Getting Skills Right

Assessing and Anticipating Changing Skill Needs

Digitalisation, globalisation, demographic shifts and other changes in work organisation are constantly reshaping skill needs. This can lead to persistent skill shortages and mismatch which are costly for individuals, firms and society in terms of lost wages and lower productivity and growth. These costs can be reduced through better assessment and anticipation of changing skill needs and by improving the responsiveness of skills development to these changes.

This report identifies effective strategies for improving labour market information on skill needs and ensuring that this information is used effectively to develop the right skills. It provides a comparative assessment of practices across 29 countries in the following areas: i) the collection of information on existing and future skill needs; ii) the use of this information to guide skill development policies in the areas of labour, education and migration; and iii) governance arrangements to ensure good co-ordination among the key stakeholders in the collection and use of skill needs information.

Contents

Chapter 1. Skills shortages and mismatches
Chapter 2. Tools and instruments to assess and anticipate skill needs
Chapter 3. Uses of skills assessment and anticipation exercises
Chapter 4. Governance and stakeholder involvement

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Foreword

Across countries, substantial changes in skill needs are challenging labour market and training policies and contributing to skill mismatch and shortages. In most countries, large shares of employers complain that they cannot find workers with the skills that their businesses require. At the same time, in many countries, a number of college graduates face difficulties in finding job opportunities matching their qualifications.

In light of these challenges, OECD has undertaken an ambitious programme of work on how to achieve a better alignment or skill supply and skill demand, with a focus on: i) understanding how countries collect and use information on skill needs; ii) investigating cost-effective training and labour market policies to tackle skill mismatch and shortages; iii) studying the incentives of training providers and participants to respond to changing skill needs; and iv) setting up a database of skill needs indicators.

This work builds on the extensive programme of work of the OECD in the area of skills, including the OECD Skill Strategy and its follow up national studies, the Survey of Adult Skills (PIAAC) and its rich analytical programme, and several studies in the areas of skills mismatch, vocational education and training and work-based learning.

The present overview report identifies effective strategies for turning qualitative and quantitative information on skill needs into relevant policy actions. It provides a comparative assessment of practices in 29 countries in the following areas: the collection and use of information on skill needs to foster a better alignment of skills acquisitions with labour market needs; and the use of effective governance arrangements to ensure good co-ordination across the key stakeholders in this area. The assessment is based on the results of a questionnaire that was sent out to countries as well as analysis of other relevant information on practices.

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### Table of contents

**Executive summary and key findings** .................................................................................................. 7

**Chapter 1. Skills shortages and mismatches** ...................................................................................... 11

- The sources of skills mismatch and shortages .................................................................................. 12
- The economic costs of mismatch and shortages .............................................................................. 14
- Evidence of mismatch and shortages in selected countries ............................................................... 15
- The responsiveness of skill supply to demand: An exploration by field of study ............................. 24
- Assessing and anticipating future skill needs to reduce skill imbalances ........................................ 25
- Conclusions ........................................................................................................................................ 26
- Notes .................................................................................................................................................. 26
- References .......................................................................................................................................... 28

**Chapter 2. Tools and instruments to assess and anticipate skill needs** ............................................. 33

- What are skills assessments and anticipation exercises? .................................................................... 34
- Skills assessment and anticipation exercises in OECD countries ...................................................... 35
- Recent and ongoing developments ..................................................................................................... 48
- Conclusions ........................................................................................................................................ 51
- Notes .................................................................................................................................................. 51
- References .......................................................................................................................................... 52

**Chapter 3. Uses of skills assessment and anticipation exercises** ........................................................ 55

- The main uses of skills assessment and anticipation exercises .......................................................... 56
- Barriers to the use of skills assessment and anticipation exercises in policy making ........................ 66
- Conclusions ........................................................................................................................................ 69
- Notes .................................................................................................................................................. 69
- References .......................................................................................................................................... 70

**Chapter 4. Governance and stakeholder involvement** ..................................................................... 73

- Stakeholder and government involvement .......................................................................................... 74
- Consensus reaching and mechanisms to resolve differences .............................................................. 86
- Conclusions ........................................................................................................................................ 90
- Note ................................................................................................................................................... 91
- References .......................................................................................................................................... 92

