# ENROLMENT IN EDUCATION FROM PRIMARY EDUCATION TO ADULT LIFE

This indicator depicts the structure of the education systems in terms of student participation. It examines enrolment at all levels of education: first by using the number of years, or education expectancy, of full-time and part-time education in which a 5-year-old can be expected to enrol over his or her lifetime, and second, by using information on enrolment rates at various levels of education to examine educational access. Finally, trends in enrolments are used to compare the evolution of access to education from 1995 to 2004.

## Key results

INDICATOR C1

#### Chart C1.1. Education expectancy

This chart shows the average number of years a 5-year-old can expect to be formally enrolled in education during his or her lifetime. The education expectancy is calculated by adding the net enrolment rates for each single year of age from five onwards. When comparing data on education expectancy, however, it is important to note that the length of the school year, intensity of participation and the quality of education vary considerably across countries.

In 24 of 28 OECD and 1 of 4 partner countries with comparable data, individuals participate in formal education for between 16 and 21 years.

Number of year

21						
	United Kingdom (20.7), Australia (20.7), Sweden (20.3)					
20	Finland (20.0)					
	Iceland (19.7), Belgium (19.6)					
19	New Zealand (19.1), Denmark (19.0)					
	Norway (18.4)					
18						
	Hungary (17.6), Netherlands and Germany (17.4)					
17	Ireland and Spain (17.2), Portugal (17.1), Poland, Italy and Czech Republic (17.0)					
	Greece and United States (16.9), France and Switzerland (16.8)					
16	Brazil (16.7), Korea (16.6), Austria (16.3)					
	Israel and Slovak Republic (15.7)					
15	Russian Federation and Chile (15.0)					
	Luxembourg (14.2)					
14						
	Mexico (13.4)					
13	Explanation:					
	Turkey (12.6) In Portugal,					
12	a 5-year-old-child					
	can expect to be enrolled during 17.1 years					
	over his or her lifetime.					
Source:	: OECD. Table C1.1.					

StatLink: http://dx.doi.org/10.1787/555553154612

# Other highlights of this indicator

- In most OECD countries, virtually all young people have access to at least 12 years of formal education. At least 90% of students are enrolled in an age band spanning 14 or more years in Belgium, Czech Republic, France, Iceland, Japan and Spain. By contrast, Mexico and Turkey have enrolment rates exceeding 90% for a period of only nine and six years. For partner countries Brazil, Chile, Israel and the Russian Federation, the corresponding number of years is respectively 10, 9, 12 and 9 years.
- In more than half of the OECD countries, 70% of children aged 3 to 4 are enrolled in either pre-primary or primary programmes.
- A child can expect to be enrolled at age 4 and under more often in the 19 European countries that are members of the OECD (EU19) than in the other OECD countries. On average, the enrolment rate for children aged 3 to 4 is 73.5% for the EU19 whereas the OECD average is 66.3%.
- Education expectancy for all levels of education combined increased by 1.5 years between 1995 and 2004 in all OECD countries reporting comparable data. A student in an OECD member country can expect to receive 0.6 years more pre-primary, primary, secondary and post-secondary non-tertiary education and 0.9 years more tertiary education in 2004 than in 1995.
- In OECD countries, a 5-year-old can expect to have 17.4 years of education, with females receiving 0.8 more years of education, on average, than males. Australia, Sweden and United Kingdom which have educational expectancy of more than 20 years count between three and six years of part-time education.
- A 17-year-old can expect to spend an average of three years in tertiary education.

# INDICATOR C1

#### **Policy context**

A well-educated population is critical for a country's economic and social development. Societies therefore have an intrinsic interest in ensuring broad access to a wide variety of educational opportunities for children and adults. Early childhood programmes prepare children for primary education, and can help combat linguistic and social disadvantages as well as provide opportunities to enhance and complement home educational experiences. Primary and secondary education lay down the foundations for a wide range of competencies, and prepare young people to become lifelong learners and productive members of society. Tertiary education, either directly after initial schooling or later in life, provides a range of options for acquiring advanced knowledge and skills.

#### Evidence and explanations

Virtually all young people in OECD countries have access to basic education. But patterns of participation in and progression through education over the life cycle vary widely among countries.

