

Education at a Glance

OECD Indicators 2004

Annex 3: Sources, methods and technical notes

Chapter C: Access to education, participation and progression

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CHAPTER C: ACCESS TO EDUCATION, PARTICIPATION AND PROGRESSION

INDICATOR C1: School expectancy and enrolment rates

■ General notes

Methodology

• Reference dates

Statistics that relate participation data to population data are published for the reference date that was used by national authorities for these statistics. The assumption is made that age references in the enrolment data refer to 1 January of the reference year. For **Australia**, 30 June is used as the reference date for both enrolments and population data. For Japan, 1 October is used as the reference date for population data and 1 May is used as the reference date for enrolments.

The dates or periods at which students, educational staff and educational institutions were counted have not been provided to the Secretariat by all countries. Some countries collect these statistics through surveys or administrative records at the beginning of the school year while others collect them during the school year, and yet others at the end of the school year or at multiple points during the school year. It should be noted that differences in the reference dates between, for example, enrolment data and population data can lead to over- or under- estimated figure (for instance, net enrolment rates exceeding 100 per cent) where there is a significant decrease or increase over time in any of the variables involved. If the reference date for students' ages used in the enrolment data differs from the reference date for the population data (usually 1 January of the reference year), this can be a further source of error in enrolment rates.

Sources: for OECD countries, see Indicator B1: Sources.

■ Table C1.1

Methodology

School expectancy (in years) under current conditions excludes all education for children younger than five years. It includes adult persons of all ages who are enrolled in formal education. School expectancy is calculated by adding the net enrolment rates for each single year of age. Data by single year of age are not available for ages 30 and above. For persons aged 30 to 39, enrolment rates were

estimated on the basis of five-year age bands, and for persons 40 and over, enrolment rates were estimated on the basis of the cohort size of 39 year-olds.

■ Notes on specific countries

Australia: Students participating in Open Learning Courses are excluded from tertiary enrolments. University enrolments exclude all students in overseas campuses. There are breaks in series in ISCED 2, 3, 4 and 5B enrolments in the Vocational Education and Training sector; from 1999, data are based on the Australian Qualification Framework (AQF) rather than the stream classification.

Austria: For upper secondary, post-secondary non-tertiary and tertiary-type B education the age group 25 to 29 years could not be broken down by single year of age. Age distribution for tertiary-type B education (ISCED 5B) is estimated. Enrolments of auxiliary nurses in training programmes were included for the first time, adding 1000 enrolments to upper secondary education (ISCED 3).

Belgium (Fl): Data for independent private institutions are not available. Since institutions of this type are not very numerous, data for all types of institutions are only slightly underestimated.

Belgium (Fr): Data concerning entrepreneurship training courses is classified in ISCED 4C (professional). Data for independent private institutions are not taken into account.

Finland: In EAG 2004 Finland reports for the first time students at ISCED 5A/6 divided to full-time/part-time students based on their study activities. Also for the first time full-time equivalent data (FTE) is reported at ISCED 5A/6. Previously all students were reported as full-time students. The division to full-time and part-time students is made based on the study credits which students have been taken during the academic year.

Age and gender distribution for enrolment at ISCED 0 non-school establishments (children's day care centres and kindergartens) is partially estimated. The estimate is based on information supplied by individual municipalities to Statistics Finland and information from the National Research and Development Centre for Welfare and Health.

Germany: Students pursuing doctoral studies (ISCED 6) are not obliged to register at university and it is not possible to estimate their number.

Hungary: The distribution of students aged 26 to 29 and 31 to 40 by single year is estimated for tertiary-type A and advanced research programmes. The age distribution for tertiary-type B students has been estimated from the age distribution for tertiary-type A education.

