 2011 (extracted in March 2013).
StatLink http://dx.doi.org/10.1787/888932899206

[Part 1/1]

Table B1.2 **Percentage of businesses with Internet access, by firm size, 2010 or latest available year**

	10 to 49 employees	50 to 249 employees	250 and more employees
Australia[1]	97.5	98.8	99.9
Austria	79.5	93.3	98.4
Belgium	89.0	96.4	98.8
Canada[2]	93.7	98.9	99.6
Czech Republic	84.1	95.4	98.9
Denmark	85.0	94.2	95.6
Estonia	86.7	93.1	99.4
Finland	95.2	98.6	99.2
France	92.3	98.0	99.7
Germany	87.4	95.5	97.5
Greece	78.0	94.2	98.8
Hungary	77.2	91.4	96.6
Iceland	94.3	100.0	100.0
Ireland	84.5	97.0	97.6
Israel[3]	91.0	100.0	100.0
Italy	82.8	94.0	98.2
Japan	m	98.5	99.4
Korea[1]	98.4	99.9	100.0
Luxembourg	86.1	94.0	99.1
Mexico[3]	89.3	94.1	97.2
Netherlands	89.5	96.1	99.0
New Zealand	95.8	98.7	99.4
Norway	85.4	94.9	98.4
Poland	64.4	84.7	97.1
Portugal	83.3	92.5	98.6
Slovak Republic	75.6	87.3	97.0
Slovenia	m	95.3	100.0
Spain	94.9	98.4	99.6
Sweden	90.1	97.6	99.1
Switzerland[3]	100.0	100.0	100.0
Turkey	87.4	96.0	97.9
United Kingdom	86.1	97.0	98.8
Average	87.5	95.7	98.7

1. Year of reference 2009.
2. Year of reference 2007.
3. Year of reference 2008.

Notes: For most European countries, the following industries are included: manufacturing, construction, wholesale and retail; hotels and restaurants; transport, storage and communication; financial intermediation and insurance; real estate, renting and business activities; and other community, social and personal service activities. In Belgium, Denmark and Finland, financial intermediation and insurance are excluded. For Canada, agriculture, fishing, hunting and trapping, and construction – specialist contractors are excluded. For Japan, data refer to enterprises with 100 or more employees and exclude: agriculture, forestry, fisheries and mining. For Korea, wholesale and retail on motor vehicle parts (ISIC 50) are excluded.

For New Zealand, data exclude government administration and defence, and personal and other services; the NZ survey also excludes businesses with fewer than six employees (calculated by Rolling Mean Employment). For Switzerland, data refer to enterprises with five or more employees.

For Canada, 50-299 employees instead of 50-249, and 300 and more instead of 250 and more. For Japan, 100-299 instead of 50-249, and 300 and more instead of 250 and more. For Mexico, 20-49 instead of 10-49 employees. For Switzerland, 5-49 instead of 10-49 employees.

Source: OECD, ICT Database and Eurostat, Community Survey on ICT usage in enterprises, November 2011.
StatLink http://dx.doi.org/10.1787/888932899225

[Part 1/1]

Table B1.3 Percent of individuals who ordered or purchased goods or services on the Internet, 2007 and 2011, or latest available year

	2007	2011
Australia[1]	47.0	51.0
Austria	26.3	35.2
Belgium	14.6	31.1
Canada[2]	33.9	40.9
Chile[3]	m	6.3
Czech Republic	8.5	16.0
Denmark	42.8	57.3
Estonia	6.1	15.6
Finland	32.5	45.4
France	25.3	40.1
Germany	40.9	53.6
Greece	5.0	13.0
Hungary	6.9	12.7
Iceland	32.4	31.2
Ireland	25.9	34.0
Israel[3]	17.7	20.6
Italy	6.6	10.4
Japan[2]	51.4	48.9
Korea[2]	44.4	52.8
Luxembourg	36.7	52.4
Mexico[2]	1.6	1.5
Netherlands	42.9	53.2
Norway	47.7	57.2
Poland	11.1	20.0
Portugal	5.8	10.3
Slovenia	9.3	20.2
Spain	13.0	18.9
Sweden	38.5	53.3
Switzerland[4]	31.8	m
Turkey	1.7	3.7
United Kingdom	44.5	63.6
United States[5]	34.0	m
Average	24.9	32.1

1. Year of reference 2008.
2. Year of reference 2010.
3. Year of reference 2009.
4. Year of reference 2005.
5. Year of reference 2003.

Notes: Data from the EU Community Survey cover EU countries plus Iceland, Norway and Turkey.

Individuals aged 16-74, except for Canada (16+), Israel (20-74), Japan (6+), Switzerland (14+).

For countries covered by Eurostat, data refer to individuals who have bought or ordered goods or services, over the Internet, for non-work use, in previous three months. For the other countries, it refers to individuals placing orders over the Internet in the previous 12 months.

For Israel, data refer to the use of Internet in the previous three months.

For Korea, percentage of individuals aged 16-74 (surveyed with only Internet users).

For Switzerland, data refer to Internet users who used the Internet at least once within the previous six months.

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

It should be noted that statistical data on Israeli patents and trademarks are supplied by the patent and trademark offices of the relevant countries.

Source: OECD ICT Database and Eurostat Community Survey on ICT usage in households and by individuals, May 2012; Canadian Internet Use Survey, 2010 from Statistics Canada.

StatLink http://dx.doi.org/10.1787/888932899244

[Part 1/1]

Table B1.4 Shares of added value of selected industrial sectors relative to the total economy, latest available year between 2005 and 2009

	Latest year	Finance, insurance, real estate and business services	Communication services	Medium-high and high technology manufactures
Australia	2005	28.97	2.64	2.93
Austria	2007	24.20	1.82	8.69
Belgium	2007	29.27	2.50	6.45
Canada	2006	25.43	2.74	4.61
Chile	2009	20.95	m	m
Czech Republic	2007	17.48	2.84	m
Denmark	2007	24.68	2.11	6.22
Estonia	2009	24.82	2.72	m
Finland	2007	22.50	1.99	11.27
France	2008	34.00	1.96	4.73
Germany	2007	29.28	1.78	13.77
Greece	2007	19.23	2.98	1.68
Hungary	2007	22.46	3.11	11.59
Iceland	2009	25.63	1.49	1.69
Ireland	2005	22.21	3.42	11.60
Israel	2008	33.45	2.71	m
Italy	2007	27.31	2.12	6.83
Japan	2008	27.00	1.99	9.75
Korea	2006	21.38	2.33	14.32
Luxembourg	2009	48.44	4.48	m
Mexico	2007	20.05	2.43	6.57
Netherlands	2007	27.88	2.46	5.09
New Zealand	2006	29.87	2.97	m
Norway	2007	18.56	1.59	m
Poland	2007	19.02	2.23	5.60
Portugal	2006	22.04	3.01	3.10
Slovak Republic	2007	17.42	2.38	8.33
Slovenia	2006	21.91	2.61	9.93
Spain	2007	22.55	2.20	4.90
Sweden	2007	25.32	1.78	9.91
Switzerland	2008	29.52	2.67	m
Turkey	2006	18.57	1.78	m
United Kingdom	2007	31.94	2.61	5.14
United States	2009	33.85	2.94	5.28

Source: OECD (2010), "STAN Indicators 2009", STAN: OECD Structural Analysis Statistics (Database). *http://dx.doi.org/10.1787/data-00031-en* (Accessed January 2013).

StatLink http://dx.doi.org/10.1787/888932899263

[Part 1/1]

Table B1.5 Average annual percentage growth of share of professionals, associated professional and technicians, by industry, 1998-2008

	Manufacturing	Services
Australia	2.29	3.84
Austria	3.84	2.70
Belgium	1.88	2.73
Canada	0.97	4.17
Czech Republic	2.31	1.90
Denmark	2.29	3.45
Estonia	2.08	1.64
Finland	1.45	1.62
France	2.65	3.17
Germany	0.81	2.02
Greece	2.69	3.35
Hungary	2.20	1.92
Iceland	2.33	6.32
Ireland	2.57	5.21
Italy	6.74	3.72
Japan (2003-08)	-1.32	1.23
Luxembourg	-2.30	4.37
Netherlands	-0.24	1.75
Norway	3.96	3.89
Portugal	1.29	4.15
Slovak Republic	1.12	1.60
Slovenia (1997-2007)	1.80	5.57
Spain	4.79	5.91
Sweden (1997-2007)	-0.63	2.88
Switzerland	0.96	3.53
United Kingdom	-0.31	2.32
United States (2003-08)	0.32	2.25

Source: OECD, ANSKILL Database, June 2011.

StatLink http://dx.doi.org/10.1787/888932899282

[Part 1/1]

Change in share of employment between 1998 and 2008, by occupational groups designated as low-, medium- or high-skilled

Table B1.6 *Two-digit ISCO-based occupational groups*

	High-skilled	Medium-skilled	Low-skilled
Austria	6.37	-5.50	-0.87
Belgium	4.67	-3.68	-0.99
Czech Republic	8.19	-6.31	-1.88
Denmark	10.11	-7.58	-2.53
Estonia	0.48	0.33	-0.81
Finland	2.28	-2.37	0.09
France	5.90	-6.10	0.20
Germany	3.46	-3.64	0.18
Greece	3.38	-1.63	-1.75
Hungary	5.21	-3.04	-2.17
Iceland	11.94	-1.25	-10.70
Ireland	5.79	-1.49	-4.30
Italy	9.56	-7.67	-1.90
Luxembourg	9.21	-7.44	-1.77
Netherlands	1.64	-1.02	-0.62
Norway	7.60	-4.38	-3.21
Poland	6.48	-5.22	-1.26
Portugal	8.10	-2.45	-5.65
Slovak Republic	4.49	-6.32	1.83
Slovenia	14.15	-7.27	-6.88
Spain	5.09	-2.06	-3.03
Sweden	5.20	-5.82	0.62
Switzerland	6.97	-7.44	0.47
United Kingdom	3.02	-3.03	0.02

Notes: OECD countries only available in 1998 (24 countries).

Occupations with high-educated workers: legislators and senior officials; corporate managers; physical, mathematical and engineering science professionals; life science and health professionals; teaching professionals; other professionals; physical and engineering science associate professionals; life science and health associate professionals; teaching associate professionals; and other associate professionals. Occupations with medium-educated workers: managers of small enterprises; office clerks; customer services clerks; personal and protective services workers; models, salespersons and demonstrators; extraction and building trades workers; metal, machinery and related trades workers; precision, handicraft, craft printing and related trades workers; stationary plant and related operators; and drivers and mobile plant operators. Occupations with low-educated workers: other craft and related trades workers; machine operators and assemblers; sales and services elementary occupations; and labourers in mining, construction, manufacturing and transport.

Source: Eurostat, LFS Database.

StatLink http://dx.doi.org/10.1787/888932899301

[Part 1/1]

Share of employment in occupational groups, 1998-2009, and change in share since 1998, by country

Table B1.7 *Occupational groups defined by workers' proficiency in literacy and numeracy*

	Occupations with lowest average scores	Occupations with next to lowest average scores	Occupations with next to highest average scores	Occupations with highest average scores
Austria	1.98	-9.01	7.18	0.08
Belgium	0.10	-2.33	-1.18	3.39
Czech Republic	-4.70	-1.86	3.14	3.36
Denmark	-4.04	-4.56	3.03	4.20
Estonia	3.59	-3.98	-0.11	1.89
Finland	2.43	-4.66	-0.12	2.30
France	0.38	-2.90	-0.59	4.58
Germany	-0.12	-1.77	-0.27	1.91
Greece	0.31	-2.74	0.97	1.55
Hungary	-1.31	-5.60	2.73	4.07
Iceland	-4.31	-8.84	2.83	8.80
Ireland	5.32	-4.50	-5.84	4.76
Italy	3.17	-7.51	0.81	1.18
Luxembourg	-2.34	-5.77	-4.36	12.76
Netherlands	0.13	-3.01	1.57	1.24
Norway	-1.42	-0.17	-1.24	2.39
Poland	0.02	-3.62	-4.03	7.69
Portugal	0.83	-6.64	1.34	4.52
Slovak Republic	0.20	-2.92	0.87	2.32
Slovenia	0.77	-12.68	1.90	9.45
Spain	1.58	-3.33	0.11	1.50
Sweden	-2.72	-0.79	-1.47	5.75
Switzerland	-0.03	-1.06	-5.22	5.65
United Kingdom	4.48	-2.58	-0.49	-1.51

Notes: Only OECD countries for which data series were available between 1998 and 2009 are included (24 countries).

Highest average scores are in or near upper half of Level 3 for literacy and numeracy; next to highest average scores are in or near lower half of Level 3 for lilteracy and numeracy; next to lowest average scores are in or near upper half of Level 2 for literacy and numeracy; lowest average scores are in or near lower half of Level 2 for literacy and numeracy.

Source: Eurostat, LFS Database and Survey of Adults Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932899320

[Part 1/1]

GDP per capita, USD

Table B2.1 *Constant 2005 prices, using PPPs*

	1970	2011
	USD	USD
Australia	18 604	37 257
Austria	14 694	36 131
Belgium	15 289	33 230
Canada	17 591	35 753
Czech Republic[1]	16 315	24 102
Denmark	17 275	32 611
Estonia	7 343	18 126
Finland	12 788	32 036
France	15 008	30 081
Germany	15 800	34 581
Ireland	9 241	36 506
Italy	13 584	27 053
Japan	12 948	30 761
Korea	2 432	27 554
Netherlands	17 787	37 119
Norway	17 473	46 734
Poland[1]	8 199	17 968
Slovak Republic[2]	9 544	20 932
Spain	11 846	26 981
Sweden	17 329	35 123
United Kingdom	14 817	32 890
United States	20 544	42 385

1. Year of reference 1990.
2. Year of reference 1992.

Source: OECD.Stat, National Accounts.

StatLink http://dx.doi.org/10.1787/888932899339

[Part 1/2]

Table B2.2 **Percentage of adults, by age and level of educational attainment**

OECD	16-24 year-olds						25-34 year-olds						35-44 year-olds					
	Lower than upper secondary		Upper secondary		Tertiary		Lower than upper secondary		Upper secondary		Tertiary		Lower than upper secondary		Upper secondary		Tertiary	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
National entities																		
Australia	30.1	(1.6)	53.6	(1.7)	15.7	(1.0)	14.6	(1.0)	41.2	(1.3)	43.2	(1.3)	21.2	(1.2)	36.7	(1.2)	40.2	(1.3)
Austria	42.3	(0.8)	53.2	(0.8)	3.6	(0.3)	12.0	(0.6)	65.7	(0.8)	20.3	(0.6)	14.4	(0.7)	63.1	(0.8)	20.7	(0.6)
Canada	31.0	(1.0)	53.7	(1.0)	14.7	(0.9)	7.6	(0.6)	34.3	(1.1)	57.3	(1.0)	7.7	(0.6)	31.8	(1.0)	59.5	(1.0)
Czech Republic	42.3	(1.2)	51.8	(1.3)	5.8	(0.7)	6.5	(0.8)	62.5	(1.4)	29.1	(1.0)	4.8	(1.2)	75.0	(1.4)	19.9	(0.7)
Denmark	57.8	(1.2)	39.1	(1.3)	2.8	(0.5)	13.6	(1.3)	35.6	(1.6)	50.2	(1.6)	15.2	(1.1)	38.8	(1.3)	45.7	(1.0)
Estonia	43.7	(1.4)	44.5	(1.5)	11.3	(0.8)	14.5	(0.9)	40.7	(1.2)	44.3	(1.4)	10.8	(0.7)	45.5	(1.2)	43.3	(1.3)
Finland	45.1	(1.7)	51.5	(1.7)	3.4	(0.6)	7.6	(1.0)	46.7	(1.2)	45.8	(1.3)	6.4	(0.8)	41.9	(1.5)	51.7	(1.5)
France	34.3	(1.1)	50.5	(1.1)	15.0	(0.9)	14.9	(1.0)	43.7	(1.2)	40.4	(1.2)	17.5	(1.1)	44.2	(1.2)	37.2	(1.0)
Germany	54.7	(1.3)	40.0	(1.2)	4.7	(0.7)	10.2	(1.1)	53.7	(1.7)	34.6	(1.6)	11.2	(0.9)	53.2	(1.4)	33.4	(1.1)
Ireland	32.5	(0.5)	49.9	(0.9)	17.7	(0.9)	13.0	(0.4)	40.8	(0.9)	45.9	(0.9)	21.7	(0.6)	38.1	(0.8)	39.5	(0.8)
Italy	62.6	(2.9)	34.1	(2.7)	3.0	(0.6)	27.6	(1.7)	47.8	(1.7)	23.6	(1.3)	47.7	(2.0)	36.8	(1.7)	14.6	(0.9)
Japan	33.8	(1.6)	47.1	(1.9)	17.6	(1.3)	7.9	(1.0)	35.2	(1.7)	55.8	(1.5)	6.8	(0.8)	41.6	(1.1)	50.5	(1.3)
Korea	32.5	(1.5)	58.0	(1.6)	9.4	(0.5)	2.3	(0.4)	35.3	(0.7)	61.6	(0.6)	5.1	(0.6)	45.8	(0.6)	48.9	(0.2)
Netherlands	42.2	(1.7)	47.7	(1.6)	9.2	(1.1)	16.8	(1.4)	40.6	(1.9)	40.6	(1.7)	21.3	(1.4)	38.8	(1.6)	37.3	(1.5)
Norway	53.5	(1.4)	39.1	(1.4)	6.5	(0.7)	16.2	(1.2)	36.5	(1.4)	43.9	(1.4)	15.1	(1.1)	36.6	(1.2)	46.1	(1.3)
Poland	38.4	(0.5)	49.4	(0.5)	12.2	(0.4)	5.2	(0.7)	48.6	(1.5)	46.2	(1.5)	7.1	(0.9)	63.0	(1.8)	30.0	(1.5)
Slovak Republic	40.8	(1.5)	50.1	(1.4)	8.9	(1.0)	12.0	(1.0)	59.3	(1.5)	28.4	(1.5)	9.8	(0.9)	67.7	(1.2)	22.1	(1.2)
Spain	53.8	(1.9)	35.0	(1.6)	10.6	(1.0)	34.3	(1.4)	25.9	(1.1)	39.2	(1.2)	39.9	(1.1)	21.5	(1.1)	38.1	(1.0)
Sweden	42.7	(0.9)	50.7	(1.1)	6.2	(0.7)	13.5	(1.2)	47.0	(1.4)	39.4	(1.1)	12.8	(0.9)	49.7	(1.3)	37.5	(1.0)
United States	32.7	(0.7)	48.5	(1.2)	13.1	(1.3)	9.7	(0.9)	45.0	(1.1)	41.8	(1.0)	8.7	(0.7)	46.3	(1.2)	40.2	(1.3)
Sub-national entities																		
Flanders (Belgium)	32.9	(1.1)	49.1	(1.4)	13.8	(1.0)	7.4	(0.8)	41.5	(1.7)	45.2	(1.6)	8.8	(1.0)	42.3	(1.7)	42.5	(1.5)
England (UK)	23.4	(1.5)	57.2	(1.6)	19.4	(1.0)	17.2	(0.9)	34.5	(1.4)	47.5	(1.0)	20.5	(1.2)	35.5	(1.6)	43.2	(1.3)
Northern Ireland (UK)	29.1	(1.7)	54.9	(1.9)	15.9	(1.4)	21.1	(1.2)	36.3	(1.6)	42.4	(1.4)	29.3	(1.1)	34.9	(1.5)	35.3	(1.1)
England/N. Ireland (UK)	23.6	(1.4)	57.1	(1.6)	19.2	(1.0)	17.3	(0.9)	34.6	(1.3)	47.3	(1.0)	20.8	(1.2)	35.5	(1.5)	43.0	(1.3)
Average	41.1	(0.3)	47.9	(0.3)	10.2	(0.2)	12.9	(0.2)	43.7	(0.3)	42.0	(0.3)	15.2	(0.2)	45.2	(0.3)	38.3	(0.3)
Partners																		
Cyprus[1]	31.4	(0.5)	57.2	(0.6)	11.0	(0.5)	12.7	(0.6)	39.9	(0.7)	46.8	(0.7)	17.6	(0.6)	45.0	(0.9)	36.5	(0.9)

[Part 2/2]

Table B2.2 **Percentage of adults, by age and level of educational attainment**

OECD	45-54 year-olds						55-65 year-olds					
	Lower than upper secondary		Upper secondary		Tertiary		Lower than upper secondary		Upper secondary		Tertiary	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
National entities												
Australia	32.3	(1.3)	33.0	(1.4)	32.4	(1.3)	39.6	(1.3)	29.9	(1.0)	27.8	(1.2)
Austria	19.5	(0.7)	59.3	(0.9)	19.6	(0.6)	29.1	(0.9)	53.3	(1.0)	14.8	(0.4)
Canada	12.2	(0.7)	36.9	(0.9)	50.0	(0.9)	17.4	(0.7)	38.2	(1.0)	43.2	(1.1)
Czech Republic	10.3	(1.5)	73.5	(1.7)	15.6	(0.9)	19.4	(1.4)	65.3	(1.5)	15.0	(1.0)
Denmark	22.5	(1.2)	41.7	(1.4)	35.2	(1.2)	26.3	(1.1)	41.1	(1.1)	32.5	(0.9)
Estonia	8.5	(0.7)	49.1	(1.4)	42.2	(1.4)	15.8	(0.8)	46.2	(1.2)	37.7	(1.2)
Finland	12.0	(1.2)	42.7	(1.5)	45.4	(1.3)	27.8	(1.1)	39.4	(1.2)	32.9	(1.0)
France	28.2	(1.0)	48.0	(1.2)	23.0	(1.0)	42.8	(1.1)	39.3	(1.1)	17.1	(0.8)
Germany	8.8	(0.9)	56.1	(1.4)	34.1	(1.1)	9.7	(1.1)	54.7	(1.8)	33.1	(1.3)
Ireland	34.5	(0.7)	39.1	(1.0)	26.3	(1.0)	49.4	(0.6)	30.1	(0.8)	19.6	(0.7)
Italy	58.8	(2.2)	31.8	(1.9)	9.0	(0.9)	72.0	(2.4)	19.4	(1.9)	8.2	(0.9)
Japan	7.8	(0.8)	42.5	(1.5)	48.2	(1.5)	21.4	(1.1)	48.7	(1.2)	28.7	(1.1)
Korea	24.6	(1.3)	45.6	(1.2)	29.7	(0.2)	53.8	(1.3)	30.5	(1.3)	15.6	(0.3)
Netherlands	29.8	(1.4)	34.9	(1.6)	32.6	(1.5)	42.0	(1.4)	28.5	(1.5)	27.0	(1.3)
Norway	22.3	(1.2)	38.9	(1.6)	35.8	(1.2)	30.7	(1.6)	34.0	(1.8)	33.9	(1.4)
Poland	11.6	(1.1)	67.3	(1.5)	21.1	(1.4)	18.0	(1.3)	67.3	(1.5)	14.6	(1.0)
Slovak Republic	17.2	(1.3)	63.8	(1.8)	18.7	(1.5)	26.4	(1.3)	59.3	(1.5)	14.1	(1.1)
Spain	49.6	(1.3)	20.5	(1.0)	29.0	(1.2)	62.6	(1.4)	18.3	(1.2)	17.5	(1.2)
Sweden	19.2	(1.2)	51.1	(1.5)	29.8	(1.1)	30.8	(0.9)	42.4	(1.1)	26.7	(0.7)
United States	11.0	(0.7)	48.8	(1.0)	36.7	(1.0)	10.0	(0.5)	49.4	(1.1)	36.6	(1.1)
Sub-national entities												
Flanders (Belgium)	16.1	(1.0)	41.1	(1.4)	37.2	(1.4)	30.7	(1.4)	39.5	(1.4)	25.7	(1.1)
England (UK)	27.7	(1.3)	37.1	(1.5)	35.1	(1.3)	35.5	(1.1)	34.4	(1.4)	30.0	(1.2)
Northern Ireland (UK)	41.5	(1.2)	31.4	(1.5)	27.1	(1.2)	52.8	(1.5)	24.8	(1.8)	22.3	(1.6)
England/N. Ireland (UK)	28.2	(1.3)	37.0	(1.5)	34.9	(1.3)	36.0	(1.1)	34.1	(1.3)	29.7	(1.2)
Average	22.1	(0.3)	45.6	(0.3)	31.2	(0.3)	32.3	(0.3)	41.3	(0.3)	25.1	(0.2)
Partners												
Cyprus[1]	23.6	(0.6)	46.4	(0.8)	29.7	(0.7)	42.3	(0.5)	35.9	(0.6)	21.6	(0.4)

1. See notes on page 408.

Notes: Lower than upper secondary includes ISCED 1, 2 and 3C short. Upper secondary education includes ISCED 3A, 3B, 3C long and 4. Tertiary includes ISCED 5A, 5B and 6. Where possible, foreign qualifications are included as per their closest correspondance to the respective national education systems. The total of the proportions by level of educational attainment for each age group may not sum up to 100% due to the existence of missing data.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932899358

[Part 1/1]

Table B2.3 **Foreign-born population as a percentage of total population**

	1995	2009
	%	%
Australia	23.0	26.5
Austria[1]	11.1	15.5
Belgium[6]	9.7	13.0
Canada	16.7	19.6
Czech Republic[1]	4.3	6.4
Denmark	4.8	7.5
Estonia[1]	18.4	16.6
Finland	2.1	4.4
France[2]	7.3	11.6
Germany	11.5	12.9
Ireland[3]	6.9	17.2
Netherlands	9.1	11.1
Norway	5.5	10.9
Slovak Republic[4, 6]	2.2	6.8
Spain[5]	3.0	14.3
Sweden	10.6	14.4
United Kingdom	6.9	11.3
United States	9.9	12.7

1. Year of reference 1998.
2. Year of reference 1999.
3. Year of reference 1996.
4. Year of reference 2001.
5. Year of reference 1996.
6. Year of reference 2008.

Note: Data are not avaialble for Italy, Poland, Japan, Korea and Cyprus*.

* See notes on page 408.

Source: OECD International Migration Database.

StatLink http://dx.doi.org/10.1787/888932899377

[Part 1/3]

Table B2.4a **Average proportion of reading component items answered correctly, by literacy proficiency level**

OECD	Print vocabulary				
	Below Level 1	Level 1	Level 2	Level 3	Level 4/5
	%	%	%	%	%
National entities					
Australia	96.2	99.0	99.5	99.7	99.9
Austria	95.2	97.9	99.4	99.7	99.9
Canada	94.1	97.6	98.8	99.5	99.9
Czech Republic	99.1	99.7	99.9	100.0	99.9
Denmark	95.6	98.6	99.3	99.6	99.8
Estonia	98.2	99.3	99.7	99.8	99.9
Finland	m	m	m	m	m
France	m	m	m	m	m
Germany	96.2	98.7	99.6	99.9	99.9
Ireland	94.9	98.2	99.0	99.4	99.4
Italy	96.6	98.0	98.7	99.1	99.3
Japan	m	m	m	m	m
Korea	96.7	98.1	99.4	99.8	99.9
Netherlands	98.4	98.7	99.7	99.8	99.7
Norway	90.8	95.8	98.6	99.3	99.7
Poland	98.4	99.1	99.4	99.7	99.8
Slovak Republic	99.8	99.9	99.9	100.0	100.0
Spain	95.9	98.6	99.4	99.7	99.7
Sweden	95.7	97.5	99.1	99.7	99.8
United States	90.4	96.2	98.6	99.8	99.8
Sub-national entities					
Flanders (Belgium)	94.2	98.8	99.6	99.5	99.7
England (UK)	95.9	98.1	99.3	99.6	99.8
Northern Ireland (UK)	94.3	98.2	99.4	99.7	99.8
England/N. Ireland (UK)	95.8	98.1	99.3	99.6	99.8
Average	95.9	98.3	99.3	99.7	99.8
Partners					
Cyprus[1]	95.6	98.6	99.7	99.8	99.9

[Part 2/3]

Table B2.4a **Average proportion of reading component items answered correctly, by literacy proficiency level**

OECD	Sentence processing				
	Below Level 1	Level 1	Level 2	Level 3	Level 4/5
	%	%	%	%	%
National entities					
Australia	81.4	89.4	94.6	97.0	97.6
Austria	78.6	89.5	95.2	97.7	98.7
Canada	79.0	88.2	93.2	96.8	98.4
Czech Republic	91.1	93.1	95.5	96.8	95.8
Denmark	87.1	91.8	95.1	96.8	97.6
Estonia	86.1	92.7	95.4	97.0	98.0
Finland	m	m	m	m	m
France	m	m	m	m	m
Germany	78.7	89.1	94.9	97.5	98.7
Ireland	84.4	89.2	94.0	96.4	96.9
Italy	87.1	92.8	95.8	97.3	97.7
Japan	m	m	m	m	m
Korea	84.1	88.7	94.0	96.7	97.8
Netherlands	85.7	89.4	94.0	96.3	98.3
Norway	78.4	86.2	92.9	95.6	97.7
Poland	90.0	92.9	95.4	96.8	97.9
Slovak Republic	99.8	100.0	99.9	100.0	100.0
Spain	87.1	92.0	95.2	96.7	98.2
Sweden	83.6	90.4	94.6	97.4	99.1
United States	72.4	83.0	93.0	96.5	97.5
Sub-national entities					
Flanders (Belgium)	78.8	89.6	94.1	96.3	97.6
England (UK)	81.1	87.0	93.1	95.3	97.7
Northern Ireland (UK)	83.7	89.8	94.8	96.7	97.8
England/N. Ireland (UK)	81.2	87.1	93.2	95.4	97.7
Average	83.9	90.3	94.7	96.9	98.0
Partners					
Cyprus[1]	82.1	88.7	92.9	94.3	95.0

1. See notes on page 408.

Note: Finland, France and Japan did not participate in the reading components assessment.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932899396

[Part 3/3]

Table B2.4a **Average proportion of reading component items answered correctly, by literacy proficiency level**

OECD	Passage comprehension				
	Below Level 1	Level 1	Level 2	Level 3	Level 4/5
	%	%	%	%	%
National entities					
Australia	90.1	96.4	98.8	99.7	99.8
Austria	83.8	92.3	97.5	98.7	99.9
Canada	84.7	94.4	97.6	98.6	99.1
Czech Republic	87.2	94.0	98.4	99.1	98.5
Denmark	90.5	95.3	97.4	99.0	99.8
Estonia	90.6	96.2	98.0	99.1	99.4
Finland	m	m	m	m	m
France	m	m	m	m	m
Germany	85.1	93.4	97.3	99.2	99.9
Ireland	90.6	94.4	97.9	98.8	99.4
Italy	83.8	90.2	95.1	98.2	99.8
Japan	m	m	m	m	m
Korea	84.4	90.5	97.2	99.2	99.8
Netherlands	91.2	94.8	98.4	99.1	99.6
Norway	81.0	93.3	98.0	99.2	99.7
Poland	93.4	96.7	98.0	98.9	99.7
Slovak Republic	99.2	99.3	99.5	99.7	99.8
Spain	89.4	94.8	98.2	98.9	99.6
Sweden	86.5	95.7	98.7	99.5	99.6
United States	82.2	90.3	96.7	99.5	99.9
Sub-national entities					
Flanders (Belgium)	88.6	95.1	98.0	98.6	99.5
England (UK)	88.1	93.6	98.2	99.3	99.6
Northern Ireland (UK)	89.5	95.6	97.3	98.3	99.8
England/N. Ireland (UK)	88.1	93.7	98.1	99.3	99.6
Average	87.9	94.2	97.8	99.1	99.6
Partners					
Cyprus[1]	83.0	93.5	97.5	98.9	99.5

1. See notes on page 408.

Note: Finland, France and Japan did not participate in the reading components assessment.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932899396

[Part 1/3]

Table B2.4b **Average time spent completing a reading component item, in seconds, by literacy proficiency level**

OECD	Print vocabulary				
	Below Level 1	Level 1	Level 2	Level 3	Level 4/5
	Seconds	Seconds	Seconds	Seconds	Seconds
National entities					
Australia	6.6	4.1	3.5	3.0	2.7
Austria	9.9	6.0	4.3	3.8	3.1
Canada	8.4	5.3	4.1	3.3	5.4
Czech Republic	6.1	4.4	3.9	3.8	3.2
Denmark	6.7	5.4	4.1	3.5	2.8
Estonia	7.5	5.5	4.6	4.0	3.6
Finland	m	m	m	m	m
France	m	m	m	m	m
Germany	7.6	5.8	4.7	4.0	3.1
Ireland	7.0	5.2	4.0	3.5	3.0
Italy	6.6	5.5	4.6	3.9	3.5
Japan	m	m	m	m	m
Korea	6.8	4.9	3.7	3.1	2.7
Netherlands	6.2	5.3	3.8	3.4	2.5
Norway	7.4	6.3	4.3	3.6	3.5
Poland	5.9	4.8	4.1	3.7	3.2
Slovak Republic	8.7	6.1	4.6	4.2	4.0
Spain	6.4	4.7	3.8	3.2	2.6
Sweden	10.7	5.2	4.1	3.6	2.9
United States	9.0	5.7	4.1	3.1	2.4
Sub-national entities					
Flanders (Belgium)	9.3	5.2	4.1	3.6	3.0
England (UK)	7.6	5.1	3.9	3.6	3.3
Northern Ireland (UK)	5.0	4.8	4.2	4.4	3.9
England/N. Ireland (UK)	7.5	5.1	4.0	3.7	3.3
Average	7.6	5.3	4.1	3.6	3.2
Partners					
Cyprus[1]	9.4	6.8	4.8	3.8	3.5

[Part 2/3]

Table B2.4b **Average time spent completing a reading component item, in seconds, by literacy proficiency level**

OECD	Sentence processing				
	Below Level 1	Level 1	Level 2	Level 3	Level 4/5
	Seconds	Seconds	Seconds	Seconds	Seconds
National entities					
Australia	14.1	9.0	7.5	6.3	5.5
Austria	17.0	12.1	8.8	7.5	5.9
Canada	17.7	10.2	8.0	6.4	5.5
Czech Republic	10.1	8.9	7.7	7.3	5.6
Denmark	13.5	9.7	7.3	5.8	5.1
Estonia	18.6	9.6	7.9	6.9	6.1
Finland	m	m	m	m	m
France	m	m	m	m	m
Germany	20.1	12.7	9.2	7.5	5.9
Ireland	12.2	8.5	7.0	6.0	5.5
Italy	11.4	10.2	8.0	6.8	6.0
Japan	m	m	m	m	m
Korea	14.4	11.0	7.8	6.5	6.1
Netherlands	10.8	10.2	7.5	6.3	5.0
Norway	14.7	12.0	8.7	7.3	6.4
Poland	10.0	8.6	7.2	6.5	5.5
Slovak Republic	15.6	11.0	8.2	6.9	6.5
Spain	11.9	8.6	6.8	5.7	4.4
Sweden	23.9	11.3	8.3	7.0	5.7
United States	14.7	10.4	7.7	5.7	4.5
Sub-national entities					
Flanders (Belgium)	17.2	9.2	7.4	6.7	5.2
England (UK)	13.7	8.6	7.1	5.8	4.9
Northern Ireland (UK)	9.7	8.5	6.9	5.8	4.9
England/N. Ireland (UK)	13.6	8.6	7.1	5.8	4.9
Average	14.8	10.1	7.8	6.6	5.5
Partners					
Cyprus[1]	14.8	12.0	8.7	7.6	7.1

1. See notes on page 408.

Note: Finland, France and Japan did not participate in the reading components assessment.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932899415

[Part 3/3]

Table B2.4b **Average time spent completing a reading component item, in seconds, by literacy proficiency level**

OECD	Passage comprehension				
	Below Level 1	Level 1	Level 2	Level 3	Level 4/5
	Seconds	Seconds	Seconds	Seconds	Seconds
National entities					
Australia	20.3	10.7	8.0	6.2	5.3
Austria	19.8	13.7	10.0	8.2	6.1
Canada	21.9	11.4	8.6	6.6	5.5
Czech Republic	13.4	11.7	8.4	7.2	5.9
Denmark	17.2	10.7	8.0	6.6	5.6
Estonia	16.7	12.1	9.2	7.8	6.6
Finland	m	m	m	m	m
France	m	m	m	m	m
Germany	20.2	14.5	10.0	7.8	6.6
Ireland	11.6	9.2	7.3	6.4	5.3
Italy	15.2	14.1	10.2	8.2	6.7
Japan	m	m	m	m	m
Korea	27.0	16.3	9.0	6.8	5.3
Netherlands	14.9	12.6	8.7	7.3	5.3
Norway	18.8	30.2	11.0	7.4	6.5
Poland	12.7	10.8	9.2	7.9	6.5
Slovak Republic	23.4	13.5	9.6	7.9	7.0
Spain	18.8	11.5	8.9	6.9	4.9
Sweden	24.3	14.8	8.8	7.2	5.4
United States	18.7	12.2	8.6	6.4	5.3
Sub-national entities					
Flanders (Belgium)	16.1	10.8	8.1	7.2	5.3
England (UK)	16.0	10.4	7.7	6.4	5.3
Northern Ireland (UK)	12.0	9.0	7.5	6.3	5.8
England/N. Ireland (UK)	15.9	10.3	7.7	6.4	5.3
Average	18.3	13.2	8.9	7.2	5.8
Partners					
Cyprus[1]	17.8	14.3	10.0	8.1	7.3

1. See notes on page 408.

Note: Finland, France and Japan did not participate in the reading components assessment.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932899415

[Part 1/2]

Table B2.5a **Percentage of adults with no computer experience**

OECD	Age										Immigrant/language status			
	16-24 year-olds		25-34 year-olds		35-44 year-olds		45-54 year-olds		55-65 year-olds		Native born, native language		Native born, foreign language	
	%	S.E	%	S.E	%	S.E	%	S.E	%	S.E	%	S.E	%	S.E
National entities														
Australia	2.1	(1.3)	5.3	(1.8)	9.5	(1.9)	25.1	(3.1)	58.0	(3.1)	57.7	(3.1)	2.1	(1.1)
Austria	0.3	(0.3)	3.2	(0.9)	11.1	(1.5)	28.1	(2.0)	57.3	(2.0)	76.8	(2.2)	0.4	(0.3)
Canada	0.8	(0.5)	3.7	(0.9)	7.5	(1.4)	30.6	(1.9)	57.3	(1.7)	58.6	(2.3)	3.0	(0.6)
Czech Republic	1.0	(0.5)	6.5	(2.1)	5.9	(1.1)	25.2	(2.6)	61.5	(2.8)	92.6	(1.8)	0.0	(0.0)
Denmark	0.4	(0.5)	7.7	(2.5)	9.1	(2.9)	22.6	(3.5)	60.2	(4.1)	77.2	(2.8)	0.4	(0.4)
Estonia	0.1	(0.1)	1.7	(0.5)	10.0	(1.1)	26.6	(1.4)	61.7	(1.6)	72.5	(1.6)	2.3	(0.5)
Finland	0.0	(0.0)	0.0	(0.0)	1.2	(0.8)	22.5	(3.7)	76.3	(3.8)	92.8	(2.5)	2.3	(1.2)
France	0.8	(0.3)	3.1	(0.7)	10.7	(1.0)	27.2	(1.5)	58.3	(1.4)	74.8	(1.5)	1.2	(0.4)
Germany	1.0	(0.5)	2.6	(0.9)	12.9	(2.1)	31.3	(2.2)	52.2	(2.6)	71.7	(3.2)	1.3	(0.7)
Ireland	1.1	(0.6)	3.9	(0.8)	14.7	(1.8)	29.6	(2.2)	50.8	(2.0)	92.4	(1.4)	2.1	(0.9)
Italy	1.5	(0.4)	5.6	(0.9)	17.8	(1.3)	30.0	(1.6)	45.1	(1.6)	88.6	(1.5)	2.7	(1.0)
Japan	2.3	(0.7)	3.3	(0.8)	8.1	(1.2)	18.1	(1.6)	68.2	(2.3)	c	c	c	c
Korea	0.7	(0.3)	1.3	(0.4)	6.7	(0.7)	36.0	(1.2)	55.3	(1.3)	96.8	(0.5)	0.4	(0.2)
Netherlands	0.0	(0.0)	3.0	(1.5)	10.0	(2.7)	25.0	(3.1)	61.9	(3.7)	66.9	(4.5)	1.6	(1.1)
Norway	2.4	(1.6)	4.3	(2.5)	7.3	(3.2)	22.6	(5.4)	63.5	(6.5)	76.5	(5.8)	1.2	(1.2)
Poland	0.6	(0.1)	4.3	(0.6)	12.8	(1.2)	32.0	(1.5)	50.3	(1.5)	c	c	c	c
Slovak Republic	3.9	(0.6)	9.7	(0.8)	14.9	(0.9)	27.1	(1.2)	44.4	(1.3)	87.0	(1.2)	8.2	(1.0)
Spain	0.8	(0.3)	5.2	(0.7)	13.7	(1.0)	30.1	(1.3)	50.1	(1.5)	85.7	(1.2)	3.5	(0.5)
Sweden	4.2	(3.2)	5.4	(3.0)	0.8	(0.8)	14.1	(4.3)	75.5	(5.1)	54.7	(6.7)	0.0	(0.0)
United States	2.9	(0.9)	7.5	(2.3)	18.7	(2.4)	31.4	(2.8)	39.5	(3.3)	50.4	(5.0)	3.8	(1.1)
Sub-national entities														
Flanders (Belgium)	0.4	(0.3)	5.3	(1.2)	8.4	(1.2)	23.4	(2.1)	62.5	(2.1)	87.9	(1.6)	1.4	(0.6)
England (UK)	2.9	(1.6)	1.7	(0.7)	8.5	(2.2)	31.3	(3.4)	55.6	(4.1)	81.8	(3.4)	0.9	(0.9)
Northern Ireland (UK)	2.9	(1.2)	5.9	(1.6)	14.6	(2.0)	32.4	(2.6)	44.2	(2.8)	93.1	(1.9)	1.6	(1.0)
England/N. Ireland (UK)	2.9	(1.5)	2.1	(0.7)	9.0	(2.1)	31.4	(3.2)	54.7	(3.8)	82.7	(3.2)	1.0	(0.9)
Average	1.4	(0.2)	4.3	(0.3)	10.0	(0.4)	26.8	(0.6)	57.5	(0.7)	77.2	(0.7)	1.9	(0.2)
Partners														
Cyprus[1]	1.6	(0.5)	5.7	(0.8)	14.8	(1.0)	31.9	(1.2)	45.9	(1.4)	92.4	(1.2)	0.3	(0.2)