#### **Overall participation in education**

Both the timing and the rate of participation in the pre-school years and after the end of compulsory education differ considerably among countries.

#### Average length of schooling in 2004

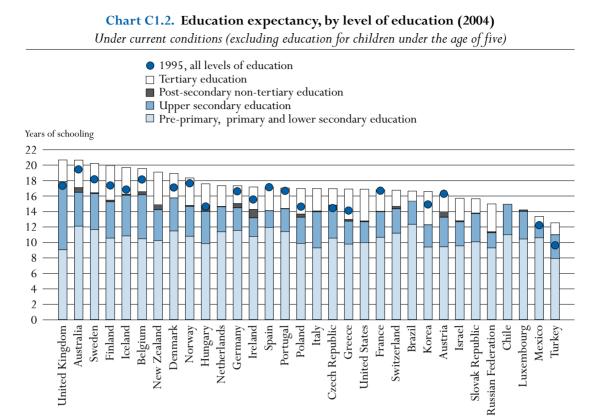
In 24 of 28 OECD and 1 of 4 partner countries, individuals are expected to participate in formal education for between 16 and 21 years. A child in Luxembourg, Mexico, the Slovak Republic, Turkey and the partner countries Chile, Israel and the Russian Federation can expect to be in education for less than 16 years, compared to 19 or more years in Australia, Belgium, Denmark, Finland, Iceland, New Zealand, Sweden and the United Kingdom (Chart C1.2).

Most of the variation in education expectancy among OECD countries comes from differences in enrolment rates in upper secondary education. Relative differences in participation are large at the tertiary level, but apply to a smaller proportion of the cohort and therefore have less of an effect on education expectancy (Table C1.1 and Chart C1.2).

Measures of the average length of schooling like education expectancy are affected by enrolment rates over the life cycle and therefore underestimate the actual number of years of schooling in systems where access to education is expanding.

Nor does this measure distinguish between full-time and part-time participation. OECD countries with a relatively large proportion of part-time enrolments will therefore tend to have relatively high values. In Australia, Belgium, New Zealand, Sweden and the United Kingdom, part-time education accounts for three or more years of education expectancy (Table C1.1).

Education expectancy can be influenced by the status of enrolment (part-time or full-time), the proportion of adults enrolled in education and mainly by those who repeat a grade and the proportion of school leavers. In OECD and partner countries where education expectancy at a given level of education exceeds the number of grades at that level, repeating a level (or, in the case of Australia, the number of adults enrolling in those programmes) has a greater impact on education expectancy than the proportion of students leaving school before completing that level of education.



Countries are ranked in descending order of the total school expectancy for all levels of education in 2004. Source: OECD. Table C1.1. See Annex 3 for notes (www.oecd.org/edu/eag2006). StatLink: http://dx.doi.org/10.1787/55553154612

Enrolment rates are influenced by entry rates into a particular level of education and by the typical duration of studies. A high number of expected years in education, therefore, does not necessarily imply that all young people will participate in education for a long time. Belgium, where 5-year-olds can expect to be in school for more than 19 years, has nearly total enrolment (more than 90%) for 16 years of education. Conversely, Australia, Denmark, Finland, New Zealand, Sweden and the United Kingdom which have equally high school expectancy, have nearly total enrolment (more than 90%) for only 13 or less years of education (Tables C1.1 and C1.2). Enrolment rates in Iceland fall in between, with nearly total enrolment for 14 years of education.

In most OECD countries, virtually all young people have access to at least 12 years of formal education. At least 90% of the population is enrolled in an age band spanning 14 or more years in Belgium, the Czech Republic, France, Iceland, Japan and Spain. By contrast, Mexico and Turkey have enrolment rates exceeding 90% for a period of only nine and six years (Table C1.2).

## Gender differences

In OECD countries, a 5-year-old can expect to stay 17.4 years in education. The variation in education expectancy is generally greater for females than for males. In OECD countries, females can expect to receive 0.8 more years of education, on average, than males. The expected duration of enrolment for females exceeds that of males by one year or more in Belgium, Denmark, Finland, Iceland, New Zealand, Norway, Portugal, Spain and the United States and by three years

in Sweden and in the United Kingdom. The opposite is true in Germany and the Netherlands, where males can expect to receive 0.2 years more education than females, but particularly in Korea, Switzerland and Turkey, with, respectively, 1.8, 0.6 and 2.1 years more education for males (Table C1.1).