Ireland: Nursing students who follow a type of dual training, with education and training taking place in hospitals only, are *excluded*. Most but not all adult education is excluded. Adult education includes part-time studies at ISCED 3 and 5 undertaken by persons returning to education after an interruption of some years. Most pre-primary enrolments are *included* because data are not collected from many privately owned pre-schools. Coverage of part-time enrolment data is uneven. Many part-time students in independent private colleges at ISCED levels 3 and 5 have been *excluded*. Only full-session part-time students (doing courses lasting approximately the full year) have been *included* in the data.

Italy: Age distribution is not available for advanced research programmes.

Turkey: Data for under 5-year-olds are included in pre-primary education.

Thailand: Wide participation in adult education results in an over-estimation of the school expectancy indicator.

■ **Table C1.2**

■ **Notes on specific countries**

Belgium, France and Iceland: The enrolment rates for 3 to 4-year-olds exceed 100 per cent. This is due to the fact that a large number of children below the age of 3 are enrolled in formal education and are included in Table C1.2 (between 15 and 25 per cent of the total number of children enrolled under the age of 4).

Canada: New Brunswick's compulsory age for school enrolment is 18.

Korea: Children enrolled in the children's centres, which cover many children under the age of 5 and provide educational services besides care, are excluded due to the data source.

Ireland: In Ireland, the end-age of compulsory schooling was increased to 16 in 2002.

Italy: Participation and school expectancy increase in Italy largely due to the fact that in Italy compulsory schooling was extended to the age of 15 in the 1999/2000 school year.

Luxembourg: A significant proportion of the youth cohort study in neighbouring countries.

The Netherlands: Participation in education drops below 90% for students aged 17 and 18 since part-time enrolment is allowed.

Spain: Net enrolment rates exceed 100 in some cases. The reason lies partly in the nature of the population forecasts by the National Institute of Statistics, and partly in a possible over-reporting of enrolments by schools.

Turkey: From the school year 1997-1998 a law was passed to extend the duration of primary education to 8 years and the ending of compulsory education was determined at age 14.

United Kingdom: The figures can be misleading because of differing definitions of the end of compulsory schooling. For example, compulsory education in the UK finishes at the end of the academic year in which a pupil's sixteenth birthday occurs. Pupils in the final year of compulsory education are aged 15 on 1 September and turn 16 during the academic year. Those in the first post-compulsory year are aged 16 on 1 September. Those among this group of post-compulsory 16-year-olds not participating are being reported as not enrolled, but they are not part of the relevant population.

Data cover enrolments in schools only. Therefore enrolments for 3 to 4 year-olds are underestimated.

Chile: Data exclude participation in tertiary education therefore the enrolment rates of 15-to-19 and 20-to-29 year-olds are underestimated.

Egypt: Data exclude participation in post-secondary and tertiary education therefore the enrolment rates of 15-to-19 and 20-to-29 year-olds are underestimated.

Jamaica: Data exclude participation in tertiary education therefore the enrolment rates of 15-to-19 and 20-to-29 year-olds are underestimated.

Jordan: Data exclude participation in tertiary education therefore the enrolment rates of 15-to-19 and 20-to-29 year-olds are underestimated.

Paraguay: Data exclude participation in upper-secondary vocational programmes and tertiary type 5A/6 education therefore the enrolment rates of 15-to-19 and 20-to-29 year-olds are underestimated.

Tunisia: Data exclude participation in tertiary education therefore the enrolment rates of 15-to-19 and 20-to-29 year-olds are underestimated.

Zimbabwe: Data exclude participation in tertiary education therefore the enrolment rates of 15-to-19 and 20-to-29 year-olds are underestimated.

■ Table C1.3

■ Notes on specific countries

Luxembourg: A significant proportion of the youth cohort study in neighbouring countries at the ISCED 3, 4, 5 and 6 levels.

The Netherlands: Higher rates than 100% can be found. For the Netherlands, this is probably caused by a different reference date at which the age is considered in the nominator and denominator when the rate is computed. Rates higher than 100 have been changed to 100.