**Annex A. Responses to the questionnaire** ......................................................................................... 93
Figures

Figure 1.1. Skill mismatch in Europe ................................................................. 18
Figure 1.2. Qualification mismatch in Europe ..................................................... 19
Figure 1.3. Total mismatch, by type of mismatch ............................................. 21
Figure 1.4. Skill shortage in selected countries ................................................. 22
Figure 1.5. Change in the percentage of young graduates and relative employment rates across fields ......................................................... 25
Figure 2.1. Measures used to assess or anticipate skill needs ............................. 38
Figure 2.2. Use of current skills assessments, skills forecasts and skills foresight exercises ............................................................... 40
Figure 2.3. Obstacles to the development of skills assessment and anticipation exercises ................................................................. 50
Figure 3.1. The uses of skills assessment and anticipation exercises for employment policy ................................................................. 57
Figure 3.2. The use of skills assessment and anticipation exercises for education policy ............................................................... 61
Figure 3.3. The use of skills assessment and anticipation exercises by social partners ................................................................. 65
Figure 4.1. Government and stakeholder involvement in the development of skills assessment and anticipation exercises ................................................. 76
Figure 4.2. Involvement of ministries in discussing results from skills assessment and anticipation exercises or in developing a policy response ............................................................................. 80
Figure 4.3. Stakeholder involvement in the discussion of findings from skills assessment and anticipation exercises and the development of a policy response ................................................. 85

Tables

Table 1.1. Skill mismatch and skill shortage in selected countries ......................... 23
Table 2.1. Skills assessment, forecast and foresight exercises ................................ 39
Table 2.2. Advantages and disadvantages of skills anticipations methods and tools ........................................................................ 43
Table 2.3. Methods and tools used in skills assessment and anticipation systems ................................................................. 45
Table 2.4. National, regional and sector levels covered in skills assessment and anticipation systems ................................................................. 47
Table 3.1. Ten most common barriers limiting the translation of skills assessment and anticipation information to effective policies ........................................................................ 68
Table 4.1. Inter-ministerial collaboration, by country ............................................. 81
Table A.1. Number of replies to the questionnaire on anticipating and responding to changing skill needs ................................................................. 93
Executive summary and key findings

Skill mismatches and shortages are common in advanced economies. Many workers believe they have the skills to cope with more demanding work while some think they need more training to cope well with duties. On average, more than 40% of European workers feel their skill levels do not correspond to those required to do their job, with similar findings for Mexico, Japan and Korea. In parallel, many employers report that they face recruitment problems due to skill shortages.

Some degree of misalignment between the supply and demand for skills is inevitable, particularly in the short run. However, the costs of persistent mismatches and shortages are substantial. For instance, skill shortages can constrain the ability of firms to innovate and adopt new technologies while skill mismatches reduce labour productivity due to the misallocation of workers to jobs. Individuals are also affected as skills mismatch can bring about a higher risk of unemployment, lower wages, lower job satisfaction and poorer career prospects.

Policy intervention can help address skills mismatches and shortages but doing so successfully relies on having good information on current and future skills needs. This report identifies effective strategies for turning qualitative and quantitative information on skill needs into relevant policy actions. It provides a comparative assessment of practices in the following areas: the collection of information on existing and future skill needs; the use of skill needs information to guide policy development in the areas of labour, education and migration; and the existence of effective governance arrangements to ensure good co-ordination among the key stakeholders in the collection and use of skill needs information. The report is based on the results of a questionnaire that was sent to countries as well as analysis of other relevant information on practices. The following key findings emerge from the analysis:

- **Systems and tools for assessing and anticipating skills needs exist in all countries, but approaches vary significantly** in terms of: how they approximate skill needs (either by measuring specific skills directly or by using proxies such as qualification levels and vocational orientation, fields of study, or occupations); their time span (i.e. short-, medium- or long-term needs); their methods (one or several quantitative or qualitative sources); and their national/regional/sectoral scope. The most common approaches include medium-term occupational forecasts or assessments of current skill needs inferred from labour market information or vacancy surveys. In many countries, more than one exercise is carried out as each approach/method presents its specific advantages and disadvantages. For instance, Canada carries out analyses of existing skill shortages along with medium to long-run forecasts to identify future skill needs and imbalances. This enables the government to tailor immediate policy intervention (e.g. identify migration opportunities or develop short-term worker training schemes) as well as long-term policy orientations (e.g. develop apprenticeship programmes in certain fields).
• **Skills challenges are common to several policy domains, thus information on skill needs has the potential to inform various policy dimensions** and contribute to developing a systematic and comprehensive policy response to imbalances.

  − **In employment policy**, skill needs information is commonly used to update occupational standards, and to design apprenticeships, re-training courses and on-the-job training programmes. For example, in Australia, Belgium and New Zealand, skill needs information feeds into the National Occupation Standards to facilitate the rapid development of standards in new occupations or in occupations with changing skill requirements. In Turkey, these exercises are used to design apprenticeships in occupations and industries where shortages are identified. Also, in France, Hungary, Ireland and Italy, skill needs information is used to help in the transition to a greener and digital economy.

  − **In education policy**, skill needs information is commonly used to inform curriculum development and set the number of student places at all levels of education, including technical and vocational education and training (TVET) programmes. It also feeds into career guidance to inform students’ choice.

  − **In migration policy**, skill needs information is used to fast track workers with skills that are in high demand. In Australia, analyses of job vacancies and contacts with employers contribute to identify occupations in current and future shortages in order to facilitate migration of workers with the relevant skills. Similarly, the United Kingdom’s Migration Advisory Committee uses general labour market information to identify occupations experiencing shortages and advise the government on immediate skill needs.

• **Two broad challenges need to be overcome to ensure that information on skills needs is used more widely and effectively.** First, the characteristics of the exercises are often not aligned with the potential policy uses: the way skills are defined may not map on to useful policy-making variables, the output may be too technical, or the results may not be sufficiently disaggregated at the regional, sub-regional or sectoral levels. Second, the key stakeholders may not be sufficiently engaged and, when they are, disagreements about skills needs and the required policy response arise, requiring consensus-building. Some countries seem to do better than others in finding solutions to these challenges. For instance, the strength of Norway’s skills assessment and anticipation system lies in that employment and education authorities are jointly involved in the design and development of the forecasts carried out by Statistics Norway, which ensures that they understand the outputs and use them for policy making.

• **Linking these exercises to more specific policies may help to overcome some of these challenges, but at the risk of losing wider relevance.** User/policy-driven exercises are narrower in scope as they are geared to very specific policy objectives and carried out by the end users of the information (e.g. public employment services in Austria, Belgium, France, Poland, Sweden and Turkey carry out skills assessment and anticipation exercises to inform their policies and programmes).

• **Information about skills needs is most effectively used in policy making when there is good co-ordination across ministries and strong stakeholders’ involvement.** Effective collaboration usually involves clear leadership and allocation of responsibilities amongst those involved, as well as the engagement
of organisations that are representative of their base (e.g. sectoral organisations, trade unions or employer organisations). A variety of mechanisms have proven successful in helping to reach consensus, including working groups (e.g. the inter-ministerial skills working groups in United States), or round tables with specific objectives and timelines (e.g. in the Netherlands where they are successfully used to enhance collaboration across regional/sub-regional administrative levels). Sector skills Councils (e.g. in Canada, the Czech Republic and the United Kingdom) and independent bodies such as national skills advisory groups (e.g. in Denmark, Finland and Germany) can also improve co-ordination.
The OECD is a unique forum where governments work together to address the economic, social and environmental challenges of globalisation. The OECD is also at the forefront of efforts to understand and to help governments respond to new developments and concerns, such as corporate governance, the information economy and the challenges of an ageing population. The Organisation provides a setting where governments can compare policy experiences, seek answers to common problems, identify good practice and work to co-ordinate domestic and international policies.

The OECD member countries are: Australia, Austria, Belgium, Canada, Chile, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Korea, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, the Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States. The European Union takes part in the work of the OECD.

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