#### Trends in participation in education

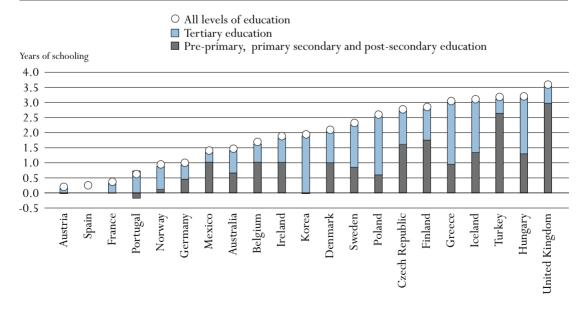
Trends in education show that more people today attain upper secondary and tertiary education compared to the past four decades. Education expectancy increased by around 13% between 1995 and 2004 in all OECD countries for which comparable trend data are available, showing a general increase of participation in education. In the Czech Republic, Finland, Greece, Hungary, Iceland, Poland, Turkey and the United Kingdom, the increase was 16% or higher over this relatively short period (Table C1.1).

Countries have extended participation in education, for example, by making pre-school education almost universal by the age of three, by retaining the majority of young people in education until the end of their teens, or by maintaining 10 to 20% participation among all age groups up to the late 20s.

On average in OECD countries, a student in 2004 can expect to spend around two years more in the education system compared to 1995. This difference over the period ranges from less than one year in Austria, France, Germany, Norway, Portugal and Spain to more than three years in Greece, Hungary, Iceland, Turkey and the United Kingdom (Chart C1.3).

#### Chart C1.3. Change in expected years of education between 1995 and 2004, by level of education

Under current conditions (excluding education for children under the age of five)



Countries are ranked in ascending order of change in school expectancy between 1995 and 2004 for all levels of education. Source: OECD. Table C1.1. See Annex 3 for notes (www.oecd.org/edu/eag2006).

StatLink: http://dx.doi.org/10.1787/555553154612

OECD countries present different patterns in their change in school expectancy between 1995 and 2004. On the one hand, in Greece, Hungary, Iceland, Korea, Poland and Sweden, the change is mainly due to an increase in participation at the tertiary level; on the other hand, the Czech Republic, Finland, Turkey and the United Kingdom, have mainly extended participation in their pre-primary, primary, secondary and post-secondary non-tertiary education.

Conversely, Austria, France and Spain present stabilised school expectancy between 1995 and 2004 for all levels of education. These three countries were also among those with higher enrolment rates of the young population aged between 5 and 14.

#### Participation in early childhood education

A child can expect to be enrolled at age 4 and under more often in the EU19 countries than in the other OECD countries. On average, the enrolment rate for children aged 3 to 4 is 73.5% for the EU19 countries whereas the OECD average is 66.3%.

In the majority of OECD and partner countries, full enrolment, which is defined here as enrolment rates exceeding 90%, begins between the ages of 5 and 6. However, in Belgium, the Czech Republic, Denmark, France, Germany, Hungary, Iceland, Italy, Japan, New Zealand, Norway, Portugal, the Slovak Republic, Spain, Sweden and the United Kingdom, at least 70% of children aged 3 to 4 are already enrolled in either pre-primary or primary programmes. Enrolment rates for early childhood education range from less than 25% in Ireland, Korea, Switzerland and Turkey, to over 90% in Belgium, France, Iceland, Italy and Spain, and the partner country Israel (Table C1.2).

Given the impact that early childhood education and care has on building a strong foundation for lifelong learning and on ensuring equitable access to learning opportunities later, pre-primary education is very important. However, institutionally based pre-primary programmes covered by this indicator are not the only form of quality early childhood education and care available. Inferences about access to and quality of pre-primary education and care should therefore be made with caution.