[Part 2/2]

Table B2.5a **Percentage of adults with no computer experience**

OECD	Immigrant/language status				Educational attainment						Occupational status							
	Foreign born, native language		Foreign born, foreign language		Less than upper secondary		Upper secondary, post-secondary non-tertiary		Tertiary		Skilled		Semi-skilled white-collar		Semi-skilled blue-collar		Elementary	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
National entities																		
Australia	10.6	(2.6)	29.6	(3.4)	66.7	(3.3)	28.4	(3.0)	4.9	(1.3)	8.7	(2.2)	15.7	(3.3)	55.9	(5.1)	19.7	(3.8)
Austria	2.1	(0.9)	20.8	(2.1)	55.8	(1.9)	41.8	(1.9)	2.4	(0.7)	6.2	(1.3)	12.4	(1.7)	50.8	(3.0)	30.6	(3.0)
Canada	6.1	(1.2)	32.3	(2.2)	51.9	(2.1)	36.4	(2.1)	11.7	(1.2)	13.9	(2.2)	24.6	(2.7)	40.5	(2.9)	21.0	(2.2)
Czech Republic	4.7	(1.7)	2.4	(0.7)	34.0	(2.9)	65.2	(2.9)	0.8	(0.3)	4.2	(1.0)	13.0	(2.5)	59.4	(4.5)	23.4	(3.5)
Denmark	2.2	(1.4)	19.8	(2.5)	69.3	(3.3)	30.0	(3.3)	0.6	(0.5)	3.8	(1.6)	21.3	(4.1)	47.8	(4.6)	27.2	(5.0)
Estonia	20.8	(1.5)	4.4	(0.8)	34.7	(1.6)	56.1	(1.6)	9.2	(0.9)	3.6	(0.7)	13.4	(1.7)	56.1	(2.4)	26.8	(2.1)
Finland	0.5	(0.6)	2.0	(1.4)	63.0	(3.9)	36.0	(3.8)	1.0	(0.7)	1.3	(1.4)	18.5	(4.1)	58.7	(5.2)	21.4	(4.7)
France	7.5	(1.0)	16.3	(1.1)	66.6	(1.7)	31.6	(1.6)	1.6	(0.4)	8.8	(1.2)	15.5	(1.5)	44.6	(2.0)	31.1	(1.7)
Germany	5.6	(1.3)	20.9	(3.0)	32.8	(2.8)	57.7	(3.4)	8.8	(1.5)	8.2	(2.0)	25.3	(2.9)	37.5	(2.8)	29.0	(3.0)
Ireland	3.8	(1.0)	1.7	(0.6)	79.1	(1.7)	18.3	(1.5)	2.0	(0.4)	8.9	(1.6)	26.7	(2.7)	45.6	(3.2)	18.9	(2.2)
Italy	1.0	(0.3)	7.7	(1.1)	88.0	(0.9)	11.2	(0.9)	0.9	(0.2)	5.6	(1.0)	22.0	(2.0)	45.4	(2.8)	27.0	(2.1)
Japan	c	c	c	c	44.0	(2.0)	45.4	(2.1)	10.6	(1.2)	6.9	(1.4)	30.4	(2.8)	44.6	(2.9)	18.0	(2.4)
Korea	2.0	(0.4)	0.8	(0.4)	67.1	(1.6)	29.8	(1.5)	3.1	(0.4)	5.3	(0.9)	26.8	(1.7)	40.1	(2.0)	27.8	(1.7)
Netherlands	4.1	(1.8)	27.4	(4.3)	84.1	(3.0)	12.2	(2.9)	3.7	(1.7)	6.4	(1.9)	12.3	(3.8)	41.0	(5.3)	40.3	(5.9)
Norway	0.0	(0.0)	20.0	(5.6)	70.7	(5.2)	23.1	(5.5)	6.2	(2.0)	14.8	(5.9)	29.4	(7.2)	40.1	(9.7)	15.6	(6.6)
Poland	c	c	c	c	29.1	(1.7)	69.2	(1.7)	1.5	(0.4)	6.4	(1.2)	13.6	(1.4)	60.8	(2.1)	19.2	(1.9)
Slovak Republic	2.3	(0.5)	2.4	(0.5)	47.0	(1.5)	52.3	(1.5)	0.7	(0.3)	7.1	(0.9)	18.6	(1.4)	50.6	(1.6)	23.7	(1.5)
Spain	3.8	(0.6)	6.7	(0.9)	89.8	(0.9)	7.7	(0.8)	2.3	(0.5)	5.3	(1.2)	23.2	(1.6)	42.0	(2.1)	29.5	(1.9)
Sweden	1.9	(2.0)	43.4	(6.6)	68.1	(5.4)	28.6	(5.2)	3.3	(2.4)	3.2	(3.3)	39.0	(8.9)	35.9	(8.6)	21.8	(9.6)
United States	3.7	(1.7)	42.1	(4.9)	57.8	(2.3)	37.0	(2.4)	5.1	(1.1)	5.8	(2.0)	22.8	(3.8)	41.4	(4.1)	29.9	(4.3)
Sub-national entities																		
Flanders (Belgium)	1.0	(0.5)	7.5	(1.4)	56.9	(2.4)	40.3	(2.2)	2.8	(0.8)	8.1	(1.8)	16.5	(2.5)	44.3	(3.1)	31.0	(2.8)
England (UK)	6.6	(2.0)	10.6	(2.5)	66.1	(3.6)	25.2	(3.1)	8.3	(2.4)	9.0	(3.3)	30.4	(5.1)	29.3	(5.0)	31.3	(5.1)
Northern Ireland (UK)	3.8	(1.4)	1.4	(1.1)	78.8	(2.1)	18.7	(2.0)	2.5	(1.1)	4.9	(1.7)	35.2	(3.7)	39.1	(3.9)	20.7	(3.3)
England/N. Ireland (UK)	6.4	(1.9)	9.9	(2.3)	67.1	(3.4)	24.7	(2.9)	7.9	(2.2)	8.6	(3.1)	30.8	(4.6)	30.0	(4.7)	30.5	(4.7)
Average	4.5	(0.3)	15.9	(0.7)	60.2	(0.6)	35.6	(0.6)	4.2	(0.3)	6.9	(0.5)	21.4	(0.8)	46.1	(1.0)	25.6	(0.9)
Partners																		
Cyprus[1]	2.6	(0.5)	4.7	(1.0)	51.4	(1.4)	41.4	(1.5)	7.2	(0.8)	11.5	(1.4)	31.7	(1.9)	36.4	(2.1)	20.4	(1.4)

1. See notes on page 408.

Note: Native language refers to whether the first or second language learned as a child is the same as the language of assessment, and not whether the language has official status. Foreign language refers to whether the first or second language learned as a child is not the same as the language of assessment. Thus in some cases, foreign language might refer to minority languages in which the assessment was not administered. Lower than upper secondary includes ISCED 1, 2 and 3C short. Upper secondary education includes ISCED 3A, 3B, 3C long and 4. Tertiary includes ISCED 5A, 5B and 6. Skilled occupations include: legislators, senior officials and managers; professionals; technicians and associate professionals. Semi-skilled white-collar occupations include: clerks; service workers and shop and market sales workers. Semi-skilled blue-collar occupations include: skilled agricultural and fishery workers; craft and related trades workers; plant and machine operators and assemblers. The proportions by category for each variable may not sum up to 100% due to the existence of missing data.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932899434

[Part 1/2]

Table B2.5b Percentage of adults who failed ICT core test

OECD	Age										Immigrant/language status			
	16-24 year-olds		25-34 year-olds		35-44 year-olds		45-54 year-olds		55-65 year-olds		Native born, native language		Native born, foreign language	
	%	S.E	%	S.E	%	S.E	%	S.E	%	S.E	%	S.E	%	S.E
National entities														
Australia	11.1	(2.9)	23.8	(3.6)	16.7	(3.0)	24.6	(3.0)	23.8	(3.9)	50.9	(4.6)	3.2	(1.2)
Austria	10.0	(1.8)	18.5	(3.3)	21.9	(3.7)	22.7	(3.7)	26.9	(3.5)	56.3	(3.2)	1.1	(0.8)
Canada	13.3	(1.7)	14.3	(1.7)	18.3	(1.5)	26.6	(2.0)	27.5	(1.8)	55.7	(2.2)	3.2	(0.7)
Czech Republic	10.9	(4.0)	7.0	(2.8)	14.7	(3.8)	26.5	(5.5)	40.9	(6.1)	96.6	(1.2)	0.0	(0.0)
Denmark	15.9	(2.1)	21.6	(2.1)	19.5	(2.1)	23.1	(2.0)	19.9	(1.7)	57.2	(2.3)	0.9	(0.6)
Estonia	10.0	(1.9)	18.6	(2.3)	22.4	(2.3)	25.2	(2.5)	23.8	(2.4)	79.0	(2.5)	5.7	(1.5)
Finland	10.1	(2.2)	13.1	(2.4)	20.0	(2.7)	22.2	(2.9)	34.6	(2.9)	62.0	(3.0)	7.9	(1.7)
France	4.0	(1.0)	13.6	(1.4)	23.9	(1.9)	28.2	(1.7)	30.3	(1.8)	72.1	(2.2)	1.8	(0.6)
Germany	6.4	(1.9)	10.5	(2.3)	21.4	(3.3)	29.7	(3.2)	32.0	(3.8)	72.7	(4.0)	1.4	(0.8)
Ireland	14.2	(2.9)	34.2	(3.3)	20.1	(3.1)	20.4	(3.1)	11.2	(2.0)	51.6	(4.0)	0.0	(0.0)
Italy	18.0	(4.8)	20.8	(3.9)	22.3	(4.0)	20.9	(5.0)	18.0	(4.0)	69.7	(5.4)	2.3	(1.7)
Japan	13.9	(1.5)	14.2	(1.6)	23.2	(2.2)	20.8	(1.9)	28.0	(2.0)	c	c	c	c
Korea	8.5	(1.2)	13.5	(1.6)	20.1	(1.9)	36.9	(1.7)	21.0	(1.7)	96.6	(0.8)	1.1	(0.5)
Netherlands	12.9	(2.5)	14.4	(3.2)	17.5	(3.4)	24.9	(3.9)	30.4	(3.1)	57.5	(3.4)	2.0	(1.0)
Norway	14.3	(2.0)	23.9	(2.7)	18.2	(2.1)	19.1	(2.4)	24.5	(2.6)	50.0	(3.1)	2.1	(1.0)
Poland	18.9	(1.2)	21.5	(2.0)	21.2	(2.3)	18.6	(2.5)	19.7	(2.2)	c	c	c	c
Slovak Republic	13.2	(3.1)	21.0	(3.8)	19.9	(3.9)	28.5	(4.1)	17.4	(3.6)	88.9	(2.9)	9.6	(2.7)
Spain	8.7	(1.3)	19.4	(2.1)	23.1	(2.4)	23.4	(2.3)	25.5	(2.3)	74.0	(2.7)	2.0	(0.7)
Sweden	14.0	(2.9)	22.1	(2.9)	21.4	(3.5)	23.0	(3.4)	19.5	(2.6)	33.9	(3.4)	2.2	(1.4)
United States	15.9	(3.3)	18.3	(2.7)	16.4	(2.7)	28.2	(3.7)	21.2	(2.4)	62.5	(3.7)	3.5	(1.3)
Sub-national entities														
Flanders (Belgium)	4.8	(1.4)	11.8	(2.5)	24.1	(3.0)	26.8	(3.6)	32.5	(2.9)	73.6	(3.1)	2.9	(1.3)
England (UK)	12.9	(2.1)	21.9	(2.6)	19.7	(2.6)	19.8	(2.7)	25.7	(2.5)	60.2	(3.3)	1.9	(1.0)
Northern Ireland (UK)	8.7	(2.2)	14.2	(3.3)	17.6	(2.8)	28.7	(3.8)	30.8	(3.9)	83.6	(3.6)	0.5	(0.4)
England/N. Ireland (UK)	12.7	(2.0)	21.7	(2.5)	19.7	(2.5)	20.1	(2.6)	25.8	(2.4)	61.0	(3.2)	1.9	(1.0)
Average	11.9	(0.5)	18.1	(0.6)	20.3	(0.6)	24.6	(0.7)	25.2	(0.7)	66.1	(0.8)	2.7	(0.3)
Partners														
Cyprus[1]	21.5	(5.8)	12.1	(3.2)	28.3	(4.5)	28.6	(6.2)	9.6	(2.5)	85.3	(3.8)	1.4	(1.4)

[Part 2/2]

Table B2.5b Percentage of adults who failed ICT core test

OECD	Immigrant/language status				Educational attainment						Occupational status							
	Foreign born, native language		Foreign born, foreign language		Less than upper secondary		Upper secondary, post-secondary non-tertiary		Tertiary		Skilled		Semi-skilled white-collar		Semi-skilled blue-collar		Elementary	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
National entities																		
Australia	16.8	(3.2)	29.1	(4.4)	35.0	(3.6)	33.1	(3.8)	31.7	(3.3)	27.8	(3.9)	31.9	(5.1)	23.9	(3.7)	16.3	(4.1)
Austria	2.6	(1.3)	40.0	(3.4)	31.9	(3.4)	59.5	(3.6)	8.7	(1.8)	19.4	(3.3)	26.1	(4.1)	37.1	(3.9)	17.4	(3.6)
Canada	9.4	(1.5)	31.3	(2.2)	18.3	(1.5)	42.0	(2.1)	39.7	(2.3)	36.4	(2.3)	30.4	(2.2)	23.8	(2.2)	9.5	(1.2)
Czech Republic	0.5	(0.6)	0.3	(0.3)	17.6	(5.2)	75.4	(5.3)	7.0	(2.4)	21.7	(5.7)	32.8	(7.0)	34.7	(6.4)	10.8	(4.2)
Denmark	2.0	(1.0)	39.8	(2.1)	41.5	(3.1)	34.8	(2.5)	23.6	(2.2)	21.9	(2.1)	23.3	(3.0)	31.4	(3.1)	23.3	(2.6)
Estonia	13.1	(2.0)	2.3	(1.0)	22.9	(2.6)	51.7	(3.3)	25.4	(2.7)	21.9	(2.8)	18.9	(2.6)	49.2	(3.3)	10.0	(2.0)
Finland	0.7	(0.5)	9.4	(2.0)	32.2	(3.2)	46.8	(3.4)	21.0	(2.7)	24.2	(3.5)	24.1	(3.2)	34.4	(3.5)	17.3	(2.8)
France	9.4	(1.3)	16.8	(1.6)	38.9	(2.1)	47.3	(2.2)	13.6	(1.3)	23.8	(1.9)	28.1	(2.2)	34.6	(2.1)	13.5	(1.8)
Germany	4.8	(1.7)	21.2	(3.3)	20.9	(3.5)	59.3	(4.2)	19.8	(3.7)	20.1	(3.8)	28.0	(3.9)	32.0	(4.3)	19.9	(3.4)
Ireland	11.2	(2.1)	37.1	(3.4)	31.2	(3.6)	46.4	(4.4)	22.4	(2.9)	18.7	(3.2)	26.4	(3.6)	34.9	(3.7)	20.1	(3.5)
Italy	3.3	(2.6)	24.7	(5.1)	52.1	(5.0)	37.0	(5.0)	10.9	(2.6)	28.4	(5.1)	17.5	(4.7)	35.9	(6.3)	18.2	(4.8)
Japan	c	c	c	c	14.4	(1.4)	51.7	(2.2)	33.9	(1.8)	29.4	(3.3)	39.1	(2.6)	23.5	(2.4)	8.0	(1.3)
Korea	0.9	(0.4)	1.4	(0.5)	24.4	(1.7)	53.5	(1.9)	22.2	(1.7)	18.9	(1.8)	40.7	(2.1)	24.9	(2.1)	15.5	(1.8)
Netherlands	5.4	(2.2)	35.1	(3.4)	55.2	(4.1)	29.8	(3.4)	14.5	(3.2)	33.0	(5.0)	27.5	(3.8)	21.2	(4.2)	18.3	(3.8)
Norway	0.6	(0.7)	46.8	(3.2)	38.7	(3.0)	34.3	(3.0)	26.9	(2.9)	24.6	(2.6)	38.9	(3.5)	22.6	(2.6)	13.8	(2.6)
Poland	c	c	c	c	15.9	(1.7)	68.2	(2.3)	15.9	(2.1)	28.2	(2.5)	27.1	(3.0)	33.0	(2.9)	11.7	(2.4)
Slovak Republic	0.8	(0.8)	0.7	(0.7)	20.9	(3.6)	60.9	(5.0)	18.2	(4.0)	41.6	(5.5)	20.7	(3.7)	33.4	(5.3)	4.2	(1.8)
Spain	10.5	(2.0)	13.4	(1.8)	58.8	(2.6)	20.9	(2.1)	19.9	(2.6)	18.1	(2.8)	36.8	(3.3)	24.9	(3.4)	20.1	(2.3)
Sweden	2.6	(1.1)	61.2	(3.8)	48.3	(3.8)	36.2	(3.8)	14.1	(2.2)	21.7	(3.9)	30.7	(4.3)	30.7	(4.5)	16.8	(3.7)
United States	4.0	(1.6)	30.0	(3.4)	26.8	(3.1)	58.4	(3.5)	14.3	(2.9)	20.4	(3.3)	36.4	(3.6)	25.0	(3.1)	18.2	(3.5)
Sub-national entities																		
Flanders (Belgium)	3.2	(1.3)	16.7	(2.6)	36.6	(3.6)	45.2	(3.9)	17.7	(2.4)	21.4	(3.3)	30.4	(4.2)	24.0	(3.4)	24.2	(3.6)
England (UK)	9.4	(2.6)	28.1	(3.0)	42.5	(3.7)	36.0	(3.4)	19.2	(2.8)	15.6	(2.4)	31.8	(3.3)	30.9	(3.0)	21.8	(3.2)
Northern Ireland (UK)	3.9	(1.4)	11.7	(3.6)	51.4	(3.5)	33.2	(3.8)	14.8	(2.6)	16.6	(3.8)	33.2	(4.9)	33.9	(4.9)	16.3	(3.6)
England/N. Ireland (UK)	9.2	(2.5)	27.6	(2.9)	42.8	(3.5)	36.0	(3.3)	19.0	(2.7)	15.6	(2.3)	31.8	(3.2)	31.0	(2.9)	21.6	(3.1)
Average	5.6	(0.4)	24.2	(0.7)	33.0	(0.7)	46.7	(0.8)	20.0	(0.6)	24.4	(0.8)	29.4	(0.8)	30.3	(0.8)	15.9	(0.7)
Partners																		
Cyprus[1]	5.6	(2.4)	7.7	(3.2)	19.8	(4.7)	47.8	(5.4)	32.4	(4.5)	34.6	(5.2)	41.0	(6.0)	21.1	(5.1)	3.4	(2.1)

1. See notes on page 408.

Note: Native language refers to whether the first or second language learned as a child is the same as the language of assessment, and not whether the language has official status. Foreign language refers to whether the first or second language learned as a child is not the same as the language of assessment. Thus in some cases, foreign language might refer to minority languages in which the assessment was not administered. Lower than upper secondary includes ISCED 1, 2 and 3C short. Upper secondary education includes ISCED 3A, 3B, 3C long and 4. Tertiary includes ISCED 5A, 5B and 6. Skilled occupations include: legislators, senior officials and managers; professionals; technicians and associate professionals. Semi-skilled white-collar occupations include: clerks; service workers and shop and market sales workers. Semi-skilled blue-collar occupations include: skilled agricultural and fishery workers; craft and related trades workers; plant and machine operators and assemblers. The proportions by category for each variable may not sum up to 100% due to the existence of missing data.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932899453

[Part 1/2]

Table B2.5c Percentage of adults who opted out of taking the computer-based assessment

OECD	Age										Immigrant/language status			
	16-24 year-olds		25-34 year-olds		35-44 year-olds		45-54 year-olds		55-65 year-olds		Native born, native language		Native born, foreign language	
	%	S.E	%	S.E	%	S.E	%	S.E	%	S.E	%	S.E	%	S.E
National entities														
Australia	9.4	(1.4)	14.8	(1.5)	20.6	(1.6)	24.7	(1.3)	30.5	(2.0)	67.4	(1.5)	2.9	(0.7)
Austria	6.5	(1.1)	13.3	(1.8)	20.6	(1.7)	30.5	(1.8)	29.1	(1.9)	77.8	(2.1)	1.7	(0.6)
Canada	5.2	(0.8)	9.6	(1.2)	18.6	(1.7)	29.1	(1.8)	37.5	(1.8)	60.1	(2.4)	4.6	(0.6)
Czech Republic	5.4	(1.1)	10.8	(1.7)	20.7	(2.2)	29.5	(3.2)	33.6	(2.9)	94.1	(1.7)	0.1	(0.1)
Denmark	6.7	(1.4)	10.4	(1.4)	14.6	(2.1)	25.0	(2.2)	43.3	(2.2)	76.7	(1.6)	0.8	(0.4)
Estonia	4.2	(0.5)	11.0	(0.9)	19.0	(1.1)	29.0	(1.1)	36.7	(1.1)	78.6	(1.2)	2.7	(0.4)
Finland	3.1	(0.8)	3.1	(0.8)	8.8	(1.4)	23.4	(1.9)	61.6	(2.4)	93.6	(1.2)	0.7	(0.3)
France	5.7	(0.7)	13.8	(1.2)	19.5	(1.2)	27.6	(1.3)	33.4	(1.4)	76.6	(1.2)	1.6	(0.4)
Germany	3.3	(0.9)	9.5	(2.0)	22.9	(2.9)	31.8	(3.2)	32.5	(3.0)	75.6	(3.2)	1.0	(0.6)
Ireland	7.2	(1.0)	16.8	(1.4)	22.3	(1.3)	26.3	(1.7)	27.3	(1.3)	77.4	(1.9)	2.1	(0.7)
Italy	6.2	(1.2)	15.1	(1.6)	27.9	(1.7)	27.0	(1.8)	23.8	(1.7)	84.3	(2.0)	3.2	(0.8)
Japan	11.5	(1.1)	14.3	(1.5)	20.6	(1.5)	19.5	(1.4)	34.0	(1.9)	c	c	c	c
Korea	2.3	(1.0)	6.0	(1.1)	18.8	(2.0)	40.3	(2.5)	32.6	(2.5)	94.5	(1.6)	1.3	(0.8)
Netherlands	6.2	(1.8)	7.3	(2.0)	14.1	(2.4)	29.3	(3.5)	43.1	(3.1)	70.0	(3.0)	0.9	(0.7)
Norway	2.9	(1.0)	8.7	(1.9)	18.0	(1.7)	20.3	(2.3)	50.1	(2.7)	82.2	(2.5)	1.4	(0.8)
Poland	9.2	(0.5)	19.0	(1.2)	22.1	(1.1)	24.9	(1.2)	24.8	(1.0)	98.1	(0.4)	1.4	(0.3)
Slovak Republic	10.0	(1.0)	18.6	(1.5)	17.6	(1.4)	23.5	(1.6)	30.3	(1.8)	90.0	(1.2)	7.3	(1.0)
Spain	3.9	(0.7)	15.2	(1.4)	25.9	(1.5)	26.2	(1.6)	28.8	(2.1)	81.8	(1.7)	3.5	(0.8)
Sweden	2.4	(0.9)	6.8	(1.9)	15.5	(2.6)	25.4	(3.1)	50.0	(3.2)	71.9	(2.8)	1.5	(0.8)
United States	8.7	(2.2)	15.0	(2.2)	15.7	(1.7)	24.1	(2.4)	36.5	(2.5)	76.1	(2.7)	3.4	(1.3)
Sub-national entities														
Flanders (Belgium)	5.9	(1.3)	8.5	(1.9)	14.5	(2.2)	27.6	(2.7)	43.5	(3.3)	80.2	(2.2)	6.3	(1.5)
England (UK)	3.3	(1.4)	11.1	(2.2)	17.1	(2.5)	29.0	(3.4)	39.6	(3.0)	79.8	(3.3)	1.3	(0.8)
Northern Ireland (UK)	2.5	(2.3)	13.7	(4.3)	17.8	(4.6)	18.8	(5.5)	47.3	(6.6)	93.1	(2.9)	2.1	(1.3)
England/N. Ireland (UK)	3.3	(1.4)	11.1	(2.1)	17.1	(2.5)	28.8	(3.4)	39.7	(3.0)	80.0	(3.2)	1.3	(0.8)
Average	5.9	(0.3)	11.8	(0.4)	18.9	(0.4)	27.0	(0.5)	36.5	(0.5)	80.3	(0.5)	2.4	(0.2)
Partners														
Cyprus[1]	13.5	(1.5)	20.3	(1.5)	22.9	(1.4)	24.6	(1.5)	18.7	(1.3)	85.8	(1.5)	0.0	(0.0)

[Part 2/2]

Table B2.5c Percentage of adults who opted out of taking the computer-based assessment

OECD	Immigrant/language status				Educational attainment						Occupational status							
	Foreign born, native language		Foreign born, foreign language		Less than upper secondary		Upper secondary, post-secondary non-tertiary		Tertiary		Skilled		Semi-skilled white-collar		Semi-skilled blue-collar		Elementary	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
National entities																		
Australia	12.4	(1.3)	17.2	(1.4)	43.3	(2.0)	39.2	(1.9)	17.5	(1.5)	23.6	(1.6)	28.4	(1.9)	32.6	(2.2)	15.5	(1.8)
Austria	3.5	(0.9)	17.0	(1.9)	31.1	(1.9)	59.2	(2.0)	9.7	(1.1)	24.6	(1.9)	30.5	(2.3)	28.4	(2.1)	16.5	(1.8)
Canada	10.4	(1.6)	25.0	(2.0)	24.7	(2.0)	44.2	(1.8)	31.0	(1.7)	31.3	(1.8)	27.2	(2.0)	27.4	(1.9)	14.0	(1.6)
Czech Republic	1.1	(0.7)	3.4	(1.2)	17.4	(2.0)	73.0	(2.7)	9.5	(1.8)	18.0	(2.4)	30.8	(2.8)	39.4	(2.8)	11.8	(1.8)
Denmark	0.6	(0.3)	21.9	(1.5)	48.5	(2.5)	36.5	(2.4)	14.8	(1.7)	16.8	(1.8)	30.1	(2.8)	30.8	(2.8)	22.3	(2.3)
Estonia	16.4	(1.1)	2.3	(0.4)	14.2	(0.9)	53.2	(1.4)	32.6	(1.4)	28.3	(1.4)	21.5	(1.3)	37.2	(1.5)	13.0	(1.0)
Finland	0.3	(0.3)	3.9	(0.8)	29.8	(1.9)	56.1	(2.0)	14.1	(1.3)	15.0	(1.7)	28.7	(2.3)	40.8	(3.2)	15.5	(2.1)
France	9.6	(1.0)	11.9	(1.1)	38.1	(1.6)	45.8	(1.6)	15.7	(1.2)	25.7	(1.6)	28.2	(1.6)	28.1	(1.6)	18.0	(1.4)
Germany	4.3	(1.4)	19.1	(2.7)	19.6	(2.5)	59.3	(3.2)	21.1	(2.3)	17.7	(2.7)	28.7	(3.1)	34.7	(3.3)	18.9	(3.0)
Ireland	9.5	(1.1)	11.0	(1.7)	41.5	(1.4)	43.3	(1.5)	15.2	(1.0)	21.9	(1.6)	34.7	(2.1)	32.0	(1.9)	11.5	(1.1)
Italy	1.3	(0.5)	11.3	(2.0)	59.0	(1.8)	34.7	(1.7)	6.3	(0.9)	23.2	(1.9)	30.1	(2.3)	35.1	(2.9)	11.7	(1.9)
Japan	c	c	c	c	16.0	(1.3)	54.4	(1.6)	29.6	(1.6)	18.6	(1.6)	43.2	(2.0)	28.9	(2.5)	9.3	(1.2)
Korea	1.1	(0.6)	2.7	(1.1)	31.9	(2.4)	54.2	(2.6)	13.9	(1.6)	16.2	(2.1)	34.4	(2.9)	36.2	(3.2)	13.3	(2.1)
Netherlands	4.0	(1.5)	25.0	(2.9)	55.1	(3.4)	31.1	(3.1)	13.8	(2.4)	28.4	(4.0)	29.7	(4.5)	24.7	(3.6)	17.2	(3.2)
Norway	0.8	(0.5)	15.5	(2.2)	48.5	(2.9)	38.9	(2.6)	12.6	(1.6)	16.9	(2.3)	37.7	(3.1)	32.8	(3.2)	12.5	(2.1)
Poland	c	c	c	c	9.5	(0.9)	70.2	(1.2)	20.3	(1.0)	30.2	(1.5)	24.7	(1.5)	35.4	(1.4)	9.8	(1.0)
Slovak Republic	1.6	(0.5)	1.1	(0.5)	15.3	(1.3)	71.1	(1.9)	13.4	(1.5)	38.0	(2.5)	24.2	(1.7)	30.0	(2.2)	7.7	(1.2)
Spain	9.0	(1.3)	5.4	(0.9)	58.3	(1.8)	25.2	(1.6)	16.4	(1.6)	20.1	(2.3)	34.3	(2.3)	24.4	(2.1)	21.2	(1.8)
Sweden	1.0	(0.8)	25.6	(2.7)	43.3	(3.6)	41.9	(3.3)	14.2	(2.2)	19.9	(3.0)	30.6	(3.4)	34.1	(3.6)	15.4	(3.2)
United States	2.4	(0.8)	17.7	(2.6)	26.5	(3.0)	61.5	(3.2)	11.9	(1.7)	25.4	(2.5)	30.9	(3.6)	25.8	(3.4)	17.9	(2.9)
Sub-national entities																		
Flanders (Belgium)	3.5	(1.1)	9.1	(1.7)	31.4	(2.7)	49.6	(3.0)	18.9	(2.4)	25.6	(3.8)	32.2	(4.1)	30.4	(3.9)	11.8	(2.2)
England (UK)	6.9	(1.9)	11.9	(2.8)	43.6	(3.1)	32.6	(3.4)	23.8	(3.2)	18.2	(3.4)	31.7	(3.8)	30.1	(3.6)	20.0	(3.1)
Northern Ireland (UK)	3.7	(2.4)	1.1	(1.1)	65.6	(5.3)	27.0	(5.1)	7.4	(2.7)	15.6	(7.3)	34.9	(8.5)	36.0	(9.3)	13.5	(6.3)
England/N. Ireland (UK)	6.8	(1.9)	11.8	(2.7)	44.0	(3.1)	32.5	(3.3)	23.5	(3.2)	18.2	(3.4)	31.7	(3.7)	30.2	(3.5)	19.9	(3.0)
Average	5.0	(0.2)	12.9	(0.4)	34.0	(0.5)	48.9	(0.5)	17.1	(0.4)	22.9	(0.5)	30.6	(0.6)	31.8	(0.6)	14.8	(0.5)
Partners																		
Cyprus[1]	6.9	(1.0)	7.4	(1.0)	10.7	(1.1)	54.4	(1.6)	34.9	(1.4)	39.0	(1.8)	42.6	(1.8)	12.7	(1.2)	5.6	(1.0)

1. See notes on page 408.

Note: Native language refers to whether the first or second language learned as a child is the same as the language of assessment, and not whether the language has official status. Foreign language refers to whether the first or second language learned as a child is not the same as the language of assessment. Thus in some cases, foreign language might refer to minority languages in which the assessment was not administered. Lower than upper secondary includes ISCED 1, 2 and 3C short. Upper secondary education includes ISCED 3A, 3B, 3C long and 4. Tertiary includes ISCED 5A, 5B and 6. Skilled occupations include: legislators, senior officials and managers; professionals; technicians and associate professionals. Semi-skilled white-collar occupations include: clerks; service workers and shop and market sales workers. Semi-skilled blue-collar occupations include: skilled agricultural and fishery workers; craft and related trades workers; plant and machine operators and assemblers. The proportions by category for each variable may not sum up to 100% due to the existence of missing data.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932899472

[Part 1/2]

Table B2.5d Percentage of adults who took the computer-based assessment

OECD	Age										Immigrant/language status			
	16-24 year-olds		25-34 year-olds		35-44 year-olds		45-54 year-olds		55-65 year-olds		Native born, native language		Native born, foreign language	
	%	S.E	%	S.E	%	S.E	%	S.E	%	S.E	%	S.E	%	S.E
National entities														
Australia	21.9	(0.3)	23.5	(0.4)	21.8	(0.3)	18.8	(0.3)	14.0	(0.3)	70.7	(0.9)	3.5	(0.4)
Austria	20.1	(0.3)	22.1	(0.4)	23.9	(0.5)	22.4	(0.5)	11.6	(0.4)	84.3	(0.5)	2.4	(0.2)
Canada	19.4	(0.1)	22.2	(0.2)	20.3	(0.2)	21.3	(0.2)	16.7	(0.2)	71.5	(0.4)	5.4	(0.3)
Czech Republic	20.5	(0.5)	25.7	(0.7)	24.5	(0.6)	15.3	(0.7)	14.0	(0.5)	96.0	(0.5)	0.1	(0.1)
Denmark	18.6	(0.2)	18.3	(0.2)	22.6	(0.3)	21.3	(0.2)	19.1	(0.2)	90.3	(0.3)	0.9	(0.1)
Estonia	23.9	(0.3)	26.5	(0.4)	22.4	(0.5)	16.5	(0.4)	10.7	(0.3)	88.3	(0.4)	1.9	(0.2)
Finland	19.9	(0.2)	22.4	(0.4)	19.9	(0.4)	20.3	(0.4)	17.5	(0.4)	94.5	(0.3)	1.3	(0.2)
France	22.8	(0.3)	22.7	(0.3)	22.2	(0.3)	18.4	(0.3)	13.9	(0.3)	89.3	(0.3)	2.1	(0.2)
Germany	18.8	(0.2)	20.3	(0.3)	22.8	(0.4)	23.2	(0.4)	14.9	(0.4)	86.8	(0.6)	1.9	(0.2)
Ireland	22.8	(0.5)	28.7	(0.5)	24.9	(0.5)	14.9	(0.5)	8.7	(0.4)	78.2	(0.7)	0.4	(0.1)
Italy	21.9	(0.6)	25.3	(0.7)	26.3	(0.8)	17.2	(0.8)	9.4	(0.6)	90.6	(0.7)	1.5	(0.4)
Japan	16.9	(0.4)	23.1	(0.5)	27.0	(0.6)	19.1	(0.5)	14.0	(0.6)	c	c	c	c
Korea	22.2	(0.3)	25.9	(0.4)	28.7	(0.3)	17.1	(0.4)	6.1	(0.2)	98.6	(0.2)	0.2	(0.1)
Netherlands	18.3	(0.3)	19.6	(0.3)	21.8	(0.4)	21.9	(0.4)	18.4	(0.3)	88.7	(0.4)	1.0	(0.2)
Norway	20.2	(0.2)	20.6	(0.3)	22.3	(0.3)	20.8	(0.4)	16.2	(0.3)	87.9	(0.5)	1.1	(0.2)
Poland	28.1	(0.4)	33.1	(0.7)	19.0	(0.7)	12.3	(0.6)	7.4	(0.5)	c	c	c	c
Slovak Republic	24.2	(0.4)	28.3	(0.4)	22.1	(0.5)	16.0	(0.6)	9.4	(0.4)	94.8	(0.5)	3.8	(0.4)
Spain	16.4	(0.3)	26.4	(0.6)	27.8	(0.6)	19.4	(0.4)	10.0	(0.4)	84.5	(0.5)	2.6	(0.3)
Sweden	20.1	(0.3)	19.5	(0.3)	21.1	(0.4)	20.1	(0.4)	19.2	(0.3)	83.7	(0.4)	2.4	(0.3)
United States	20.3	(0.5)	21.8	(0.4)	20.5	(0.3)	20.9	(0.4)	16.5	(0.4)	85.0	(0.7)	3.8	(0.5)
Sub-national entities														
Flanders (Belgium)	18.0	(0.2)	19.9	(0.3)	21.2	(0.3)	22.9	(0.4)	18.0	(0.3)	90.2	(0.5)	3.3	(0.3)
England (UK)	19.6	(0.2)	21.8	(0.2)	22.2	(0.2)	20.5	(0.3)	15.9	(0.3)	84.8	(0.7)	1.6	(0.2)
Northern Ireland (UK)	23.1	(0.3)	23.3	(0.4)	22.5	(0.3)	18.6	(0.4)	12.5	(0.5)	92.1	(0.6)	0.7	(0.2)
England/N. Ireland (UK)	19.7	(0.2)	21.8	(0.2)	22.2	(0.2)	20.5	(0.3)	15.8	(0.3)	85.0	(0.7)	1.6	(0.2)
Average	20.7	(0.1)	23.5	(0.1)	23.0	(0.1)	19.1	(0.1)	13.7	(0.1)	86.9	(0.1)	2.1	(0.1)
Partners														
Cyprus[1]	32.0	(0.9)	29.2	(0.9)	19.7	(0.8)	13.0	(0.7)	6.2	(0.5)	86.5	(0.8)	0.2	(0.1)

[Part 2/2]

Table B2.5d Percentage of adults who took the computer-based assessment

OECD	Immigrant/language status				Educational attainment						Occupational status							
	Foreign born, native language		Foreign born, foreign language		Less than upper secondary		Upper secondary, post-secondary non-tertiary		Tertiary		Skilled		Semi-skilled white-collar		Semi-skilled blue-collar		Elementary	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
National entities																		
Australia	14.1	(0.6)	11.7	(0.6)	22.3	(0.6)	40.3	(0.6)	37.4	(0.5)	47.6	(0.9)	28.4	(0.7)	15.6	(0.6)	8.5	(0.5)
Austria	4.7	(0.4)	8.6	(0.5)	16.7	(0.4)	63.0	(0.5)	20.3	(0.3)	46.6	(1.0)	30.0	(0.8)	18.3	(0.7)	5.2	(0.4)
Canada	8.0	(0.3)	15.0	(0.3)	11.7	(0.2)	38.3	(0.4)	49.9	(0.4)	54.2	(0.5)	25.2	(0.5)	13.9	(0.4)	6.7	(0.3)
Czech Republic	1.5	(0.4)	2.1	(0.3)	12.7	(0.4)	65.4	(0.5)	21.9	(0.4)	40.6	(1.2)	24.6	(0.9)	28.1	(1.0)	6.7	(0.5)
Denmark	1.7	(0.2)	7.1	(0.2)	22.5	(0.5)	40.4	(0.6)	37.1	(0.4)	46.0	(0.7)	27.9	(0.6)	15.7	(0.5)	10.4	(0.5)
Estonia	8.7	(0.3)	1.1	(0.2)	16.4	(0.5)	41.7	(0.7)	41.9	(0.7)	49.2	(0.7)	20.0	(0.6)	22.8	(0.6)	8.0	(0.4)
Finland	1.3	(0.2)	1.4	(0.2)	15.8	(0.5)	42.6	(0.6)	41.6	(0.5)	42.4	(0.6)	29.3	(0.6)	20.5	(0.6)	7.8	(0.5)
France	4.0	(0.2)	4.5	(0.2)	19.4	(0.5)	47.1	(0.5)	33.5	(0.3)	45.8	(0.6)	26.9	(0.6)	19.1	(0.6)	8.2	(0.4)
Germany	2.9	(0.3)	8.4	(0.5)	15.4	(0.4)	51.8	(0.8)	32.8	(0.7)	41.2	(0.8)	31.8	(0.7)	20.8	(0.6)	6.3	(0.4)
Ireland	13.3	(0.6)	8.1	(0.5)	17.3	(0.5)	41.7	(0.6)	41.0	(0.5)	42.0	(0.9)	34.7	(0.8)	16.1	(0.8)	7.2	(0.5)
Italy	2.5	(0.4)	5.4	(0.5)	38.1	(0.9)	43.4	(0.7)	18.5	(0.4)	40.0	(1.1)	32.2	(1.1)	20.9	(1.2)	7.0	(0.6)
Japan	c	c	c	c	9.7	(0.5)	39.2	(0.7)	51.1	(0.5)	42.4	(1.1)	37.8	(1.0)	15.5	(0.8)	4.3	(0.4)
Korea	0.6	(0.1)	0.6	(0.1)	10.4	(0.5)	44.1	(0.6)	45.5	(0.3)	34.5	(0.8)	42.5	(1.0)	15.4	(0.6)	7.6	(0.5)
Netherlands	3.3	(0.4)	6.9	(0.4)	26.9	(0.7)	40.0	(0.8)	33.1	(0.5)	52.5	(0.7)	29.6	(0.7)	10.0	(0.4)	7.9	(0.4)
Norway	1.2	(0.2)	9.7	(0.5)	24.2	(0.6)	38.3	(0.6)	37.5	(0.5)	47.6	(0.7)	33.6	(0.7)	14.5	(0.6)	4.3	(0.3)
Poland	c	c	c	c	12.7	(0.4)	48.4	(0.9)	38.9	(0.9)	46.5	(1.1)	25.6	(0.9)	21.6	(0.8)	6.3	(0.4)
Slovak Republic	0.6	(0.1)	0.7	(0.2)	12.5	(0.5)	61.1	(0.8)	26.5	(0.8)	47.9	(1.0)	23.7	(0.9)	23.0	(0.9)	5.4	(0.5)
Spain	9.0	(0.4)	3.7	(0.3)	33.6	(0.5)	27.4	(0.4)	39.1	(0.4)	37.2	(1.0)	34.4	(0.9)	16.8	(0.7)	11.6	(0.5)
Sweden	2.1	(0.2)	11.8	(0.3)	20.3	(0.4)	49.5	(0.6)	30.2	(0.5)	45.2	(0.6)	29.9	(0.7)	19.6	(0.6)	5.2	(0.4)
United States	3.8	(0.3)	7.5	(0.5)	10.4	(0.3)	49.2	(0.6)	40.4	(0.6)	47.9	(0.9)	31.3	(0.8)	13.7	(0.7)	7.1	(0.5)
Sub-national entities																		
Flanders (Belgium)	3.1	(0.3)	2.6	(0.2)	15.1	(0.5)	44.7	(0.8)	40.1	(0.7)	50.6	(0.9)	26.0	(0.7)	16.2	(0.6)	7.2	(0.5)
England (UK)	5.8	(0.4)	7.4	(0.5)	19.2	(0.7)	41.3	(0.8)	39.2	(0.7)	40.6	(0.8)	36.2	(0.8)	14.1	(0.6)	9.1	(0.5)
Northern Ireland (UK)	4.5	(0.4)	2.8	(0.4)	24.7	(0.8)	40.4	(0.9)	34.8	(0.8)	38.1	(1.1)	38.9	(1.1)	15.7	(0.9)	7.2	(0.6)
England/N. Ireland (UK)	5.8	(0.4)	7.2	(0.5)	19.4	(0.7)	41.3	(0.8)	39.1	(0.7)	40.5	(0.8)	36.3	(0.8)	14.1	(0.6)	9.1	(0.5)
Average	4.6	(0.1)	6.2	(0.1)	18.3	(0.1)	45.4	(0.1)	36.2	(0.1)	44.9	(0.2)	30.1	(0.2)	17.8	(0.2)	7.2	(0.1)
Partners																		
Cyprus[1]	7.9	(0.6)	5.4	(0.5)	13.8	(0.5)	45.5	(0.8)	40.7	(0.8)	47.4	(1.2)	37.4	(1.4)	11.5	(0.9)	3.7	(0.6)