INDICATOR C2: Entry into and expected years in tertiary education and participation in secondary education

■ Table C2.1

Methodology

- **Calculation of net entry rates**

The net entry rates given in Table C2.1 represent the proportion of persons of a synthetic age cohort who enter a certain level of tertiary education at one point during their lives. The net entry rate is

defined as the sum of net entry rates for single ages. The total net entry rate is therefore the sum of the proportions of new entrants to tertiary-type A and B aged i to the total population aged i , at all ages. Since data by single year are only available for ages 15 to 29, the net entry rates for older students are estimated from data for 5-year age bands.

- **Calculation of gross entry rates**

In the case where no data on new entrants by age were provided, gross entry rates are calculated. Gross entry rates are the ratio of all entrants, regardless of their age, to the size of the population at the typical age of entry. Gross entry rates are more easily influenced by differences in the size of population by single year of age. Taking into account the effect of changing cohort sizes, all gross rates presented here were tested for possible error. The error is well below five percentage points.

- **Calculation of age at the 25th, 50th and 75th percentiles**

The ages given for the 25th, 50th and 75th percentiles are linear approximations from data by single year of age. The i -th percentile is calculated as follows: let age k be the age at which less than i per cent of new entrants are younger than k years of age and more than i per cent are younger than $k+1$. If $P(<k)$ is the percentage of new entrants aged less than k and $P(k)$ the percentage of new entrants aged k , then the age at the i -th percentile is $k + (i - P(<k)) / (P(k) - P(<k))$.

- **Notes on specific countries**

Luxembourg: A significant proportion of the youth cohort study in neighbouring countries at the ISCED 5 and 6 levels.

- **Table C2.2**

Methodology

- **Change in total tertiary enrolment**

The change in total tertiary enrolment is expressed as an index, the base year of which is 1995 (100). The number of tertiary students in 2002 is therefore expressed as a percentage of the number of tertiary students in 1995. The impact of demographic change on total enrolment is calculated by applying the enrolment rates measured in 1995 to the population data for 2002: population change was taken into account while enrolment rates by single year of age were kept constant at the 1995 level. The impact of changing enrolment rates is calculated by applying the enrolment rates measured in 2002 to the population data for 1995, i.e., the enrolment rates by single year of age for 2002 are multiplied by the population by single year of age for 1995 to obtain the total number of students that could be expected if the population had been constant since 1995.

■ Notes on specific countries

Austria: There was a decline of the number of students enrolled in tertiary education in Austria in 2001, which is the year where tuition fees were introduced. Other indicators of participation in tertiary education (entry rates, graduation rates, duration of study) do not show declining participation in tertiary education.

Germany: Excludes advanced research programmes.

Hungary: The age distribution for part-time students is estimated, and the age distribution of full-time students is estimated on 1999 data.

Luxembourg: A significant proportion of the youth cohort study in neighbouring countries at the ISCED 5 and 6 level.

Turkey: Excludes open university faculties.

■ Tables C2.3 and C2.4

Classification

Educational institutions are classified as either public or private according to whether a public agency or a private entity has the ultimate power to make decisions concerning the institution's affairs. The extent to which an institution receives its funding from public or private sources does *not* determine the classification status of the institution. An institution is classified as *private* if it is controlled and managed by a non-governmental organisation (*e.g.*, a Church, a Trade Union or a business enterprise), or if its Governing Board consists mostly of members not selected by a public agency. The terms “*government-dependent*” and “*independent*” refer only to the degree of a private institution's dependence on funding from government sources; they do not refer to the degree of government direction or regulation. A government-dependent private institution is one that receives more than 50 per cent of its core funding from government agencies. An independent private institution is one that receives less than 50 per cent of its core funding from government agencies.

■ Notes on specific countries

Turkey: Excludes open university faculties.

■ Table C2.5

■ Notes on specific countries

Sweden: The figures specified "by programme destination" do not add up to 100%: Adult education at ISCED level 3 can not be classified according to destination.

United Kingdom: In the United Kingdom, 60 per cent or more of upper secondary students are enrolled in vocational programmes. This includes enrolments in ISCED3 provision at any age, not only at the typical age of full-time upper secondary education (14 to 18-years-olds).