#### Participation towards the end of compulsory education and beyond

Several factors influence the decision to stay enrolled beyond the end of compulsory education. Young people with insufficient education for example are at a higher risk of unemployment and other forms of exclusion than their well-educated peers. In many OECD countries, the transition from education to employment has become a longer and more complex process that provides the opportunity or the obligation for students to combine learning and work to develop marketable skills (see Indicator C4).

The age at which compulsory education in OECD and partner countries ends, ranges from 14 in Korea, Portugal and Turkey, and the partner countries Brazil and Chile, to 18 in Belgium, Germany and the Netherlands. All other countries lie between the two extremes with compulsory education ending at the ages 15 or 16 (Table C1.2). However, the statutory age at which compulsory education ends does not always correspond to the age at which enrolment is universal.

While participation rates in most OECD and partner countries tend to be high until the end of compulsory education, in Germany, Mexico, the Netherlands, New Zealand, Turkey, the United States and the partner country the Russian Federation, rates drop to below 90% before the age at which students are no longer legally required to be enrolled in school. More than 10% of students also never finish compulsory education in these countries. In Germany, the Netherlands and the United States, this may be due, in part, to the fact that compulsory education ends relatively late at age 18 (age 17, on average, in the United States).

In most OECD and partner countries, enrolment rates gradually decline during the last years of upper secondary education (Table C1.3). More than 20% of the population aged between 15 and 19 is not enrolled in education in Austria, Italy, Luxembourg, Mexico, New Zealand, Portugal, Spain, Turkey, the United Kingdom and the United States, and in the partner countries Brazil, Chile and Israel. By contrast, enrolment rates remain relatively high until the age of 20 to 29 in Australia, Denmark, Finland, Iceland, Poland and Sweden, where enrolment rates for 20-to-29-year-olds still exceed 30% (Table C1.2).

Graduates from upper secondary programmes who decide not to enter the labour market directly as well as people who are already working and want to upgrade their skills can choose from a wide range of post-secondary programmes.

#### The transition to post-secondary education

Upper secondary students in many education systems can enrol in relatively short programmes (less than two years) to prepare for a certain trade or specific vocational fields. Some OECD countries delay vocational training until after graduation from upper secondary education. While these programmes are offered as advanced upper secondary programmes in some OECD countries (*e.g.* Austria, Hungary and Spain), they are offered as post-secondary education in others (*e.g.* Canada and the United States), although these post-secondary programmes often resemble upper secondary level programmes.

From an internationally comparable point of view, these programmes straddle upper secondary and tertiary education and are therefore classified as a distinct level of education (post-secondary non-tertiary education).

In 26 of the 30 OECD countries, these kinds of programmes are offered to upper secondary graduates. A 17-year-old can expect to receive 0.3 years of post-secondary non-tertiary education on average in OECD countries. This expectation ranges from 0.1 years in Iceland, Italy, Norway, the Slovak Republic, Sweden and the United States to 0.6 years and more in Australia, Austria, the Czech Republic, Hungary, Ireland and New Zealand (Table C1.1).

#### Participation in tertiary education

Graduates from upper secondary programmes and those in the workforce who want to upgrade their skills can also choose from a wide range of tertiary programmes.

This indicator distinguishes among different categories of tertiary qualifications: *i*) programmes at tertiary-type B level (ISCED 5B); *ii*) programmes at tertiary-type A level (ISCED 5A); and *iii*) advanced research programmes at the doctorate level (ISCED 6). Tertiary-type A programmes are largely theoretically based and designed to provide qualifications for entry into advanced research programmes and highly skilled professions. Tertiary-type B programmes are classified at the same level of competence as tertiary-type A programmes, but are more occupationally oriented and lead to direct labour market access. The programmes are tend not to last as long

**C**<sub>1</sub>

as type A programmes (typically two to three years), and generally are not deemed to lead to university-level degrees. The institutional location of programmes is used to give a relatively clear idea of their nature (*e.g.* university versus non-university institutions of higher education), but these distinctions have become blurred and are therefore not applied in the OECD indicators.