1. See notes on page 408.

Note: Native language refers to whether the first or second language learned as a child is the same as the language of assessment, and not whether the language has official status. Foreign language refers to whether the first or second language learned as a child is not the same as the language of assessment. Thus in some cases, foreign language might refer to minority languages in which the assessment was not administered. Lower than upper secondary includes ISCED 1, 2 and 3C short. Upper secondary education includes ISCED 3A, 3B, 3C long and 4. Tertiary includes ISCED 5A, 5B and 6. Skilled occupations include: legislators, senior officials and managers; professionals; technicians and associate professionals. Semi-skilled white-collar occupations include: clerks; service workers and shop and market sales workers. Semi-skilled blue-collar occupations include: skilled agricultural and fishery workers; craft and related trades workers; plant and machine operators and assemblers. The proportions by category for each variable may not sum up to 100% due to the existence of missing data.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932899491

[Part 1/2]

Table B2.5e Literacy and numeracy mean scores, by experience with computers and the computer-based assessment

	Literacy score							
	Adults with no computer experience		Adults who failed ICT core		Adults who opted out of taking the computer-based assessment		Adults who took the computer-based assessment	
OECD	Mean	S.E	Mean	S.E	Mean	S.E	Mean	S.E
National entities								
Australia	204.1	(4.8)	246.9	(6.0)	266.4	(2.2)	289.0	(0.9)
Austria	233.6	(3.0)	238.1	(3.8)	258.3	(1.9)	277.6	(0.8)
Canada	214.5	(2.9)	245.9	(3.3)	257.3	(3.2)	280.4	(0.6)
Czech Republic	245.9	(3.1)	269.6	(5.6)	275.0	(2.7)	277.9	(1.1)
Denmark	198.8	(4.9)	224.3	(3.2)	234.1	(2.7)	278.5	(0.7)
Estonia	243.5	(2.0)	262.7	(3.5)	280.0	(1.8)	280.3	(0.8)
Finland	222.7	(5.0)	234.8	(4.3)	269.0	(2.5)	296.1	(0.7)
France	215.7	(1.9)	243.7	(2.9)	263.5	(2.1)	270.5	(0.7)
Germany	227.4	(3.3)	246.3	(4.6)	256.0	(4.2)	276.1	(1.0)
Ireland	227.2	(2.7)	234.3	(5.3)	262.1	(2.0)	275.9	(1.0)
Italy	225.5	(2.4)	220.1	(6.8)	255.1	(2.3)	261.2	(1.4)
Japan	255.5	(2.6)	298.4	(2.0)	292.9	(1.8)	303.5	(0.8)
Korea	231.8	(2.0)	265.4	(2.0)	266.2	(3.1)	283.1	(0.7)
Netherlands	213.4	(5.6)	237.3	(5.4)	256.1	(3.9)	289.9	(0.7)
Norway	222.5	(7.4)	229.0	(4.3)	259.6	(3.0)	284.1	(0.6)
Poland	233.3	(1.9)	256.3	(2.9)	270.4	(1.9)	279.7	(1.0)
Slovak Republic	249.3	(1.5)	252.8	(5.8)	277.6	(1.8)	282.4	(0.8)
Spain	208.5	(2.1)	231.9	(3.7)	255.4	(2.6)	264.3	(0.8)
Sweden	206.3	(6.9)	202.6	(4.7)	243.3	(3.5)	287.1	(0.7)
United States	199.8	(4.2)	230.5	(4.8)	247.3	(3.1)	278.2	(1.0)
Sub-national entities								
Flanders (Belgium)	225.1	(2.9)	242.2	(4.3)	261.6	(3.3)	282.5	(1.0)
England (UK)	223.7	(4.1)	240.0	(4.5)	266.9	(4.3)	277.6	(1.2)
Northern Ireland (UK)	238.5	(4.2)	250.4	(5.8)	259.2	(5.7)	274.1	(1.9)
England/N. Ireland (UK)	224.8	(3.8)	240.3	(4.4)	266.7	(4.3)	277.5	(1.1)
Average	224.0	(0.9)	243.3	(1.0)	262.5	(0.6)	280.7	(0.2)
Partners								
Cyprus[1]	257.4	(1.6)	271.9	(6.2)	284.0	(2.0)	267.2	(1.0)

[Part 2/2]

Table B2.5e Literacy and numeracy mean scores, by experience with computers and the computer-based assessment

	Numeracy score							
	Adults with no computer experience		Adults who failed ICT core		Adults who opted out of taking the computer-based assessment		Adults who took the computer-based assessment	
OECD	Mean	S.E	Mean	S.E	Mean	S.E	Mean	S.E
National entities								
Australia	183.6	(5.1)	221.1	(6.0)	243.2	(2.5)	279.2	(0.9)
Austria	232.0	(2.8)	234.2	(4.9)	251.7	(1.9)	286.6	(1.0)
Canada	194.1	(2.9)	226.7	(3.4)	234.6	(2.9)	275.0	(0.6)
Czech Republic	239.0	(2.9)	248.1	(6.6)	265.4	(2.8)	283.3	(1.0)
Denmark	218.1	(5.0)	225.6	(3.2)	238.1	(2.9)	286.3	(0.8)
Estonia	235.3	(2.3)	245.5	(3.7)	265.0	(1.7)	281.8	(0.7)
Finland	223.5	(5.2)	221.1	(4.4)	252.7	(2.5)	292.4	(0.8)
France	192.9	(2.5)	216.8	(2.5)	236.4	(2.0)	269.7	(0.7)
Germany	212.7	(3.9)	224.9	(4.8)	245.4	(4.6)	281.7	(0.9)
Ireland	206.5	(3.4)	218.4	(5.9)	242.5	(2.0)	269.0	(1.1)
Italy	212.1	(2.2)	220.5	(7.7)	245.4	(2.3)	263.5	(1.3)
Japan	244.9	(2.5)	285.3	(2.5)	282.6	(1.9)	297.2	(0.9)
Korea	216.5	(2.2)	247.0	(2.1)	243.2	(2.5)	277.5	(0.9)
Netherlands	194.0	(5.5)	230.2	(5.6)	248.1	(4.5)	287.2	(0.7)
Norway	211.9	(9.4)	212.1	(5.0)	245.5	(3.4)	286.3	(0.8)
Poland	224.1	(2.3)	239.5	(3.0)	261.4	(1.8)	275.5	(1.1)
Slovak Republic	242.0	(1.8)	258.8	(5.9)	273.7	(2.2)	288.6	(0.9)
Spain	193.7	(2.0)	220.2	(3.3)	240.0	(2.1)	262.8	(0.7)
Sweden	201.7	(7.3)	185.3	(5.0)	234.0	(3.7)	288.5	(0.8)
United States	171.5	(4.4)	199.2	(5.2)	219.4	(3.6)	263.6	(1.1)
Sub-national entities								
Flanders (Belgium)	225.7	(3.0)	229.7	(4.7)	253.2	(3.0)	289.3	(0.8)
England (UK)	195.1	(4.6)	208.4	(5.1)	235.3	(4.4)	270.4	(1.2)
Northern Ireland (UK)	213.3	(4.6)	223.7	(6.1)	233.4	(6.3)	268.3	(1.7)
England/N. Ireland (UK)	196.5	(4.3)	208.9	(4.9)	235.2	(4.3)	270.3	(1.1)
Average	212.4	(0.9)	228.1	(1.1)	248.0	(0.6)	279.8	(0.2)
Partners								
Cyprus[1]	240.8	(1.7)	242.6	(7.1)	269.2	(1.8)	273.6	(1.1)

1. See notes on page 408.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932899510

[Part 1/3]

Table B2.5f Percentage of adults at each level of engagement in ICT-related practices in everyday life, by experience with computers and the computer-based assessment

OECD	Adults who took the computer-based assessment											
	No engagement in ICT		Almost never		Rarely		Sometimes		Frequently		Almost every day	
	%	S.E	%	S.E	%	S.E	%	S.E	%	S.E	%	S.E
National entities												
Australia	0.3	(0.1)	14.8	(0.5)	19.2	(0.7)	20.8	(0.8)	23.1	(0.6)	21.7	(0.7)
Austria	0.6	(0.2)	20.7	(0.7)	20.0	(0.8)	20.9	(0.8)	20.3	(0.7)	17.5	(0.6)
Canada	0.4	(0.1)	13.4	(0.4)	18.7	(0.5)	22.2	(0.4)	21.8	(0.5)	23.6	(0.5)
Czech Republic	0.2	(0.1)	10.2	(0.8)	19.0	(0.7)	20.6	(1.1)	22.4	(1.0)	27.6	(1.3)
Denmark	0.2	(0.1)	10.4	(0.4)	15.6	(0.5)	21.1	(0.6)	24.2	(0.6)	28.5	(0.8)
Estonia	0.2	(0.1)	14.3	(0.5)	21.5	(0.5)	20.8	(0.7)	21.3	(0.6)	21.7	(0.6)
Finland	0.2	(0.1)	13.7	(0.5)	23.1	(0.6)	25.5	(0.6)	21.6	(0.6)	15.9	(0.5)
France	0.0	(0.0)	13.5	(0.5)	22.0	(0.5)	23.6	(0.5)	21.1	(0.6)	19.8	(0.6)
Germany	0.4	(0.1)	17.5	(0.6)	19.7	(0.7)	21.0	(0.7)	22.2	(0.7)	19.2	(0.7)
Ireland	0.4	(0.1)	19.3	(0.9)	22.0	(0.8)	19.5	(0.8)	19.2	(0.8)	19.5	(0.8)
Italy	0.9	(0.3)	26.8	(1.3)	18.6	(0.9)	16.3	(0.8)	18.3	(0.9)	19.2	(1.0)
Japan	1.8	(0.3)	39.3	(1.2)	28.6	(1.0)	15.1	(0.7)	8.8	(0.5)	6.4	(0.5)
Korea	1.5	(0.2)	32.3	(0.8)	20.4	(0.7)	16.1	(0.5)	14.1	(0.6)	15.5	(0.6)
Netherlands	0.3	(0.1)	10.3	(0.4)	16.7	(0.6)	21.4	(0.7)	26.2	(0.8)	25.1	(0.7)
Norway	0.1	(0.1)	11.3	(0.5)	19.2	(0.6)	23.5	(0.7)	25.1	(0.7)	20.7	(0.6)
Poland	0.8	(0.2)	18.2	(0.8)	17.2	(0.8)	18.9	(0.8)	21.8	(0.8)	23.2	(0.7)
Slovak Republic	0.5	(0.1)	17.3	(0.7)	17.7	(0.8)	17.0	(0.7)	19.9	(0.7)	27.7	(0.9)
Spain	0.6	(0.1)	20.9	(0.7)	20.5	(0.8)	19.2	(0.7)	18.1	(0.7)	20.6	(0.8)
Sweden	0.1	(0.1)	14.5	(0.6)	22.0	(0.6)	23.9	(0.7)	22.5	(0.7)	16.9	(0.6)
United States	0.5	(0.1)	14.8	(1.0)	19.0	(0.7)	20.4	(0.8)	20.8	(0.7)	24.6	(0.7)
Sub-national entities												
Flanders (Belgium)	0.4	(0.1)	15.3	(0.6)	21.4	(0.6)	20.9	(0.6)	22.1	(0.7)	19.8	(0.6)
England (UK)	0.4	(0.1)	18.6	(0.8)	20.5	(0.6)	20.8	(0.7)	19.4	(0.8)	20.4	(0.9)
Northern Ireland (UK)	0.9	(0.2)	24.5	(1.0)	22.3	(0.9)	19.4	(0.8)	16.4	(0.8)	16.6	(0.9)
England/N. Ireland (UK)	0.4	(0.1)	18.8	(0.8)	20.5	(0.6)	20.8	(0.7)	19.3	(0.7)	20.3	(0.8)
Average	0.5	(0.0)	17.6	(0.2)	20.1	(0.2)	20.4	(0.2)	20.6	(0.2)	20.7	(0.2)
Partners												
Cyprus[1]	1.5	(0.3)	28.3	(1.1)	20.5	(0.9)	16.4	(1.0)	15.3	(1.0)	18.0	(1.1)

[Part 2/3]

Table B2.5f Percentage of adults at each level of engagement in ICT-related practices in everyday life, by experience with computers and the computer-based assessment

OECD	Adults who failed ICT core											
	No engagement in ICT		Almost never		Rarely		Sometimes		Frequently		Almost every day	
	%	S.E	%	S.E	%	S.E	%	S.E	%	S.E	%	S.E
National entities												
Australia	2.5	(1.4)	26.3	(4.2)	28.5	(5.0)	16.1	(3.7)	14.3	(2.8)	12.2	(2.8)
Austria	3.9	(1.8)	43.6	(4.9)	17.7	(3.3)	8.8	(2.6)	11.7	(2.8)	14.3	(3.3)
Canada	2.1	(0.6)	32.5	(2.3)	18.7	(1.8)	17.1	(1.8)	15.2	(1.8)	14.4	(1.6)
Czech Republic	1.9	(2.0)	30.8	(6.8)	24.7	(6.9)	17.0	(5.5)	21.3	(6.1)	4.2	(1.6)
Denmark	2.5	(0.8)	36.8	(3.0)	14.1	(1.9)	13.1	(1.7)	16.4	(2.0)	17.2	(2.1)
Estonia	1.7	(0.9)	47.1	(3.0)	24.3	(2.4)	11.2	(1.9)	7.5	(1.9)	8.1	(1.8)
Finland	1.7	(1.0)	36.5	(3.4)	22.5	(3.3)	15.6	(2.8)	13.5	(2.4)	10.1	(2.2)
France	0.0	(0.0)	37.9	(2.4)	26.2	(2.2)	18.1	(2.3)	8.1	(1.2)	9.6	(1.5)
Germany	8.2	(3.1)	45.5	(4.4)	16.2	(3.8)	8.6	(2.2)	12.9	(3.6)	8.8	(2.6)
Ireland	0.6	(0.5)	30.4	(3.8)	22.9	(3.5)	15.6	(2.9)	17.5	(2.9)	13.0	(2.8)
Italy	6.8	(2.9)	52.7	(5.4)	14.7	(3.3)	6.7	(2.8)	8.0	(2.9)	11.2	(3.9)
Japan	4.1	(1.1)	52.8	(2.2)	20.8	(2.1)	11.4	(1.8)	6.9	(1.7)	3.9	(1.0)
Korea	8.5	(1.4)	53.4	(2.8)	15.3	(1.8)	7.3	(1.3)	6.7	(1.4)	8.9	(1.6)
Netherlands	1.2	(0.8)	40.1	(4.3)	19.5	(3.5)	15.5	(3.0)	17.0	(3.3)	6.6	(1.9)
Norway	0.0	(0.0)	25.4	(2.9)	23.1	(2.4)	18.8	(3.0)	18.9	(2.7)	13.7	(2.1)
Poland	3.4	(1.4)	38.3	(3.2)	19.6	(2.2)	15.2	(2.1)	12.8	(2.4)	10.8	(1.3)
Slovak Republic	2.4	(1.5)	32.6	(5.7)	12.5	(3.8)	21.3	(4.9)	11.0	(3.7)	20.2	(5.6)
Spain	6.2	(1.5)	42.9	(3.8)	22.4	(2.8)	13.1	(2.2)	9.0	(2.1)	6.3	(1.8)
Sweden	5.6	(2.0)	29.9	(3.7)	20.7	(3.4)	11.0	(2.7)	19.3	(3.4)	13.4	(2.3)
United States	3.3	(1.7)	35.9	(4.8)	19.0	(3.6)	15.3	(3.3)	6.9	(1.9)	19.6	(3.5)
Sub-national entities												
Flanders (Belgium)	3.7	(1.6)	42.4	(3.8)	21.3	(3.9)	13.5	(3.0)	12.3	(3.1)	6.8	(2.1)
England (UK)	1.3	(0.9)	38.2	(3.6)	23.3	(3.3)	13.8	(2.4)	14.6	(2.3)	8.7	(2.2)
Northern Ireland (UK)	2.0	(0.9)	52.9	(4.9)	24.8	(3.9)	8.7	(2.7)	3.3	(1.7)	8.2	(2.8)
England/N. Ireland (UK)	1.3	(0.8)	38.6	(3.5)	23.4	(3.2)	13.7	(2.3)	14.3	(2.3)	8.7	(2.2)
Average	3.3	(0.3)	38.7	(0.9)	20.4	(0.8)	13.8	(0.6)	12.8	(0.6)	11.0	(0.6)
Partners												
Cyprus[1]	5.9	(2.9)	31.2	(6.5)	26.6	(7.1)	15.6	(4.9)	7.8	(3.4)	12.8	(4.9)

1. See notes on page 408.

Source: Survey of Adult Skills (PIAAC) (2012).

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[Part 3/3]

Table B2.5f Percentage of adults at each level of engagement in ICT-related practices in everyday life, by experience with computers and the computer-based assessment

OECD	Adults who opted out of taking the computer-based assessment											
	No engagement in ICT		Almost never		Rarely		Sometimes		Frequently		Almost every day	
	%	S.E	%	S.E	%	S.E	%	S.E	%	S.E	%	S.E
National entities												
Australia	3.0	(0.9)	30.6	(2.0)	25.7	(2.0)	16.4	(1.5)	12.4	(1.6)	11.9	(1.8)
Austria	3.9	(1.4)	49.7	(3.0)	19.1	(2.5)	13.5	(1.9)	10.3	(1.8)	3.4	(1.1)
Canada	4.2	(0.9)	38.1	(2.2)	18.2	(2.0)	17.8	(2.0)	10.4	(1.7)	11.3	(1.6)
Czech Republic	0.4	(0.3)	33.1	(4.4)	19.8	(2.8)	18.2	(3.1)	16.7	(3.3)	11.8	(3.5)
Denmark	3.9	(1.3)	41.4	(2.9)	21.7	(2.7)	13.3	(1.8)	10.3	(1.6)	9.4	(1.5)
Estonia	2.9	(0.7)	44.9	(1.5)	24.5	(1.4)	11.9	(1.0)	8.7	(1.0)	7.1	(0.9)
Finland	3.0	(0.9)	57.9	(2.6)	22.8	(2.0)	8.4	(1.6)	6.4	(1.4)	1.6	(0.7)
France	0.0	(0.0)	36.0	(2.3)	28.8	(1.9)	15.9	(1.8)	10.8	(1.2)	8.6	(1.2)
Germany	8.1	(2.6)	57.3	(4.8)	17.6	(3.3)	7.5	(2.1)	3.6	(1.3)	5.9	(2.2)
Ireland	4.0	(1.2)	44.6	(2.6)	25.1	(2.0)	13.3	(1.6)	9.5	(1.4)	3.5	(0.8)
Italy	10.9	(1.9)	54.9	(2.9)	18.9	(2.5)	7.6	(1.5)	4.0	(1.1)	3.8	(1.2)
Japan	7.3	(1.6)	64.0	(2.2)	15.9	(1.8)	7.8	(1.0)	3.6	(1.0)	1.4	(0.6)
Korea	10.1	(2.2)	64.1	(3.9)	10.4	(1.8)	5.3	(1.5)	7.1	(2.4)	2.9	(0.9)
Netherlands	1.8	(1.1)	45.5	(4.4)	22.9	(3.7)	10.3	(2.2)	11.6	(2.8)	8.0	(2.4)
Norway	2.4	(1.0)	51.6	(3.7)	23.2	(3.1)	11.4	(2.4)	7.5	(2.1)	3.8	(1.5)
Poland	3.5	(0.6)	46.5	(2.0)	19.4	(1.6)	10.4	(1.2)	9.8	(1.0)	10.3	(1.1)
Slovak Republic	5.6	(1.3)	40.2	(2.6)	21.5	(2.3)	11.5	(1.7)	9.2	(1.8)	11.9	(1.9)
Spain	1.7	(0.8)	46.0	(3.4)	21.1	(2.7)	12.7	(2.0)	9.2	(2.2)	9.3	(2.1)
Sweden	6.1	(3.2)	48.8	(5.5)	17.0	(3.2)	15.4	(4.0)	4.6	(1.7)	7.9	(2.5)
United States	5.8	(2.6)	28.6	(5.0)	26.8	(4.5)	14.6	(3.7)	12.0	(3.2)	12.3	(3.1)
Sub-national entities												
Flanders (Belgium)	3.8	(1.5)	51.9	(4.3)	17.2	(3.2)	15.2	(2.7)	7.3	(2.1)	4.6	(1.5)
England (UK)	3.0	(1.3)	37.8	(4.9)	29.3	(4.4)	14.7	(4.5)	10.6	(3.8)	4.5	(2.1)
Northern Ireland (UK)	12.9	(6.0)	41.5	(9.9)	24.7	(9.7)	3.4	(2.6)	15.6	(11.2)	1.9	(1.8)
England/N. Ireland (UK)	3.2	(1.3)	37.8	(4.8)	29.2	(4.3)	14.6	(4.5)	10.7	(3.7)	4.5	(2.0)
Average	4.3	(0.3)	46.1	(0.8)	21.2	(0.6)	12.4	(0.5)	8.9	(0.5)	7.1	(0.4)
Partners												
Cyprus[1]	3.4	(0.8)	44.6	(2.3)	18.4	(1.6)	15.6	(1.6)	8.3	(1.2)	9.6	(1.2)

1. See notes on page 408.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932899529



[Part 1/3]

Table B2.5g Percentage of adults at each level of engagement in ICT-related practices at work, by experience with computers and the computer-based assessment

OECD	Adults who took the computer-based assessment											
	No engagement in ICT		Almost never		Rarely		Sometimes		Frequently		Almost every day	
	%	S.E	%	S.E	%	S.E	%	S.E	%	S.E	%	S.E
National entities												
Australia	5.3	(0.4)	16.7	(0.8)	15.7	(0.7)	17.5	(0.7)	20.4	(0.7)	24.2	(0.8)
Austria	6.2	(0.5)	18.2	(0.8)	19.4	(0.8)	20.3	(0.8)	20.4	(0.8)	15.4	(0.8)
Canada	6.7	(0.3)	16.6	(0.5)	17.0	(0.5)	17.5	(0.5)	19.5	(0.6)	22.7	(0.6)
Czech Republic	5.7	(0.7)	13.3	(0.9)	16.8	(1.2)	21.5	(1.1)	23.3	(1.5)	19.5	(1.4)
Denmark	4.9	(0.4)	16.5	(0.6)	20.6	(0.6)	19.5	(0.6)	17.4	(0.6)	21.1	(0.6)
Estonia	4.9	(0.4)	14.3	(0.6)	16.7	(0.7)	18.5	(0.7)	20.2	(0.6)	25.4	(0.7)
Finland	3.9	(0.4)	19.0	(0.7)	25.5	(0.8)	21.1	(0.7)	17.6	(0.8)	13.0	(0.7)
France	3.1	(0.3)	19.3	(0.6)	20.3	(0.6)	20.1	(0.6)	22.5	(0.7)	14.8	(0.5)
Germany	7.1	(0.5)	17.0	(0.7)	19.3	(0.8)	21.4	(0.7)	21.9	(0.8)	13.3	(0.7)
Ireland	5.8	(0.6)	16.6	(1.0)	17.5	(1.0)	17.5	(0.8)	17.8	(0.9)	24.8	(1.2)
Italy	5.9	(0.9)	14.3	(1.1)	17.7	(1.1)	17.2	(1.2)	23.0	(1.2)	21.9	(1.1)
Japan	5.6	(0.5)	25.9	(1.1)	20.4	(0.9)	18.3	(0.8)	18.7	(0.9)	11.2	(0.6)
Korea	4.7	(0.4)	23.8	(0.8)	17.9	(0.8)	14.4	(0.7)	13.7	(0.8)	25.4	(0.9)
Netherlands	4.3	(0.4)	14.1	(0.6)	17.8	(0.7)	21.7	(0.8)	24.2	(0.8)	17.9	(0.8)
Norway	3.3	(0.3)	18.3	(0.6)	21.6	(0.7)	21.7	(0.7)	18.7	(0.7)	16.3	(0.5)
Poland	5.0	(0.6)	17.6	(1.0)	18.0	(1.1)	18.6	(1.2)	22.0	(1.2)	18.9	(1.1)
Slovak Republic	4.9	(0.5)	15.8	(1.0)	16.8	(0.9)	20.2	(1.2)	20.4	(1.1)	22.0	(1.1)
Spain	8.1	(0.6)	16.5	(1.0)	16.1	(0.9)	19.4	(1.1)	21.1	(1.0)	18.8	(1.1)
Sweden	5.6	(0.5)	21.1	(0.7)	23.6	(0.8)	19.6	(0.7)	16.4	(0.8)	13.6	(0.6)
United States	5.7	(0.5)	19.2	(0.8)	16.5	(0.8)	16.1	(1.0)	18.0	(0.9)	24.6	(1.0)
Sub-national entities												
Flanders (Belgium)	5.6	(0.4)	13.1	(0.7)	19.2	(0.8)	22.5	(0.8)	22.7	(0.8)	16.9	(0.7)
England (UK)	5.5	(0.5)	14.8	(0.7)	16.3	(0.7)	18.5	(0.8)	21.6	(0.8)	23.2	(0.9)
Northern Ireland (UK)	6.9	(0.8)	17.3	(1.1)	17.3	(1.1)	17.8	(1.2)	20.7	(1.2)	20.0	(1.2)
England/N. Ireland (UK)	5.5	(0.5)	14.9	(0.7)	16.4	(0.7)	18.5	(0.8)	21.6	(0.8)	23.1	(0.8)
Average	5.4	(0.1)	17.4	(0.2)	18.7	(0.2)	19.2	(0.2)	20.1	(0.2)	19.3	(0.2)
Partners												
Cyprus[1]	7.4	(0.9)	22.8	(1.3)	19.9	(1.2)	19.5	(1.1)	15.9	(1.0)	14.5	(1.0)

[Part 2/3]

Table B2.5g Percentage of adults at each level of engagement in ICT-related practices at work, by experience with computers and the computer-based assessment

OECD	Adults who failed ICT core											
	No engagement in ICT		Almost never		Rarely		Sometimes		Frequently		Almost every day	
	%	S.E	%	S.E	%	S.E	%	S.E	%	S.E	%	S.E
National entities												
Australia	12.1	(5.9)	27.2	(5.2)	11.9	(2.8)	11.6	(3.6)	17.6	(3.8)	19.6	(5.0)
Austria	19.6	(4.7)	24.3	(6.0)	12.7	(4.1)	16.4	(4.2)	12.3	(3.7)	14.8	(3.9)
Canada	13.7	(2.4)	24.8	(2.7)	19.7	(2.4)	13.4	(2.3)	12.1	(2.1)	16.2	(2.4)
Czech Republic	12.8	(7.5)	27.0	(8.0)	8.1	(5.9)	30.4	(10.4)	7.2	(3.5)	14.5	(8.1)
Denmark	13.0	(2.7)	28.5	(4.2)	17.7	(3.4)	14.3	(3.0)	8.0	(2.0)	18.5	(3.0)
Estonia	14.4	(3.6)	37.3	(4.8)	16.0	(3.7)	7.3	(2.7)	11.1	(3.1)	13.9	(3.6)
Finland	8.5	(2.8)	36.6	(5.2)	23.8	(4.4)	14.7	(3.1)	8.0	(2.8)	8.3	(2.4)
France	4.9	(1.7)	29.8	(3.6)	25.8	(2.5)	21.4	(3.1)	12.0	(2.2)	6.1	(1.6)
Germany	21.8	(6.1)	32.0	(6.2)	17.8	(5.4)	7.0	(3.1)	6.5	(3.4)	14.9	(7.8)
Ireland	27.5	(5.3)	34.6	(5.7)	8.8	(3.0)	17.0	(5.0)	5.7	(2.4)	6.5	(2.4)
Italy	4.4	(3.3)	17.8	(6.9)	19.7	(7.8)	19.9	(10.2)	20.2	(8.6)	18.0	(6.7)
Japan	13.9	(2.4)	36.0	(2.8)	17.2	(2.2)	15.7	(2.4)	11.8	(2.2)	5.4	(1.2)
Korea	15.2	(2.5)	32.0	(3.6)	17.4	(3.1)	12.6	(2.5)	8.6	(1.9)	14.1	(2.7)
Netherlands	21.6	(6.2)	24.0	(4.7)	10.4	(4.2)	17.3	(4.8)	15.9	(5.1)	10.7	(3.3)
Norway	5.8	(2.2)	30.1	(4.2)	23.4	(4.5)	15.7	(3.7)	11.3	(2.7)	13.6	(3.1)
Poland	10.2	(2.6)	29.4	(4.3)	22.1	(3.9)	12.7	(3.4)	15.4	(3.2)	10.1	(2.3)
Slovak Republic	10.9	(4.9)	12.4	(4.8)	6.7	(3.9)	18.9	(5.9)	26.8	(6.6)	24.3	(7.7)
Spain	14.0	(3.1)	27.1	(5.0)	18.5	(3.6)	23.3	(4.0)	10.1	(3.3)	7.0	(2.7)
Sweden	9.2	(3.8)	34.9	(5.6)	22.2	(4.4)	14.1	(4.0)	7.2	(3.2)	12.4	(4.1)
United States	20.9	(5.6)	31.4	(6.1)	14.9	(4.5)	7.4	(2.5)	12.6	(3.1)	12.9	(3.7)
Sub-national entities												
Flanders (Belgium)	16.1	(5.7)	28.8	(6.5)	13.8	(4.9)	17.5	(5.8)	14.7	(5.0)	9.1	(4.0)
England (UK)	18.8	(5.2)	26.3	(4.3)	21.2	(4.8)	11.1	(3.5)	9.6	(3.3)	13.1	(3.8)
Northern Ireland (UK)	25.8	(7.0)	40.1	(7.5)	10.6	(5.4)	8.9	(3.3)	6.2	(2.6)	8.4	(3.2)
England/N. Ireland (UK)	19.0	(5.0)	26.8	(4.2)	20.8	(4.7)	11.0	(3.4)	9.4	(3.1)	12.9	(3.7)
Average	14.1	(1.0)	28.8	(1.2)	16.8	(0.9)	15.4	(1.1)	12.0	(0.9)	12.9	(1.0)
Partners												
Cyprus[1]	10.4	(4.4)	31.8	(6.3)	23.5	(6.9)	16.9	(5.8)	8.3	(3.7)	9.1	(4.5)

1. See notes on page 408.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932899548

[Part 3/3]

Table B2.5g Percentage of adults at each level of engagement in ICT-related practices at work, by experience with computers and the computer-based assessment

OECD	Adults who opted out of taking the computer-based assessment											
	No engagement in ICT		Almost never		Rarely		Sometimes		Frequently		Almost every day	
	%	S.E	%	S.E	%	S.E	%	S.E	%	S.E	%	S.E
National entities												
Australia	13.9	(2.2)	27.1	(2.7)	22.4	(2.9)	13.8	(2.0)	10.1	(1.5)	12.7	(2.2)
Austria	23.0	(3.7)	34.5	(3.9)	17.2	(3.0)	11.9	(2.3)	9.7	(2.1)	3.7	(1.4)
Canada	26.1	(2.9)	26.0	(2.7)	13.0	(2.7)	11.1	(1.9)	12.9	(2.2)	10.9	(1.7)
Czech Republic	20.2	(4.4)	23.1	(4.3)	17.1	(4.5)	14.9	(2.9)	14.2	(4.0)	10.7	(3.6)
Denmark	16.3	(2.7)	38.8	(3.9)	22.1	(3.7)	15.3	(2.9)	5.5	(1.7)	2.1	(1.2)
Estonia	13.1	(1.6)	22.3	(2.0)	24.1	(2.2)	17.0	(1.8)	13.1	(1.9)	10.3	(1.6)
Finland	10.6	(2.3)	48.9	(3.8)	23.2	(3.4)	8.5	(2.0)	5.0	(1.6)	3.7	(1.5)
France	8.9	(1.3)	35.2	(2.4)	20.3	(1.8)	16.1	(1.7)	12.9	(1.6)	6.7	(1.4)
Germany	27.3	(6.0)	27.0	(4.8)	16.8	(5.4)	14.3	(4.3)	6.8	(2.7)	7.9	(2.9)
Ireland	16.5	(2.6)	35.2	(3.3)	22.9	(2.7)	14.2	(2.0)	8.2	(1.8)	3.0	(0.9)
Italy	18.0	(2.6)	29.8	(3.5)	16.5	(3.0)	15.7	(2.8)	11.4	(2.4)	8.6	(2.4)
Japan	24.8	(2.8)	46.5	(2.6)	14.0	(1.9)	5.8	(1.0)	6.0	(1.5)	2.9	(0.9)
Korea	16.7	(3.5)	46.4	(5.4)	15.4	(3.4)	3.8	(1.7)	7.6	(3.4)	10.0	(3.3)
Netherlands	6.7	(3.1)	34.9	(6.0)	29.5	(5.2)	10.2	(3.7)	11.4	(4.4)	7.3	(3.0)
Norway	10.7	(3.2)	51.0	(4.6)	22.7	(3.9)	8.6	(3.2)	3.1	(1.6)	3.9	(1.7)
Poland	10.5	(1.6)	25.6	(2.6)	24.1	(2.7)	17.5	(2.3)	11.1	(1.5)	11.2	(2.0)
Slovak Republic	15.2	(2.4)	26.2	(3.1)	20.0	(3.1)	14.1	(2.8)	14.6	(2.4)	9.9	(2.1)
Spain	22.4	(4.0)	24.9	(4.6)	20.2	(3.6)	11.9	(2.8)	6.4	(2.0)	14.2	(3.1)
Sweden	16.3	(4.9)	37.2	(5.5)	27.0	(5.8)	5.6	(2.2)	7.8	(3.6)	6.2	(2.7)
United States	15.9	(4.7)	35.8	(5.3)	22.5	(3.9)	5.9	(2.2)	9.5	(3.3)	10.4	(3.2)
Sub-national entities												
Flanders (Belgium)	16.1	(4.5)	24.9	(5.2)	24.3	(5.6)	19.4	(5.2)	6.0	(2.9)	9.4	(3.4)
England (UK)	18.4	(4.6)	27.5	(5.4)	21.4	(5.5)	11.0	(3.4)	16.5	(4.8)	5.2	(2.8)
Northern Ireland (UK)	27.2	(8.7)	61.6	(9.2)	3.2	(2.8)	5.6	(3.1)	0.0	(0.0)	2.5	(2.6)
England/N. Ireland (UK)	18.5	(4.6)	28.0	(5.3)	21.1	(5.5)	11.0	(3.4)	16.3	(4.7)	5.2	(2.8)
Average	16.7	(0.8)	33.1	(0.9)	20.7	(0.9)	12.1	(0.6)	9.5	(0.6)	7.8	(0.5)
Partners												
Cyprus[1]	17.2	(2.1)	32.1	(2.5)	17.5	(2.0)	16.0	(1.9)	8.5	(1.4)	8.8	(1.6)

1. See notes on page 408.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932899548

[Part 1/1]

Relationship between literacy proficiency and taking the paper-based assessment

Table B2.6 *OLS regression weights*

OECD	Adjusted		
	ß	S.E	p-value
National entities			
Australia	-8.3	(2.3)	0.000
Austria	-4.5	(1.9)	0.000
Canada	-1.8	(1.6)	0.323
Czech Republic	2.5	(2.2)	0.013
Denmark	-9.9	(2.0)	0.000
Estonia	9.0	(1.8)	0.000
Finland	5.6	(2.1)	0.003
France	10.9	(1.4)	0.000
Germany	-4.4	(2.6)	0.010
Ireland	8.2	(1.8)	0.000
Italy	-1.1	(2.3)	0.509
Japan	-2.4	(1.5)	0.042
Korea	2.4	(1.6)	0.206
Netherlands	-8.4	(2.6)	0.000
Norway	4.6	(2.5)	0.010
Poland	-2.8	(1.9)	0.015
Slovak Republic	-8.1	(1.5)	0.000
Spain	4.4	(1.6)	0.019
Sweden	-10.7	(3.0)	0.000
United States	-11.2	(2.7)	0.000
Sub-national entities			
Flanders (Belgium)	-5.5	(2.4)	0.000
England (UK)	-2.8	(2.7)	0.349
Northern Ireland (UK)	1.5	(2.6)	0.527
England/N. Ireland (UK)	-2.7	(2.6)	0.342
Average	-1.6	(0.5)	0.000
Partners			
Cyprus[1]	18.3	(1.9)	0.000

1. See notes on page 408.

Note: Data are based on multiple linear regression model and are adjusted for age, educational attainment, gender and immigration and language background. Reference groups (in brackets) are: age (35-44); educational attainment (upper secondary); gender (men); immigrant and language background (native-born, native language).