INDICATOR C3: Foreign students in tertiary education

General notes

Methodology

Students are classified as foreign students if they are not citizens of the country for which the data are collected. Countries unable to provide data or estimates for non-nationals on the basis of their passports were requested to substitute data according to a related alternative criterion, e.g., the country of residence, the non-national mother tongue or non-national parentage (see notes on specific countries).

The number of students studying abroad is obtained from the report of the countries of destination. Students studying in countries which did not report to the OECD are not included in this indicator.

■ Notes on specific countries

■ Table C3.1

Coverage

Australia: The number of foreign students reported comprises only the Higher Education sector, i.e. ISCED 5A/6 and the higher education component of tertiary type B level.

Austria: Data on the citizenship of students is partly missing at tertiary type B level.

Belgium: Foreign students are defined by citizenship hence include children of permanent residents in the country. The number of tertiary students who came to Belgium for the purpose of study is *over-estimated*.

Denmark: The numbers of foreign students by country of origin are estimated.

Hungary: Data on tertiary foreign students in tertiary type B programmes include only those enrolled in colleges and universities.

Ireland: Foreign students are defined by domiciliary origin. Data on tertiary foreign students include only full-time enrolments.

Netherlands: Data on tertiary foreign students do not include foreign tertiary students enrolled at the Open University or in advanced research programmes.

New Zealand: Most Australian students are not counted as foreign students.

Norway: Foreign students are defined by country of birth.

Sweden: Students who are not registered in the Swedish population register (mainly from other Nordic countries) are *not included*.

Switzerland: Some foreign students at non-university level tertiary education are *not included*. The total number of foreign students is *under-estimated*.

Turkey: Only students who come to Turkey for the purpose of study are counted as foreign students.

United Kingdom: Foreign students are defined by home address.

■ Table C3.2

Belgium: Foreign students data do not distinguish resident from non-resident foreign students at the tertiary level. Therefore, the distribution of foreign students by country of origin reflects the geographic composition of the resident immigrant population.

The citizenship of some categories of foreign students is unknown: refugees and the members of the Supreme Headquarters Allied Powers Europe.

France: Data on tertiary foreign students are partial. Their distribution by country of citizenship correspond to a coverage of 1,648,880 tertiary students out of 2,029,179 (i.e. 81.3%).

Germany: Data on tertiary foreign students do not include those enrolled in advanced research programmes. Their distribution by country of citizenship corresponds to this partial coverage.

Greece: Data on tertiary foreign students do not include foreign tertiary students enrolled in tertiary type B programmes. Their distribution by country of citizenship corresponds to this partial coverage.

Hungary: Data on tertiary foreign students in tertiary type B programmes include only those enrolled in colleges and universities. Their distribution by country of citizenship corresponds to this partial coverage.

Ireland: Data on tertiary foreign students include only full-time enrolments. Their distribution by country of citizenship corresponds to this partial coverage.

Netherlands: Data on tertiary foreign students do not include foreign tertiary students enrolled at the Open University or in advanced research programmes. Their distribution by country of citizenship corresponds to this partial coverage.

Poland: Data on tertiary foreign students do not include those enrolled in advanced research programmes. Their distribution by country of citizenship corresponds to this partial coverage.

Turkey: Data on tertiary foreign students do not include those enrolled in advanced research programmes. Their distribution by country of citizenship corresponds to this partial coverage.

Argentina: Data on tertiary foreign students do not include foreign tertiary students enrolled in tertiary type A and advanced research programmes. Their distribution by country of citizenship corresponds to this partial coverage.

India: Data on tertiary foreign students is partly missing in tertiary type A and advanced research programmes. Their distribution by country of citizenship corresponds to this partial coverage.

Russian Federation: Data on tertiary foreign students do not include foreign tertiary students enrolled in advanced research programmes. Their distribution by geographic origin corresponds to this partial coverage.