On average in OECD countries, a 17-year-old can expect to receive 3 years of tertiary education. Tertiary entry rates, drop-out rates and the typical duration of study affect the expectancy of tertiary education. In Australia, Belgium, Denmark, Finland, Greece, Iceland, Korea, New Zealand, Norway, Poland, Spain, Sweden and the United States, tertiary studies typically last for three years or more. By contrast, in Mexico, the Slovak Republic and Turkey, tertiary education usually lasts less than 2 years (Table C1.1 and Indicator C2).

Policies to expand education have put pressure on gaining greater access to tertiary education in many OECD countries. Thus far, this pressure has more than compensated the declines in cohort sizes which had led, until recently, to predictions of stable or declining demand from school leavers in several OECD countries. Whereas some OECD countries are now showing signs of a levelling demand for tertiary education, the overall trend remains on an upward course.

#### End of compulsory education and decline in enrolment rates

An analysis of the rate of participation by level of education and single year of age shows that there is no close relationship between the end of compulsory education and the decline in enrolment rates. The sharpest decline in enrolment rates occurs in most of the OECD and partner countries, not at the end of compulsory education but at the end of upper secondary education. After the age of 16, however, enrolment rates begin to decline in almost all OECD countries (except in Belgium). On average in the OECD countries, the enrolment rate in secondary education falls from 91% at the age of 16 to 82% at the age of 17, 53% at the age of 18, and 28% at the age of 19. In Belgium, the Czech Republic, Finland, Germany, Japan, Korea, Norway, Poland and Sweden, more than 90% of all 17-year-olds are still enrolled at this level, even though the age at which compulsory education ends is under 17 in most of the countries (Table C1.3).

## **Definitions and methodologies**

Data for the school year 2003-2004 are based on the UOE data collection on education statistics that is administered annually by the OECD, and on the 2005 World Education Indicators Programme.

Except where otherwise noted, figures are based on head counts; that is, they do not distinguish between full-time and part-time study. A standardised distinction between full-time and part-time participants is very difficult because the concept of part-time study is not recognised by some countries. For other OECD countries, part-time education is covered only partially by the reported data.

The average length of time a 5-year-old can expect to be formally enrolled in education during his/her lifetime, or education expectancy, is calculated by adding the net enrolment rates for each single year of age from five onwards (Table C1.1). The education expectancy for a cohort will reflect any tendency to lengthen (or shorten) studies in subsequent years. When comparing data on education expectancy, however, it must be borne in mind that neither the length of the school year nor the quality of education is necessarily the same in each country.

Education expectancy gives a domestic measure of the overall participation in education for a country as the UOE data collection covers all of a country's domestic educational activity (*i.e.* within its own territory), regardless of the delivery mechanism and of the ownership or sponsorship (public or private, national or foreign) of the institution which organises the activity. Table C1.1 also shows the index of change in education expectancy between 1995 and 2004.

Net enrolment rates expressed as percentages in Table C1.2 are calculated by dividing the number of students of a particular age group enrolled in all levels of education by the size of the population of that age group.

Data for 1994-1995 are based on a special survey carried out in OECD countries in 2000. OECD countries were asked to report according to the ISCED-97 classification.