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932899567

[Part 1/1]

Table B3.1 (L) **Mean literacy proficiency, by age and gender, and score difference between men and women aged 16-24**

	Men										Women										Difference between men and women aged 16-24		
	16-24 year-olds		25-34 year-olds		35-44 year-olds		45-54 year-olds		55-65 year-olds		16-24 year-olds		25-34 year-olds		35-44 year-olds		45-54 year-olds		55-65 year-olds				
OECD	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Dif.	S.E.	p-value
National entities																							
Australia	282.8	(3.2)	286.4	(2.4)	289.8	(2.3)	278.8	(2.6)	266.8	(2.7)	285.5	(2.9)	288.6	(2.5)	287.7	(1.8)	275.0	(2.5)	258.8	(2.3)	-2.7	(4.2)	0.524
Austria	278.0	(2.3)	281.9	(2.3)	277.4	(2.3)	267.9	(2.1)	252.7	(2.2)	277.4	(2.1)	277.8	(2.2)	271.8	(2.3)	264.4	(1.7)	247.0	(2.1)	0.6	(3.3)	0.866
Canada	275.1	(1.7)	285.4	(1.9)	280.0	(1.8)	269.9	(1.8)	263.6	(1.6)	276.4	(1.7)	284.8	(1.8)	279.3	(1.8)	266.0	(1.8)	257.3	(1.6)	-1.3	(2.3)	0.571
Czech Republic	282.6	(2.5)	286.3	(2.3)	278.2	(2.8)	268.3	(2.6)	262.1	(2.7)	278.4	(3.1)	287.2	(2.4)	271.9	(3.0)	263.2	(2.6)	262.6	(2.6)	4.3	(3.6)	0.241
Denmark	273.6	(2.1)	282.2	(2.4)	282.3	(2.3)	264.7	(2.1)	252.7	(1.5)	278.6	(1.8)	281.9	(2.4)	279.9	(2.0)	266.3	(1.9)	252.2	(1.3)	-5.0	(2.9)	0.082
Estonia	284.0	(2.0)	284.8	(2.4)	277.2	(2.0)	267.8	(2.0)	259.1	(2.1)	290.2	(1.5)	287.0	(2.0)	278.3	(1.4)	269.7	(1.7)	261.8	(1.7)	-6.2	(2.5)	0.013
Finland	296.3	(2.6)	303.5	(2.8)	294.7	(2.9)	283.3	(2.6)	259.7	(2.1)	297.1	(2.4)	314.7	(1.9)	303.0	(2.9)	283.9	(2.8)	259.8	(1.9)	-0.9	(3.3)	0.794
France	273.4	(1.8)	278.2	(2.2)	266.0	(1.9)	253.8	(1.7)	242.6	(1.8)	276.6	(1.6)	277.8	(1.8)	267.6	(1.6)	253.7	(1.5)	241.1	(1.6)	-3.1	(2.2)	0.154
Germany	280.9	(2.5)	281.5	(2.5)	276.5	(2.3)	266.5	(2.2)	259.3	(2.5)	276.9	(1.9)	281.2	(2.4)	274.0	(2.3)	260.7	(2.2)	248.1	(2.4)	4.0	(3.0)	0.184
Ireland	271.1	(2.7)	276.5	(2.6)	273.2	(2.4)	261.1	(2.9)	252.1	(2.8)	270.0	(2.5)	274.8	(1.7)	269.2	(2.1)	257.5	(2.5)	248.8	(2.4)	1.1	(3.8)	0.767
Italy	257.3	(4.0)	261.3	(2.9)	252.7	(2.6)	248.9	(3.0)	232.5	(3.1)	265.3	(3.0)	259.2	(2.9)	252.9	(2.1)	248.7	(2.2)	234.1	(2.7)	-8.0	(4.8)	0.092
Japan	301.1	(2.0)	310.1	(2.2)	309.3	(1.3)	297.9	(2.1)	275.8	(2.0)	297.5	(2.3)	308.3	(2.2)	304.9	(1.6)	296.2	(2.0)	270.8	(2.2)	3.7	(3.1)	0.234
Korea	293.5	(2.2)	290.3	(1.7)	280.8	(1.7)	262.4	(1.8)	251.6	(2.1)	292.4	(1.9)	288.6	(1.5)	274.4	(1.4)	254.8	(1.8)	236.7	(1.9)	1.1	(2.3)	0.633
Netherlands	294.0	(2.3)	300.0	(2.8)	298.3	(2.5)	280.9	(2.5)	265.2	(2.2)	295.2	(2.3)	296.2	(2.8)	289.4	(2.4)	273.7	(2.2)	256.3	(2.0)	-1.2	(3.2)	0.717
Norway	275.3	(2.0)	287.6	(2.5)	291.9	(2.1)	280.5	(2.1)	264.8	(2.1)	274.8	(1.9)	289.5	(2.5)	284.3	(2.4)	274.2	(2.2)	258.9	(2.3)	0.5	(2.8)	0.856
Poland	278.9	(1.4)	274.0	(2.0)	266.3	(3.0)	253.5	(2.6)	244.5	(2.4)	284.2	(1.4)	280.4	(2.2)	269.9	(2.3)	264.6	(2.2)	253.2	(2.4)	-5.4	(1.8)	0.003
Slovak Republic	275.4	(2.3)	277.3	(1.9)	279.7	(1.9)	270.4	(2.0)	263.4	(2.1)	276.6	(2.0)	279.5	(2.1)	276.9	(1.9)	269.8	(1.6)	268.3	(1.6)	-1.2	(2.9)	0.663
Spain	264.7	(2.2)	263.7	(2.1)	262.5	(1.8)	250.2	(2.1)	229.9	(2.5)	263.0	(2.0)	261.9	(1.9)	256.5	(2.0)	246.8	(2.2)	223.8	(2.3)	1.7	(2.8)	0.558
Sweden	282.9	(2.2)	292.7	(2.7)	288.1	(2.5)	276.1	(2.6)	266.4	(1.8)	282.6	(2.6)	287.2	(2.9)	286.6	(2.7)	275.9	(2.2)	258.3	(2.0)	0.2	(3.5)	0.950
United States	270.0	(2.8)	274.7	(2.9)	276.2	(2.5)	265.3	(2.2)	264.6	(2.6)	273.4	(3.0)	276.2	(2.2)	270.7	(2.4)	266.5	(2.3)	261.4	(2.1)	-3.4	(4.2)	0.422
Sub-national entities																							
Flanders (Belgium)	283.7	(2.1)	292.5	(2.3)	285.2	(2.4)	276.2	(2.0)	258.8	(2.4)	286.3	(2.3)	289.1	(2.3)	279.3	(2.3)	267.2	(2.0)	251.4	(2.1)	-2.5	(3.0)	0.394
England (UK)	267.3	(3.7)	281.2	(2.8)	279.9	(2.7)	273.0	(2.6)	266.8	(2.9)	263.6	(3.0)	279.0	(2.9)	278.5	(2.0)	269.6	(2.4)	263.9	(2.4)	3.7	(4.8)	0.441
Northern Ireland (UK)	275.0	(3.6)	280.7	(4.1)	275.8	(3.2)	266.4	(3.6)	259.4	(4.7)	269.5	(3.4)	274.6	(3.0)	272.2	(2.6)	258.9	(3.2)	251.2	(3.3)	5.5	(4.5)	0.225
England/N. Ireland (UK)	267.6	(3.6)	281.2	(2.7)	279.8	(2.6)	272.8	(2.5)	266.6	(2.8)	263.8	(2.9)	278.8	(2.8)	278.2	(1.9)	269.3	(2.3)	263.5	(2.3)	3.8	(4.7)	0.414
Average	279.2	(0.5)	284.2	(0.5)	280.3	(0.5)	269.0	(0.5)	257.0	(0.5)	280.1	(0.5)	284.1	(0.5)	277.6	(0.5)	266.7	(0.5)	253.4	(0.5)	-0.9	(0.7)	0.191
Partners																							
Cyprus[1]	265.3	(2.6)	271.7	(2.8)	270.7	(2.3)	270.0	(2.4)	262.1	(2.5)	269.1	(2.4)	277.9	(2.2)	269.3	(2.0)	270.1	(2.2)	259.5	(2.1)	-3.9	(3.7)	0.301

1. See notes on page 408.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932899586

[Part 1/1]

Table B3.1 (N) Mean numeracy proficiency, by age and gender, and score difference between men and women aged 16-24

	Men										Women										Difference between men and women aged 16-24		
	16-24 year-olds		25-34 year-olds		35-44 year-olds		45-54 year-olds		55-65 year-olds		16-24 year-olds		25-34 year-olds		35-44 year-olds		45-54 year-olds		55-65 year-olds				
OECD	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Mean score	S.E.	Dif.	S.E.	p-value
National entities																							
Australia	272.9	(3.5)	279.7	(2.6)	282.8	(2.6)	274.6	(2.9)	260.3	(3.1)	267.1	(3.4)	270.3	(2.8)	268.9	(2.1)	255.0	(2.7)	240.7	(2.7)	5.8	(4.8)	0.225
Austria	284.0	(2.5)	288.8	(2.3)	289.1	(2.8)	280.8	(2.5)	264.5	(2.6)	274.3	(2.5)	275.5	(2.5)	273.6	(2.6)	268.3	(2.1)	250.6	(2.3)	9.7	(3.7)	0.008
Canada	272.7	(2.1)	283.1	(2.1)	279.1	(2.0)	268.3	(1.8)	261.3	(1.8)	263.7	(2.0)	269.9	(1.9)	264.7	(1.9)	253.0	(2.0)	241.8	(2.0)	9.0	(2.7)	0.001
Czech Republic	280.8	(2.2)	291.0	(2.4)	283.9	(2.6)	278.9	(3.3)	264.9	(3.1)	275.1	(2.6)	285.4	(2.9)	270.5	(2.8)	264.7	(2.7)	261.7	(2.6)	5.8	(3.5)	0.102
Denmark	274.1	(2.3)	292.9	(2.9)	297.5	(2.6)	281.2	(2.2)	271.2	(1.7)	272.0	(2.1)	280.5	(2.4)	282.5	(1.9)	272.3	(2.3)	259.5	(1.6)	2.1	(3.1)	0.506
Estonia	279.1	(1.9)	288.6	(2.2)	278.9	(2.1)	272.4	(2.1)	259.2	(1.9)	278.0	(1.6)	278.5	(2.4)	271.6	(1.4)	266.0	(1.7)	259.6	(1.5)	1.1	(2.6)	0.676
Finland	291.2	(2.6)	304.8	(3.0)	295.8	(3.1)	285.1	(2.7)	265.4	(2.1)	278.4	(2.4)	299.9	(2.3)	288.2	(3.0)	273.4	(3.0)	254.9	(1.9)	12.8	(3.5)	0.000
France	268.3	(2.1)	275.4	(1.9)	266.7	(2.1)	251.6	(2.1)	239.9	(2.0)	258.5	(1.9)	263.6	(2.2)	257.6	(2.1)	240.6	(1.9)	228.8	(2.1)	9.7	(2.5)	0.000
Germany	281.2	(2.6)	286.1	(2.4)	286.0	(3.0)	278.4	(2.5)	269.7	(3.0)	269.0	(2.3)	277.5	(2.7)	270.9	(2.6)	257.9	(2.6)	243.4	(2.5)	12.3	(3.4)	0.000
Ireland	263.4	(3.3)	271.1	(2.7)	268.4	(2.5)	254.9	(3.0)	245.6	(3.5)	252.6	(3.0)	260.3	(2.0)	253.4	(2.3)	244.4	(2.6)	230.5	(2.8)	10.8	(4.5)	0.016
Italy	250.9	(3.8)	267.8	(3.3)	256.9	(2.5)	250.1	(3.0)	235.8	(3.0)	251.8	(3.3)	256.9	(3.0)	244.8	(2.4)	237.9	(2.6)	223.6	(2.9)	-1.0	(5.0)	0.848
Japan	287.2	(3.0)	301.6	(2.2)	305.0	(1.9)	298.2	(2.5)	280.3	(2.5)	278.6	(2.8)	293.0	(2.3)	289.0	(1.8)	284.8	(2.2)	265.8	(2.0)	8.6	(3.8)	0.023
Korea	282.8	(2.5)	283.2	(1.8)	275.7	(1.9)	256.8	(2.0)	242.4	(2.2)	279.3	(2.2)	277.7	(1.7)	265.8	(1.8)	245.4	(1.9)	221.3	(2.4)	3.5	(2.6)	0.177
Netherlands	289.7	(2.5)	299.3	(2.7)	297.7	(2.7)	286.5	(2.6)	271.8	(2.6)	280.9	(2.4)	286.7	(2.6)	276.5	(2.7)	267.9	(2.3)	252.2	(1.9)	8.8	(3.4)	0.010
Norway	275.6	(2.5)	289.3	(2.8)	298.5	(2.5)	288.8	(2.3)	273.4	(2.4)	266.1	(2.2)	280.3	(2.8)	279.2	(2.6)	271.2	(2.6)	255.9	(2.5)	9.5	(3.2)	0.003
Poland	268.7	(1.4)	272.8	(2.4)	264.7	(3.3)	252.6	(3.0)	243.0	(2.8)	268.5	(1.5)	268.0	(2.1)	258.8	(2.2)	255.9	(2.5)	244.2	(2.5)	0.2	(1.9)	0.918
Slovak Republic	278.6	(2.3)	280.0	(2.2)	285.1	(2.3)	276.0	(2.6)	264.2	(2.3)	277.4	(2.2)	277.6	(2.3)	277.5	(2.2)	274.8	(2.1)	266.3	(1.9)	1.2	(2.9)	0.670
Spain	258.3	(2.4)	262.4	(2.1)	261.2	(1.8)	247.8	(2.3)	229.0	(2.5)	251.8	(2.1)	252.0	(1.9)	248.2	(1.9)	236.9	(2.2)	212.6	(2.1)	6.5	(2.9)	0.027
Sweden	282.5	(2.4)	295.8	(3.0)	292.1	(2.7)	281.9	(3.3)	277.4	(2.3)	273.6	(2.5)	279.4	(2.6)	279.9	(2.9)	270.9	(2.7)	259.0	(2.4)	8.9	(3.4)	0.010
United States	253.2	(3.1)	267.6	(3.1)	266.0	(2.7)	256.4	(2.7)	257.0	(2.9)	245.0	(3.0)	252.7	(2.5)	249.8	(2.6)	243.9	(2.7)	238.3	(2.5)	8.2	(4.3)	0.056
Sub-national entities																							
Flanders (Belgium)	285.9	(2.3)	301.2	(2.9)	297.8	(2.8)	290.3	(2.4)	269.3	(2.7)	279.8	(2.3)	289.0	(2.2)	280.0	(2.3)	269.5	(2.2)	250.7	(2.2)	6.1	(3.0)	0.040
England (UK)	262.2	(3.9)	275.2	(3.1)	274.6	(3.0)	266.4	(3.0)	265.0	(2.8)	250.2	(3.4)	258.1	(3.1)	263.1	(2.2)	252.0	(2.6)	249.1	(2.7)	12.0	(5.1)	0.018
Northern Ireland (UK)	269.6	(4.2)	274.1	(4.1)	271.5	(3.1)	259.5	(3.3)	254.8	(4.6)	257.2	(4.4)	261.3	(3.2)	260.3	(2.8)	244.3	(2.8)	236.2	(4.0)	12.5	(5.2)	0.016
England/N. Ireland (UK)	262.5	(3.8)	275.2	(3.0)	274.5	(2.9)	266.2	(2.9)	264.7	(2.7)	250.5	(3.3)	258.2	(3.1)	263.0	(2.2)	251.7	(2.5)	248.7	(2.6)	12.0	(4.9)	0.014
Average	274.7	(0.6)	284.5	(0.5)	282.0	(0.5)	271.7	(0.6)	259.6	(0.6)	267.8	(0.5)	274.2	(0.5)	268.8	(0.5)	259.4	(0.5)	245.9	(0.5)	6.9	(0.8)	0.000
Partners																							
Cyprus[1]	263.9	(3.2)	273.4	(3.2)	273.6	(2.7)	270.8	(2.5)	260.4	(2.6)	264.6	(2.9)	273.0	(2.4)	265.0	(2.1)	258.7	(2.4)	241.1	(2.7)	-0.7	(4.5)	0.877

1. See notes on page 408.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932899586

[Part 1/2]

Table B3.2 Mean engagement in ICT-related practices, by gender, and difference between men and women

	Adults aged 16-65												
	Index of engagement in ICT-related practices at work							Index of engagement in ICT-related practices outside work					
	Men		Women		Difference between men and women			Men		Women		Difference between men and women		
OECD	Mean score	S.E.	Mean score	S.E.	Dif.	S.E.	p-value	Mean score	S.E.	Mean score	S.E.	Dif.	S.E.	p-value
National entities														
Australia	2.1	(0.0)	2.1	(0.0)	0.017	(0.0)	0.605	2.0	(0.0)	2.1	(0.0)	-0.060	(0.0)	0.064
Austria	2.0	(0.0)	1.8	(0.0)	0.131	(0.0)	0.000	2.0	(0.0)	1.8	(0.0)	0.211	(0.0)	0.000
Canada	2.1	(0.0)	2.0	(0.0)	0.121	(0.0)	0.000	2.1	(0.0)	2.1	(0.0)	-0.041	(0.0)	0.033
Czech Republic	2.0	(0.0)	2.1	(0.0)	-0.096	(0.0)	0.021	2.3	(0.0)	2.2	(0.0)	0.065	(0.0)	0.117
Denmark	2.1	(0.0)	1.9	(0.0)	0.231	(0.0)	0.000	2.2	(0.0)	2.2	(0.0)	0.016	(0.0)	0.527
Estonia	2.2	(0.0)	2.1	(0.0)	0.079	(0.0)	0.001	2.0	(0.0)	2.0	(0.0)	0.028	(0.0)	0.232
Finland	1.9	(0.0)	1.8	(0.0)	0.072	(0.0)	0.002	2.0	(0.0)	1.9	(0.0)	0.016	(0.0)	0.480
France	1.7	(0.0)	1.7	(0.0)	0.062	(0.0)	0.046	2.0	(0.0)	1.9	(0.0)	0.036	(0.0)	0.243
Germany	2.0	(0.0)	1.8	(0.0)	0.152	(0.0)	0.000	2.1	(0.0)	1.9	(0.0)	0.176	(0.0)	0.000
Ireland	2.1	(0.0)	2.0	(0.0)	0.043	(0.0)	0.209	1.9	(0.0)	1.9	(0.0)	0.002	(0.0)	0.958
Italy	2.2	(0.0)	2.0	(0.0)	0.114	(0.1)	0.048	1.8	(0.0)	1.7	(0.0)	0.068	(0.1)	0.237
Japan	1.8	(0.0)	1.4	(0.0)	0.454	(0.0)	0.000	1.4	(0.0)	1.3	(0.0)	0.164	(0.0)	0.000
Korea	2.2	(0.0)	1.9	(0.0)	0.272	(0.0)	0.000	1.7	(0.0)	1.5	(0.0)	0.174	(0.0)	0.000
Netherlands	2.2	(0.0)	1.9	(0.0)	0.239	(0.0)	0.000	2.3	(0.0)	2.1	(0.0)	0.156	(0.0)	0.000
Norway	2.1	(0.0)	1.8	(0.0)	0.297	(0.0)	0.000	2.2	(0.0)	2.0	(0.0)	0.170	(0.0)	0.000
Poland	2.0	(0.0)	1.9	(0.0)	0.057	(0.0)	0.194	1.9	(0.0)	1.8	(0.0)	0.074	(0.0)	0.087
Slovak Republic	2.1	(0.0)	2.1	(0.0)	0.057	(0.0)	0.147	2.1	(0.0)	2.1	(0.0)	0.040	(0.0)	0.311
Spain	2.1	(0.0)	1.9	(0.0)	0.212	(0.0)	0.000	2.0	(0.0)	1.9	(0.0)	0.160	(0.0)	0.000
Sweden	1.9	(0.0)	1.8	(0.0)	0.118	(0.0)	0.000	2.0	(0.0)	2.0	(0.0)	0.020	(0.0)	0.437
United States	2.1	(0.0)	2.0	(0.0)	0.131	(0.0)	0.000	2.1	(0.0)	2.1	(0.0)	-0.003	(0.0)	0.928
Sub-national entities														
Flanders (Belgium)	2.1	(0.0)	2.0	(0.0)	0.110	(0.0)	0.000	2.1	(0.0)	2.0	(0.0)	0.142	(0.0)	0.000
England (UK)	2.2	(0.0)	2.0	(0.0)	0.198	(0.0)	0.000	2.1	(0.0)	2.0	(0.0)	0.088	(0.0)	0.043
Northern Ireland (UK)	2.1	(0.0)	2.0	(0.0)	0.086	(0.1)	0.090	1.9	(0.0)	1.7	(0.0)	0.171	(0.1)	0.001
England/N. Ireland (UK)	2.2	(0.0)	2.0	(0.0)	0.195	(0.0)	0.000	2.1	(0.0)	2.0	(0.0)	0.090	(0.0)	0.032
Average	0.4	(0.0)	0.4	(0.0)	0.038	(0.0)	0.031	0.4	(0.0)	0.4	(0.0)	0.023	(0.0)	0.076
Partners														
Cyprus[1]	1.8	(0.0)	1.8	(0.0)	0.036	(0.1)	0.497	1.7	(0.0)	1.7	(0.0)	-0.009	(0.1)	0.867

[Part 2/2]

Table B3.2 Mean engagement in ICT-related practices, by gender, and difference between men and women

	Adults aged 16-24												
	Index of engagement in ICT-related practices at work							Index of engagement in ICT-related practices outside work					
	Men		Women		Difference between men and women			Men		Women		Difference between men and women		
OECD	Mean score	S.E.	Mean score	S.E.	Dif.	S.E.	p-value	Mean score	S.E.	Mean score	S.E.	Dif.	S.E.	p-value
National entities														
Australia	1.4	(0.1)	1.7	(0.1)	-0.245	(0.1)	0.002	2.2	(0.1)	2.3	(0.1)	-0.094	(0.1)	0.235
Austria	1.5	(0.1)	1.7	(0.1)	-0.171	(0.1)	0.011	2.1	(0.0)	2.1	(0.0)	0.025	(0.1)	0.714
Canada	1.4	(0.1)	1.4	(0.1)	0.028	(0.0)	0.515	2.3	(0.0)	2.4	(0.0)	-0.114	(0.0)	0.007
Czech Republic	1.7	(0.1)	1.8	(0.1)	-0.103	(0.1)	0.066	2.6	(0.0)	2.5	(0.0)	0.084	(0.1)	0.130
Denmark	1.3	(0.1)	1.3	(0.1)	0.077	(0.0)	0.095	2.5	(0.0)	2.6	(0.0)	-0.108	(0.0)	0.019
Estonia	1.6	(0.1)	1.8	(0.1)	-0.143	(0.0)	0.001	2.4	(0.0)	2.4	(0.0)	-0.053	(0.0)	0.233
Finland	1.2	(0.1)	1.2	(0.1)	0.008	(0.0)	0.824	2.2	(0.0)	2.2	(0.0)	0.067	(0.0)	0.079
France	1.3	(0.1)	1.3	(0.1)	0.072	(0.1)	0.214	2.3	(0.0)	2.3	(0.0)	-0.002	(0.1)	0.971
Germany	1.6	(0.1)	1.5	(0.1)	0.092	(0.0)	0.062	2.3	(0.0)	2.2	(0.0)	0.124	(0.0)	0.012
Ireland	1.6	(0.1)	1.5	(0.1)	0.017	(0.1)	0.823	2.1	(0.1)	2.1	(0.0)	-0.019	(0.1)	0.803
Italy	1.7	(0.2)	1.7	(0.2)	-0.091	(0.1)	0.479	2.0	(0.1)	2.2	(0.1)	-0.185	(0.1)	0.150
Japan	1.1	(0.1)	1.3	(0.1)	-0.162	(0.1)	0.075	1.6	(0.1)	1.3	(0.1)	0.229	(0.1)	0.012
Korea	1.3	(0.1)	1.6	(0.1)	-0.276	(0.1)	0.000	2.0	(0.1)	2.0	(0.0)	-0.013	(0.1)	0.865
Netherlands	1.5	(0.1)	1.5	(0.1)	0.014	(0.1)	0.791	2.5	(0.0)	2.4	(0.0)	0.103	(0.1)	0.047
Norway	1.3	(0.1)	1.1	(0.1)	0.190	(0.0)	0.000	2.4	(0.0)	2.4	(0.0)	0.006	(0.0)	0.877
Poland	1.6	(0.1)	1.7	(0.1)	-0.066	(0.0)	0.124	2.2	(0.0)	2.3	(0.0)	-0.049	(0.0)	0.256
Slovak Republic	1.9	(0.1)	1.9	(0.1)	0.047	(0.1)	0.398	2.5	(0.0)	2.5	(0.0)	0.022	(0.1)	0.686
Spain	1.9	(0.2)	1.4	(0.1)	0.459	(0.1)	0.000	2.3	(0.0)	2.3	(0.0)	-0.036	(0.1)	0.564
Sweden	1.3	(0.1)	1.3	(0.1)	0.018	(0.1)	0.723	2.3	(0.0)	2.3	(0.0)	0.010	(0.1)	0.840
United States	1.6	(0.1)	1.3	(0.1)	0.289	(0.1)	0.000	2.4	(0.1)	2.3	(0.0)	0.025	(0.1)	0.730
Sub-national entities														
Flanders (Belgium)	1.8	(0.1)	1.8	(0.1)	-0.039	(0.0)	0.432	2.4	(0.0)	2.3	(0.0)	0.072	(0.0)	0.146
England (UK)	1.7	(0.1)	1.4	(0.1)	0.334	(0.1)	0.000	2.2	(0.1)	2.1	(0.0)	0.118	(0.1)	0.217
Northern Ireland (UK)	1.7	(0.1)	1.8	(0.2)	-0.025	(0.1)	0.804	2.2	(0.1)	2.1	(0.1)	0.073	(0.1)	0.476
England/N. Ireland (UK)	1.7	(0.1)	1.4	(0.1)	0.323	(0.1)	0.000	2.2	(0.1)	2.1	(0.0)	0.116	(0.1)	0.207
Average	0.3	(0.0)	0.3	(0.0)	0.038	(0.0)	0.084	0.5	(0.0)	0.5	(0.0)	0.020	(0.0)	0.111
Partners														
Cyprus[1]	1.2	(0.2)	1.6	(0.1)	-0.377	(0.1)	0.000	1.9	(0.1)	2.1	(0.1)	-0.273	(0.1)	0.006

1. See notes on page 408.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932899605

[Part 1/1]

Table B3.3 **Percentage of adults, by age**

OECD	16-24 year-olds		25-34 year-olds		35-44 year-olds		45-54 year-olds		55-65 year-olds	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
National entities										
Australia	18.6	(0.2)	21.5	(0.1)	21.0	(0.0)	20.2	(0.0)	18.8	(0.1)
Austria	16.0	(0.2)	19.1	(0.3)	22.2	(0.3)	23.8	(0.3)	18.9	(0.2)
Canada	17.2	(0.0)	20.1	(0.1)	19.5	(0.0)	22.6	(0.1)	20.6	(0.0)
Czech Republic	16.3	(0.4)	21.8	(0.5)	21.8	(0.4)	18.3	(0.4)	21.8	(0.3)
Denmark	17.3	(0.1)	17.8	(0.1)	21.6	(0.1)	21.7	(0.1)	21.7	(0.1)
Estonia	17.9	(0.2)	21.3	(0.2)	20.6	(0.3)	19.8	(0.2)	20.4	(0.2)
Finland	17.0	(0.2)	19.3	(0.2)	18.2	(0.3)	20.8	(0.3)	24.8	(0.2)
France	17.2	(0.1)	19.0	(0.2)	20.8	(0.2)	21.0	(0.2)	21.9	(0.1)
Germany	15.8	(0.2)	17.8	(0.3)	22.1	(0.3)	24.5	(0.3)	19.8	(0.2)
Ireland	17.4	(0.2)	24.4	(0.3)	23.3	(0.3)	18.6	(0.3)	16.4	(0.2)
Italy	14.4	(0.2)	18.9	(0.3)	24.4	(0.4)	21.8	(0.4)	20.5	(0.2)
Japan	14.2	(0.2)	18.6	(0.3)	23.6	(0.3)	19.3	(0.3)	24.3	(0.2)
Korea	16.5	(0.2)	20.0	(0.2)	24.0	(0.1)	23.1	(0.1)	16.5	(0.1)
Netherlands	16.8	(0.2)	18.2	(0.3)	21.0	(0.3)	22.5	(0.3)	21.4	(0.2)
Norway	18.1	(0.1)	19.9	(0.2)	21.5	(0.3)	20.9	(0.2)	19.5	(0.2)
Poland	17.7	(0.1)	23.4	(0.3)	18.7	(0.3)	19.5	(0.3)	20.7	(0.2)
Slovak Republic	17.7	(0.2)	22.8	(0.3)	19.9	(0.3)	19.6	(0.3)	19.9	(0.2)
Spain	11.9	(0.2)	21.1	(0.4)	24.8	(0.3)	22.2	(0.3)	20.0	(0.2)
Sweden	18.5	(0.2)	18.7	(0.3)	20.5	(0.4)	20.5	(0.4)	21.8	(0.3)
United States	18.6	(0.3)	20.2	(0.3)	20.0	(0.3)	21.8	(0.3)	19.3	(0.2)
Sub-national entities										
Flanders (Belgium)	15.3	(0.1)	18.0	(0.2)	20.2	(0.2)	23.4	(0.3)	23.0	(0.2)
England (UK)	17.9	(0.0)	20.6	(0.0)	21.2	(0.0)	21.1	(0.0)	19.2	(0.0)
Northern Ireland (UK)	19.5	(0.0)	20.8	(0.0)	21.4	(0.0)	20.6	(0.0)	17.7	(0.0)
England/N. Ireland (UK)	17.9	(0.0)	20.6	(0.0)	21.2	(0.0)	21.1	(0.0)	19.2	(0.0)
Average	16.7	(0.0)	20.1	(0.1)	21.4	(0.1)	21.2	(0.1)	20.5	(0.0)
Partners										
Cyprus[1]	19.0	(0.2)	23.8	(0.3)	20.4	(0.3)	19.5	(0.3)	17.3	(0.2)

1. See notes on page 408.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932899624

[Part 1/1]

Table B3.4 **Percentage of adults aged 16-65, by gender**

OECD	Men		Women	
	%	S.E.	%	S.E.
National entities				
Australia	49.8	(0.1)	50.2	(0.1)
Austria	49.9	(0.0)	50.1	(0.0)
Canada	50.0	(0.0)	50.0	(0.0)
Czech Republic	50.4	(0.0)	49.6	(0.0)
Denmark	50.4	(0.0)	49.6	(0.0)
Estonia	47.9	(0.0)	52.1	(0.0)
Finland	50.3	(0.0)	49.7	(0.0)
France	48.9	(0.2)	51.1	(0.2)
Germany	50.4	(0.1)	49.6	(0.1)
Ireland	49.1	(0.1)	50.9	(0.1)
Italy	50.0	(0.0)	50.0	(0.0)
Japan	50.3	(0.0)	49.7	(0.0)
Korea	49.8	(0.0)	50.2	(0.0)
Netherlands	50.3	(0.0)	49.7	(0.0)
Norway	51.1	(0.0)	48.9	(0.0)
Poland	49.5	(0.0)	50.5	(0.0)
Slovak Republic	50.0	(0.0)	50.0	(0.0)
Spain	50.2	(0.0)	49.8	(0.0)
Sweden	50.7	(0.1)	49.3	(0.1)
United States	49.1	(0.0)	50.9	(0.0)
Sub-national entities				
Flanders (Belgium)	50.5	(0.0)	49.5	(0.0)
England (UK)	49.9	(0.0)	50.1	(0.0)
Northern Ireland (UK)	49.4	(0.0)	50.6	(0.0)
England/N. Ireland (UK)	49.9	(0.0)	50.1	(0.0)
Average	49.9	(0.0)	50.1	(0.0)
Partners				
Cyprus[1]	48.5	(0.0)	51.5	(0.0)

1. See notes on page 408.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932899643

[Part 1/1]

Table B3.5 **Percentage of adults aged 16-65, by parents' educational attainment**

OECD	Neither parent attained upper secondary		At least one parent attained upper secondary		At least one parent attained tertiary		Missing	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.
National entities								
Australia	37.3	(0.7)	21.9	(0.6)	27.1	(0.7)	13.7	(0.5)
Austria	26.0	(0.6)	50.0	(0.6)	18.9	(0.6)	5.1	(0.3)
Canada	22.9	(0.4)	32.9	(0.5)	37.0	(0.4)	7.2	(0.2)
Czech Republic	9.9	(0.6)	70.7	(1.0)	14.5	(0.6)	4.8	(0.5)
Denmark	29.8	(0.5)	37.2	(0.5)	31.5	(0.6)	1.5	(0.1)
Estonia	24.2	(0.5)	35.4	(0.6)	32.6	(0.5)	7.7	(0.3)
Finland	39.1	(0.6)	38.2	(0.7)	20.1	(0.5)	2.6	(0.2)
France	37.2	(0.6)	28.9	(0.5)	15.8	(0.3)	18.1	(0.6)
Germany	9.8	(0.5)	48.3	(0.8)	33.0	(0.8)	9.0	(0.5)
Ireland	47.4	(0.7)	26.6	(0.7)	20.8	(0.6)	5.2	(0.4)
Italy	71.3	(0.7)	21.0	(0.6)	6.3	(0.4)	1.4	(0.2)
Japan	22.4	(0.5)	39.4	(0.8)	30.7	(0.7)	7.5	(0.4)
Korea	51.1	(0.6)	28.9	(0.6)	18.8	(0.5)	1.2	(0.2)
Netherlands	46.6	(0.6)	24.9	(0.6)	23.8	(0.6)	4.7	(0.3)
Norway	25.5	(0.6)	37.0	(0.7)	33.2	(0.7)	4.3	(0.2)
Poland	26.9	(0.6)	56.4	(0.7)	13.6	(0.4)	3.2	(0.3)
Slovak Republic	28.1	(0.7)	58.0	(0.7)	12.8	(0.4)	1.1	(0.1)
Spain	69.0	(0.6)	14.6	(0.6)	12.4	(0.4)	4.0	(0.3)
Sweden	37.1	(0.6)	22.8	(0.7)	34.3	(0.7)	5.8	(0.4)
United States	15.9	(0.7)	40.4	(1.0)	34.7	(1.0)	8.9	(0.7)
Sub-national entities								
Flanders (Belgium)	36.2	(0.6)	30.5	(0.6)	23.6	(0.6)	9.7	(0.3)
England (UK)	21.9	(0.7)	34.7	(0.9)	20.6	(0.7)	22.7	(0.9)
Northern Ireland (UK)	36.3	(0.8)	37.9	(0.9)	14.9	(0.6)	10.9	(0.6)
England/N. Ireland (UK)	22.4	(0.7)	34.8	(0.8)	20.4	(0.7)	22.3	(0.8)
Average	33.3	(0.1)	36.7	(0.2)	23.8	(0.1)	6.2	(0.1)
Partners								
Cyprus[1]	46.2	(0.7)	21.0	(0.6)	14.4	(0.5)	18.4	(0.4)

1. See notes on page 408.

Note: Lower than upper secondary includes ISCED 1, 2 and 3C short. Upper secondary education includes ISCED 3A, 3B, 3C long and 4. Tertiary includes ISCED 5A, 5B and 6.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932899662

[Part 1/1]

Table B3.6 **Percentage of adults aged 16-65, by level of educational attainment**

OECD	Lower than upper secondary		Upper secondary		Tertiary		Missing	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.
National entities								
Australia	27.1	(0.5)	38.8	(0.4)	32.4	(0.5)	1.7	(0.2)
Austria	22.4	(0.3)	59.2	(0.3)	16.5	(0.1)	1.8	(0.2)
Canada	14.7	(0.1)	38.5	(0.3)	45.8	(0.3)	0.9	(0.1)
Czech Republic	15.5	(0.3)	66.1	(0.4)	17.8	(0.2)	0.6	(0.2)
Denmark	26.3	(0.5)	39.4	(0.6)	34.0	(0.4)	0.4	(0.1)
Estonia	18.0	(0.4)	45.2	(0.5)	36.4	(0.6)	0.4	(0.1)
Finland	19.6	(0.4)	44.0	(0.5)	36.4	(0.4)	0.0	(0.0)
France	27.7	(0.4)	44.9	(0.4)	26.6	(0.0)	0.8	(0.1)
Germany	17.0	(0.5)	52.2	(0.7)	29.2	(0.5)	1.6	(0.2)
Ireland	28.3	(0.1)	39.7	(0.3)	31.5	(0.3)	0.4	(0.1)
Italy	53.4	(0.2)	33.8	(0.0)	12.1	(0.1)	0.7	(0.2)
Japan	14.6	(0.4)	43.1	(0.4)	41.1	(0.2)	1.3	(0.1)
Korea	21.6	(0.5)	43.1	(0.5)	35.0	(0.0)	0.2	(0.1)
Netherlands	30.3	(0.6)	37.6	(0.7)	29.9	(0.5)	2.2	(0.2)
Norway	26.8	(0.5)	37.0	(0.6)	33.9	(0.4)	2.2	(0.2)
Poland	15.3	(0.4)	58.9	(0.5)	25.7	(0.5)	0.0	(0.0)
Slovak Republic	20.6	(0.6)	60.2	(0.7)	19.0	(0.6)	0.3	(0.1)
Spain	47.1	(0.1)	23.2	(0.1)	28.9	(0.0)	0.8	(0.1)
Sweden	23.7	(0.4)	48.1	(0.6)	28.1	(0.4)	0.1	(0.1)
United States	14.1	(0.3)	47.6	(0.5)	34.0	(0.4)	4.3	(0.6)
Sub-national entities								
Flanders (Belgium)	19.0	(0.5)	42.3	(0.7)	33.5	(0.6)	5.3	(0.3)
England (UK)	24.7	(0.6)	39.3	(0.7)	35.6	(0.6)	0.4	(0.1)
Northern Ireland (UK)	34.2	(0.5)	36.6	(0.7)	29.0	(0.6)	0.1	(0.1)
England/N. Ireland (UK)	25.1	(0.5)	39.2	(0.7)	35.4	(0.6)	0.4	(0.1)
Average	24.0	(0.1)	44.6	(0.1)	30.1	(0.1)	1.2	(0.0)
Partners								
Cyprus[1]	24.5	(0.1)	44.8	(0.1)	30.2	(0.1)	0.5	(0.1)

1. See notes on page 408.

Note: Lower than upper secondary includes ISCED 1, 2 and 3C short. Upper secondary education includes ISCED 3A, 3B, 3C long and 4. Tertiary includes ISCED 5A, 5B and 6. Where possible, foreign qualifications are included as per their closest correspondance to the respective national education systems.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932899681



[Part 1/1]

Table B3.7 **Percentage of adults aged 16-24, by education and work status**

OECD	In education only		In education and work		In work only		Neither in education nor work but has been in education or training during previous 12 months		Neither in education nor work and has not been in education or training during previous 12 months		Missing	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
National entities												
Australia	23.6	(1.5)	31.8	(1.5)	33.2	(1.7)	4.9	(0.8)	6.1	(0.9)	0.5	(0.3)
Austria	29.0	(1.2)	22.2	(1.3)	38.8	(1.5)	5.8	(0.8)	3.2	(0.6)	0.9	(0.3)
Canada	30.5	(1.3)	35.5	(1.3)	25.9	(1.3)	4.7	(0.6)	2.8	(0.3)	0.6	(0.1)
Czech Republic	60.5	(1.3)	8.6	(0.9)	22.6	(1.5)	4.2	(0.6)	4.0	(0.7)	0.2	(0.1)
Denmark	35.2	(1.4)	40.4	(1.5)	15.9	(1.2)	5.6	(0.7)	2.8	(0.6)	0.1	(0.1)
Estonia	44.4	(1.4)	21.0	(1.1)	24.3	(1.0)	6.1	(0.7)	3.7	(0.5)	0.6	(0.2)
Finland	47.5	(1.6)	19.7	(1.2)	21.5	(1.6)	7.9	(0.9)	3.5	(0.6)	0.0	(0.0)
France	49.6	(1.2)	10.6	(0.8)	22.3	(1.1)	8.7	(0.8)	8.7	(0.7)	0.1	(0.1)
Germany	36.5	(1.4)	31.8	(1.6)	22.6	(1.4)	5.4	(0.7)	3.0	(0.5)	0.7	(0.3)
Ireland	45.5	(2.2)	17.7	(1.6)	21.0	(1.6)	9.3	(1.3)	6.5	(1.1)	0.0	(0.0)
Italy	61.2	(2.5)	4.2	(0.8)	18.6	(1.7)	4.1	(0.8)	11.5	(1.5)	0.5	(0.5)
Japan	39.1	(1.1)	12.3	(1.0)	37.6	(1.3)	4.7	(1.0)	4.1	(1.0)	2.2	(0.5)
Korea	58.9	(1.8)	12.2	(1.1)	19.1	(1.5)	6.8	(1.0)	2.9	(0.6)	0.1	(0.1)
Netherlands	28.8	(1.3)	42.8	(1.4)	23.5	(1.4)	3.0	(0.6)	1.0	(0.4)	0.9	(0.4)
Norway	32.7	(1.6)	34.6	(1.5)	25.7	(1.4)	3.6	(0.6)	2.5	(0.6)	0.9	(0.2)
Poland	52.6	(0.9)	18.4	(0.8)	16.9	(0.5)	5.2	(0.3)	6.9	(0.4)	0.0	(0.0)
Slovak Republic	55.5	(1.4)	8.7	(0.8)	18.4	(1.2)	4.6	(0.6)	12.4	(0.9)	0.4	(0.2)
Spain	53.4	(1.7)	11.8	(1.3)	16.1	(1.1)	8.0	(0.9)	10.1	(1.0)	0.7	(0.2)
Sweden	46.1	(1.6)	14.9	(1.4)	28.0	(1.3)	6.6	(0.9)	4.4	(0.9)	0.0	(0.0)
United States	28.0	(1.6)	29.5	(2.0)	26.0	(1.7)	6.8	(0.9)	4.1	(1.0)	5.7	(1.0)
Sub-national entities												
Flanders (Belgium)	55.6	(1.3)	8.0	(0.8)	22.5	(0.9)	5.1	(0.7)	4.6	(0.7)	4.1	(0.5)
England (UK)	29.0	(1.5)	20.9	(1.6)	29.6	(1.6)	8.2	(1.2)	10.0	(1.1)	2.2	(0.6)
Northern Ireland (UK)	29.8	(1.9)	25.0	(1.8)	26.4	(1.9)	7.4	(1.2)	8.6	(1.1)	2.8	(1.0)
England/N. Ireland (UK)	29.1	(1.5)	21.0	(1.5)	29.5	(1.5)	8.2	(1.2)	10.0	(1.1)	2.2	(0.6)
Average	42.9	(0.3)	20.8	(0.3)	24.1	(0.3)	5.9	(0.2)	5.4	(0.2)	1.0	(0.1)
Partners												
Cyprus[1]	41.7	(1.8)	8.0	(0.9)	17.2	(1.3)	10.6	(1.4)	12.6	(1.4)	10.0	(1.4)

1. See notes on page 408.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932899700

[Part 1/1]

Table B3.8 **Percentage of adults aged 16-65, by respondent's and parents' level of educational attainment**