■ Table C3.4

Coverage

France: Data on tertiary foreign students are partial. Their distribution by level of education correspond to a coverage of 1,648,880 tertiary students out of 2,029,179 (i.e. 81.3%).

Germany: Data on tertiary foreign students do not include those enrolled in advanced research programmes. Their distribution by level of education corresponds to this partial coverage.

Hungary: Data on tertiary foreign students in tertiary type B programmes include only those enrolled in colleges and universities. Their distribution by level of education corresponds to this partial coverage.

Norway: Data on tertiary foreign students by level of education are partial. Their distribution by level of education correspond to a coverage of 7,679 foreign tertiary students out of 9,505 (i.e. 80.8%).

Poland: Data on tertiary foreign students do not include those enrolled in advanced research programmes. Their distribution by level of education corresponds to this partial coverage.

India: Data on tertiary foreign students is partly missing in tertiary type A and advanced research programmes. Their distribution by level of education corresponds to this partial coverage.

Russian Federation: Data on tertiary foreign students do not include foreign tertiary students enrolled in advanced research programmes. Their distribution by level of education corresponds to this partial coverage.

Interpretation

Belgium: ISCED 5B programmes are fairly widespread in Belgium. As a result the comparatively high percentage of foreign students enrolled in these programmes reflects a general trend in this country.

■ **Table C3.5**

Austria: Data on foreign tertiary students by field of study are based on the number of registrations, not head counts.

Belgium: Data do not include foreign tertiary students enrolled in the German Community nor those enrolled in distance education programmes or independent private institutions of the French Community. In both cases, the corresponding foreign enrolments are thought to be marginal.

Germany: Data on tertiary foreign students do not include those enrolled in advanced research programmes. Their distribution by field of study corresponds to this partial coverage.

Hungary: Data on tertiary foreign students in tertiary type B programmes include only those enrolled in colleges and universities. Their distribution by field of study corresponds to this partial coverage.

Netherlands: Data on foreign tertiary students by field of study do not include students enrolled at the Open University nor those in advanced research programmes. Their distribution by field of study corresponds to this partial coverage.

Poland: Data on tertiary foreign students do not include those enrolled in advanced research programmes. Their distribution by field of study corresponds to this partial coverage.

■ **Additional data**

Please see www.oecd.org/edu/eag2004 for additional web tables under Indicator C3.

INDICATOR C4: Education and work status of the youth population

■ **Tables C4.1 and C4.1a C4.1b.**

■ **General notes**

Methods and definitions

The most frequent source is the Labour Force Survey (see Indicator A3). This data request expands the request on labour force status by completed level of education (ISCED-97) and aims at describing the transition process of youngsters aged 15 to 29 years from school to work.

Data refer to the first quarter of each year comprising the following months: January, February, March.

The work status refers to the International Labor Office definition of employment, unemployment and not in the labour force. The type of employment refers to full-time or part-time employment based on a threshold definition of 30-usual-hour cut off on the main job. Full-time workers are those working usually 30 hours or more on their main job.

The school status is understood in terms of Education or/and training currently being received in the regular educational system, which can be during the previous four weeks (including the survey reference week) or a shorter period. If such question does not exist in the national labour force survey, the "Main activity question" have been used to fill the schooling status.

Work study programs are combinations of work and study periods where both aspects are parts of an integrated, formal education / training activity (examples are the "dual system" in Germany, "apprentissage" or "formation en alternance" in France and Belgium, internship or co-operative education in Canada, Apprenticeship in Ireland, Youth Training in the United Kingdom... Vocational education/training occurs not only in school settings but also in a working environment. Sometimes students or trainees are paid, sometimes not. There is a strong relationship between the job and the courses / training. Work study programs are considered in education and in employment. Consequently by comparing with raw data, differences in results can be found for some countries.

The ISCED level refers to the ISCED mapping used to code the LFS (See Indicator A3). For those in education, this refers to the level of education of the program attended. For those not in education, this refers to the completed level of education.