		Full-time and part-time						Full- time	Part- time	in sch	lex of cha ool expec 1995 = 100	ctancy	
			All levels of education combined		Primary and lower secondary education	Upper secondary education	Post-secondary non-tertiary	Tertiary education	All levels.	or equcation combined	All levels of education combined	Primary, secondary and post-secondary non-tertiary education	Tertiary education
		M+W	Men	Women		MH	⊦W		M-	W		M+W	
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
ries	Australia	20.7	20.4	20.9	11.7	4.4	0.6	3.6	14.9	5.8	107	102	126
<b>OECD</b> countries	Austria	16.3	16.1	16.4	8.2	3.8	0.7	2.3	m	m	101	103	108
Dcc	Belgium <sup>1</sup>	19.6	19.0	20.2	9.4	5.7	0.4	3.0	16.5	3.1	109	107	125
OEC	Canada <sup>2</sup>	m	m	m	m	m	0.3	2.9	m	m	m	m	102
•	Czech Republic	17.0	16.9	17.1	9.0	3.7	0.6	2.1	16.6	0.4	119	111	206
	Denmark	19.0	18.1	19.8	9.6	4.3	n	3.2	18.2	0.7	112	108	148
	Finland -	20.0	19.3	20.7	9.0	4.7	0.2	4.5	18.1	1.9	116	110	130
	France	16.8	16.5	17.1	9.5	3.3	n	2.8	16.8	n	102	99	113
	Germany	17.4	17.5	17.3	10.2	3.0	0.5	2.3	17.3	0.1	106	103	126
	Greece	16.9	16.6	17.3	9.0	3.0	0.2	3.9	16.7	0.3	121	105	207
	Hungary	17.6	17.2	18.0	8.1	4.2	0.6	2.9	15.6	2.0	122	109	267
	Iceland	19.7	18.5	20.9	9.9	5.3	0.1	3.5	17.5	2.3	118	109	197
	Ireland	17.2	17.0	17.5	10.8	2.4	1.1	2.9	16.0	1.2	112	108	138
	Italy	17.0	16.6	17.3	8.4	4.7	0.1	2.9	16.9	0.1	m	m	m
	Japan	m	m	m	9.1	3.0	m	m	m	m	m	m	m
	Korea	16.6	17.5	15.7	8.9	2.9	a	4.3	16.6	n	113	99	179
	Luxembourg	14.2	14.1	14.3	9.2	3.6	0.2	m	14.0	0.2	m	m	m
	Mexico	13.4	13.2	13.6	9.7	1.6	a	1.2	13.4	n	111	109	137
	Netherlands	17.4	17.5	17.3	10.4	3.2	n	2.7	16.8	0.6	m	m	m
	New Zealand	19.1	18.2	20.1	10.2	4.0	0.6	4.2	15.3	3.8	m	m	m
	Norway <sup>3</sup>	18.4	16.7	18.2	9.9	3.9	0.1	3.6	17.0	1.4	105	108	127
	Poland	17.0	16.6	17.5	9.0	3.4	0.4	3.3	15.2	1.8	118	104 97	242 139
	Portugal	17.1 15.7	16.6 15.5	17.6 15.9	10.5 8.8	3.0 3.7	n 0.1	2.6 1.9	17.1 14.9	n 0.8	103		
	Slovak Republic	17.2	15.5	15.9	0.0 11.0	2.2	0.1 a	3.0	16.3	0.8	m 101	m 96	m 127
	Spain Sweden	20.3	18.8	21.8	9.8	4.7	a 0.1	3.8	17.0	3.2	113	105	127
	Switzerland	16.8	17.1	16.5	9.6	3.2	0.1	2.1	16.2	0.6	m	m	m
	Turkey	12.6	13.3	11.2	7.7	3.1	0.5 a	1.5	12.6	0.0 n	133	129	146
	United Kingdom	20.7	19.2	22.2	9.1	8.8	a x(5)	2.8	12.0	5.4	121	120	125
	United States	16.9	16.3	17.6	9.1	2.7	0.1	4.1	15.0	1.9	m	m	m
	OECD average	17.4	17.0	17.8	9.5 0.1	3.8	0.3	3.0	16.1	1.7	113	107	153
	EU19 average	17.6	17.1	18.1	9.4	4.0	0.3	2.9	16.4	1.3	112	106	157
ies	Brazil	16.7	16.0	17.3	10.9	3.0	а	1.3	16.7	n	m	m	m
rartner countries	Chile	15.0	15.1	14.8	8.1	3.9	а	m	15.0	n	m	m	m
cou	Israel	15.7	15.4	16.1	8.5	3.1	0.1	2.9	15.3	0.4	m	m	m
	Russian Federation	15.0	x(1)	x(1)	8.2	2.0	0.1	3.6	m	m	m	m	m

#### Table C1.1. Education expectancy (2004)

Expected years of education under current conditions (excluding education for children under the age of five)

Partner

Note: Mismatches between the coverage of the population data and the student/graduate data mean that the participation/graduation rates for those countries that are net exporters of students may be underestimated (for instance, Luxembourg) and those that are net importers may be overestimated. 1. Excludes the German-speaking Community of Belgium.