OECD	Respondent and at least one parent with upper secondary or higher		Respondent's education lower than upper secondary, at least one parent with upper secondary or higher		Respondent's education at least upper secondary, neither parent attained upper secondary		Neither respondent nor either parent attained upper secondary		Other	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
National entities										
Australia	40.9	(0.8)	8.1	(0.4)	23.8	(0.7)	13.5	(0.4)	13.7	(0.6)
Austria	57.4	(0.6)	11.5	(0.3)	16.2	(0.5)	9.8	(0.3)	5.1	(0.3)
Canada	62.6	(0.4)	7.3	(0.2)	17.5	(0.3)	5.3	(0.2)	7.3	(0.3)
Czech Republic	73.6	(0.7)	11.7	(0.4)	7.2	(0.5)	2.7	(0.4)	4.8	(0.5)
Denmark	53.4	(0.6)	15.3	(0.5)	19.4	(0.4)	10.4	(0.4)	1.5	(0.1)
Estonia	57.8	(0.6)	10.2	(0.3)	19.0	(0.4)	5.2	(0.2)	7.7	(0.3)
Finland	48.4	(0.5)	9.9	(0.4)	30.6	(0.6)	8.6	(0.3)	2.6	(0.2)
France	37.1	(0.5)	7.6	(0.3)	23.5	(0.5)	13.6	(0.4)	18.2	(0.6)
Germany	69.9	(0.7)	11.3	(0.4)	6.4	(0.4)	3.4	(0.4)	9.1	(0.5)
Ireland	40.2	(0.5)	7.2	(0.3)	28.3	(0.6)	19.1	(0.4)	5.2	(0.4)
Italy	19.8	(0.6)	7.5	(0.5)	25.9	(0.6)	45.4	(0.5)	1.4	(0.2)
Japan	62.1	(0.6)	8.0	(0.3)	17.7	(0.5)	4.7	(0.3)	7.5	(0.4)
Korea	41.3	(0.5)	6.3	(0.3)	36.2	(0.6)	14.9	(0.4)	1.2	(0.2)
Netherlands	39.0	(0.6)	9.7	(0.4)	27.4	(0.6)	19.2	(0.6)	4.7	(0.3)
Norway	53.9	(0.6)	16.3	(0.4)	16.1	(0.5)	9.3	(0.4)	4.3	(0.2)
Poland	61.3	(0.7)	8.7	(0.2)	21.0	(0.6)	5.9	(0.3)	3.2	(0.3)
Slovak Republic	61.3	(0.7)	9.5	(0.4)	17.3	(0.6)	10.8	(0.5)	1.1	(0.1)
Spain	20.9	(0.5)	6.1	(0.3)	30.2	(0.5)	38.8	(0.4)	4.1	(0.3)
Sweden	46.6	(0.6)	10.4	(0.3)	26.1	(0.6)	11.0	(0.4)	5.9	(0.4)
United States	67.5	(0.6)	7.6	(0.3)	11.2	(0.5)	4.7	(0.3)	9.0	(0.7)
Sub-national entities										
Flanders (Belgium)	47.7	(0.7)	6.4	(0.3)	25.4	(0.6)	10.8	(0.4)	9.8	(0.3)
England (UK)	48.1	(0.9)	7.2	(0.4)	12.9	(0.5)	9.0	(0.4)	23.0	(0.9)
Northern Ireland (UK)	42.8	(0.6)	9.8	(0.6)	17.9	(0.5)	18.4	(0.7)	11.1	(0.6)
England/N. Ireland (UK)	47.9	(0.9)	7.3	(0.4)	13.0	(0.5)	9.3	(0.4)	22.6	(0.8)
Average	50.5	(0.1)	9.2	(0.1)	20.9	(0.1)	12.6	(0.1)	6.8	(0.1)
Partners										
Cyprus[1]	30.0	(0.6)	5.4	(0.2)	34.2	(0.6)	12.0	(0.3)	18.4	(0.4)

1. See notes on page 408.

Note: Lower than upper secondary includes ISCED 1, 2 and 3C short. Upper secondary education includes ISCED 3A, 3B, 3C long and 4. Tertiary includes ISCED 5A, 5B and 6.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932899719

[Part 1/1]

Table B3.9 **Percentage of adults aged 45-65, by respondent's and parents' educational attainment**

OECD	Men and one/both parent(s) with at least upper secondary		Women and one/both parent(s) with at least upper secondary		Men with lower than upper secondary, one/both parent(s) with at least upper secondary		Women with lower than upper secondary, one/both parent(s) with at least upper secondary		Men with at least upper secondary, neither parent with upper secondary		Women with at least upper secondary, neither parent with upper secondary		Neither men nor either parent with upper secondary		Neither women nor either parent with upper secondary	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
National entities																
Australia	13.7	(0.6)	12.0	(0.6)	2.6	(0.4)	2.5	(0.3)	15.4	(0.8)	14.0	(0.7)	9.3	(0.6)	13.9	(0.6)
Austria	26.1	(0.7)	23.1	(0.7)	2.0	(0.3)	5.6	(0.5)	13.5	(0.7)	9.1	(0.6)	5.1	(0.3)	9.8	(0.5)
Canada	25.5	(0.5)	25.3	(0.5)	1.8	(0.2)	1.3	(0.2)	13.6	(0.4)	14.9	(0.4)	4.2	(0.3)	4.7	(0.3)
Czech Republic	35.3	(0.9)	32.3	(0.9)	2.3	(0.5)	6.3	(0.6)	7.4	(0.9)	5.6	(0.6)	1.4	(0.4)	4.1	(0.6)
Denmark	23.6	(0.7)	21.4	(0.5)	3.4	(0.4)	5.0	(0.4)	15.0	(0.6)	14.8	(0.5)	7.3	(0.5)	8.3	(0.5)
Estonia	20.0	(0.6)	24.7	(0.7)	1.5	(0.2)	0.8	(0.2)	15.2	(0.6)	22.1	(0.6)	4.4	(0.3)	3.4	(0.3)
Finland	14.4	(0.6)	14.4	(0.6)	2.1	(0.3)	1.5	(0.3)	23.3	(0.8)	26.0	(0.9)	8.5	(0.5)	7.4	(0.6)
France	10.4	(0.5)	12.4	(0.4)	2.3	(0.2)	2.8	(0.2)	16.9	(0.5)	14.8	(0.6)	10.6	(0.4)	12.3	(0.4)
Germany	38.8	(0.7)	34.6	(0.8)	1.1	(0.3)	2.7	(0.4)	4.6	(0.6)	4.9	(0.6)	1.6	(0.3)	2.1	(0.4)
Ireland	10.2	(0.7)	11.2	(0.7)	2.0	(0.4)	2.2	(0.4)	16.0	(0.7)	18.2	(0.9)	19.2	(0.6)	15.1	(0.6)
Italy	4.3	(0.4)	4.6	(0.4)	1.1	(0.3)	0.7	(0.2)	12.6	(0.9)	12.8	(0.7)	29.2	(1.4)	33.9	(1.2)
Japan	23.9	(0.9)	23.0	(0.8)	1.6	(0.3)	1.9	(0.3)	15.7	(0.7)	15.9	(0.7)	4.8	(0.5)	4.3	(0.5)
Korea	9.8	(0.6)	10.7	(0.6)	0.9	(0.2)	2.0	(0.3)	25.3	(0.9)	16.9	(0.7)	13.0	(0.6)	20.0	(0.7)
Netherlands	13.7	(0.7)	14.0	(0.6)	1.8	(0.3)	3.8	(0.4)	18.3	(0.7)	14.4	(0.6)	13.1	(0.6)	15.4	(0.7)
Norway	23.2	(0.7)	21.0	(0.7)	4.3	(0.5)	5.3	(0.5)	14.0	(0.6)	12.3	(0.8)	7.6	(0.6)	8.6	(0.6)
Poland	19.7	(0.8)	23.8	(0.9)	1.3	(0.3)	1.0	(0.2)	19.5	(0.8)	19.2	(0.8)	5.8	(0.5)	6.0	(0.5)
Slovak Republic	23.0	(0.8)	23.3	(0.8)	2.0	(0.4)	2.9	(0.4)	16.2	(0.7)	15.0	(0.7)	6.8	(0.6)	9.7	(0.5)
Spain	5.7	(0.4)	6.7	(0.5)	1.3	(0.2)	1.3	(0.3)	15.2	(0.7)	14.6	(0.7)	24.3	(0.7)	26.2	(0.7)
Sweden	15.5	(0.7)	15.2	(0.6)	2.0	(0.4)	1.5	(0.4)	20.3	(0.8)	20.9	(0.7)	9.5	(0.6)	10.0	(0.6)
United States	31.8	(1.0)	34.0	(1.1)	1.7	(0.2)	1.5	(0.2)	7.0	(0.6)	9.4	(0.7)	2.7	(0.4)	3.2	(0.4)
Sub-national entities																
Flanders (Belgium)	17.4	(0.6)	16.4	(0.8)	1.3	(0.2)	1.5	(0.3)	18.8	(0.7)	16.6	(0.8)	8.4	(0.5)	10.4	(0.5)
England (UK)	16.8	(0.8)	18.5	(0.9)	3.2	(0.4)	4.5	(0.5)	10.1	(0.7)	9.8	(0.7)	7.1	(0.6)	7.7	(0.6)
Northern Ireland (UK)	13.8	(0.8)	11.6	(0.8)	4.2	(0.6)	6.3	(0.6)	12.8	(0.9)	12.3	(1.0)	13.1	(1.0)	17.3	(0.8)
England/N. Ireland (UK)	16.7	(0.8)	18.3	(0.8)	3.2	(0.4)	4.5	(0.5)	10.2	(0.7)	9.9	(0.7)	7.3	(0.5)	8.0	(0.6)
Average	19.2	(0.1)	19.2	(0.2)	2.0	(0.1)	2.7	(0.1)	15.2	(0.2)	14.6	(0.1)	9.3	(0.1)	10.8	(0.1)
Partners																
Cyprus[1]	5.0	(0.5)	6.2	(0.5)	0.5	(0.2)	0.8	(0.2)	23.3	(0.8)	23.4	(0.7)	11.0	(0.5)	13.5	(0.5)

1. See notes on page 408.

Notes: Lower than upper secondary includes ISCED 1, 2 and 3C short. Upper secondary education includes ISCED 3A, 3B, 3C long and 4. Tertiary includes ISCED 5A, 5B and 6. For each country, the remaining observations fall into a category "other", which includes various combinations of missing data.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932899738

[Part 1/1]

Table B3.10 **Percentage of adults aged 16-65, by immigration background**

OECD	Native-born		Foreign born					
			Total		In host country less than 5 years		In host country 5 years or more	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.
National entities								
Australia	70.8	(0.7)	27.3	(0.7)	m	m	m	m
Austria	82.2	(0.4)	16.0	(0.4)	2.4	(0.2)	13.9	(0.5)
Canada	73.7	(0.2)	25.5	(0.2)	5.1	(0.2)	20.5	(0.2)
Czech Republic	95.0	(0.5)	4.4	(0.4)	0.7	(0.2)	3.7	(0.4)
Denmark	87.9	(0.2)	11.8	(0.2)	3.1	(0.1)	8.7	(0.2)
Estonia	86.6	(0.4)	12.9	(0.3)	0.3	(0.1)	12.7	(0.4)
Finland	94.2	(0.2)	5.7	(0.2)	1.2	(0.2)	4.5	(0.2)
France	86.5	(0.1)	12.7	(0.0)	1.2	(0.1)	11.6	(0.1)
Germany	84.8	(0.7)	13.6	(0.6)	1.1	(0.2)	12.7	(0.6)
Ireland	78.7	(0.8)	20.9	(0.8)	6.6	(0.5)	14.3	(0.6)
Italy	90.0	(0.6)	9.3	(0.6)	1.4	(0.3)	7.9	(0.6)
Japan	98.4	(0.2)	0.4	(0.1)	0.0	(0.0)	0.4	(0.1)
Korea	98.1	(0.2)	1.6	(0.2)	1.0	(0.2)	0.7	(0.1)
Netherlands	85.2	(0.2)	12.6	(0.2)	1.3	(0.2)	11.6	(0.3)
Norway	84.6	(0.5)	13.1	(0.5)	4.3	(0.3)	9.1	(0.5)
Poland	99.7	(0.1)	0.2	(0.1)	0.0	(0.0)	0.2	(0.1)
Slovak Republic	97.5	(0.2)	2.3	(0.2)	0.0	(0.0)	2.3	(0.2)
Spain	86.0	(0.1)	13.2	(0.1)	3.0	(0.2)	10.3	(0.2)
Sweden	82.4	(0.1)	17.5	(0.1)	3.9	(0.2)	13.7	(0.2)
United States	81.6	(0.2)	14.1	(0.6)	1.6	(0.2)	13.1	(0.4)
Sub-national entities								
Flanders (Belgium)	87.5	(0.4)	7.3	(0.3)	1.2	(0.2)	6.4	(0.3)
England (UK)	83.6	(0.6)	15.1	(0.6)	4.5	(0.4)	10.6	(0.5)
Northern Ireland (UK)	90.4	(0.6)	7.4	(0.5)	3.0	(0.4)	4.5	(0.4)
England/N. Ireland (UK)	83.8	(0.6)	14.8	(0.6)	4.5	(0.4)	10.4	(0.5)
Average	87.0	(0.1)	11.7	(0.1)	2.1	(0.0)	9.0	(0.1)
Partners								
Cyprus[1]	72.3	(0.4)	10.0	(0.5)	2.7	(0.3)	9.4	(0.5)

1. See notes on page 408.

Note: Information about years since immigration is not available for Australia. Due to differences in missing data for the country of birth and years since immigration variables, the combined proportion of foreign-born adults in host country for more or less than five years does not exactly match the proportion of foreign-born adults. The proportions of native-born and foreign-born (total) may not sum up to 100% due to the existence of missing data.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932899757



[Part 1/1]

Table B3.11 Percentage of adults aged 16-65, by immigrant and language background

OECD	Native born and native language		Native born and foreign language		Foreign born and native language		Foreign born and foreign language		Missing	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
National entities										
Australia	67.5	(0.7)	3.3	(0.3)	13.6	(0.5)	13.8	(0.6)	1.9	(0.2)
Austria	81.6	(0.4)	2.1	(0.2)	4.2	(0.3)	12.0	(0.4)	0.0	(0.0)
Canada	69.1	(0.3)	5.1	(0.2)	8.2	(0.3)	17.4	(0.3)	0.1	(0.0)
Czech Republic	94.8	(0.5)	0.1	(0.1)	1.8	(0.3)	2.2	(0.3)	1.1	(0.2)
Denmark	87.2	(0.3)	0.8	(0.1)	1.7	(0.2)	10.1	(0.2)	0.2	(0.0)
Estonia	84.7	(0.4)	2.2	(0.2)	11.3	(0.3)	1.7	(0.2)	0.1	(0.0)
Finland	92.6	(0.2)	1.6	(0.2)	1.2	(0.2)	2.1	(0.2)	2.6	(0.2)
France	84.9	(0.2)	1.9	(0.2)	5.4	(0.2)	7.3	(0.2)	0.5	(0.1)
Germany	84.4	(0.6)	1.8	(0.2)	3.3	(0.2)	10.5	(0.5)	0.0	(0.0)
Ireland	78.1	(0.8)	0.9	(0.2)	11.6	(0.5)	9.4	(0.6)	0.1	(0.0)
Italy	88.1	(0.7)	2.0	(0.4)	2.0	(0.2)	7.3	(0.6)	0.6	(0.2)
Japan	99.6	(0.1)	0.0	(0.0)	0.3	(0.1)	0.1	(0.0)	0.0	(0.0)
Korea	97.7	(0.2)	0.4	(0.1)	0.9	(0.1)	0.8	(0.2)	0.3	(0.1)
Netherlands	85.9	(0.3)	1.1	(0.2)	3.4	(0.3)	9.4	(0.4)	0.2	(0.1)
Norway	85.3	(0.5)	1.2	(0.2)	1.1	(0.2)	12.2	(0.5)	0.2	(0.1)
Poland	98.6	(0.2)	1.1	(0.2)	0.2	(0.0)	0.0	(0.0)	0.1	(0.0)
Slovak Republic	92.4	(0.5)	5.3	(0.4)	1.1	(0.2)	1.2	(0.2)	0.0	(0.0)
Spain	83.8	(0.3)	2.8	(0.3)	8.2	(0.3)	5.0	(0.2)	0.2	(0.1)
Sweden	80.1	(0.2)	2.3	(0.2)	2.0	(0.2)	15.5	(0.2)	0.1	(0.0)
United States	81.2	(0.6)	3.8	(0.4)	3.7	(0.3)	11.0	(0.6)	0.3	(0.1)
Sub-national entities										
Flanders (Belgium)	88.8	(0.4)	3.3	(0.3)	2.9	(0.2)	3.9	(0.3)	1.1	(0.1)
England (UK)	82.9	(0.7)	1.6	(0.2)	6.1	(0.5)	8.9	(0.6)	0.4	(0.1)
Northern Ireland (UK)	91.7	(0.6)	0.8	(0.2)	4.4	(0.3)	3.1	(0.4)	0.0	(0.0)
England/N. Ireland (UK)	83.2	(0.7)	1.6	(0.2)	6.1	(0.4)	8.7	(0.6)	0.4	(0.1)
Average	85.9	(0.1)	2.0	(0.1)	4.3	(0.1)	7.3	(0.1)	0.5	(0.0)
Partners										
Cyprus[1]	87.6	(0.5)	0.2	(0.1)	6.4	(0.4)	5.7	(0.4)	0.0	(0.0)

1. See notes on page 408.

Note: Native language refers to whether the first or second language learned as a child is the same as the language of assessment, and not whether the language has official status. Foreign language refers to whether the first or second language learned as a child is not the same as the language of assessment. Thus in some cases, foreign language might refer to minority languages in which the assessment was not administered.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932899776

[Part 1/1]

Table B3.12 **Percentage of adults aged 16-65, by immigrant, language and socio-economic background**

OECD	Native born and native language, at least one parent with upper secondary education or higher		Native born and native language, neither parent attained upper secondary education		Foreign born and foreign language, at least one parent with upper secondary education or higher		Foreign born and foreign language, neither parent attained upper secondary education		Other	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
National entities										
Australia	31.9	(0.8)	26.6	(0.6)	8.0	(0.4)	4.8	(0.3)	28.7	(0.6)
Austria	58.4	(0.6)	19.1	(0.5)	6.4	(0.4)	5.1	(0.3)	11.0	(0.4)
Canada	48.9	(0.4)	14.7	(0.3)	11.7	(0.2)	5.1	(0.2)	19.6	(0.4)
Czech Republic	82.1	(0.9)	8.9	(0.6)	1.5	(0.2)	0.6	(0.2)	6.9	(0.6)
Denmark	60.4	(0.6)	25.8	(0.5)	6.3	(0.2)	3.5	(0.1)	4.0	(0.2)
Estonia	59.0	(0.5)	19.5	(0.4)	0.9	(0.1)	0.6	(0.1)	20.0	(0.5)
Finland	53.6	(0.6)	37.0	(0.6)	1.4	(0.2)	0.4	(0.1)	7.6	(0.3)
France	40.6	(0.5)	28.6	(0.6)	1.8	(0.1)	4.6	(0.2)	24.4	(0.6)
Germany	72.0	(0.7)	5.2	(0.3)	6.1	(0.5)	3.1	(0.4)	13.6	(0.6)
Ireland	34.0	(0.6)	40.5	(0.7)	6.3	(0.5)	2.5	(0.3)	16.8	(0.6)
Italy	24.0	(0.6)	63.5	(0.8)	2.3	(0.3)	4.8	(0.4)	5.4	(0.5)
Japan	69.8	(0.5)	22.3	(0.5)	0.1	(0.0)	0.0	(0.0)	7.8	(0.4)
Korea	46.8	(0.6)	49.9	(0.6)	0.4	(0.1)	0.4	(0.1)	2.5	(0.3)
Netherlands	43.0	(0.6)	39.5	(0.6)	3.3	(0.3)	5.2	(0.3)	9.0	(0.5)
Norway	60.5	(0.6)	21.4	(0.6)	7.8	(0.4)	3.7	(0.3)	6.5	(0.3)
Poland	69.0	(0.6)	26.5	(0.6)	0.0	(0.0)	0.0	(0.0)	4.5	(0.3)
Slovak Republic	67.1	(0.7)	24.3	(0.7)	0.7	(0.1)	0.4	(0.1)	7.5	(0.4)
Spain	21.4	(0.6)	59.0	(0.6)	1.8	(0.2)	3.0	(0.2)	14.8	(0.4)
Sweden	46.4	(0.6)	29.8	(0.6)	8.2	(0.3)	6.1	(0.3)	9.5	(0.5)
United States	65.2	(0.8)	8.8	(0.6)	5.4	(0.5)	4.8	(0.4)	15.7	(0.8)
Sub-national entities										
Flanders (Belgium)	48.6	(0.5)	32.1	(0.6)	1.5	(0.2)	1.7	(0.2)	16.1	(0.4)
England (UK)	45.6	(0.9)	17.6	(0.7)	5.2	(0.4)	2.4	(0.3)	29.2	(0.9)
Northern Ireland (UK)	48.2	(0.9)	33.4	(0.8)	1.7	(0.3)	1.1	(0.3)	15.6	(0.7)
England/N. Ireland (UK)	45.7	(0.8)	18.1	(0.6)	5.1	(0.4)	2.4	(0.3)	28.8	(0.9)
Average	52.2	(0.1)	28.2	(0.1)	4.0	(0.1)	2.9	(0.1)	12.8	(0.1)
Partners										
Cyprus[1]	28.9	(0.6)	42.6	(0.6)	3.0	(0.3)	1.7	(0.2)	23.8	(0.5)

1. See notes on page 408.

Notes: Native language refers to whether the first or second language learned as a child is the same as the language of assessment, and not whether the language has official status. Foreign language refers to whether the first or second language learned as a child is not the same as the language of assessment. Thus in some cases, foreign language might refer to minority languages in which the assessment was not administered. Lower than upper secondary includes ISCED 1, 2 and 3C short. Upper secondary education includes ISCED 3A, 3B, 3C long and 4. Tertiary includes ISCED 5A, 5B and 6. The category "other" includes various combinations of missing data.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932899795

[Part 1/1]

Table B3.13 **Percentage of adults aged 16-65, by immigrant and language background, and gender**

OECD	Native born and native language, men		Native born and native language, women		Foreign born and foreign language, men		Foreign born and foreign language, women		Other	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
National entities										
Australia	33.4	(0.5)	34.1	(0.5)	7.0	(0.4)	6.8	(0.4)	18.8	(0.5)
Austria	40.0	(0.4)	40.1	(0.4)	5.7	(0.3)	6.2	(0.3)	8.0	(0.3)
Canada	34.6	(0.3)	33.9	(0.3)	8.3	(0.2)	9.0	(0.2)	14.1	(0.4)
Czech Republic	48.0	(0.4)	46.9	(0.3)	1.0	(0.2)	1.2	(0.2)	3.0	(0.4)
Denmark	44.0	(0.2)	43.0	(0.2)	4.9	(0.1)	5.2	(0.1)	3.0	(0.2)
Estonia	41.2	(0.3)	43.3	(0.3)	0.8	(0.1)	0.9	(0.1)	13.9	(0.4)
Finland	46.7	(0.2)	45.8	(0.2)	0.9	(0.1)	1.2	(0.2)	5.4	(0.3)
France	41.2	(0.3)	43.3	(0.3)	3.7	(0.2)	3.6	(0.2)	8.2	(0.3)
Germany	42.2	(0.4)	40.9	(0.5)	4.5	(0.3)	5.9	(0.4)	6.5	(0.4)
Ireland	38.1	(0.5)	39.8	(0.5)	4.6	(0.4)	4.8	(0.4)	12.8	(0.5)
Italy	44.5	(0.4)	43.5	(0.5)	3.4	(0.4)	3.9	(0.4)	4.7	(0.5)
Japan	49.3	(0.1)	49.0	(0.1)	0.1	(0.0)	0.0	(0.0)	1.6	(0.2)
Korea	48.6	(0.1)	49.0	(0.2)	0.3	(0.1)	0.4	(0.1)	1.6	(0.2)
Netherlands	42.7	(0.3)	41.3	(0.3)	4.2	(0.3)	5.0	(0.3)	6.8	(0.4)
Norway	42.3	(0.4)	41.1	(0.3)	6.4	(0.4)	5.5	(0.3)	4.6	(0.2)
Poland	48.7	(0.1)	49.9	(0.1)	0.0	(0.0)	0.0	(0.0)	1.4	(0.2)
Slovak Republic	46.2	(0.3)	45.9	(0.3)	0.6	(0.1)	0.5	(0.1)	6.7	(0.4)
Spain	42.0	(0.3)	41.1	(0.3)	2.4	(0.2)	2.6	(0.2)	11.9	(0.4)
Sweden	41.3	(0.3)	38.8	(0.3)	7.4	(0.2)	8.0	(0.3)	4.5	(0.3)
United States	38.1	(0.4)	39.9	(0.3)	5.1	(0.4)	5.4	(0.4)	11.5	(0.7)
Sub-national entities										
Flanders (Belgium)	42.9	(0.4)	41.4	(0.3)	1.7	(0.2)	1.9	(0.2)	12.1	(0.4)
England (UK)	40.8	(0.5)	41.0	(0.4)	4.4	(0.4)	4.4	(0.4)	9.4	(0.5)
Northern Ireland (UK)	44.4	(0.4)	45.3	(0.5)	1.4	(0.3)	1.6	(0.3)	7.3	(0.5)
England/N. Ireland (UK)	40.9	(0.5)	41.1	(0.4)	4.3	(0.4)	4.3	(0.3)	9.3	(0.5)
Average	42.6	(0.1)	42.4	(0.1)	3.5	(0.1)	3.7	(0.1)	7.7	(0.1)
Partners										
Cyprus[1]	34.6	(0.5)	37.6	(0.4)	1.9	(0.3)	2.8	(0.2)	23.2	(0.4)

1. See notes on page 408.

Notes: Native language refers to whether the first or second language learned as a child is the same as the language of assessment, and not whether the language has official status. Foreign language refers to whether the first or second language learned as a child is not the same as the language of assessment. Thus in some cases, foreign language might refer to minority languages in which the assessment was not administered. The category "other" includes various combinations of missing data.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932899814

[Part 1/1]

Table B3.14 **Percentage of adults aged 16-65 who worked during previous five years, by type of occupation**

OECD	Skilled occupations		Semi-skilled white-collar occupations		Semi-skilled blue-collar occupations		Elementary occupations		Had not worked during previous five years		Missing	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
National entities												
Australia	36.4	(0.7)	24.0	(0.5)	16.3	(0.5)	8.5	(0.4)	12.4	(0.5)	2.3	(0.2)
Austria	33.5	(0.7)	24.0	(0.7)	19.1	(0.6)	7.5	(0.4)	12.4	(0.4)	3.5	(0.2)
Canada	44.8	(0.5)	22.7	(0.4)	14.5	(0.4)	6.9	(0.2)	9.2	(0.3)	1.9	(0.1)
Czech Republic	28.5	(0.8)	20.5	(0.7)	26.8	(0.8)	7.3	(0.5)	15.7	(0.5)	1.3	(0.2)
Denmark	38.3	(0.5)	24.9	(0.5)	16.0	(0.4)	10.7	(0.4)	8.4	(0.3)	1.6	(0.2)
Estonia	35.8	(0.5)	17.0	(0.4)	24.7	(0.5)	8.9	(0.3)	12.3	(0.4)	1.3	(0.1)
Finland	33.8	(0.6)	25.5	(0.5)	21.0	(0.6)	8.1	(0.4)	10.9	(0.5)	0.7	(0.1)
France	31.0	(0.4)	21.0	(0.4)	18.7	(0.4)	9.5	(0.3)	18.3	(0.3)	1.5	(0.1)
Germany	31.2	(0.6)	26.3	(0.7)	19.5	(0.5)	7.6	(0.4)	12.7	(0.5)	2.7	(0.2)
Ireland	28.1	(0.6)	27.1	(0.6)	17.5	(0.6)	7.5	(0.4)	19.0	(0.6)	0.8	(0.1)
Italy	21.1	(0.5)	20.6	(0.7)	20.0	(0.8)	8.5	(0.5)	28.4	(0.6)	1.4	(0.2)
Japan	26.8	(0.6)	29.8	(0.6)	16.2	(0.6)	5.1	(0.3)	14.0	(0.4)	8.1	(0.4)
Korea	22.2	(0.5)	31.6	(0.7)	16.6	(0.5)	9.2	(0.4)	19.3	(0.5)	1.1	(0.2)
Netherlands	42.5	(0.6)	24.8	(0.6)	9.7	(0.3)	7.8	(0.4)	12.5	(0.4)	2.7	(0.2)
Norway	35.4	(0.6)	27.1	(0.5)	12.9	(0.4)	4.3	(0.3)	9.0	(0.3)	11.4	(0.4)
Poland	26.7	(0.5)	17.9	(0.5)	24.0	(0.4)	7.2	(0.4)	23.2	(0.5)	1.1	(0.2)
Slovak Republic	29.7	(0.7)	17.3	(0.5)	22.2	(0.6)	6.8	(0.4)	22.8	(0.5)	1.2	(0.2)
Spain	24.0	(0.6)	26.5	(0.6)	17.4	(0.5)	12.6	(0.4)	18.1	(0.5)	1.4	(0.2)
Sweden	37.6	(0.5)	26.6	(0.6)	18.5	(0.5)	5.6	(0.4)	10.3	(0.4)	1.5	(0.2)
United States	37.1	(0.7)	26.4	(0.6)	13.6	(0.6)	7.7	(0.4)	10.1	(0.6)	5.2	(0.6)
Sub-national entities												
Flanders (Belgium)	34.7	(0.6)	19.5	(0.6)	14.1	(0.4)	7.0	(0.4)	17.8	(0.4)	6.8	(0.3)
England (UK)	31.5	(0.7)	29.8	(0.6)	13.4	(0.6)	9.1	(0.5)	13.5	(0.4)	2.7	(0.3)
Northern Ireland (UK)	25.2	(0.7)	28.2	(0.7)	13.8	(0.7)	6.5	(0.5)	20.2	(0.5)	6.1	(0.4)
England/N. Ireland (UK)	31.3	(0.6)	29.8	(0.6)	13.4	(0.5)	9.0	(0.5)	13.7	(0.4)	2.8	(0.3)
Average	32.3	(0.1)	24.1	(0.1)	17.8	(0.1)	7.9	(0.1)	15.0	(0.1)	2.8	(0.1)
Partners												
Cyprus[1]	23.0	(0.5)	23.0	(0.6)	10.5	(0.4)	4.7	(0.3)	19.4	(0.5)	19.5	(0.4)

1. See notes on page 408.

Note: Includes all adults who worked during the previous five years. Skilled occupations include: legislators, senior officials and managers; professionals; technicians and associate professionals. Semi-skilled white-collar occupations include: clerks; service workers and shop and market sales workers. Semi-skilled blue-collar occupations include: skilled agricultural and fishery workers; craft and related trades workers; plant and machine operators and assemblers.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932899833

[Part 1/1]

Table B3.15 **Percentage of adults aged 16-65, by educational attainment and type of occupation**

OECD	Workers in skilled occupations, attained upper secondary or higher		Workers in low-/semi-skilled occupations, attained upper secondary or higher		Workers in skilled occupations, did not attain upper secondary		Workers in low-/semi-skilled occupations, did not attain upper secondary		Non-employed	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
National entities										
Australia	32.7	(0.7)	32.6	(0.7)	3.7	(0.3)	16.3	(0.5)	12.4	(0.5)
Austria	31.6	(0.6)	36.7	(0.7)	1.9	(0.2)	13.9	(0.4)	12.4	(0.4)
Canada	42.7	(0.5)	35.0	(0.5)	2.1	(0.2)	9.0	(0.2)	9.2	(0.3)
Czech Republic	28.0	(0.8)	46.6	(0.8)	0.5	(0.1)	7.9	(0.5)	15.7	(0.5)
Denmark	35.9	(0.5)	33.1	(0.6)	2.4	(0.2)	18.5	(0.5)	8.4	(0.3)
Estonia	34.9	(0.5)	39.6	(0.6)	0.9	(0.1)	11.0	(0.3)	12.3	(0.4)
Finland	32.6	(0.5)	42.3	(0.6)	1.3	(0.2)	12.2	(0.4)	10.9	(0.5)
France	28.2	(0.3)	34.2	(0.5)	2.8	(0.2)	14.8	(0.3)	18.3	(0.3)
Germany	30.5	(0.6)	43.3	(0.7)	0.8	(0.1)	10.1	(0.5)	12.7	(0.5)
Ireland	25.8	(0.5)	36.4	(0.6)	2.3	(0.2)	15.6	(0.5)	19.0	(0.6)
Italy	18.4	(0.4)	18.8	(0.4)	2.7	(0.3)	30.3	(0.7)	28.4	(0.6)
Japan	26.1	(0.6)	43.2	(0.8)	0.7	(0.1)	7.9	(0.4)	14.0	(0.4)
Korea	21.5	(0.5)	44.9	(0.6)	0.6	(0.1)	12.5	(0.4)	19.3	(0.5)
Netherlands	37.7	(0.5)	24.1	(0.6)	4.8	(0.3)	18.1	(0.5)	12.5	(0.4)
Norway	32.6	(0.5)	27.7	(0.5)	2.8	(0.2)	16.5	(0.5)	9.0	(0.3)
Poland	26.4	(0.5)	42.2	(0.6)	0.3	(0.1)	6.9	(0.4)	23.2	(0.5)
Slovak Republic	29.3	(0.7)	38.2	(0.7)	0.4	(0.1)	8.1	(0.5)	22.8	(0.5)
Spain	21.1	(0.5)	24.6	(0.5)	2.9	(0.2)	31.8	(0.4)	18.1	(0.5)
Sweden	35.2	(0.5)	35.9	(0.5)	2.4	(0.2)	14.7	(0.4)	10.3	(0.4)
United States	36.1	(0.7)	38.6	(0.7)	1.0	(0.1)	9.0	(0.4)	10.1	(0.6)
Sub-national entities										
Flanders (Belgium)	33.4	(0.6)	31.1	(0.7)	1.3	(0.2)	9.5	(0.4)	17.8	(0.4)
England (UK)	29.0	(0.6)	37.5	(0.7)	2.3	(0.3)	14.7	(0.5)	13.5	(0.4)
Northern Ireland (UK)	23.2	(0.6)	31.4	(0.8)	2.0	(0.2)	17.1	(0.6)	20.2	(0.5)
England/N. Ireland (UK)	28.8	(0.6)	37.3	(0.7)	2.3	(0.2)	14.8	(0.5)	13.7	(0.4)
Average	30.4	(0.1)	35.8	(0.1)	1.9	(0.0)	14.1	(0.1)	15.0	(0.1)
Partners										
Cyprus[1]	22.1	(0.5)	29.2	(0.5)	0.9	(0.1)	8.9	(0.3)	19.4	(0.5)

1. See notes on page 408.

Note: For each country, the remaining observations fall into a category "other" which includes various combinations of missing data.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932899852

[Part 1/1]

Table B3.16 **Percentage of adults aged 16-65, by age, gender and type of occupation**

OECD	Men in skilled occupations, aged 25-44		Men in low-/ semi-skilled occupations, aged 25-44		Men in skilled occupations, aged 45-65		Men in low-/ semi-skilled occupations, aged 45-65		Women in skilled occupations, aged 25-44		Women in low-/ semi-skilled occupations, aged 25-44		Women in skilled occupations, aged 45-65		Women in low-/ semi-skilled occupations, aged 45-65	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
National entities																
Australia	9.2	(0.3)	11.0	(0.3)	7.8	(0.3)	9.1	(0.3)	9.6	(0.3)	8.6	(0.3)	6.5	(0.3)	7.9	(0.3)
Austria	8.8	(0.3)	10.5	(0.3)	7.9	(0.3)	10.2	(0.3)	8.0	(0.3)	10.8	(0.4)	5.8	(0.3)	10.8	(0.3)
Canada	10.3	(0.3)	8.7	(0.3)	9.7	(0.2)	9.6	(0.2)	11.2	(0.2)	7.0	(0.2)	9.9	(0.2)	7.9	(0.2)
Czech Republic	8.1	(0.5)	13.8	(0.5)	5.6	(0.3)	11.2	(0.4)	7.5	(0.5)	11.9	(0.4)	5.9	(0.4)	10.3	(0.4)
Denmark	8.8	(0.3)	10.0	(0.3)	8.7	(0.3)	10.9	(0.3)	10.0	(0.3)	8.2	(0.3)	9.0	(0.3)	9.5	(0.3)
Estonia	8.6	(0.3)	11.1	(0.3)	5.2	(0.2)	10.4	(0.3)	10.6	(0.3)	9.4	(0.3)	8.4	(0.3)	10.4	(0.3)
Finland	7.8	(0.3)	10.5	(0.3)	7.8	(0.3)	11.6	(0.4)	8.4	(0.4)	8.8	(0.4)	8.3	(0.3)	12.2	(0.4)
France	8.0	(0.3)	10.6	(0.3)	7.6	(0.2)	10.5	(0.3)	7.5	(0.2)	10.4	(0.3)	5.9	(0.2)	11.2	(0.3)
Germany	7.0	(0.3)	12.1	(0.3)	8.3	(0.3)	11.8	(0.3)	7.2	(0.3)	10.0	(0.3)	6.6	(0.3)	11.2	(0.3)
Ireland	8.2	(0.3)	13.1	(0.4)	5.0	(0.3)	10.0	(0.4)	8.2	(0.3)	12.7	(0.5)	4.6	(0.3)	7.4	(0.3)
Italy	6.2	(0.3)	14.1	(0.5)	5.0	(0.3)	11.7	(0.5)	5.2	(0.3)	10.7	(0.5)	4.1	(0.3)	8.3	(0.5)
Japan	8.1	(0.4)	11.5	(0.4)	9.4	(0.4)	10.1	(0.4)	4.7	(0.3)	10.9	(0.4)	3.2	(0.2)	11.4	(0.4)
Korea	6.9	(0.3)	14.7	(0.4)	4.7	(0.2)	13.7	(0.3)	6.5	(0.3)	10.6	(0.3)	2.6	(0.2)	10.8	(0.3)
Netherlands	11.4	(0.3)	7.5	(0.3)	11.4	(0.3)	7.7	(0.3)	9.2	(0.4)	7.9	(0.4)	7.6	(0.3)	8.2	(0.3)
Norway	9.0	(0.3)	8.5	(0.3)	8.1	(0.3)	7.7	(0.3)	9.4	(0.3)	8.1	(0.3)	7.2	(0.3)	7.8	(0.3)
Poland	6.8	(0.3)	12.7	(0.3)	3.7	(0.3)	11.1	(0.3)	8.6	(0.3)	9.8	(0.3)	6.1	(0.3)	7.3	(0.3)
Slovak Republic	8.1	(0.4)	12.0	(0.4)	5.6	(0.3)	10.6	(0.4)	8.1	(0.4)	9.8	(0.3)	6.6	(0.3)	8.4	(0.3)
Spain	6.7	(0.3)	15.7	(0.3)	5.0	(0.3)	13.2	(0.3)	6.7	(0.3)	13.5	(0.3)	4.4	(0.3)	9.7	(0.4)
Sweden	8.4	(0.3)	10.6	(0.3)	9.4	(0.3)	9.7	(0.3)	9.0	(0.3)	8.6	(0.3)	8.8	(0.2)	9.9	(0.3)
United States	7.8	(0.4)	10.2	(0.3)	8.4	(0.3)	8.4	(0.4)	8.8	(0.4)	9.3	(0.4)	9.2	(0.4)	8.0	(0.3)
Sub-national entities																
Flanders (Belgium)	8.7	(0.3)	8.7	(0.3)	9.4	(0.3)	9.9	(0.3)	8.2	(0.3)	8.4	(0.3)	7.1	(0.3)	8.4	(0.3)
England (UK)	8.7	(0.3)	10.9	(0.3)	7.2	(0.3)	10.3	(0.3)	7.7	(0.3)	9.8	(0.3)	5.6	(0.3)	10.7	(0.3)
Northern Ireland (UK)	7.4	(0.4)	11.1	(0.5)	5.2	(0.3)	8.6	(0.4)	6.3	(0.3)	10.0	(0.4)	3.9	(0.3)	8.8	(0.4)
England/N. Ireland (UK)	8.7	(0.3)	10.9	(0.3)	7.2	(0.3)	10.2	(0.3)	7.7	(0.3)	9.8	(0.2)	5.5	(0.3)	10.7	(0.3)
Average	8.3	(0.1)	11.3	(0.1)	7.3	(0.1)	10.4	(0.1)	8.2	(0.1)	9.8	(0.1)	6.5	(0.1)	9.5	(0.1)
Partners																
Cyprus[1]	5.7	(0.3)	8.7	(0.4)	5.5	(0.3)	8.0	(0.3)	7.0	(0.3)	9.3	(0.4)	3.4	(0.2)	7.1	(0.3)

1. See notes on page 408.

Note: Skilled occupations include: legislators, senior officials and managers; professionals; technicians and associate professionals. Semi-skilled white-collar occupations include: clerks; service workers and shop and market sales workers. Semi-skilled blue-collar occupations include: skilled agricultural and fishery workers; craft and related trades workers; plant and machine operators and assemblers. For each country, the remaining observations correspond to either adults aged 16-24 or fall into a category "other" which includes various combinations of missing data.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932899871

[Part 1/3]

Table B3.17 (L) Literacy proficiency, adjusted for socio-demographic characteristics