Sources of transition data are the same as in Tables A1.1 except For the United States where the source is the October CPS. The reference period is generally the first quarter of the year except for Greece and Switzerland (second quarter), Australia (May), Switzerland and Japan (average of the year) and United Kingdom (spring).

■ Notes on specific countries

Raw data for **Iceland, Sweden, Norway, Spain and United Kingdom** concern 16 to 19-year-olds. The young people aged 15 year-olds are estimated as the fraction of 1/14 of the total population aged 16 to 29 years olds. They are considered in education, with lower secondary level of education and out of labour force.

France: The age was calculated by difference in years between the investigation and the birth, as the previous years. The young people of 15-19 year olds in March 2002 were born from 1983 to 1987, the 20-24 year olds from 1978 to 1982 and the 25-29 year olds from 1973 to 1977.

Ireland: Data for work-study programmes (apprenticeship) are not complete according to UOE requirements since only those enrolled in educational institutions are included, and not those in training in the workplace.

Sources

Canada: Students attending all schools includes primary, secondary, college, CEGEP, university and other schools.

United Kingdom: The work study programmes definition includes:

- Government employment or training schemes (Youth training programme, Training for work, Action for Community Employment, Job Skills, National young traineeship),
- those on New deal scheme, working for an employer in public or private sector, working for the voluntary sector, working for an environmental task force, other type of New deal scheme involving practical training (practical training, at college, temporarily away from project/college),
- those on the following government employment or training schemes: in England/Wales on a scheme run by a Training & Enterprise Council, in Scotland on a scheme run by a Local Enterprise Company,
- training course for a qualification in nursing, physiotherapy or a similar medical subject,
- enrolled on a University 'sandwich' course - work in industry included in course,
- teacher training course,
- post Graduate Certificate in Education,
- anyone on a recognised Trade Apprenticeship not included in any of the above schemes.

The category "Other employed" includes people in education, who are employed but not included in the work study program.

INDICATOR C5: The situation of the youth population with low levels of education

■ **General notes**

The indicator is based on labour force survey data on age-specific proportions of young people in each of the specified categories. The definitions of the labour force statuses of those not in education (and not enrolled in work-study programmes) are based on ILO guidelines. Data for this indicator were calculated from the special OECD data collection on transition from education to work (see Indicator C4). In 2003, the OECD Network B carried out a specific and enriched data collection for which requirements coincide with the requirements for the transition data collection. In the absence of data submission from the country itself Network B obtained data from the Eurostat Labour Force Survey. As different definitions are used for people "in education", inconsistencies might occur between the regular OECD transition data collection and the specific data collection; this is partly addressed by Eurostat data regarding the indicator "percentage of 20 to 24-year-olds who are not in education and who have not attained upper secondary education". As a result, percentages for young adults with low level of education published in *Education at a Glance 2004* will not necessarily be reproduced in the planned separate publication of detailed results on the young adults with low levels of education.

An “early school leaver” could broadly be defined as “a young person who has not attained upper secondary education and is not in education, or in a work-study programme leading to an upper secondary qualification or higher”. However, such a definition must include the specification of an age group within which very few people can still be attending school at the primary or secondary level. Young people aged 18 and 19, in a significant number of OECD countries, are still enrolled in upper secondary education. Very early leavers may eventually return to school. Moreover, labour market outcomes at early ages may not be representative of outcomes at later ages. The OECD therefore defines a young adult with low level of education as “a person aged 20 to 24 years who has not attained upper secondary education and who is not enrolled in education nor in a work-study programme”.

Please see Tables C4.1 for sources.

■ Notes on specific countries

Raw data for **Iceland, Sweden, Norway, Spain and United Kingdom** concern 16 to 19-year-olds. The young people aged 15 year-olds are estimated as the fraction of 1/14 of the total population aged 16 to 29 years olds. They are considered in education, with lower secondary level of education and out of labour force.

The Danish LFS data for 2002 has later been revised. In the revised data set the percentage of 20 to 24-years-olds not in education and below upper secondary attainment is lower.