	Age										Gender			
	16-24 year-olds		25-34 year-olds		35-44 year-olds		45-54 year-olds		55-65 year-olds		Men		Women	
OECD	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.
National entities														
Australia	296.0	(0.5)	294.2	(0.2)	297.3	(0.0)	292.9	(0.0)	284.3	(0.0)	297.3	(0.0)	292.9	(0.0)
Austria	287.1	(0.0)	282.6	(0.0)	278.1	(0.0)	270.5	(0.0)	258.6	(0.0)	278.1	(0.0)	275.5	(0.0)
Canada	283.5	(0.0)	276.1	(0.1)	273.2	(0.0)	267.1	(0.0)	266.4	(0.0)	273.2	(0.0)	268.8	(0.0)
Czech Republic	294.7	(0.0)	287.0	(0.0)	279.1	(0.0)	273.4	(0.0)	272.1	(0.0)	279.1	(0.0)	274.5	(0.0)
Denmark	291.6	(0.0)	280.9	(0.3)	280.1	(0.0)	269.4	(0.0)	259.4	(0.0)	280.1	(0.0)	276.5	(0.0)
Estonia	293.4	(0.0)	281.0	(0.0)	274.3	(0.0)	269.3	(0.0)	267.4	(0.0)	274.3	(0.0)	271.6	(0.0)
Finland	307.9	(0.0)	302.3	(0.0)	295.3	(0.0)	282.1	(0.0)	265.9	(0.0)	295.3	(0.0)	292.9	(0.1)
France	282.0	(0.0)	278.7	(0.0)	270.7	(0.0)	265.5	(0.0)	259.0	(0.0)	270.7	(0.0)	268.7	(0.0)
Germany	295.0	(0.0)	281.6	(0.2)	277.7	(0.0)	264.6	(0.0)	255.9	(0.0)	277.7	(0.0)	272.4	(0.0)
Ireland	282.2	(0.1)	278.8	(0.6)	278.8	(0.0)	273.4	(0.0)	271.3	(0.0)	278.8	(0.0)	273.5	(0.0)
Italy	281.5	(0.0)	274.0	(0.9)	273.8	(0.0)	272.9	(0.5)	259.4	(0.0)	273.8	(0.0)	273.4	(0.8)
Japan	301.2	(0.5)	299.2	(0.5)	299.0	(0.0)	291.4	(0.0)	276.0	(0.0)	299.0	(0.0)	296.7	(0.1)
Korea	299.1	(0.0)	283.3	(0.0)	276.1	(0.0)	265.9	(0.0)	260.8	(0.0)	276.1	(0.0)	270.4	(0.0)
Netherlands	311.4	(0.0)	301.0	(0.8)	301.5	(0.0)	289.9	(0.0)	278.0	(0.0)	301.5	(0.0)	297.5	(0.0)
Norway	286.2	(0.3)	288.5	(0.1)	287.5	(0.0)	281.4	(0.0)	266.6	(0.0)	287.5	(0.0)	280.7	(0.0)
Poland	282.8	(0.0)	263.1	(0.0)	261.5	(0.0)	259.0	(0.6)	254.4	(0.1)	261.5	(0.0)	263.3	(0.1)
Slovak Republic	286.6	(0.0)	278.5	(0.3)	279.8	(0.0)	277.5	(0.2)	279.3	(0.9)	279.8	(0.0)	281.6	(0.3)
Spain	286.7	(0.0)	277.6	(0.2)	277.4	(0.0)	269.9	(0.0)	253.9	(0.0)	277.4	(0.0)	270.6	(0.0)
Sweden	302.4	(0.0)	295.0	(0.6)	294.5	(0.0)	287.5	(0.0)	276.6	(0.0)	294.5	(0.0)	289.1	(0.0)
United States	276.2	(0.0)	266.7	(0.9)	266.4	(0.0)	262.4	(0.1)	259.4	(0.0)	266.4	(0.0)	264.1	(0.1)
Sub-national entities														
Flanders (Belgium)	296.2	(0.0)	287.9	(0.0)	282.2	(0.0)	275.8	(0.0)	267.3	(0.0)	282.2	(0.0)	275.6	(0.0)
England (UK)	278.8	(0.0)	287.0	(0.7)	288.0	(0.0)	283.9	(0.1)	281.2	(0.0)	288.0	(0.0)	285.4	(0.2)
Northern Ireland (UK)	284.2	(0.7)	282.4	(0.7)	283.8	(0.0)	278.4	(0.0)	278.1	(0.0)	283.8	(0.0)	278.1	(0.0)
England/N. Ireland (UK)	279.0	(0.0)	286.7	(0.7)	287.8	(0.0)	283.6	(0.1)	281.1	(0.0)	287.8	(0.0)	285.2	(0.1)
Average	291.0	(0.0)	283.9	(0.1)	281.5	(0.0)	274.8	(0.0)	267.0	(0.0)	281.5	(0.0)	278.0	(0.0)
Partners														
Cyprus[1]	268.6	(0.2)	270.9	(0.9)	271.0	(0.0)	273.2	(0.2)	267.9	(0.4)	271.0	(0.0)	271.8	(0.6)

[Part 2/3]

Table B3.17 (L) Literacy proficiency, adjusted for socio-demographic characteristics

	Immigrant and language background								Educational attainment					
	Native born, native language		Native born, foreign language		Foreign born, native language		Foreign born, foreign language		Lower than upper secondary		Upper secondary		Tertiary	
OECD	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.
National entities														
Australia	297.3	(0.0)	285.5	(0.0)	294.4	(0.0)	260.3	(0.0)	279.4	(0.0)	297.3	(0.0)	311.5	(0.0)
Austria	278.1	(0.0)	261.0	(0.0)	276.2	(0.8)	246.7	(0.0)	264.1	(0.0)	278.1	(0.0)	297.0	(0.0)
Canada	273.2	(0.0)	272.2	(0.6)	255.2	(0.0)	240.2	(0.0)	246.0	(0.0)	273.2	(0.0)	291.0	(0.0)
Czech Republic	279.1	(0.0)	c	c	275.8	(1.0)	275.6	(0.2)	263.9	(0.0)	279.1	(0.0)	299.2	(0.0)
Denmark	280.1	(0.0)	271.3	(0.1)	272.2	(0.1)	237.4	(0.0)	261.4	(0.0)	280.1	(0.0)	295.4	(0.0)
Estonia	274.3	(0.0)	269.2	(0.1)	257.2	(0.0)	258.7	(0.0)	258.0	(0.0)	274.3	(0.0)	285.8	(0.0)
Finland	295.3	(0.0)	272.5	(0.0)	297.4	(0.4)	241.6	(0.0)	282.3	(0.0)	295.3	(0.0)	315.2	(0.0)
France	270.7	(0.0)	256.8	(0.0)	252.5	(0.0)	235.3	(0.0)	250.7	(0.0)	270.7	(0.0)	292.0	(0.0)
Germany	277.7	(0.0)	262.1	(0.0)	268.3	(0.0)	246.7	(0.0)	257.0	(0.0)	277.7	(0.0)	294.4	(0.0)
Ireland	278.8	(0.0)	288.5	(0.1)	277.2	(0.4)	249.8	(0.0)	255.0	(0.0)	278.8	(0.0)	296.0	(0.0)
Italy	273.8	(0.0)	268.4	(0.4)	265.0	(0.2)	244.6	(0.0)	253.7	(0.0)	273.8	(0.0)	282.5	(0.0)
Japan	299.0	(0.0)	c	c	c	c	c	c	283.5	(0.0)	299.0	(0.0)	316.2	(0.0)
Korea	276.1	(0.0)	c	c	254.3	(0.0)	222.2	(0.0)	256.3	(0.0)	276.1	(0.0)	291.0	(0.0)
Netherlands	301.5	(0.0)	267.2	(0.0)	278.7	(0.0)	261.1	(0.0)	280.7	(0.0)	301.5	(0.0)	320.2	(0.0)
Norway	287.5	(0.0)	265.4	(0.0)	277.6	(0.0)	243.7	(0.0)	274.0	(0.0)	287.5	(0.0)	305.8	(0.0)
Poland	261.5	(0.0)	253.2	(0.1)	c	c	c	c	248.8	(0.0)	261.5	(0.0)	283.6	(0.0)
Slovak Republic	279.8	(0.0)	269.2	(0.0)	275.9	(0.7)	281.6	(0.3)	258.1	(0.0)	279.8	(0.0)	290.8	(0.0)
Spain	277.4	(0.0)	275.0	(0.8)	261.0	(0.0)	243.3	(0.0)	252.3	(0.0)	277.4	(0.0)	291.2	(0.0)
Sweden	294.5	(0.0)	289.2	(0.4)	285.1	(0.1)	241.7	(0.0)	277.3	(0.0)	294.5	(0.0)	315.2	(0.0)
United States	266.4	(0.0)	265.1	(0.1)	257.3	(0.0)	235.6	(0.0)	246.5	(0.0)	266.4	(0.0)	291.4	(0.0)
Sub-national entities														
Flanders (Belgium)	282.2	(0.0)	270.8	(0.0)	278.4	(0.0)	233.8	(0.0)	263.9	(0.0)	282.2	(0.0)	305.7	(0.0)
England (UK)	288.0	(0.0)	277.9	(0.1)	276.4	(0.0)	253.7	(0.0)	261.0	(0.0)	288.0	(0.0)	296.8	(0.0)
Northern Ireland (UK)	283.8	(0.0)	c	c	281.1	(0.3)	250.6	(0.0)	257.8	(0.0)	283.8	(0.0)	294.3	(0.0)
England/N. Ireland (UK)	287.8	(0.0)	278.0	(0.1)	276.5	(0.0)	253.5	(0.0)	260.8	(0.0)	287.8	(0.0)	296.6	(0.0)
Average	281.5	(0.0)	270.5	(0.1)	271.8	(0.1)	247.7	(0.0)	262.4	(0.0)	281.5	(0.0)	298.5	(0.0)
Partners														
Cyprus[1]	271.0	(0.0)	c	c	261.8	(0.0)	244.9	(0.0)	257.4	(0.0)	271.0	(0.0)	281.7	(0.0)

1. See notes on page 408.

Note: Data are based on a multiple linear regression model that takes account of differences associated with the following variables: age, gender, education, immigration and language background, socio-economic background and type of occupation. Reference groups (in brackets) for each socio-demographic characteristics are: age (35-44); gender (men); immigrant status (native-born); language status (native language); education (upper secondary); parents' education (upper secondary); and occupation status (semi-skilled, white-collar).

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932899890

[Part 3/3]

Table B3.17 (L) Literacy proficiency, adjusted for socio-demographic characteristics

	Socio-economic background						Type of occupation							
	Neither parent attained upper secondary		At least one parent attained upper secondary		At least one parent attained tertiary		Skilled		Semi-skilled white-collar		Semi-skilled blue-collar		Elementary	
OECD	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.
National entities														
Australia	289.6	(0.0)	297.3	(0.0)	307.0	(0.0)	307.4	(0.0)	297.3	(0.0)	283.4	(0.0)	283.9	(0.0)
Austria	269.4	(0.0)	278.1	(0.0)	286.0	(0.0)	289.8	(0.0)	278.1	(0.0)	268.6	(0.0)	263.3	(0.0)
Canada	263.2	(0.0)	273.2	(0.0)	281.7	(0.0)	291.1	(0.0)	273.2	(0.0)	267.8	(0.0)	265.6	(0.0)
Czech Republic	271.6	(0.0)	279.1	(0.0)	286.8	(0.0)	282.0	(0.3)	279.1	(0.0)	265.9	(0.0)	259.4	(0.0)
Denmark	276.0	(0.0)	280.1	(0.0)	293.0	(0.0)	288.7	(0.0)	280.1	(0.0)	267.3	(0.0)	270.3	(0.0)
Estonia	271.5	(0.0)	274.3	(0.0)	282.6	(0.0)	284.5	(0.0)	274.3	(0.0)	266.0	(0.0)	268.9	(0.0)
Finland	289.6	(0.0)	295.3	(0.0)	307.8	(0.0)	304.6	(0.0)	295.3	(0.0)	287.5	(0.0)	286.7	(0.0)
France	264.6	(0.0)	270.7	(0.0)	284.6	(0.0)	275.9	(0.0)	270.7	(0.0)	259.9	(0.0)	255.4	(0.0)
Germany	268.0	(0.0)	277.7	(0.0)	288.9	(0.0)	289.6	(0.0)	277.7	(0.0)	265.4	(0.0)	269.5	(0.0)
Ireland	268.3	(0.0)	278.8	(0.0)	287.7	(0.0)	287.0	(0.0)	278.8	(0.0)	277.6	(0.5)	274.4	(0.2)
Italy	264.1	(0.0)	273.8	(0.0)	283.1	(0.0)	280.6	(0.0)	273.8	(0.0)	264.9	(0.0)	260.4	(0.0)
Japan	292.7	(0.0)	299.0	(0.0)	303.5	(0.0)	305.4	(0.0)	299.0	(0.0)	295.5	(0.1)	293.3	(0.0)
Korea	270.9	(0.0)	276.1	(0.0)	282.4	(0.0)	283.7	(0.0)	276.1	(0.0)	271.5	(0.0)	264.6	(0.0)
Netherlands	292.9	(0.0)	301.5	(0.0)	307.4	(0.0)	308.6	(0.0)	301.5	(0.0)	290.6	(0.0)	285.4	(0.0)
Norway	278.5	(0.0)	287.5	(0.0)	296.5	(0.0)	300.2	(0.0)	287.5	(0.0)	280.3	(0.0)	274.8	(0.0)
Poland	250.0	(0.0)	261.5	(0.0)	272.7	(0.0)	275.1	(0.0)	261.5	(0.0)	254.5	(0.0)	255.3	(0.0)
Slovak Republic	264.6	(0.0)	279.8	(0.0)	289.1	(0.0)	283.8	(0.0)	279.8	(0.0)	278.4	(0.3)	274.0	(0.0)
Spain	269.4	(0.0)	277.4	(0.0)	284.1	(0.0)	286.3	(0.0)	277.4	(0.0)	270.5	(0.0)	269.2	(0.0)
Sweden	286.4	(0.0)	294.5	(0.0)	301.1	(0.0)	304.9	(0.0)	294.5	(0.0)	286.1	(0.0)	280.6	(0.0)
United States	250.1	(0.0)	266.4	(0.0)	278.0	(0.0)	278.8	(0.0)	266.4	(0.0)	260.6	(0.0)	253.9	(0.0)
Sub-national entities														
Flanders (Belgium)	274.3	(0.0)	282.2	(0.0)	290.9	(0.0)	287.7	(0.0)	282.2	(0.0)	271.8	(0.0)	266.8	(0.0)
England (UK)	272.7	(0.0)	288.0	(0.0)	299.6	(0.0)	302.0	(0.0)	288.0	(0.0)	285.2	(0.3)	275.8	(0.0)
Northern Ireland (UK)	274.9	(0.0)	283.8	(0.0)	294.9	(0.0)	296.3	(0.0)	283.8	(0.0)	275.2	(0.0)	277.1	(0.0)
England/N. Ireland (UK)	272.7	(0.0)	287.8	(0.0)	299.4	(0.0)	301.8	(0.0)	287.8	(0.0)	284.8	(0.3)	275.8	(0.0)
Average	272.7	(0.0)	281.5	(0.0)	290.6	(0.0)	290.8	(0.0)	281.5	(0.0)	273.6	(0.0)	270.5	(0.0)
Partners														
Cyprus[1]	265.3	(0.0)	271.0	(0.0)	277.7	(0.0)	278.9	(0.0)	271.0	(0.0)	266.8	(0.1)	268.0	(0.5)

1. See notes on page 408.

Note: Data are based on a multiple linear regression model that takes account of differences associated with the following variables: age, gender, education, immigration and language background, socio-economic background and type of occupation. Reference groups (in brackets) for each socio-demographic characteristics are: age (35-44); gender (men); immigrant status (native-born); language status (native language); education (upper secondary); parents' education (upper secondary); and occupation status (semi-skilled, white-collar).

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932899890

[Part 1/1]

Table B4.1 **Percentage of adults, by labour market status**

OECD	Employed		Unemployed		Out of the labour force		Missing	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.
National entities								
Australia	72.1	(0.4)	4.5	(0.2)	21.7	(0.4)	1.8	(0.2)
Austria	72.1	(0.6)	3.4	(0.3)	22.6	(0.6)	1.8	(0.2)
Canada	75.2	(0.4)	4.4	(0.2)	19.5	(0.4)	0.9	(0.1)
Czech Republic	65.2	(0.1)	4.7	(0.0)	29.5	(0.1)	0.7	(0.2)
Denmark	73.1	(0.4)	5.0	(0.3)	21.5	(0.4)	0.4	(0.1)
Estonia	71.7	(0.5)	6.1	(0.2)	21.8	(0.5)	0.5	(0.1)
Finland	70.1	(0.6)	4.5	(0.3)	25.4	(0.6)	0.1	(0.0)
Germany	74.3	(0.6)	4.1	(0.3)	20.1	(0.5)	1.5	(0.2)
Ireland	60.9	(0.8)	9.2	(0.4)	29.5	(0.8)	0.4	(0.1)
Italy	55.8	(0.1)	9.0	(0.5)	34.5	(0.5)	0.8	(0.2)
Japan	71.5	(0.1)	2.0	(0.2)	25.0	(0.2)	1.5	(0.1)
Korea	67.2	(0.6)	2.9	(0.2)	29.6	(0.6)	0.4	(0.1)
Netherlands	74.5	(0.5)	3.8	(0.3)	19.5	(0.4)	2.2	(0.2)
Norway	77.1	(0.5)	3.2	(0.2)	17.5	(0.5)	2.3	(0.2)
Poland	61.4	(0.6)	6.8	(0.3)	31.7	(0.6)	0.1	(0.0)
Slovak Republic	60.6	(0.7)	7.3	(0.3)	31.6	(0.6)	0.4	(0.1)
Spain	57.9	(0.6)	13.7	(0.5)	27.5	(0.5)	0.9	(0.1)
Sweden	73.7	(0.5)	5.1	(0.4)	21.1	(0.5)	0.0	(0.0)
United States	70.2	(0.9)	7.6	(0.4)	17.9	(0.7)	4.3	(0.0)
Sub-national entities								
Flanders (Belgium)	66.5	(0.3)	2.0	(0.2)	26.4	(0.2)	5.2	(0.2)
England (UK)	69.9	(0.0)	6.3	(0.1)	22.3	(0.2)	1.5	(0.2)
Northern Ireland (UK)	65.1	(0.0)	5.3	(0.2)	27.1	(0.4)	2.5	(0.3)
England/N. Ireland (UK)	69.7	(0.0)	6.2	(0.1)	22.5	(0.2)	1.5	(0.2)
Average	68.6	(0.1)	5.5	(0.1)	24.6	(0.1)	1.3	(0.0)
Partners								
Cyprus[1]	51.5	(0.7)	5.8	(0.4)	25.0	(0.6)	17.8	(0.4)

1. See notes on page 408.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932899909

[Part 1/1]

Table B4.2 **Percentage of unemployed adults, by length of unemployment**

OECD	Unemployed for more than 12 months		Unemployed for 12 months or less		Missing	
	%	S.E.	%	S.E.	%	S.E.
National entities						
Australia	m	m	m	m	m	m
Austria	81.2	(3.3)	18.8	(3.3)	0.0	(0.0)
Canada	90.6	(1.5)	9.3	(1.6)	0.1	(0.0)
Czech Republic	72.9	(5.0)	24.9	(4.9)	2.2	(1.0)
Denmark	78.9	(2.7)	21.1	(2.7)	0.0	(0.0)
Estonia	71.3	(2.1)	27.0	(2.0)	1.7	(0.6)
Finland	81.0	(2.7)	18.5	(2.7)	0.5	(0.5)
Germany	69.9	(3.7)	29.0	(3.7)	1.1	(0.7)
Ireland	63.7	(2.5)	36.3	(2.5)	0.0	(0.0)
Italy	69.8	(3.0)	30.2	(3.0)	0.0	(0.0)
Japan	86.6	(4.3)	13.4	(4.3)	0.0	(0.0)
Korea	95.1	(1.8)	4.9	(1.8)	0.0	(0.0)
Netherlands	82.6	(2.8)	16.8	(3.0)	0.6	(0.6)
Norway	84.3	(3.8)	15.2	(3.8)	0.5	(0.5)
Poland	70.6	(2.5)	28.6	(2.5)	0.7	(0.3)
Slovak Republic	60.6	(2.5)	38.8	(2.5)	0.6	(0.4)
Spain	65.3	(2.1)	34.5	(2.1)	0.1	(0.1)
Sweden	77.2	(3.4)	21.5	(3.2)	1.3	(1.1)
United States	83.4	(2.1)	16.2	(2.1)	0.4	(0.4)
Sub-national entities						
Flanders (Belgium)	87.0	(3.1)	12.0	(3.1)	1.0	(1.0)
England (UK)	80.8	(2.2)	19.0	(2.1)	0.2	(0.2)
Northern Ireland (UK)	68.6	(3.6)	30.9	(3.6)	0.4	(0.4)
England/N. Ireland (UK)	80.5	(2.1)	19.3	(2.1)	0.2	(0.2)
Average	77.6	(0.7)	21.8	(0.7)	0.5	(0.1)
Partners						
Cyprus[1]	84.7	(2.6)	15.3	(2.6)	0.0	(0.0)

1. See notes on page 408.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932899928

[Part 1/1]

Table B4.3 **Percentage of workers, by establishment size**

OECD	1 to 10 employees		11 to 50 employees		51 to 250 employees		251 to 1 000 employees		More than 1 000 employees		Missing	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
National entities												
Australia	35.7	(0.8)	27.5	(0.8)	19.7	(0.7)	9.5	(0.5)	6.0	(0.4)	1.7	(0.2)
Austria	33.2	(0.8)	27.3	(0.9)	18.6	(0.6)	12.2	(0.6)	6.4	(0.5)	2.3	(0.3)
Canada	31.1	(0.6)	26.7	(0.5)	20.8	(0.5)	11.0	(0.5)	8.1	(0.4)	2.3	(0.2)
Czech Republic	40.4	(1.4)	25.8	(1.1)	19.3	(1.1)	9.7	(0.9)	3.9	(0.6)	1.0	(0.2)
Denmark	26.9	(0.7)	31.8	(0.6)	23.5	(0.6)	8.9	(0.5)	7.0	(0.4)	2.0	(0.2)
Estonia	35.4	(0.7)	31.5	(0.6)	19.4	(0.5)	7.1	(0.3)	2.9	(0.3)	3.8	(0.3)
Finland	34.6	(0.7)	30.9	(0.7)	19.7	(0.5)	9.0	(0.4)	3.8	(0.3)	1.9	(0.3)
Germany	30.9	(0.8)	24.4	(0.7)	20.8	(0.7)	13.5	(0.6)	8.7	(0.5)	1.7	(0.2)
Ireland	38.1	(0.8)	27.3	(0.9)	16.0	(0.7)	10.1	(0.6)	5.6	(0.4)	2.9	(0.3)
Italy	49.7	(1.2)	20.7	(0.7)	14.4	(0.8)	6.4	(0.5)	6.0	(0.6)	2.7	(0.4)
Japan	29.9	(0.8)	30.2	(0.7)	21.1	(0.6)	10.4	(0.5)	6.2	(0.5)	2.2	(0.3)
Korea	49.4	(0.9)	21.2	(0.8)	13.4	(0.5)	7.2	(0.4)	6.2	(0.6)	2.7	(0.3)
Netherlands	29.2	(0.7)	28.2	(0.7)	22.0	(0.6)	10.4	(0.5)	7.5	(0.4)	2.7	(0.3)
Norway	25.9	(0.7)	31.9	(0.7)	20.9	(0.7)	10.0	(0.4)	9.7	(0.5)	1.6	(0.2)
Poland	35.7	(0.9)	26.1	(0.8)	19.9	(0.8)	8.6	(0.5)	5.1	(0.4)	4.6	(0.5)
Slovak Republic	34.1	(0.9)	27.2	(0.8)	20.1	(0.7)	10.4	(0.7)	6.1	(0.5)	2.2	(0.3)
Spain	44.2	(1.0)	25.6	(0.8)	14.9	(0.7)	7.5	(0.5)	3.9	(0.4)	3.8	(0.4)
Sweden	28.7	(0.9)	29.1	(0.8)	21.6	(0.8)	10.5	(0.5)	7.6	(0.4)	2.6	(0.3)
United States	29.7	(0.9)	24.9	(0.9)	20.2	(0.8)	12.8	(0.7)	9.7	(0.6)	2.6	(0.3)
Sub-national entities												
Flanders (Belgium)	28.2	(0.9)	24.4	(0.8)	25.2	(0.7)	12.8	(0.6)	7.4	(0.4)	2.0	(0.3)
England (UK)	29.5	(0.9)	24.1	(0.9)	20.3	(0.8)	13.8	(0.7)	10.7	(0.6)	1.7	(0.3)
Northern Ireland (UK)	30.9	(1.1)	28.2	(1.2)	17.8	(1.0)	11.7	(0.8)	9.8	(0.7)	1.6	(0.3)
England/N. Ireland (UK)	29.6	(0.9)	24.2	(0.9)	20.2	(0.8)	13.7	(0.7)	10.6	(0.6)	1.7	(0.3)
Average	34.3	(0.2)	27.0	(0.2)	19.6	(0.2)	10.1	(0.1)	6.6	(0.1)	2.4	(0.1)
Partners												
Cyprus[1]	46.9	(1.0)	26.5	(0.9)	15.8	(0.8)	5.9	(0.5)	2.1	(0.4)	2.7	(0.4)

1. See notes on page 408.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932899947



[Part 1/2]

Table B4.4 **Percentage of workers, by contract type**

OECD	Self-employed		Indefinite contract		Fixed-term contract		Temporary employment agency contract	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.
National entities								
Australia	15.4	(0.6)	55.8	(0.8)	8.7	(0.5)	0.0	(0.0)
Austria	12.7	(0.6)	74.4	(0.7)	6.8	(0.5)	1.2	(0.2)
Canada	14.5	(0.4)	60.9	(0.6)	7.9	(0.3)	5.1	(0.2)
Czech Republic	16.6	(1.0)	67.4	(1.2)	13.3	(1.0)	0.3	(0.1)
Denmark	9.1	(0.4)	75.8	(0.6)	8.7	(0.4)	0.6	(0.1)
Estonia	10.3	(0.4)	74.9	(0.6)	10.6	(0.4)	0.3	(0.1)
Finland	11.6	(0.5)	73.3	(0.7)	11.9	(0.5)	0.4	(0.1)
Germany	10.5	(0.6)	69.2	(0.8)	10.4	(0.5)	1.0	(0.2)
Ireland	15.9	(0.6)	56.1	(1.1)	12.1	(0.7)	3.0	(0.4)
Italy	23.0	(0.9)	59.8	(1.0)	11.3	(0.8)	0.8	(0.2)
Japan	9.8	(0.5)	70.2	(0.8)	16.8	(0.6)	1.4	(0.2)
Korea	25.0	(0.7)	37.3	(0.9)	13.6	(0.6)	1.3	(0.2)
Netherlands	13.6	(0.4)	63.5	(0.5)	15.5	(0.6)	2.3	(0.3)
Norway	6.9	(0.4)	79.1	(0.7)	8.7	(0.4)	0.8	(0.2)
Poland	17.1	(0.8)	54.0	(1.0)	21.3	(0.8)	0.5	(0.1)
Slovak Republic	15.9	(0.8)	66.7	(1.0)	10.3	(0.5)	5.8	(0.4)
Spain	16.6	(0.7)	60.2	(0.9)	14.9	(0.7)	1.3	(0.2)
Sweden	10.4	(0.5)	74.0	(0.8)	9.6	(0.5)	0.7	(0.1)
United States	13.8	(0.6)	25.5	(1.5)	9.5	(0.7)	1.5	(0.2)
Sub-national entities								
Flanders (Belgium)	13.1	(0.6)	79.2	(0.7)	4.6	(0.3)	1.4	(0.2)
England (UK)	14.8	(0.7)	68.0	(0.9)	8.7	(0.5)	2.5	(0.4)
Northern Ireland (UK)	13.1	(0.8)	65.0	(1.1)	11.2	(0.8)	2.2	(0.3)
England/N. Ireland (UK)	14.8	(0.7)	67.9	(0.9)	8.8	(0.5)	2.5	(0.4)
Average	14.1	(0.1)	64.1	(0.2)	11.2	(0.1)	1.5	(0.0)
Partners								
Cyprus[1]	12.7	(0.8)	64.3	(1.2)	6.4	(0.6)	5.8	(0.5)

[Part 2/2]

Table B4.4 **Percentage of workers, by contract type**

OECD	Apprenticeship or other training scheme		No contract		Other		Missing	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.
National entities								
Australia	1.7	(0.2)	17.7	(0.6)	0.5	(0.1)	0.2	(0.1)
Austria	2.3	(0.2)	2.4	(0.3)	0.1	(0.1)	0.0	(0.0)
Canada	0.7	(0.1)	10.3	(0.4)	0.6	(0.1)	0.1	(0.0)
Czech Republic	0.0	(0.0)	1.0	(0.2)	1.1	(0.2)	0.3	(0.1)
Denmark	2.1	(0.2)	2.9	(0.2)	0.7	(0.1)	0.0	(0.0)
Estonia	0.2	(0.1)	3.0	(0.3)	0.3	(0.1)	0.3	(0.1)
Finland	0.8	(0.2)	1.4	(0.2)	0.6	(0.1)	0.1	(0.0)
Germany	3.9	(0.3)	3.7	(0.4)	1.2	(0.2)	0.0	(0.0)
Ireland	0.8	(0.2)	11.4	(0.7)	0.6	(0.2)	0.2	(0.1)
Italy	1.1	(0.2)	2.6	(0.5)	1.3	(0.3)	0.0	(0.0)
Japan	0.3	(0.1)	0.6	(0.1)	0.7	(0.1)	0.2	(0.1)
Korea	0.3	(0.1)	21.1	(0.8)	1.2	(0.2)	0.1	(0.1)
Netherlands	1.3	(0.2)	2.1	(0.2)	1.7	(0.2)	0.0	(0.0)
Norway	1.8	(0.2)	2.5	(0.3)	0.1	(0.0)	0.0	(0.0)
Poland	0.6	(0.1)	2.8	(0.3)	3.3	(0.3)	0.4	(0.1)
Slovak Republic	0.2	(0.1)	0.4	(0.1)	0.6	(0.1)	0.1	(0.1)
Spain	0.9	(0.2)	3.1	(0.2)	2.6	(0.3)	0.3	(0.1)
Sweden	0.3	(0.1)	4.5	(0.4)	0.5	(0.1)	0.0	(0.0)
United States	0.3	(0.1)	47.5	(1.5)	1.6	(0.2)	0.3	(0.1)
Sub-national entities								
Flanders (Belgium)	0.6	(0.1)	0.5	(0.1)	0.5	(0.1)	0.1	(0.0)
England (UK)	0.5	(0.1)	4.5	(0.4)	0.8	(0.2)	0.1	(0.1)
Northern Ireland (UK)	0.7	(0.2)	7.0	(0.7)	0.5	(0.2)	0.3	(0.1)
England/N. Ireland (UK)	0.5	(0.1)	4.6	(0.4)	0.8	(0.2)	0.2	(0.0)
Average	1.0	(0.0)	7.0	(0.1)	1.0	(0.0)	0.1	(0.0)
Partners								
Cyprus[1]	0.5	(0.2)	10.2	(0.6)	0.0	(0.0)	0.0	(0.0)

1. See notes on page 408.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932899966

[Part 1/2]

Table B4.5 **Percentage of workers, by type of occupation**

OECD	Armed forces occupations		Managers		Professionals		Technicians and associate professionals		Clerical support workers		Service and sales workers	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
National entities												
Australia	0.0	(0.0)	11.7	(0.6)	20.3	(0.7)	12.4	(0.5)	10.4	(0.5)	15.5	(0.6)
Austria	0.5	(0.1)	6.0	(0.4)	15.5	(0.5)	20.2	(0.8)	10.8	(0.6)	16.0	(0.7)
Canada	0.3	(0.1)	11.2	(0.3)	22.1	(0.4)	19.1	(0.5)	7.1	(0.3)	16.2	(0.4)
Czech Republic	0.3	(0.1)	6.8	(0.5)	12.9	(0.7)	17.3	(1.0)	11.2	(0.8)	11.9	(0.7)
Denmark	0.4	(0.1)	5.2	(0.3)	28.0	(0.6)	13.8	(0.5)	7.8	(0.4)	16.9	(0.5)
Estonia	0.4	(0.1)	10.6	(0.4)	20.7	(0.5)	14.0	(0.5)	5.2	(0.3)	12.9	(0.5)
Finland	0.5	(0.1)	3.7	(0.3)	20.3	(0.6)	18.6	(0.7)	7.7	(0.4)	19.2	(0.6)
Germany	0.5	(0.1)	4.2	(0.3)	16.9	(0.5)	17.2	(0.6)	11.6	(0.5)	18.0	(0.6)
Ireland	0.5	(0.2)	7.1	(0.4)	21.1	(0.7)	10.3	(0.6)	10.9	(0.5)	20.8	(0.7)
Italy	1.0	(0.2)	2.8	(0.3)	13.0	(0.6)	16.4	(0.8)	9.3	(0.6)	17.8	(0.9)
Japan	0.4	(0.1)	6.6	(0.4)	13.5	(0.6)	15.0	(0.7)	13.6	(0.5)	23.0	(0.8)
Korea	0.2	(0.1)	3.0	(0.2)	14.3	(0.6)	11.1	(0.5)	14.8	(0.6)	22.3	(0.7)
Netherlands	0.2	(0.1)	13.1	(0.5)	22.6	(0.6)	16.4	(0.5)	11.2	(0.5)	16.3	(0.6)
Norway	0.0	(0.0)	7.2	(0.4)	19.2	(0.5)	15.8	(0.6)	5.9	(0.4)	22.2	(0.6)
Poland	0.5	(0.1)	8.3	(0.6)	18.3	(0.7)	11.6	(0.6)	6.7	(0.4)	14.3	(0.6)
Slovak Republic	0.3	(0.1)	10.1	(0.6)	16.3	(0.8)	17.1	(0.7)	6.4	(0.5)	14.7	(0.7)
Spain	0.0	(0.0)	6.1	(0.4)	18.5	(0.7)	9.6	(0.6)	14.3	(0.6)	17.9	(0.7)
Sweden	0.3	(0.1)	5.8	(0.4)	23.5	(0.5)	17.1	(0.6)	5.3	(0.3)	22.0	(0.6)
United States	0.5	(0.2)	9.9	(0.4)	20.3	(0.7)	16.3	(0.7)	7.5	(0.4)	20.9	(0.8)
Sub-national entities												
Flanders (Belgium)	0.2	(0.1)	10.3	(0.5)	22.4	(0.7)	15.0	(0.7)	11.4	(0.5)	12.5	(0.6)
England (UK)	0.2	(0.1)	11.3	(0.6)	15.4	(0.6)	13.0	(0.7)	12.0	(0.7)	20.9	(0.8)
Northern Ireland (UK)	0.0	(0.0)	10.0	(0.8)	14.9	(0.7)	9.6	(0.7)	15.3	(0.8)	21.2	(1.0)
England/N. Ireland (UK)	0.2	(0.1)	11.3	(0.6)	15.4	(0.6)	12.9	(0.7)	12.1	(0.7)	20.9	(0.7)
Average	0.3	(0.0)	7.7	(0.1)	18.8	(0.1)	15.1	(0.1)	9.6	(0.1)	17.7	(0.1)
Partners												
Cyprus[1]	2.7	(0.4)	4.7	(0.4)	18.4	(0.7)	15.6	(0.8)	13.5	(0.7)	21.7	(0.8)

[Part 2/2]

Table B4.5 **Percentage of workers, by type of occupation**

OECD	Skilled agricultural, forestry and fishery workers		Craft and related trades workers		Plant and machine operators, assemblers		Elementary occupations		Missing	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.	%	S.E.
National entities										
Australia	1.7	(0.2)	11.2	(0.6)	6.8	(0.4)	8.9	(0.5)	1.1	(0.2)
Austria	4.0	(0.3)	11.7	(0.6)	6.0	(0.5)	7.3	(0.5)	2.0	(0.2)
Canada	1.5	(0.2)	8.8	(0.4)	6.1	(0.3)	6.5	(0.3)	1.1	(0.1)
Czech Republic	1.1	(0.3)	17.0	(1.0)	14.8	(0.9)	6.3	(0.6)	0.4	(0.1)
Denmark	2.3	(0.2)	10.3	(0.4)	5.0	(0.3)	9.3	(0.5)	1.0	(0.2)
Estonia	1.6	(0.1)	14.3	(0.4)	11.5	(0.5)	7.7	(0.4)	1.1	(0.1)
Finland	3.4	(0.3)	11.9	(0.5)	7.9	(0.4)	6.3	(0.4)	0.5	(0.1)
Germany	1.9	(0.3)	13.2	(0.6)	7.9	(0.5)	7.4	(0.4)	1.2	(0.2)
Ireland	4.4	(0.5)	10.1	(0.6)	5.9	(0.5)	7.8	(0.5)	1.0	(0.2)
Italy	2.4	(0.5)	15.6	(0.8)	10.4	(0.8)	10.3	(0.8)	1.0	(0.2)
Japan	2.3	(0.3)	11.2	(0.6)	7.8	(0.5)	5.8	(0.4)	1.0	(0.1)
Korea	2.8	(0.2)	10.2	(0.5)	9.7	(0.4)	9.9	(0.5)	1.6	(0.2)
Netherlands	1.4	(0.2)	6.8	(0.3)	3.0	(0.3)	7.7	(0.4)	1.1	(0.2)
Norway	1.3	(0.2)	8.6	(0.4)	4.5	(0.4)	3.9	(0.3)	11.4	(0.4)
Poland	6.4	(0.4)	16.3	(0.6)	8.8	(0.5)	7.4	(0.5)	1.5	(0.2)
Slovak Republic	0.9	(0.2)	14.0	(0.7)	11.8	(0.5)	7.4	(0.5)	0.9	(0.2)
Spain	2.5	(0.3)	11.1	(0.5)	5.6	(0.4)	12.2	(0.5)	2.0	(0.3)
Sweden	2.2	(0.2)	10.5	(0.5)	7.6	(0.4)	4.3	(0.4)	1.4	(0.2)
United States	0.9	(0.2)	8.9	(0.6)	5.8	(0.5)	8.0	(0.5)	0.9	(0.2)
Sub-national entities										
Flanders (Belgium)	1.2	(0.2)	10.7	(0.5)	5.8	(0.4)	8.1	(0.5)	2.2	(0.3)
England (UK)	0.9	(0.2)	8.3	(0.6)	7.0	(0.5)	9.5	(0.5)	1.5	(0.3)
Northern Ireland (UK)	2.2	(0.4)	9.8	(0.8)	5.9	(0.6)	7.9	(0.7)	3.2	(0.4)
England/N. Ireland (UK)	0.9	(0.2)	8.3	(0.6)	7.0	(0.5)	9.4	(0.5)	1.6	(0.3)
Average	2.2	(0.1)	11.5	(0.1)	7.6	(0.1)	7.7	(0.1)	1.7	(0.0)
Partners										
Cyprus[1]	0.8	(0.2)	10.9	(0.7)	4.4	(0.4)	5.8	(0.5)	1.4	(0.3)

1. See notes on page 408.

Note: ISCO 1-digit occupations.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932899985



[Part 1/3]

Table B4.6 **Percentage of workers, by type of industry**

OECD	Agriculture/forestry/fishing		Manufacturing, mining and quarrying and other industrial activities		Construction	
	%	S.E.	%	S.E.	%	S.E.
National entities						
Australia	2.3	(0.3)	12.9	(0.6)	8.9	(0.5)
Austria	4.2	(0.3)	17.4	(0.6)	7.0	(0.4)
Canada	1.9	(0.2)	13.7	(0.4)	6.9	(0.3)
Czech Republic	2.2	(0.5)	31.9	(1.1)	7.7	(0.6)
Denmark	2.2	(0.2)	15.1	(0.6)	6.7	(0.4)
Estonia	4.0	(0.2)	21.2	(0.5)	9.0	(0.4)
Finland	3.5	(0.3)	15.6	(0.6)	7.6	(0.4)
Germany	1.7	(0.3)	23.5	(0.7)	6.0	(0.5)
Ireland	4.8	(0.5)	12.9	(0.6)	5.8	(0.5)
Italy	4.5	(0.7)	22.0	(1.1)	9.1	(0.7)
Japan	2.3	(0.3)	22.4	(0.8)	7.1	(0.5)
Korea	3.1	(0.2)	20.7	(0.6)	8.1	(0.5)
Netherlands	0.9	(0.2)	13.7	(0.6)	5.6	(0.4)
Norway	1.9	(0.2)	9.5	(0.5)	7.5	(0.4)
Poland	7.7	(0.5)	22.3	(0.8)	9.7	(0.5)
Slovak Republic	2.9	(0.3)	25.7	(0.9)	9.2	(0.7)
Spain	4.4	(0.4)	12.4	(0.6)	7.4	(0.4)
Sweden	2.2	(0.2)	13.4	(0.6)	7.0	(0.4)
United States	1.0	(0.2)	12.6	(0.6)	6.5	(0.5)
Sub-national entities						
Flanders (Belgium)	1.5	(0.2)	18.9	(0.7)	6.5	(0.4)
England (UK)	0.8	(0.2)	12.2	(0.6)	6.8	(0.5)
Northern Ireland (UK)	2.1	(0.4)	10.4	(0.8)	6.6	(0.7)
England/N. Ireland (UK)	0.9	(0.2)	12.2	(0.6)	6.8	(0.5)
Average	2.9	(0.1)	17.6	(0.1)	7.4	(0.1)
Partners						
Cyprus[1]	1.4	(0.2)	9.6	(0.7)	8.4	(0.6)

[Part 2/3]

Table B4.6 **Percentage of workers, by type of industry**

OECD	Wholesale and retail trade, transportation and storage, accommodation and food service activities		Information and communication		Financial and insurance activities		Real estate activities	
	%	S.E.	%	S.E.	%	S.E.	%	S.E.
National entities								
Australia	28.8	(0.8)	3.4	(0.3)	4.0	(0.4)	1.0	(0.2)
Austria	25.6	(0.7)	2.6	(0.3)	3.9	(0.4)	0.8	(0.1)
Canada	25.4	(0.5)	3.7	(0.2)	4.7	(0.2)	1.3	(0.1)
Czech Republic	22.5	(1.0)	3.5	(0.6)	2.6	(0.3)	0.4	(0.1)
Denmark	22.0	(0.6)	4.5	(0.3)	2.9	(0.2)	0.9	(0.1)
Estonia	23.4	(0.7)	3.0	(0.2)	1.9	(0.2)	1.8	(0.2)
Finland	22.2	(0.6)	3.3	(0.3)	1.8	(0.2)	0.4	(0.1)
Germany	20.7	(0.7)	3.7	(0.4)	3.7	(0.3)	0.9	(0.2)
Ireland	25.1	(0.8)	3.4	(0.3)	5.6	(0.4)	0.3	(0.1)
Italy	23.8	(0.9)	2.3	(0.3)	3.1	(0.3)	0.6	(0.1)
Japan	25.9	(0.8)	4.0	(0.3)	2.5	(0.2)	0.8	(0.2)
Korea	29.9	(0.8)	2.2	(0.2)	3.5	(0.3)	2.0	(0.2)
Netherlands	22.3	(0.6)	3.9	(0.3)	3.0	(0.2)	1.0	(0.1)
Norway	22.7	(0.7)	3.4	(0.3)	1.5	(0.2)	0.7	(0.1)
Poland	21.0	(0.7)	2.3	(0.3)	2.0	(0.3)	1.0	(0.2)
Slovak Republic	23.3	(0.8)	3.7	(0.4)	2.4	(0.3)	0.6	(0.2)
Spain	26.1	(0.8)	2.5	(0.3)	2.5	(0.3)	0.4	(0.1)
Sweden	20.5	(0.7)	3.8	(0.3)	2.0	(0.2)	1.4	(0.2)
United States	22.9	(0.9)	4.2	(0.4)	4.5	(0.4)	1.4	(0.2)
Sub-national entities								
Flanders (Belgium)	20.3	(0.7)	2.9	(0.3)	4.0	(0.3)	0.2	(0.1)
England (UK)	23.7	(0.7)	4.2	(0.4)	3.6	(0.4)	1.0	(0.2)
Northern Ireland (UK)	23.0	(1.1)	2.2	(0.4)	3.1	(0.4)	0.5	(0.1)
England/N. Ireland (UK)	23.7	(0.7)	4.1	(0.4)	3.5	(0.4)	0.9	(0.2)
Average	23.7	(0.2)	3.4	(0.1)	3.1	(0.1)	0.9	(0.0)
Partners								
Cyprus[1]	28.4	(1.0)	3.2	(0.3)	6.2	(0.5)	0.2	(0.1)

1. See notes on page 408.

Note: High-level SNA/ISIC aggregation.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932900004

[Part 3/3]

Table B4.6 **Percentage of workers, by type of industry**

	Professional, scientific, technical, administrative and support		Public administration and defence, education, human health and social work activities		Other service activities		Missing	
OECD	%	S.E.	%	S.E.	%	S.E.	%	S.E.
National entities								
Australia	8.9	(0.4)	25.2	(0.6)	3.4	(0.3)	1.1	(0.2)
Austria	7.3	(0.5)	23.5	(0.7)	5.0	(0.4)	2.7	(0.3)
Canada	9.2	(0.3)	24.6	(0.5)	5.3	(0.3)	3.3	(0.2)
Czech Republic	7.3	(0.6)	18.0	(0.9)	3.3	(0.4)	0.5	(0.1)
Denmark	8.9	(0.5)	31.7	(0.5)	4.2	(0.3)	1.0	(0.2)
Estonia	7.2	(0.3)	21.8	(0.6)	4.9	(0.3)	1.7	(0.2)
Finland	10.7	(0.5)	27.8	(0.6)	6.7	(0.4)	0.5	(0.1)
Germany	9.6	(0.6)	24.8	(0.7)	4.3	(0.4)	0.9	(0.2)
Ireland	8.1	(0.5)	27.4	(0.6)	5.6	(0.5)	1.0	(0.2)
Italy	8.8	(0.7)	18.0	(0.7)	6.6	(0.6)	1.3	(0.3)
Japan	6.9	(0.5)	21.9	(0.6)	5.3	(0.4)	0.9	(0.2)
Korea	6.4	(0.4)	16.7	(0.6)	5.9	(0.3)	1.6	(0.2)
Netherlands	10.5	(0.5)	33.4	(0.8)	4.6	(0.3)	1.2	(0.2)
Norway	8.9	(0.5)	34.7	(0.7)	3.0	(0.3)	6.2	(0.4)
Poland	6.4	(0.4)	21.8	(0.7)	4.2	(0.4)	1.4	(0.2)
Slovak Republic	7.9	(0.6)	20.7	(0.7)	2.5	(0.3)	1.1	(0.2)
Spain	10.1	(0.6)	24.2	(0.7)	7.7	(0.5)	2.2	(0.3)
Sweden	12.4	(0.6)	31.6	(0.8)	4.4	(0.3)	1.2	(0.2)
United States	10.7	(0.7)	28.8	(1.0)	6.8	(0.5)	0.7	(0.1)
Sub-national entities								
Flanders (Belgium)	8.7	(0.5)	31.9	(0.7)	3.6	(0.3)	1.5	(0.2)
England (UK)	10.9	(0.6)	28.2	(0.8)	5.8	(0.4)	2.9	(0.4)
Northern Ireland (UK)	7.2	(0.6)	31.5	(1.1)	5.7	(0.5)	7.7	(0.6)
England/N. Ireland (UK)	10.7	(0.6)	28.3	(0.8)	5.8	(0.4)	3.0	(0.4)
Average	8.8	(0.1)	25.6	(0.2)	4.9	(0.1)	1.7	(0.0)
Partners								
Cyprus[1]	6.3	(0.5)	29.1	(0.9)	5.7	(0.5)	1.4	(0.3)

1. See notes on page 408.

Note: High-level SNA/ISIC aggregation.

Source: Survey of Adult Skills (PIAAC) (2012).

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[Part 1/3]

Table B5.1 Mean literacy proficiency in the International Adult Literacy Survey (1994-98), the Survey of Adult Skills (2012), and score difference between the two, by age

	Australia							Canada						
	1996		2012		Difference between 2012 and 1996			1994		2012		Difference between 2012 and 1994		
Age	Mean score	S.E.	Mean score	S.E.	Dif.	S.E.	p-value	Mean score	S.E.	Mean score	S.E.	Dif.	S.E.	p-value
16	282.5	(5.5)	272.9	(6.2)	-9.6	(8.3)	0.126	286.7	(7.7)	268.4	(4.1)	-18.4	(8.7)	0.018
17	273.1	(6.1)	282.2	(5.9)	9.1	(8.5)	0.141	290.3	(6.2)	267.8	(4.0)	-22.5	(7.4)	0.001
18	275.4	(6.4)	291.5	(6.2)	16.0	(8.9)	0.036	295.8	(5.5)	273.4	(4.5)	-22.4	(7.1)	0.001
19	274.5	(5.8)	287.1	(7.8)	12.6	(9.7)	0.097	288.9	(9.2)	275.3	(3.6)	-13.6	(9.8)	0.083
20	274.5	(6.8)	293.9	(6.4)	19.5	(9.3)	0.019	308.9	(7.9)	280.9	(3.7)	-28.0	(8.8)	0.001
21	280.5	(6.6)	288.4	(7.7)	7.9	(10.1)	0.218	296.2	(10.4)	290.6	(4.0)	-5.5	(11.2)	0.310
22	279.6	(5.2)	288.1	(6.7)	8.4	(8.5)	0.160	301.8	(6.4)	281.6	(4.8)	-20.2	(8.0)	0.006
23	269.5	(5.9)	281.7	(8.1)	12.2	(10.0)	0.112	298.8	(8.6)	288.4	(3.7)	-10.4	(9.3)	0.133
24	281.5	(4.7)	276.1	(6.2)	-5.3	(7.7)	0.245	290.5	(6.2)	286.4	(3.9)	-4.1	(7.3)	0.287
25	274.2	(6.4)	284.6	(7.5)	10.4	(9.9)	0.146	287.6	(13.6)	292.7	(4.9)	5.1	(14.5)	0.361
26	268.6	(6.9)	289.1	(6.7)	20.5	(9.7)	0.017	288.1	(10.6)	292.1	(5.0)	4.1	(11.8)	0.365
27	277.3	(4.8)	293.7	(5.6)	16.3	(7.4)	0.013	302.3	(11.9)	293.6	(4.8)	-8.7	(12.8)	0.250
28	281.6	(5.2)	292.8	(6.6)	11.2	(8.4)	0.091	280.1	(9.2)	294.2	(3.6)	14.1	(9.9)	0.077
29	279.8	(4.9)	291.4	(6.5)	11.6	(8.1)	0.077	283.5	(36.0)	293.4	(4.1)	9.9	(36.2)	0.392
30	273.9	(4.6)	288.4	(4.6)	14.5	(6.5)	0.013	296.5	(11.4)	295.4	(3.6)	-1.1	(12.0)	0.463
31	272.9	(4.7)	299.0	(5.3)	26.1	(7.1)	0.000	297.0	(10.2)	285.0	(5.1)	-12.0	(11.4)	0.147
32	278.7	(4.1)	294.0	(6.2)	15.3	(7.5)	0.020	293.8	(8.7)	289.0	(5.5)	-4.8	(10.3)	0.320
33	275.5	(3.7)	289.9	(5.6)	14.4	(6.7)	0.015	293.0	(8.9)	290.9	(4.3)	-2.1	(9.9)	0.417
34	280.5	(4.2)	296.6	(4.5)	16.1	(6.1)	0.004	282.1	(14.7)	292.9	(4.0)	10.8	(15.3)	0.239
35	272.3	(3.6)	291.7	(4.6)	19.4	(5.9)	0.000	303.8	(8.4)	293.8	(4.1)	-10.0	(9.3)	0.142
36	272.7	(4.1)	295.7	(5.5)	23.0	(6.8)	0.000	305.4	(13.4)	294.0	(4.2)	-11.4	(14.1)	0.209
37	271.5	(5.2)	295.3	(5.3)	23.8	(7.4)	0.001	296.1	(9.3)	295.5	(4.9)	-0.6	(10.5)	0.477
38	271.7	(5.1)	296.0	(5.4)	24.3	(7.4)	0.001	294.4	(12.3)	288.3	(4.2)	-6.0	(13.0)	0.321
39	269.5	(4.9)	292.4	(4.9)	22.8	(6.9)	0.000	304.5	(11.8)	290.8	(4.4)	-13.7	(12.6)	0.139
40	275.7	(5.0)	286.9	(4.6)	11.2	(6.8)	0.049	293.6	(11.7)	284.4	(4.8)	-9.2	(12.7)	0.234
41	279.4	(4.4)	288.9	(5.1)	9.4	(6.8)	0.083	302.5	(27.5)	288.7	(4.3)	-13.8	(27.9)	0.311
42	279.1	(4.7)	290.2	(6.2)	11.1	(7.8)	0.077	280.4	(8.0)	283.2	(4.0)	2.8	(9.0)	0.376
43	264.8	(6.9)	292.5	(5.5)	27.7	(8.8)	0.001	285.3	(21.9)	277.4	(3.9)	-7.9	(22.3)	0.361
44	277.3	(5.2)	284.9	(6.5)	7.6	(8.4)	0.182	285.5	(7.6)	284.8	(3.5)	-0.7	(8.3)	0.464
45	285.0	(6.2)	283.1	(4.8)	-1.9	(7.8)	0.404	265.6	(16.5)	278.1	(4.3)	12.5	(17.0)	0.232
46	281.3	(5.2)	282.1	(5.0)	0.8	(7.2)	0.453	276.0	(21.2)	279.4	(4.1)	3.4	(21.6)	0.438
47	271.6	(6.3)	289.2	(4.6)	17.5	(7.8)	0.013	247.2	(35.2)	275.2	(3.8)	28.0	(35.4)	0.215
48	276.5	(5.5)	286.5	(5.7)	10.0	(7.9)	0.104	289.9	(10.7)	280.9	(3.9)	-9.0	(11.4)	0.216
49	271.9	(4.4)	270.6	(7.1)	-1.3	(8.4)	0.440	266.3	(14.1)	281.1	(4.9)	14.8	(14.9)	0.161
50	284.5	(6.0)	282.4	(6.1)	-2.1	(8.5)	0.402	275.8	(9.5)	273.0	(3.7)	-2.8	(10.2)	0.393
51	280.0	(5.9)	277.8	(6.6)	-2.2	(8.8)	0.404	230.5	(33.3)	276.2	(4.3)	45.7	(33.6)	0.087
52	282.7	(5.2)	269.9	(5.1)	-12.9	(7.3)	0.040	279.8	(14.4)	272.6	(4.8)	-7.2	(15.2)	0.317
53	276.8	(6.0)	276.1	(5.3)	-0.7	(8.0)	0.464	262.7	(15.2)	270.4	(3.6)	7.7	(15.6)	0.312
54	275.3	(7.7)	270.7	(6.5)	-4.6	(10.1)	0.325	271.4	(28.5)	270.7	(3.8)	-0.7	(28.8)	0.490
55	272.0	(8.0)	279.1	(5.4)	7.1	(9.6)	0.230	240.9	(30.3)	263.2	(3.2)	22.4	(30.5)	0.231
56	265.6	(9.1)	283.3	(5.8)	17.7	(10.8)	0.050	245.6	(8.6)	273.3	(3.3)	27.6	(9.2)	0.001
57	272.4	(5.7)	277.3	(6.6)	4.9	(8.8)	0.287	247.0	(22.7)	269.1	(4.4)	22.2	(23.2)	0.169
58	279.0	(7.7)	269.9	(7.3)	-9.0	(10.7)	0.198	263.8	(7.3)	265.0	(3.6)	1.2	(8.1)	0.439
59	284.6	(6.2)	267.7	(7.3)	-17.0	(9.6)	0.038	246.1	(31.1)	270.0	(4.2)	23.9	(31.4)	0.223
60	282.0	(6.5)	262.5	(7.8)	-19.5	(10.2)	0.028	243.4	(51.4)	270.9	(3.8)	27.5	(51.5)	0.297
61	271.7	(5.3)	262.4	(6.2)	-9.2	(8.2)	0.131	238.8	(55.8)	269.5	(3.6)	30.7	(55.9)	0.292
62	282.2	(6.0)	263.7	(5.6)	-18.5	(8.2)	0.012	257.6	(17.2)	260.1	(4.3)	2.6	(17.7)	0.442
63	283.0	(5.3)	267.2	(5.8)	-15.8	(7.9)	0.023	250.2	(24.3)	265.9	(3.7)	15.6	(24.5)	0.262
64	276.6	(5.4)	273.0	(5.7)	-3.7	(7.9)	0.321	246.7	(16.4)	257.6	(4.2)	10.9	(17.0)	0.261
65	278.0	(4.8)	255.7	(5.1)	-22.3	(7.1)	0.001	244.2	(17.1)	260.2	(3.6)	16.0	(17.5)	0.180

Note: The 2012 estimate for Canada excludes the Northern Territories since they were not included in the IALS survey in 1994.

Source: Survey of Adult Skills (PIAAC) (2012) and OECD, IALS Database.

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[Part 2/3]

Table B5.1 Mean literacy proficiency in the International Adult Literacy Survey (1994-98), the Survey of Adult Skills (2012), and score difference between the two, by age

	Czech Republic							Finland						
	1998		2012		Difference between 2012 and 1998			1998		2012		Difference between 2012 and 1998		
Age	Mean score	S.E.	Mean score	S.E.	Dif.	S.E.	p-value	Mean score	S.E.	Mean score	S.E.	Dif.	S.E.	p-value
16	278.7	(9.9)	271.0	(5.8)	-7.7	(11.4)	0.250	305.1	(5.2)	284.8	(3.8)	-20.3	(6.4)	0.001
17	276.7	(10.1)	265.9	(5.2)	-10.7	(11.4)	0.173	304.5	(5.1)	290.0	(4.5)	-14.5	(6.9)	0.018
18	282.4	(5.3)	286.6	(6.0)	4.2	(8.0)	0.300	305.0	(5.0)	291.5	(3.9)	-13.5	(6.4)	0.017
19	288.6	(5.9)	278.6	(6.5)	-9.9	(8.8)	0.130	316.5	(4.4)	291.4	(4.9)	-25.1	(6.6)	0.000
20	286.1	(7.0)	285.9	(8.1)	-0.2	(10.7)	0.492	315.5	(5.9)	302.9	(4.3)	-12.5	(7.3)	0.044
21	284.9	(7.6)	287.4	(5.0)	2.5	(9.0)	0.391	316.1	(5.0)	305.1	(4.6)	-11.0	(6.8)	0.054
22	294.0	(7.6)	278.3	(6.2)	-15.7	(9.8)	0.055	313.6	(5.8)	314.0	(4.3)	0.4	(7.3)	0.478
23	289.8	(7.0)	286.2	(4.8)	-3.6	(8.5)	0.334	314.4	(5.8)	312.6	(4.6)	-1.7	(7.4)	0.408
24	296.0	(6.4)	283.7	(5.3)	-12.3	(8.3)	0.068	314.7	(5.6)	309.6	(5.2)	-5.1	(7.6)	0.251
25	288.5	(8.4)	284.2	(7.5)	-4.2	(11.2)	0.354	314.1	(5.3)	316.5	(4.8)	2.3	(7.1)	0.371
26	291.3	(7.1)	277.1	(6.1)	-14.2	(9.4)	0.064	317.6	(5.0)	313.2	(5.3)	-4.4	(7.3)	0.271
27	289.2	(6.9)	290.1	(6.4)	0.8	(9.4)	0.465	314.5	(5.7)	311.0	(4.0)	-3.5	(7.0)	0.309
28	297.9	(6.1)	287.1	(5.8)	-10.8	(8.4)	0.099	308.6	(4.9)	312.1	(4.0)	3.5	(6.3)	0.289
29	283.4	(7.9)	284.3	(4.3)	0.9	(9.0)	0.460	300.7	(7.2)	309.4	(5.4)	8.8	(9.0)	0.165
30	296.0	(6.1)	286.0	(4.9)	-10.0	(7.9)	0.101	307.3	(5.4)	323.9	(4.3)	16.7	(6.9)	0.008
31	284.3	(5.3)	280.7	(5.6)	-3.6	(7.7)	0.318	306.6	(6.2)	313.6	(4.8)	7.1	(7.8)	0.184
32	289.3	(5.8)	300.4	(5.3)	11.1	(7.9)	0.080	308.9	(4.7)	316.6	(4.5)	7.7	(6.5)	0.117
33	278.6	(6.7)	282.4	(6.7)	3.8	(9.5)	0.345	294.6	(6.2)	312.4	(4.4)	17.8	(7.6)	0.009
34	279.1	(5.6)	285.8	(5.3)	6.7	(7.7)	0.194	304.5	(4.4)	311.2	(4.1)	6.6	(6.0)	0.136
35	287.2	(7.7)	285.0	(4.5)	-2.2	(8.9)	0.404	304.3	(5.1)	315.8	(5.0)	11.5	(7.2)	0.054
36	285.9	(6.1)	278.7	(6.1)	-7.2	(8.6)	0.202	298.6	(6.2)	309.5	(5.1)	10.9	(8.0)	0.088
37	279.8	(8.3)	270.8	(6.2)	-9.0	(10.4)	0.193	294.4	(5.0)	305.3	(4.8)	10.9	(6.9)	0.056
38	284.8	(4.3)	277.1	(6.1)	-7.7	(7.5)	0.152	302.3	(5.1)	317.3	(5.8)	15.0	(7.7)	0.026
39	284.0	(7.7)	280.1	(6.0)	-3.8	(9.8)	0.347	296.8	(6.5)	308.2	(4.4)	11.4	(7.8)	0.072
40	285.6	(4.9)	270.0	(7.6)	-15.6	(9.0)	0.042	292.0	(5.8)	303.8	(5.4)	11.9	(7.9)	0.067
41	280.6	(6.3)	274.2	(5.9)	-6.4	(8.6)	0.227	289.7	(4.2)	294.0	(6.4)	4.4	(7.7)	0.285
42	266.7	(8.0)	270.2	(7.6)	3.5	(11.0)	0.375	295.7	(7.4)	298.8	(4.4)	3.2	(8.6)	0.357
43	272.0	(7.6)	275.9	(6.2)	3.9	(9.8)	0.347	287.3	(5.7)	300.8	(4.4)	13.5	(7.2)	0.031
44	276.6	(5.8)	274.7	(6.6)	-2.0	(8.8)	0.411	279.0	(5.8)	292.9	(4.6)	13.9	(7.4)	0.030
45	279.5	(5.6)	265.4	(5.4)	-14.2	(7.7)	0.034	281.4	(5.4)	289.4	(6.5)	7.9	(8.5)	0.176
46	280.3	(6.5)	268.1	(5.7)	-12.3	(8.7)	0.079	280.1	(6.2)	290.3	(4.6)	10.2	(7.7)	0.092
47	270.2	(7.3)	276.3	(6.7)	6.1	(9.9)	0.268	283.3	(5.8)	299.6	(5.3)	16.3	(7.9)	0.019
48	270.3	(6.3)	258.6	(8.4)	-11.8	(10.5)	0.130	273.9	(6.2)	289.1	(4.8)	15.2	(7.8)	0.026
49	269.8	(6.4)	278.8	(6.6)	9.0	(9.2)	0.164	287.9	(5.8)	299.9	(3.5)	12.0	(6.8)	0.038
50	272.8	(6.3)	265.6	(4.8)	-7.3	(8.0)	0.182	271.4	(6.3)	284.9	(5.0)	13.5	(8.1)	0.048
51	269.3	(4.6)	273.7	(5.3)	4.4	(7.1)	0.265	272.7	(5.7)	280.7	(5.2)	8.0	(7.7)	0.150
52	263.9	(5.1)	257.3	(9.7)	-6.7	(11.0)	0.272	277.6	(5.2)	283.3	(4.6)	5.7	(7.0)	0.205
53	268.3	(8.7)	255.4	(8.5)	-12.9	(12.1)	0.144	262.7	(8.6)	284.5	(5.1)	21.8	(10.0)	0.015
54	268.2	(8.8)	265.8	(4.9)	-2.4	(10.1)	0.405	270.9	(9.6)	273.2	(5.6)	2.3	(11.1)	0.417
55	261.5	(7.7)	260.4	(8.4)	-1.1	(11.4)	0.462	262.7	(8.9)	275.5	(4.4)	12.8	(10.0)	0.100
56	261.2	(6.9)	269.5	(6.3)	8.3	(9.4)	0.189	257.5	(6.1)	259.2	(3.9)	1.6	(7.2)	0.410
57	267.2	(5.3)	268.2	(5.8)	1.1	(7.9)	0.447	261.6	(7.7)	271.9	(5.4)	10.3	(9.4)	0.137
58	259.3	(10.6)	265.2	(6.4)	5.9	(12.4)	0.316	258.0	(6.7)	264.2	(4.0)	6.2	(7.8)	0.215
59	265.9	(14.0)	250.7	(5.2)	-15.2	(14.9)	0.155	259.4	(7.2)	260.7	(5.0)	1.3	(8.7)	0.441
60	262.0	(7.7)	260.4	(9.0)	-1.6	(11.8)	0.446	244.8	(7.9)	264.0	(4.1)	19.2	(8.9)	0.016
61	256.2	(6.8)	254.5	(4.7)	-1.7	(8.2)	0.416	242.1	(9.0)	261.2	(4.8)	19.1	(10.2)	0.031
62	261.9	(7.9)	261.6	(5.8)	-0.3	(9.8)	0.490	250.4	(8.2)	256.3	(4.1)	5.9	(9.2)	0.258
63	261.3	(5.7)	271.8	(6.9)	10.5	(8.9)	0.119	235.0	(7.8)	251.8	(4.4)	16.8	(9.0)	0.031
64	250.3	(8.6)	259.9	(9.2)	9.6	(12.6)	0.221	237.3	(9.4)	251.3	(3.8)	14.0	(10.1)	0.083
65	237.0	(11.9)	263.3	(4.0)	26.3	(12.5)	0.018	233.0	(8.1)	250.5	(4.5)	17.5	(9.3)	0.029

Note: The 2012 estimate for Canada excludes the Northern Territories since they were not included in the IALS survey in 1994.

Source: Survey of Adult Skills (PIAAC) (2012) and OECD, IALS Database.

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Table B5.1 Mean literacy proficiency in the International Adult Literacy Survey (1994-98), the Survey of Adult Skills (2012), and score difference between the two, by age

	Netherlands							United States						
	1994		2012		Difference between 2012 and 1994			1994		2012		Difference between 2012 and 1994		
Age	Mean score	S.E.	Mean score	S.E.	Dif.	S.E.	p-value	Mean score	S.E.	Mean score	S.E.	Dif.	S.E.	p-value
16	281.3	(9.9)	285.8	(3.8)	4.5	(10.6)	0.338	259.6	(9.9)	267.1	(4.7)	7.5	(10.9)	0.246
17	303.5	(7.2)	288.4	(3.9)	-15.1	(8.2)	0.033	271.0	(7.3)	255.0	(6.1)	-16.0	(9.5)	0.047
18	298.9	(7.4)	292.6	(4.3)	-6.2	(8.5)	0.233	261.9	(13.0)	268.3	(7.1)	6.4	(14.8)	0.334
19	303.3	(7.2)	294.2	(4.5)	-9.1	(8.5)	0.144	263.4	(12.3)	275.1	(6.9)	11.7	(14.1)	0.203
20	297.4	(9.8)	293.5	(5.0)	-3.9	(11.0)	0.362	264.4	(16.6)	275.1	(5.8)	10.7	(17.6)	0.272
21	307.0	(7.3)	301.8	(4.5)	-5.2	(8.6)	0.274	283.0	(13.3)	271.7	(5.7)	-11.3	(14.5)	0.218
22	305.1	(5.5)	307.0	(4.1)	1.9	(6.9)	0.392	269.6	(16.5)	287.9	(5.6)	18.3	(17.4)	0.146
23	296.7	(8.7)	305.6	(4.5)	9.0	(9.8)	0.180	295.5	(9.6)	277.9	(5.2)	-17.6	(10.9)	0.053
24	308.9	(6.2)	306.7	(5.8)	-2.2	(8.5)	0.397	285.8	(7.9)	286.0	(4.7)	0.1	(9.2)	0.494
25	305.5	(4.1)	302.4	(5.6)	-3.1	(7.0)	0.328	276.5	(10.8)	277.6	(7.2)	1.1	(13.0)	0.467
26	297.1	(8.0)	310.4	(4.1)	13.3	(9.0)	0.070	284.8	(8.5)	280.6	(6.2)	-4.2	(10.5)	0.344
27	308.3	(5.1)	298.6	(6.6)	-9.7	(8.4)	0.124	293.6	(6.4)	290.5	(5.6)	-3.1	(8.5)	0.358
28	310.9	(5.5)	308.6	(5.1)	-2.3	(7.5)	0.381	276.6	(9.5)	283.0	(5.8)	6.4	(11.1)	0.282
29	304.6	(5.9)	305.5	(6.7)	1.0	(8.9)	0.456	282.5	(10.8)	286.1	(7.3)	3.6	(13.0)	0.392
30	297.6	(5.7)	311.0	(5.7)	13.4	(8.1)	0.048	293.4	(8.6)	285.0	(5.5)	-8.4	(10.3)	0.207
31	302.8	(4.5)	305.6	(5.2)	2.7	(6.9)	0.346	300.6	(6.8)	268.5	(4.8)	-32.1	(8.3)	0.000
32	297.2	(4.5)	303.6	(7.0)	6.4	(8.3)	0.220	291.9	(9.1)	287.3	(5.5)	-4.6	(10.7)	0.335
33	301.8	(4.2)	301.9	(5.0)	0.1	(6.6)	0.495	286.5	(9.7)	275.8	(6.3)	-10.7	(11.5)	0.176
34	303.0	(5.4)	300.9	(5.2)	-2.1	(7.5)	0.390	293.8	(9.8)	283.3	(6.7)	-10.5	(11.9)	0.189
35	295.4	(5.7)	301.0	(5.2)	5.6	(7.7)	0.232	287.7	(8.1)	286.3	(5.6)	-1.4	(9.8)	0.442
36	288.2	(5.4)	300.9	(4.7)	12.7	(7.1)	0.038	304.3	(7.8)	276.3	(6.1)	-28.0	(9.9)	0.002
37	298.0	(4.1)	300.1	(4.2)	2.1	(5.9)	0.362	290.6	(9.7)	278.2	(5.1)	-12.5	(10.9)	0.126
38	291.1	(6.9)	309.4	(4.3)	18.3	(8.2)	0.013	280.0	(10.8)	287.3	(6.0)	7.3	(12.4)	0.278
39	300.9	(4.6)	304.8	(4.1)	3.9	(6.2)	0.265	282.8	(7.8)	280.3	(5.5)	-2.5	(9.5)	0.396
40	290.3	(5.9)	300.1	(4.6)	9.8	(7.5)	0.097	294.7	(5.5)	276.2	(6.2)	-18.4	(8.3)	0.013
41	292.8	(4.4)	301.3	(3.8)	8.5	(5.8)	0.071	288.2	(13.8)	277.2	(5.4)	-11.0	(14.8)	0.228
42	278.0	(6.1)	295.8	(4.7)	17.8	(7.7)	0.010	295.7	(7.5)	274.5	(5.1)	-21.2	(9.1)	0.010
43	281.3	(5.6)	304.9	(4.5)	23.6	(7.1)	0.000	286.7	(8.1)	275.3	(6.7)	-11.4	(10.5)	0.139
44	289.3	(5.2)	297.1	(5.1)	7.8	(7.2)	0.140	283.7	(11.8)	281.5	(5.4)	-2.3	(13.0)	0.431
45	280.4	(7.8)	285.2	(5.0)	4.9	(9.2)	0.299	299.5	(8.9)	270.7	(5.5)	-28.8	(10.4)	0.003
46	290.1	(5.7)	291.2	(4.2)	1.0	(7.1)	0.441	274.6	(13.4)	270.9	(5.6)	-3.6	(14.6)	0.402
47	281.0	(5.1)	289.6	(4.7)	8.6	(6.9)	0.108	288.0	(9.9)	273.1	(5.3)	-15.0	(11.2)	0.091
48	278.9	(6.2)	289.8	(4.4)	10.9	(7.6)	0.077	292.1	(11.9)	279.5	(4.7)	-12.6	(12.8)	0.162
49	280.3	(6.4)	291.7	(5.1)	11.4	(8.2)	0.083	285.7	(7.4)	271.6	(5.5)	-14.0	(9.3)	0.065
50	281.9	(4.9)	288.1	(4.4)	6.2	(6.6)	0.174	282.0	(9.5)	260.7	(5.4)	-21.3	(10.9)	0.026
51	278.5	(8.8)	277.5	(5.6)	-1.0	(10.4)	0.464	288.2	(10.2)	268.7	(5.9)	-19.6	(11.8)	0.049
52	271.1	(7.3)	277.6	(4.9)	6.5	(8.8)	0.231	282.8	(7.5)	271.1	(5.3)	-11.7	(9.2)	0.101
53	261.6	(7.0)	270.4	(5.0)	8.8	(8.6)	0.153	281.4	(8.4)	279.5	(5.7)	-1.9	(10.1)	0.427
54	266.6	(10.5)	273.2	(4.6)	6.6	(11.5)	0.282	281.7	(6.0)	283.1	(4.8)	1.5	(7.7)	0.426
55	260.2	(8.1)	277.5	(6.0)	17.3	(10.0)	0.043	292.9	(13.5)	270.7	(5.8)	-22.2	(14.7)	0.065
56	269.3	(6.9)	277.0	(6.3)	7.7	(9.3)	0.205	265.9	(12.4)	271.5	(6.3)	5.6	(13.9)	0.343
57	272.2	(7.7)	261.7	(4.9)	-10.5	(9.2)	0.125	266.7	(15.6)	266.5	(5.9)	-0.2	(16.7)	0.494
58	267.0	(5.7)	272.3	(4.8)	5.4	(7.4)	0.236	286.2	(6.9)	267.0	(5.8)	-19.2	(9.0)	0.016
59	256.3	(6.0)	257.8	(5.5)	1.5	(8.1)	0.425	278.6	(7.4)	266.3	(6.5)	-12.3	(9.9)	0.108
60	250.4	(9.4)	271.6	(4.3)	21.2	(10.3)	0.020	274.2	(11.1)	263.3	(6.3)	-10.9	(12.8)	0.197
61	258.5	(9.8)	260.4	(4.6)	1.9	(10.9)	0.432	265.2	(6.7)	258.1	(5.6)	-7.1	(8.7)	0.207
62	261.5	(9.6)	262.4	(5.3)	0.9	(11.0)	0.469	266.4	(9.2)	275.9	(6.8)	9.5	(11.5)	0.205
63	252.8	(9.5)	261.2	(4.6)	8.4	(10.5)	0.212	260.2	(9.0)	267.9	(6.0)	7.7	(10.8)	0.238
64	244.8	(7.3)	259.1	(4.4)	14.2	(8.5)	0.047	265.5	(7.4)	271.3	(4.4)	5.8	(8.6)	0.251
65	248.2	(6.8)	257.7	(5.1)	9.5	(8.5)	0.134	240.8	(21.2)	273.1	(6.6)	32.3	(22.2)	0.073

Note: The 2012 estimate for Canada excludes the Northern Territories since they were not included in the IALS survey in 1994.

Source: Survey of Adult Skills (PIAAC) (2012) and OECD, IALS Database.

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[Part 1/3]

Table B5.2 Mean literacy proficiency in the International Adult Literacy Survey (1994-98), the Survey of Adult Skills (2012), and score difference between the two, by corresponding cohorts

Australia									Canada								
1996			2012			Difference between 2012 and 1996			1994			2012			Difference between 2012 and 1994		
Age	Mean score	S.E.	Age	Mean score	S.E.	Dif.	S.E.	p-value	Age	Mean score	S.E.	Age	Mean score	S.E.	Dif.	S.E.	p-value
16	282.5	(5.5)	32	294.0	(6.2)	11.5	(8.3)	0.082	16	286.7	(7.7)	34	292.9	(4.0)	6.2	(8.7)	0.237
17	273.1	(6.1)	33	289.9	(5.6)	16.8	(8.3)	0.021	17	290.3	(6.2)	35	293.8	(4.1)	3.5	(7.4)	0.316
18	275.4	(6.4)	34	296.6	(4.5)	21.2	(7.8)	0.003	18	295.8	(5.5)	36	294.0	(4.2)	-1.8	(6.9)	0.398
19	274.5	(5.8)	35	291.7	(4.6)	17.2	(7.4)	0.010	19	288.9	(9.2)	37	295.5	(4.9)	6.6	(10.4)	0.263
20	274.5	(6.8)	36	295.7	(5.5)	21.2	(8.7)	0.008	20	308.9	(7.9)	38	288.3	(4.2)	-20.6	(9.0)	0.011
21	280.5	(6.6)	37	295.3	(5.3)	14.8	(8.4)	0.039	21	296.2	(10.4)	39	290.8	(4.4)	-5.4	(11.3)	0.318
22	279.6	(5.2)	38	296.0	(5.4)	16.4	(7.5)	0.014	22	301.8	(6.4)	40	284.4	(4.8)	-17.4	(8.0)	0.015
23	269.5	(5.9)	39	292.4	(4.9)	22.9	(7.6)	0.001	23	298.8	(8.6)	41	288.7	(4.3)	-10.1	(9.6)	0.145
24	281.5	(4.7)	40	286.9	(4.6)	5.5	(6.5)	0.202	24	290.5	(6.2)	42	283.2	(4.0)	-7.3	(7.3)	0.159
25	274.2	(6.4)	41	288.9	(5.1)	14.7	(8.2)	0.037	25	287.6	(13.6)	43	277.4	(3.9)	-10.2	(14.2)	0.237
26	268.6	(6.9)	42	290.2	(6.2)	21.6	(9.3)	0.010	26	288.1	(10.6)	44	284.8	(3.5)	-3.3	(11.2)	0.384
27	277.3	(4.8)	43	292.5	(5.5)	15.2	(7.3)	0.019	27	302.3	(11.9)	45	278.1	(4.3)	-24.2	(12.7)	0.028
28	281.6	(5.2)	44	284.9	(6.5)	3.3	(8.4)	0.344	28	280.1	(9.2)	46	279.4	(4.1)	-0.7	(10.1)	0.472
29	279.8	(4.9)	45	283.1	(4.8)	3.3	(6.9)	0.314	29	283.5	(36.0)	47	275.2	(3.8)	-8.3	(36.2)	0.409
30	273.9	(4.6)	46	282.1	(5.0)	8.2	(6.8)	0.114	30	296.5	(11.4)	48	280.9	(3.9)	-15.6	(12.1)	0.098
31	272.9	(4.7)	47	289.2	(4.6)	16.3	(6.6)	0.007	31	297.0	(10.2)	49	281.1	(4.9)	-15.9	(11.3)	0.080
32	278.7	(4.1)	48	286.5	(5.7)	7.9	(7.1)	0.133	32	293.8	(8.7)	50	273.0	(3.7)	-20.8	(9.5)	0.014
33	275.5	(3.7)	49	270.6	(7.1)	-4.9	(8.0)	0.270	33	293.0	(8.9)	51	276.2	(4.3)	-16.7	(9.9)	0.045
34	280.5	(4.2)	50	282.4	(6.1)	1.9	(7.4)	0.399	34	282.1	(14.7)	52	272.6	(4.8)	-9.5	(15.5)	0.269
35	272.3	(3.6)	51	277.8	(6.6)	5.6	(7.5)	0.230	35	303.8	(8.4)	53	270.4	(3.6)	-33.4	(9.1)	0.000
36	272.7	(4.1)	52	269.9	(5.1)	-2.8	(6.6)	0.333	36	305.4	(13.4)	54	270.7	(3.8)	-34.7	(14.0)	0.006
37	271.5	(5.2)	53	276.1	(5.3)	4.7	(7.5)	0.267	37	296.1	(9.3)	55	263.2	(3.2)	-32.8	(9.8)	0.000
38	271.7	(5.1)	54	270.7	(6.5)	-1.0	(8.3)	0.450	38	294.4	(12.3)	56	273.3	(3.3)	-21.1	(12.7)	0.049
39	269.5	(4.9)	55	279.1	(5.4)	9.5	(7.3)	0.096	39	304.5	(11.8)	57	269.1	(4.4)	-35.4	(12.6)	0.002
40	275.7	(5.0)	56	283.3	(5.8)	7.5	(7.7)	0.162	40	293.6	(11.7)	58	265.0	(3.6)	-28.5	(12.3)	0.010
41	279.4	(4.4)	57	277.3	(6.6)	-2.1	(8.0)	0.394	41	302.5	(27.5)	59	270.0	(4.2)	-32.5	(27.9)	0.122
42	279.1	(4.7)	58	269.9	(7.3)	-9.2	(8.7)	0.146	42	280.4	(8.0)	60	270.9	(3.8)	-9.5	(8.9)	0.141
43	264.8	(6.9)	59	267.7	(7.3)	2.9	(10.1)	0.387	43	285.3	(21.9)	61	269.5	(3.6)	-15.8	(22.2)	0.238
44	277.3	(5.2)	60	262.5	(7.8)	-14.8	(9.4)	0.058	44	285.5	(7.6)	62	260.1	(4.3)	-25.4	(8.7)	0.002
45	285.0	(6.2)	61	262.4	(6.2)	-22.6	(8.8)	0.005	45	265.6	(16.5)	63	265.9	(3.7)	0.3	(16.9)	0.494
46	281.3	(5.2)	62	263.7	(5.6)	-17.6	(7.6)	0.011	46	276.0	(21.2)	64	257.6	(4.2)	-18.4	(21.6)	0.197
47	271.6	(6.3)	63	267.2	(5.8)	-4.4	(8.6)	0.305	47	247.2	(35.2)	65	260.2	(3.6)	13.0	(35.4)	0.357
48	276.5	(5.5)	64	273.0	(5.7)	-3.6	(7.9)	0.327									
49	271.9	(4.4)	65	255.7	(5.1)	-16.2	(6.8)	0.008									

Note: The 2012 estimate for Canada excludes the Northern Territories since they were not included in the IALS survey in 1994.

Source: Survey of Adult Skills (PIAAC) (2012) and OECD, IALS Database.

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[Part 2/3]

Table B5.2 Mean literacy proficiency in the International Adult Literacy Survey (1994-98), the Survey of Adult Skills (2012), and score difference between the two, by corresponding cohorts

Czech Republic									Finland								
1998			2012			Difference between 2012 and 1998			1998			2012			Difference between 2012 and 1998		
Age	Mean score	S.E.	Age	Mean score	S.E.	Dif.	S.E.	p-value	Age	Mean score	S.E.	Age	Mean score	S.E.	Dif.	S.E.	p-value
16	278.7	(9.9)	30	286.0	(4.9)	7.3	(11.0)	0.254	16	305.1	(5.2)	30	323.9	(4.3)	18.8	(6.7)	0.003
17	276.7	(10.1)	31	280.7	(5.6)	4.0	(11.5)	0.363	17	304.5	(5.1)	31	313.6	(4.8)	9.2	(7.0)	0.096
18	282.4	(5.3)	32	300.4	(5.3)	18.0	(7.5)	0.008	18	305.0	(5.0)	32	316.6	(4.5)	11.6	(6.8)	0.043
19	288.6	(5.9)	33	282.4	(6.7)	-6.2	(9.0)	0.246	19	316.5	(4.4)	33	312.4	(4.4)	-4.1	(6.2)	0.257
20	286.1	(7.0)	34	285.8	(5.3)	-0.3	(8.8)	0.485	20	315.5	(5.9)	34	311.2	(4.1)	-4.3	(7.2)	0.274
21	284.9	(7.6)	35	285.0	(4.5)	0.1	(8.8)	0.495	21	316.1	(5.0)	35	315.8	(5.0)	-0.2	(7.1)	0.487
22	294.0	(7.6)	36	278.7	(6.1)	-15.2	(9.7)	0.059	22	313.6	(5.8)	36	309.5	(5.1)	-4.1	(7.8)	0.298
23	289.8	(7.0)	37	270.8	(6.2)	-19.0	(9.3)	0.021	23	314.4	(5.8)	37	305.3	(4.8)	-9.1	(7.5)	0.113
24	296.0	(6.4)	38	277.1	(6.1)	-18.9	(8.8)	0.016	24	314.7	(5.6)	38	317.3	(5.8)	2.5	(8.1)	0.377
25	288.5	(8.4)	39	280.1	(6.0)	-8.3	(10.3)	0.210	25	314.1	(5.3)	39	308.2	(4.4)	-5.9	(6.9)	0.196
26	291.3	(7.1)	40	270.0	(7.6)	-21.3	(10.4)	0.020	26	317.6	(5.0)	40	303.8	(5.4)	-13.7	(7.3)	0.030
27	289.2	(6.9)	41	274.2	(5.9)	-15.0	(9.1)	0.049	27	314.5	(5.7)	41	294.0	(6.4)	-20.5	(8.6)	0.008
28	297.9	(6.1)	42	270.2	(7.6)	-27.8	(9.8)	0.002	28	308.6	(4.9)	42	298.8	(4.4)	-9.7	(6.6)	0.070
29	283.4	(7.9)	43	275.9	(6.2)	-7.5	(10.1)	0.229	29	300.7	(7.2)	43	300.8	(4.4)	0.1	(8.5)	0.494
30	296.0	(6.1)	44	274.7	(6.6)	-21.3	(9.0)	0.009	30	307.3	(5.4)	44	292.9	(4.6)	-14.4	(7.1)	0.021
31	284.3	(5.3)	45	265.4	(5.4)	-19.0	(7.5)	0.006	31	306.6	(6.2)	45	289.4	(6.5)	-17.2	(9.0)	0.028
32	289.3	(5.8)	46	268.1	(5.7)	-21.2	(8.1)	0.005	32	308.9	(4.7)	46	290.3	(4.6)	-18.6	(6.5)	0.002
33	278.6	(6.7)	47	276.3	(6.7)	-2.3	(9.5)	0.405	33	294.6	(6.2)	47	299.6	(5.3)	5.0	(8.1)	0.267
34	279.1	(5.6)	48	258.6	(8.4)	-20.5	(10.1)	0.021	34	304.5	(4.4)	48	289.1	(4.8)	-15.4	(6.5)	0.009
35	287.2	(7.7)	49	278.8	(6.6)	-8.3	(10.2)	0.205	35	304.3	(5.1)	49	299.9	(3.5)	-4.4	(6.2)	0.240
36	285.9	(6.1)	50	265.6	(4.8)	-20.3	(7.8)	0.005	36	298.6	(6.2)	50	284.9	(5.0)	-13.7	(8.0)	0.044
37	279.8	(8.3)	51	273.7	(5.3)	-6.1	(9.9)	0.270	37	294.4	(5.0)	51	280.7	(5.2)	-13.7	(7.2)	0.028
38	284.8	(4.3)	52	257.3	(9.7)	-27.5	(10.7)	0.005	38	302.3	(5.1)	52	283.3	(4.6)	-19.0	(6.8)	0.003
39	284.0	(7.7)	53	255.4	(8.5)	-28.6	(11.5)	0.006	39	296.8	(6.5)	53	284.5	(5.1)	-12.3	(8.2)	0.068
40	285.6	(4.9)	54	265.8	(4.9)	-19.8	(7.0)	0.002	40	292.0	(5.8)	54	273.2	(5.6)	-18.7	(8.0)	0.010
41	280.6	(6.3)	55	260.4	(8.4)	-20.3	(10.5)	0.027	41	289.7	(4.2)	55	275.5	(4.4)	-14.2	(6.1)	0.010
42	266.7	(8.0)	56	269.5	(6.3)	2.8	(10.2)	0.392	42	295.7	(7.4)	56	259.2	(3.9)	-36.5	(8.3)	0.000
43	272.0	(7.6)	57	268.2	(5.8)	-3.8	(9.6)	0.346	43	287.3	(5.7)	57	271.9	(5.4)	-15.4	(7.9)	0.026
44	276.6	(5.8)	58	265.2	(6.4)	-11.4	(8.6)	0.092	44	279.0	(5.8)	58	264.2	(4.0)	-14.8	(7.0)	0.017
45	279.5	(5.6)	59	250.7	(5.2)	-28.8	(7.6)	0.000	45	281.4	(5.4)	59	260.7	(5.0)	-20.8	(7.4)	0.002
46	280.3	(6.5)	60	260.4	(9.0)	-19.9	(11.1)	0.037	46	280.1	(6.2)	60	264.0	(4.1)	-16.1	(7.4)	0.015
47	270.2	(7.3)	61	254.5	(4.7)	-15.7	(8.7)	0.035	47	283.3	(5.8)	61	261.2	(4.8)	-22.1	(7.5)	0.002
48	270.3	(6.3)	62	261.6	(5.8)	-8.7	(8.5)	0.154	48	273.9	(6.2)	62	256.3	(4.1)	-17.6	(7.4)	0.009
49	269.8	(6.4)	63	271.8	(6.9)	2.0	(9.4)	0.415	49	287.9	(5.8)	63	251.8	(4.4)	-36.2	(7.2)	0.000
50	272.8	(6.3)	64	259.9	(9.2)	-12.9	(11.2)	0.123	50	271.4	(6.3)	64	251.3	(3.8)	-20.1	(7.4)	0.003
51	269.3	(4.6)	65	263.3	(4.0)	-6.0	(6.1)	0.165	51	272.7	(5.7)	65	250.5	(4.5)	-22.2	(7.3)	0.001

Note: The 2012 estimate for Canada excludes the Northern Territories since they were not included in the IALS survey in 1994.

Source: Survey of Adult Skills (PIAAC) (2012) and OECD, IALS Database.

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[Part 3/3]

Table B5.2 Mean literacy proficiency in the International Adult Literacy Survey (1994-98), the Survey of Adult Skills (2012), and score difference between the two, by corresponding cohorts

Netherlands									United States								
1994			2012			Difference between 2012 and 1994			1994			2012			Difference between 2012 and 1994		
Age	Mean score	S.E.	Age	Mean score	S.E.	Dif.	S.E.	p-value	Age	Mean score	S.E.	Age	Mean score	S.E.	Dif.	S.E.	p-value
16	281.3	(9.9)	34	300.9	(5.2)	19.6	(11.2)	0.040	16	259.6	(9.9)	34	283.3	(6.7)	23.7	(11.9)	0.024
17	303.5	(7.2)	35	301.0	(5.2)	-2.5	(8.9)	0.388	17	271.0	(7.3)	35	286.3	(5.6)	15.3	(9.2)	0.047
18	298.9	(7.4)	36	300.9	(4.7)	2.1	(8.7)	0.406	18	261.9	(13.0)	36	276.3	(6.1)	14.4	(14.4)	0.159
19	303.3	(7.2)	37	300.1	(4.2)	-3.2	(8.3)	0.352	19	263.4	(12.3)	37	278.2	(5.1)	14.8	(13.3)	0.133
20	297.4	(9.8)	38	309.4	(4.3)	12.0	(10.7)	0.131	20	264.4	(16.6)	38	287.3	(6.0)	22.9	(17.7)	0.097
21	307.0	(7.3)	39	304.8	(4.1)	-2.2	(8.4)	0.396	21	283.0	(13.3)	39	280.3	(5.5)	-2.7	(14.4)	0.426
22	305.1	(5.5)	40	300.1	(4.6)	-5.1	(7.1)	0.239	22	269.6	(16.5)	40	276.2	(6.2)	6.6	(17.6)	0.354
23	296.7	(8.7)	41	301.3	(3.8)	4.6	(9.5)	0.312	23	295.5	(9.6)	41	277.2	(5.4)	-18.3	(11.0)	0.048
24	308.9	(6.2)	42	295.8	(4.7)	-13.1	(7.7)	0.045	24	285.8	(7.9)	42	274.5	(5.1)	-11.3	(9.4)	0.114
25	305.5	(4.1)	43	304.9	(4.5)	-0.6	(6.1)	0.460	25	276.5	(10.8)	43	275.3	(6.7)	-1.2	(12.7)	0.462
26	297.1	(8.0)	44	297.1	(5.1)	0.0	(9.5)	0.499	26	284.8	(8.5)	44	281.5	(5.4)	-3.3	(10.1)	0.370
27	308.3	(5.1)	45	285.2	(5.0)	-23.1	(7.2)	0.001	27	293.6	(6.4)	45	270.7	(5.5)	-23.0	(8.4)	0.003
28	310.9	(5.5)	46	291.2	(4.2)	-19.7	(7.0)	0.002	28	276.6	(9.5)	46	270.9	(5.6)	-5.7	(11.0)	0.303
29	304.6	(5.9)	47	289.6	(4.7)	-14.9	(7.5)	0.023	29	282.5	(10.8)	47	273.1	(5.3)	-9.5	(12.0)	0.215
30	297.6	(5.7)	48	289.8	(4.4)	-7.8	(7.2)	0.139	30	293.4	(8.6)	48	279.5	(4.7)	-13.9	(9.8)	0.079
31	302.8	(4.5)	49	291.7	(5.1)	-11.1	(6.8)	0.050	31	300.6	(6.8)	49	271.6	(5.5)	-29.0	(8.7)	0.000
32	297.2	(4.5)	50	288.1	(4.4)	-9.1	(6.3)	0.076	32	291.9	(9.1)	50	260.7	(5.4)	-31.2	(10.6)	0.002
33	301.8	(4.2)	51	277.5	(5.6)	-24.3	(7.0)	0.000	33	286.5	(9.7)	51	268.7	(5.9)	-17.9	(11.3)	0.058
34	303.0	(5.4)	52	277.6	(4.9)	-25.4	(7.2)	0.000	34	293.8	(9.8)	52	271.1	(5.3)	-22.8	(11.2)	0.021
35	295.4	(5.7)	53	270.4	(5.0)	-25.0	(7.6)	0.000	35	287.7	(8.1)	53	279.5	(5.7)	-8.2	(9.9)	0.204
36	288.2	(5.4)	54	273.2	(4.6)	-15.0	(7.1)	0.017	36	304.3	(7.8)	54	283.1	(4.8)	-21.1	(9.2)	0.011
37	298.0	(4.1)	55	277.5	(6.0)	-20.5	(7.3)	0.002	37	290.6	(9.7)	55	270.7	(5.8)	-20.0	(11.3)	0.038
38	291.1	(6.9)	56	277.0	(6.3)	-14.2	(9.4)	0.065	38	280.0	(10.8)	56	271.5	(6.3)	-8.5	(12.5)	0.248
39	300.9	(4.6)	57	261.7	(4.9)	-39.2	(6.7)	0.000	39	282.8	(7.8)	57	266.5	(5.9)	-16.3	(9.7)	0.047
40	290.3	(5.9)	58	272.3	(4.8)	-18.0	(7.6)	0.009	40	294.7	(5.5)	58	267.0	(5.8)	-27.6	(8.0)	0.000
41	292.8	(4.4)	59	257.8	(5.5)	-35.0	(7.0)	0.000	41	288.2	(13.8)	59	266.3	(6.5)	-21.9	(15.3)	0.076
42	278.0	(6.1)	60	271.6	(4.3)	-6.4	(7.5)	0.195	42	295.7	(7.5)	60	263.3	(6.3)	-32.4	(9.8)	0.000
43	281.3	(5.6)	61	260.4	(4.6)	-20.9	(7.2)	0.002	43	286.7	(8.1)	61	258.1	(5.6)	-28.6	(9.8)	0.002
44	289.3	(5.2)	62	262.4	(5.3)	-26.9	(7.4)	0.000	44	283.7	(11.8)	62	275.9	(6.8)	-7.8	(13.6)	0.283
45	280.4	(7.8)	63	261.2	(4.6)	-19.2	(9.0)	0.017	45	299.5	(8.9)	63	267.9	(6.0)	-31.6	(10.7)	0.002
46	290.1	(5.7)	64	259.1	(4.4)	-31.1	(7.2)	0.000	46	274.6	(13.4)	64	271.3	(4.4)	-3.3	(14.1)	0.408
47	281.0	(5.1)	65	257.7	(5.1)	-23.3	(7.2)	0.001	47	288.0	(9.9)	65	273.1	(6.6)	-14.9	(11.9)	0.104

Note: The 2012 estimate for Canada excludes the Northern Territories since they were not included in the IALS survey in 1994.
Source: Survey of Adult Skills (PIAAC) (2012) and OECD, IALS Database.
StatLink http://dx.doi.org/10.1787/888932900042

[Part 1/5]

Table B5.3 (L) **Literacy proficiency, adjusted for socio-demographic characteristics and practice-oriented factors**

OECD	Age										Gender				Immigrant and language background			
	16-24 year-olds		25-34 year-olds		35-44 year-olds		45-54 year-olds		55-65 year-olds		Men		Women		Native born, native language		Native born, foreign language	
	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.
National entities																		
Australia	307.5	(3.5)	319.3	(2.1)	322.8	(3.8)	320.3	(2.1)	315.4	(2.3)	322.8	(3.8)	320.0	(1.5)	322.8	(3.8)	309.9	(4.3)
Austria	292.3	(2.8)	296.2	(1.9)	293.0	(3.4)	287.9	(2.0)	280.6	(2.0)	293.0	(3.4)	293.9	(1.2)	293.0	(3.4)	276.4	(4.7)
Canada	293.5	(3.0)	301.7	(1.5)	299.5	(2.6)	295.8	(1.6)	299.2	(1.6)	299.5	(2.6)	296.9	(1.1)	299.5	(2.6)	296.5	(2.0)
Czech Republic	277.2	(4.4)	286.9	(2.6)	279.6	(4.8)	275.5	(2.5)	278.3	(3.0)	279.6	(4.8)	279.3	(1.6)	279.6	(4.8)	294.2	(21.6)
Denmark	293.8	(2.5)	296.8	(2.1)	295.6	(3.8)	286.3	(2.0)	281.7	(1.7)	295.6	(3.8)	296.1	(1.1)	295.6	(3.8)	286.0	(6.8)
Estonia	294.3	(2.7)	293.3	(1.9)	289.2	(3.3)	286.5	(1.7)	288.3	(1.9)	289.2	(3.3)	289.3	(1.1)	289.2	(3.3)	284.6	(4.1)
Finland	308.2	(3.6)	310.0	(2.1)	303.6	(3.2)	294.1	(2.4)	282.2	(2.4)	303.6	(3.2)	305.2	(1.5)	303.6	(3.2)	281.6	(6.1)
Germany	296.2	(3.4)	301.8	(2.0)	299.4	(3.5)	289.2	(2.0)	285.5	(2.3)	299.4	(3.5)	300.0	(1.4)	299.4	(3.5)	286.6	(5.4)
Ireland	293.6	(3.6)	297.5	(1.8)	297.8	(4.2)	293.4	(2.5)	294.4	(2.6)	297.8	(4.2)	293.7	(1.3)	297.8	(4.2)	309.2	(6.6)
Italy	292.2	(4.4)	300.4	(2.3)	300.9	(6.2)	302.1	(2.1)	292.3	(2.6)	300.9	(6.2)	304.4	(1.6)	300.9	(6.2)	297.6	(4.8)
Japan	314.9	(3.3)	318.7	(1.8)	318.2	(4.1)	311.5	(1.9)	298.4	(1.9)	318.2	(4.1)	318.5	(1.3)	318.2	(4.1)	346.4	(18.7)
Korea	297.0	(3.1)	297.2	(1.7)	291.1	(3.9)	284.8	(1.5)	282.9	(2.2)	291.1	(3.9)	287.1	(1.1)	291.1	(3.9)	278.2	(8.8)
Netherlands	313.7	(3.0)	318.3	(2.0)	317.7	(3.9)	307.5	(2.0)	299.6	(2.0)	317.7	(3.9)	316.7	(1.3)	317.7	(3.9)	290.3	(5.9)
Norway	292.7	(2.8)	302.9	(2.2)	302.0	(3.6)	295.7	(1.8)	285.6	(1.9)	302.0	(3.6)	299.8	(1.3)	302.0	(3.6)	278.8	(6.4)
Poland	282.5	(2.4)	282.0	(2.3)	282.2	(4.6)	284.3	(2.4)	282.6	(2.8)	282.2	(4.6)	285.9	(1.4)	282.2	(4.6)	271.8	(6.5)
Slovak Republic	281.1	(2.8)	290.1	(1.8)	291.5	(4.1)	290.5	(1.7)	294.7	(1.7)	291.5	(4.1)	293.0	(1.1)	291.5	(4.1)	283.3	(2.8)
Spain	285.9	(2.7)	290.7	(1.9)	292.3	(4.2)	287.6	(1.9)	276.8	(2.3)	292.3	(4.2)	289.3	(1.3)	292.3	(4.2)	288.8	(4.1)
Sweden	313.7	(2.9)	316.0	(2.5)	315.8	(3.3)	309.9	(1.9)	303.9	(1.9)	315.8	(3.3)	314.9	(1.5)	315.8	(3.3)	310.8	(4.5)
United States	287.9	(3.7)	290.2	(2.2)	292.1	(3.8)	289.9	(1.8)	289.9	(2.1)	292.1	(3.8)	290.2	(1.5)	292.1	(3.8)	289.9	(4.7)
Sub-national entities																		
Flanders (Belgium)	296.6	(3.2)	299.3	(1.9)	294.0	(3.6)	289.5	(1.9)	284.8	(2.2)	294.0	(3.6)	290.7	(1.2)	294.0	(3.6)	282.2	(3.5)
England (UK)	302.5	(4.0)	313.5	(2.4)	315.5	(4.5)	312.6	(2.5)	312.6	(2.7)	315.5	(4.5)	314.3	(1.7)	315.5	(4.5)	301.3	(6.3)
Northern Ireland (UK)	298.4	(4.3)	302.1	(2.5)	303.5	(6.0)	298.8	(2.8)	299.7	(3.0)	303.5	(6.0)	300.2	(1.7)	303.5	(6.0)	305.5	(9.2)
England/N. Ireland (UK)	302.4	(3.8)	313.1	(2.3)	315.1	(4.4)	312.2	(2.4)	312.2	(2.6)	315.1	(4.4)	313.9	(1.6)	315.1	(4.4)	301.2	(6.2)
Average	296.1	(0.7)	301.1	(0.4)	299.7	(0.9)	295.0	(0.4)	290.9	(0.5)	299.7	(0.9)	299.0	(0.3)	299.7	(0.9)	292.6	(1.8)
Partners																		
Cyprus[1]	269.3	(3.8)	275.5	(2.2)	276.9	(5.1)	279.8	(2.1)	275.2	(2.6)	276.9	(5.1)	277.5	(1.5)	276.9	(5.1)	244.1	(13.6)

[Part 2/5]

Table B5.3 (L) **Literacy proficiency, adjusted for socio-demographic characteristics and practice-oriented factors**

OECD	Immigrant and language background				Educational attainment						Parents' educational attainment					
	Foreign born, native language		Foreign born, foreign language		Lower than upper secondary		Upper secondary		Tertiary		Lower than upper secondary		Upper secondary		Tertiary	
	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.
National entities																
Australia	319.0	(2.2)	288.1	(2.2)	310.0	(2.2)	322.8	(3.8)	334.5	(2.1)	318.3	(1.9)	322.8	(3.8)	328.4	(1.9)
Austria	289.5	(3.3)	263.6	(2.8)	280.4	(1.9)	293.0	(3.4)	309.1	(1.5)	286.6	(1.9)	293.0	(3.4)	298.8	(1.8)
Canada	282.1	(2.0)	268.1	(1.7)	277.2	(1.7)	299.5	(2.6)	313.2	(1.2)	293.6	(1.4)	299.5	(2.6)	304.5	(1.1)
Czech Republic	278.7	(8.2)	274.7	(4.9)	264.1	(2.8)	279.6	(4.8)	298.0	(2.4)	274.2	(3.0)	279.6	(4.8)	287.1	(2.4)
Denmark	289.2	(4.0)	255.7	(2.0)	282.2	(1.8)	295.6	(3.8)	308.6	(1.6)	293.4	(1.4)	295.6	(3.8)	306.6	(1.2)
Estonia	272.2	(1.8)	274.4	(4.6)	274.1	(1.6)	289.2	(3.3)	299.3	(1.3)	288.4	(1.5)	289.2	(3.3)	295.8	(1.4)
Finland	303.4	(5.3)	255.0	(8.1)	293.9	(2.2)	303.6	(3.2)	320.5	(1.8)	299.3	(1.6)	303.6	(3.2)	314.7	(1.9)
Germany	291.0	(4.7)	274.1	(2.9)	282.6	(2.6)	299.4	(3.5)	313.8	(1.7)	293.8	(2.9)	299.4	(3.5)	307.3	(1.5)
Ireland	293.8	(2.3)	268.2	(2.9)	277.4	(1.9)	297.8	(4.2)	310.3	(1.7)	290.8	(1.7)	297.8	(4.2)	305.8	(2.1)
Italy	290.7	(5.1)	275.9	(4.1)	283.8	(2.0)	300.9	(6.2)	305.3	(2.2)	295.2	(2.0)	300.9	(6.2)	307.6	(3.5)
Japan	305.2	(13.1)	253.4	(18.4)	303.7	(2.3)	318.2	(4.1)	333.7	(1.3)	312.7	(1.8)	318.2	(4.1)	320.9	(1.6)
Korea	273.4	(8.4)	242.2	(9.4)	274.8	(1.7)	291.1	(3.9)	303.2	(1.3)	287.7	(1.2)	291.1	(3.9)	296.0	(1.5)
Netherlands	296.5	(4.6)	281.7	(3.2)	301.6	(1.7)	317.7	(3.9)	332.1	(1.7)	312.2	(1.5)	317.7	(3.9)	321.6	(1.9)
Norway	294.6	(5.3)	260.2	(2.4)	293.7	(1.8)	302.0	(3.6)	318.6	(1.6)	295.3	(1.7)	302.0	(3.6)	309.4	(1.4)
Poland	283.6	(13.1)	307.2	(20.1)	269.9	(2.1)	282.2	(4.6)	300.0	(1.9)	275.5	(2.1)	282.2	(4.6)	290.7	(2.4)
Slovak Republic	288.6	(4.8)	292.3	(5.7)	270.9	(1.7)	291.5	(4.1)	299.6	(1.7)	279.9	(1.6)	291.5	(4.1)	297.9	(1.9)
Spain	275.9	(2.2)	261.3	(3.7)	275.3	(1.6)	292.3	(4.2)	303.5	(1.9)	286.3	(1.7)	292.3	(4.2)	298.2	(2.3)
Sweden	305.2	(4.4)	264.1	(2.2)	301.9	(1.9)	315.8	(3.3)	333.9	(1.7)	310.3	(2.0)	315.8	(3.3)	320.5	(1.7)
United States	282.5	(3.8)	265.1	(2.7)	277.9	(2.4)	292.1	(3.8)	312.6	(1.7)	280.3	(2.3)	292.1	(3.8)	301.5	(1.8)
Sub-national entities																
Flanders (Belgium)	288.8	(3.8)	246.7	(4.1)	278.0	(2.1)	294.0	(3.6)	313.0	(1.7)	288.8	(1.6)	294.0	(3.6)	300.9	(1.8)
England (UK)	303.4	(4.6)	282.5	(3.8)	294.7	(2.3)	315.5	(4.5)	322.2	(2.0)	304.3	(2.2)	315.5	(4.5)	323.0	(2.1)
Northern Ireland (UK)	299.4	(4.2)	272.8	(7.2)	281.3	(2.3)	303.5	(6.0)	312.7	(2.5)	297.6	(2.3)	303.5	(6.0)	312.5	(2.7)
England/N. Ireland (UK)	303.2	(4.5)	282.1	(3.8)	294.3	(2.1)	315.1	(4.4)	322.0	(1.9)	304.2	(2.1)	315.1	(4.4)	322.7	(2.1)
Average	290.8	(1.3)	269.2	(1.6)	284.2	(0.4)	299.7	(0.9)	313.6	(0.4)	293.7	(0.4)	299.7	(0.9)	306.5	(0.4)
Partners																
Cyprus[1]	267.0	(3.1)	249.9	(3.7)	262.1	(2.2)	276.9	(5.1)	290.3	(2.0)	271.6	(2.4)	276.9	(5.1)	283.4	(2.2)

1. See notes on page 408.

Note: Data are based on a multiple linear regression model. Reference groups (in brackets) for each socio-demographic characteristics are: age (35-44); gender (men); immigrant and language background (native born, native language); educational attainment (upper secondary); parents' educational attainment (upper secondary); participation in adult education and training (participated); level of engagement in reading at work/outside work (third quintile); level of engagement in numeracy-related practices at work/outside work (third quintile); and level of engagement in ICT-related practices at work/outside work (third quintile). Lower than upper secondary includes ISCED 1, 2 and 3C short. Upper secondary education includes ISCED 3A, 3B, 3C long and 4. Tertiary includes ISCED 5A, 5B and 6. Where possible, foreign qualifications are included as per their closest correspondance to the respective national education systems.

Source: Survey of Adult Skills (PIAAC) (2012).

StatLink http://dx.doi.org/10.1787/888932900061

[Part 3/5]

Table B5.3 (L) Literacy proficiency, adjusted for socio-demographic characteristics and practice-oriented factors

OECD	Participation in adult education and training				Level of engagement in reading at work (quintiles)						Level of engagement in numeracy-related practices at work (quintiles)					
	Participated		Did not participate		No practice, first and second quintile		Third quintile		Fourth and fifth quintile		No practice, first and second quintile		Third quintile		Fourth and fifth quintile	
	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.
National entities																
Australia	322.8	(3.8)	316.0	(1.8)	319.1	(2.4)	322.8	(3.8)	315.6	(2.0)	318.6	(1.9)	322.8	(3.8)	318.6	(1.9)
Austria	293.0	(3.4)	288.2	(1.8)	290.3	(2.1)	293.0	(3.4)	289.6	(1.8)	292.4	(2.3)	293.0	(3.4)	293.7	(2.1)
Canada	299.5	(2.6)	292.7	(1.2)	299.6	(1.6)	299.5	(2.6)	296.0	(1.6)	296.0	(1.7)	299.5	(2.6)	296.7	(1.5)
Czech Republic	279.6	(4.8)	276.0	(2.0)	284.6	(2.7)	279.6	(4.8)	280.6	(2.7)	278.2	(2.9)	279.6	(4.8)	279.1	(2.9)
Denmark	295.6	(3.8)	290.8	(1.5)	293.1	(1.8)	295.6	(3.8)	292.2	(1.5)	292.2	(1.7)	295.6	(3.8)	294.8	(1.8)
Estonia	289.2	(3.3)	285.0	(1.4)	295.9	(1.9)	289.2	(3.3)	287.9	(2.0)	285.6	(1.9)	289.2	(3.3)	287.0	(1.8)
Finland	303.6	(3.2)	299.8	(1.7)	304.6	(1.6)	303.6	(3.2)	298.6	(1.8)	300.2	(2.1)	303.6	(3.2)	301.6	(1.8)
Germany	299.4	(3.5)	292.2	(1.6)	301.7	(1.9)	299.4	(3.5)	297.3	(2.0)	293.7	(2.4)	299.4	(3.5)	296.0	(2.3)
Ireland	297.8	(4.2)	295.9	(1.7)	294.5	(2.4)	297.8	(4.2)	294.0	(2.5)	296.7	(2.5)	297.8	(4.2)	297.0	(2.7)
Italy	300.9	(6.2)	295.7	(1.9)	302.6	(3.0)	300.9	(6.2)	301.7	(3.4)	293.7	(3.0)	300.9	(6.2)	299.2	(3.0)
Japan	318.2	(4.1)	315.3	(1.5)	321.7	(2.0)	318.2	(4.1)	315.3	(2.1)	313.7	(2.0)	318.2	(4.1)	317.8	(1.9)
Korea	291.1	(3.9)	284.3	(1.3)	289.1	(1.8)	291.1	(3.9)	288.3	(1.5)	290.7	(1.7)	291.1	(3.9)	292.0	(1.7)
Netherlands	317.7	(3.9)	318.5	(1.7)	316.0	(1.9)	317.7	(3.9)	313.4	(2.0)	315.7	(2.0)	317.7	(3.9)	316.1	(2.2)
Norway	302.0	(3.6)	302.7	(1.6)	302.3	(2.0)	302.0	(3.6)	296.5	(1.7)	298.5	(1.8)	302.0	(3.6)	300.9	(2.0)
Poland	282.2	(4.6)	277.3	(1.7)	281.1	(2.2)	282.2	(4.6)	279.8	(2.4)	280.9	(2.5)	282.2	(4.6)	283.7	(2.6)
Slovak Republic	291.5	(4.1)	284.6	(1.9)	293.6	(2.4)	291.5	(4.1)	291.8	(2.2)	291.3	(2.2)	291.5	(4.1)	291.6	(2.4)
Spain	292.3	(4.2)	288.2	(1.4)	290.7	(2.6)	292.3	(4.2)	289.5	(2.7)	290.2	(2.6)	292.3	(4.2)	294.7	(2.6)
Sweden	315.8	(3.3)	314.0	(1.7)	315.8	(2.1)	315.8	(3.3)	309.4	(2.0)	311.4	(1.8)	315.8	(3.3)	319.2	(2.1)
United States	292.1	(3.8)	290.0	(1.7)	294.8	(2.2)	292.1	(3.8)	288.0	(1.9)	288.6	(2.2)	292.1	(3.8)	289.5	(2.2)
Sub-national entities																
Flanders (Belgium)	294.0	(3.6)	294.6	(1.3)	296.4	(2.1)	294.0	(3.6)	288.8	(1.9)	294.7	(2.0)	294.0	(3.6)	294.4	(2.2)
England (UK)	315.5	(4.5)	311.3	(1.7)	315.2	(2.7)	315.5	(4.5)	311.9	(2.4)	313.4	(2.5)	315.5	(4.5)	315.1	(2.6)
Northern Ireland (UK)	303.5	(6.0)	300.7	(2.2)	301.6	(2.9)	303.5	(6.0)	300.0	(3.1)	295.1	(2.9)	303.5	(6.0)	295.2	(3.1)
England/N. Ireland (UK)	315.1	(4.4)	311.0	(1.7)	314.7	(2.6)	315.1	(4.4)	311.6	(2.4)	312.8	(2.4)	315.1	(4.4)	314.4	(2.5)
Average	299.7	(0.9)	295.9	(0.4)	300.1	(0.5)	299.7	(0.9)	296.5	(0.5)	296.9	(0.5)	299.7	(0.9)	299.0	(0.5)
Partners																
Cyprus[1]	276.9	(5.1)	276.1	(2.1)	285.1	(2.4)	276.9	(5.1)	276.7	(2.9)	276.9	(2.9)	276.9	(5.1)	277.8	(3.0)

[Part 4/5]

Table B5.3 (L) Literacy proficiency, adjusted for socio-demographic characteristics and practice-oriented factors

OECD	Level of engagement in ICT-related practices at work (quintiles)								Level of engagement in reading outside work (quintiles)					
	No engagement in ICT-related practices at work		First and second quintile		Third quintile		Fourth and fifth quintile		No practice, first and second quintile		Third quintile		Fourth and fifth quintile	
	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.
National entities														
Australia	309.0	(2.7)	314.7	(2.1)	322.8	(3.8)	323.0	(2.2)	311.5	(2.3)	322.8	(3.8)	321.5	(1.5)
Austria	281.2	(3.0)	287.0	(2.2)	293.0	(3.4)	296.7	(2.0)	287.8	(1.8)	293.0	(3.4)	294.9	(1.8)
Canada	284.6	(2.0)	291.9	(1.7)	299.5	(2.6)	304.5	(2.0)	290.7	(1.4)	299.5	(2.6)	301.8	(1.2)
Czech Republic	271.1	(3.1)	278.8	(3.5)	279.6	(4.8)	281.0	(3.2)	272.4	(2.7)	279.6	(4.8)	278.8	(2.6)
Denmark	282.9	(2.1)	289.8	(1.9)	295.6	(3.8)	298.8	(1.7)	288.8	(1.4)	295.6	(3.8)	294.8	(1.7)
Estonia	274.9	(2.5)	279.0	(2.1)	289.2	(3.3)	291.2	(2.1)	283.6	(1.6)	289.2	(3.3)	289.7	(1.4)
Finland	286.9	(2.7)	296.4	(2.0)	303.6	(3.2)	305.7	(1.9)	295.0	(1.8)	303.6	(3.2)	307.2	(1.5)
Germany	284.9	(2.6)	291.7	(2.2)	299.4	(3.5)	299.5	(2.2)	286.8	(1.8)	299.4	(3.5)	297.8	(1.9)
Ireland	286.8	(2.9)	287.8	(2.6)	297.8	(4.2)	296.8	(2.4)	291.8	(1.7)	297.8	(4.2)	300.1	(1.7)
Italy	286.2	(3.5)	294.7	(3.4)	300.9	(6.2)	299.0	(3.1)	293.8	(2.4)	300.9	(6.2)	296.9	(2.9)
Japan	307.3	(2.5)	311.1	(2.1)	318.2	(4.1)	317.7	(2.2)	313.6	(1.7)	318.2	(4.1)	318.1	(1.6)
Korea	286.5	(3.0)	288.6	(2.5)	291.1	(3.9)	292.3	(2.5)	285.0	(1.5)	291.1	(3.9)	289.2	(1.7)
Netherlands	296.4	(2.5)	306.3	(2.0)	317.7	(3.9)	319.2	(1.9)	309.4	(1.7)	317.7	(3.9)	314.9	(1.8)
Norway	280.3	(2.9)	295.0	(1.5)	302.0	(3.6)	305.4	(1.9)	292.6	(2.0)	302.0	(3.6)	304.5	(1.5)
Poland	275.0	(3.1)	278.3	(3.3)	282.2	(4.6)	284.6	(3.3)	281.4	(1.8)	282.2	(4.6)	282.5	(2.1)
Slovak Republic	290.5	(2.9)	291.0	(3.1)	291.5	(4.1)	294.0	(2.8)	288.1	(1.5)	291.5	(4.1)	289.3	(1.8)
Spain	286.9	(2.6)	290.7	(2.4)	292.3	(4.2)	295.9	(2.2)	285.7	(1.7)	292.3	(4.2)	289.4	(2.0)
Sweden	295.9	(2.7)	306.5	(2.2)	315.8	(3.3)	317.7	(2.5)	306.7	(2.0)	315.8	(3.3)	315.7	(1.7)
United States	272.4	(3.4)	286.6	(2.7)	292.1	(3.8)	292.5	(2.5)	287.7	(1.9)	292.1	(3.8)	288.5	(1.8)
Sub-national entities														
Flanders (Belgium)	274.3	(2.3)	285.0	(2.2)	294.0	(3.6)	300.0	(2.1)	289.2	(1.6)	294.0	(3.6)	293.1	(1.5)
England (UK)	294.1	(3.2)	303.3	(2.9)	315.5	(4.5)	314.8	(3.0)	308.5	(2.3)	315.5	(4.5)	315.4	(2.3)
Northern Ireland (UK)	287.0	(3.9)	295.2	(3.1)	303.5	(6.0)	305.5	(3.0)	295.0	(2.5)	303.5	(6.0)	303.4	(2.6)
England/N. Ireland (UK)	294.0	(3.1)	303.0	(2.8)	315.1	(4.4)	314.5	(2.9)	308.1	(2.2)	315.1	(4.4)	315.0	(2.2)
Average	286.1	(0.6)	293.0	(0.5)	299.7	(0.9)	301.4	(0.5)	292.8	(0.4)	299.7	(0.9)	299.2	(0.4)
Partners														
Cyprus[1]	268.8	(3.5)	270.1	(3.0)	276.9	(5.1)	276.1	(3.3)	276.1	(2.5)	276.9	(5.1)	275.3	(2.2)

1. See notes on page 408.

Note: Data are based on a multiple linear regression model. Reference groups (in brackets) for each socio-demographic characteristics are: age (35-44); gender (men); immigrant and language background (native born, native language); educational attainment (upper secondary); parents' educational attainment (upper secondary); participation in adult education and training (participated); level of engagement in reading at work/outside work (third quintile); level of engagement in numeracy-related practices at work/outside work (third quintile); and level of engagement in ICT-related practices at work/outside work (third quintile). Lower than upper secondary includes ISCED 1, 2 and 3C short. Upper secondary education includes ISCED 3A, 3B, 3C long and 4. Tertiary includes ISCED 5A, 5B and 6. Where possible, foreign qualifications are included as per their closest correspondance to the respective national education systems.

Source: Survey of Adult Skills (PIAAC) (2012).

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[Part 5/5]

Table B5.3 (L) **Literacy proficiency, adjusted for socio-demographic characteristics and practice-oriented factors**

	Level of engagement in numeracy-related practices outside work (quintiles)						Level of engagement in ICT-related practices outside work (quintiles)					
	No practice, first and second quintile		Third quintile		Fourth and fifth quintile		No engagement in ICT-related practices outside work		First and second quintile		Third quintile		Fourth and fifth quintile	
OECD	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.	Score	S.E.
National entities														
Australia	314.0	(2.1)	322.8	(3.8)	325.4	(2.0)	298.7	(2.8)	316.8	(2.1)	322.8	(3.8)	325.7	(2.0)
Austria	288.4	(1.7)	293.0	(3.4)	297.0	(1.7)	282.6	(2.7)	285.0	(1.8)	293.0	(3.4)	293.7	(1.7)
Canada	293.7	(1.3)	299.5	(2.6)	304.5	(1.2)	281.3	(2.2)	289.6	(1.4)	299.5	(2.6)	299.8	(1.3)
Czech Republic	271.8	(2.8)	279.6	(4.8)	285.3	(2.2)	272.4	(3.2)	276.5	(2.6)	279.6	(4.8)	282.3	(2.5)
Denmark	287.3	(1.6)	295.6	(3.8)	298.5	(1.6)	271.9	(3.1)	289.1	(1.8)	295.6	(3.8)	296.7	(1.6)
Estonia	280.9	(1.5)	289.2	(3.3)	292.7	(1.5)	285.7	(2.3)	285.8	(1.4)	289.2	(3.3)	292.4	(1.6)
Finland	299.3	(1.8)	303.6	(3.2)	310.7	(1.5)	291.6	(3.5)	299.6	(1.6)	303.6	(3.2)	305.3	(1.7)
Germany	292.3	(1.9)	299.4	(3.5)	304.0	(1.7)	289.1	(3.1)	291.2	(1.9)	299.4	(3.5)	300.8	(2.0)
Ireland	295.0	(2.0)	297.8	(4.2)	304.0	(2.3)	287.8	(2.2)	292.3	(1.9)	297.8	(4.2)	299.6	(2.2)
Italy	292.8	(2.9)	300.9	(6.2)	304.2	(2.9)	290.3	(3.5)	293.5	(2.8)	300.9	(6.2)	297.8	(2.9)
Japan	315.3	(1.8)	318.2	(4.1)	322.8	(2.1)	306.9	(1.8)	313.9	(1.7)	318.2	(4.1)	316.3	(2.0)
Korea	287.2	(1.2)	291.1	(3.9)	293.6	(1.6)	276.3	(2.5)	286.4	(1.5)	291.1	(3.9)	290.5	(1.9)
Netherlands	312.4	(1.9)	317.7	(3.9)	321.4	(2.0)	297.8	(3.6)	309.2	(1.9)	317.7	(3.9)	321.7	(1.7)
Norway	295.3	(1.6)	302.0	(3.6)	306.1	(1.7)	294.2	(3.7)	297.6	(1.8)	302.0	(3.6)	303.4	(1.6)
Poland	273.1	(2.0)	282.2	(4.6)	285.7	(2.3)	262.9	(2.5)	275.4	(2.2)	282.2	(4.6)	281.5	(2.2)
Slovak Republic	282.5	(1.6)	291.5	(4.1)	293.8	(1.6)	283.6	(2.2)	291.3	(1.9)	291.5	(4.1)	290.1	(2.0)
Spain	285.1	(1.7)	292.3	(4.2)	293.4	(1.7)	276.4	(2.4)	286.4	(2.0)	292.3	(4.2)	296.9	(2.3)
Sweden	308.6	(1.8)	315.8	(3.3)	316.9	(1.9)	299.3	(3.0)	307.5	(2.0)	315.8	(3.3)	314.8	(1.9)
United States	282.5	(2.1)	292.1	(3.8)	293.0	(2.2)	270.4	(2.9)	286.0	(2.3)	292.1	(3.8)	295.7	(2.1)
Sub-national entities														
Flanders (Belgium)	288.5	(1.6)	294.0	(3.6)	297.0	(1.9)	278.4	(2.5)	288.3	(1.8)	294.0	(3.6)	297.2	(1.6)
England (UK)	307.0	(2.3)	315.5	(4.5)	313.4	(2.3)	296.2	(3.3)	307.7	(2.3)	315.5	(4.5)	317.3	(2.1)
Northern Ireland (UK)	303.2	(2.6)	303.5	(6.0)	310.9	(3.1)	300.6	(3.6)	302.2	(3.0)	303.5	(6.0)	305.1	(3.1)
England/N. Ireland (UK)	307.0	(2.2)	315.1	(4.4)	313.4	(2.2)	296.6	(3.1)	307.6	(2.2)	315.1	(4.4)	317.0	(2.0)
Average	293.0	(0.4)	299.7	(0.9)	303.0	(0.4)	285.4	(0.6)	293.8	(0.4)	299.7	(0.9)	300.9	(0.4)
Partners														
Cyprus[1]	280.4	(2.0)	276.9	(5.1)	281.6	(2.2)	268.8	(3.1)	270.8	(2.5)	276.9	(5.1)	274.3	(2.6)

1. See notes on page 408.

Note: Data are based on a multiple linear regression model. Reference groups (in brackets) for each socio-demographic characteristics are: age (35-44); gender (men); immigrant and language background (native born, native language); educational attainment (upper secondary); parents' educational attainment (upper secondary); participation in adult education and training (participated); level of engagement in reading at work/outside work (third quintile); level of engagement in numeracy-related practices at work/outside work (third quintile); and level of engagement in ICT-related practices at work/outside work (third quintile). Lower than upper secondary includes ISCED 1, 2 and 3C short. Upper secondary education includes ISCED 3A, 3B, 3C long and 4. Tertiary includes ISCED 5A, 5B and 6. Where possible, foreign qualifications are included as per their closest correspondance to the respective national education systems.

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OECD Skills Outlook 2013

FIRST RESULTS FROM THE SURVEY OF ADULT SKILLS

In the wake of the technological revolution that began in the last decades of the 20th century, labour market demand for information-processing and other high-level cognitive and interpersonal skills is growing substantially. The Survey of Adult Skills, a product of the OECD Programme for the International Assessment of Adult Competencies (PIAAC), was designed to provide insights into the availability of some of these key skills in society and how they are used at work and at home. The first survey of its kind, it directly measures proficiency in several information-processing skills – namely literacy, numeracy and problem solving in technology-rich environments.

This first edition of the *OECD Skills Outlook* reports results from the countries and regions that participated in the first round of the Survey of Adult Skills. The data from the survey will underpin much of the content in forthcoming editions of the *Outlook,* which will feature analysis from across the OECD in the fields of education, employment, tax, innovation and economic development at the national, regional and local levels related to key issues in skills policy. A related report, *The Survey of Adult Skills: Reader's Companion,* describes the design and methodology of the survey and its relationship to other international assessments of young students and adults.

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