2. Year of reference 2002.

3. The total (males + females) includes the 5-year-olds but is not reported in the distribution of 5-year-olds by sex.

Source: OECD. See Annex 3 for notes (www.oecd.org/edu/eag2006).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink: http://dx.doi.org/10.1787/555553154612

				•	•	•					
					Enrolment rates by age group						
		Ending age of compulsory education (1)	Number of years at which over 90% of the population are enrolled (2)	Age range at which over 90% of the population are enrolled (3)	<ul> <li>4 and under</li> <li>as a percentage</li> <li>of the population</li> <li>aged 3-4</li> </ul>	© of the population aged 5-14	<ul><li>15-19 as a percentage</li><li>of the population</li><li>aged 15-19</li></ul>	(2) 20-29 as a percentage of the population aged 20-29	<ul><li>30-39 as a percentage</li><li>of the population</li><li>aged 30-39</li></ul>	<ul> <li>40 and over</li> <li>as a percentage</li> <li>of the population</li> <li>aged 40 and over</li> </ul>	
8	Australia	15	12	5 - 16	42.4	98.5	81.6	32.6	14.0	6.1	
OECD countries	Austria Belgium <sup>1,2</sup>	15	13 16	5 - 17 3 - 18	65.8 120.8	98.5 100.4	79.0 95.7	18.9 28.0	3.2 7.9	0.3	
EC	Canada	16	m	m	m	m	m	m	m	m	
0	Czech Republic	15	15	4 - 18	84.3	99.7	91.4	18.6	3.5	0.3	
	Denmark	16	12	4 - 16	87.6	98.0	84.5	36.0	7.2	1.6	
	Finland	16	13	6 - 18	41.9	95.1	86.7	41.1	11.5	2.5	
	France <sup>1</sup>	16	15	3 - 17	116.3	101.6	87.1	20.8	2.6	а	
	Germany	18	12	6 - 17	76.9	97.9	88.8	27.9	2.9	0.2	
	Greece	14.5	12	6 - 19	28.3	97.2	85.5	28.0	0.4	n	
	Hungary	16	13	4 - 16	81.4	100.5	85.5	23.7	5.6	0.5	
	Iceland	16	14	3 - 16	94.1	98.8	84.4	37.3	11.1	3.0	
	Ireland	15	12	5 - 16	24.7	100.9	86.9	22.6	3.7	x(8)	
	Italy <sup>1</sup>	15	13	3 - 15	104.9	101.6	78.8	19.4	3.1	x(8)	
	Japan	15	15	4 - 17	81.4	101.0	m	m	m	m	
	Korea	14	11	6 - 17	20.3	93.5	85.2	27.4	1.9	0.4	
	Luxembourg	15	11	5 - 15	60.7	96.4	75.4	7.1	0.5	n	
	Mexico	15	9	5 - 13	44.5	97.7	41.6	10.0	3.2	0.5	
	Netherlands	18	12	5 - 16	36.6	99.6	86.1	25.5	2.9	0.8	
	New Zealand	16	12	4 - 15	88.7	100.5	72.5	30.0	12.0	4.7	
	Norway	16	12	+ - 13 6 - 17	83.1	98.3	85.7	29.4	7.2	1.8	
	Poland	16	12	6 - 17	32.2	94.5	89.8	30.2	4.7	x(8)	
	Portugal	14	11	5 - 15	72.0	104.1	72.7	22.6	4.0	0.7	
	Slovak Republic	16	11	6 - 16	72.0	97.3	83.3	14.5	2.2	0.3	
	Spain <sup>1</sup>	16	14	3 - 16	118.4	101.8	79.6	22.2	3.3	0.9	
	Sweden	16	13	6 - 18	85.1	99.1	87.5	35.8	13.5	3.1	
	Switzerland	15	13	5 - 16	23.1	99.6	83.3	21.5	3.7	0.4	
	Turkey	13	6	8 - 13	2.6	81.2	39.8	9.6	1.5	0.1	
	United Kingdom	16	13	4 - 16	76.7	100.4	79.0	27.8	15.6	7.8	
	United States	17	11	6 - 16	52.9	97.3	76.5	23.4	5.2	1.5	
				0 10							
	OECD average	16	12		66.3	98.3	80.5	24.7	5.6	1.6	
	EU19 average	16	13		73.5	99.2	84.7	25.1	5.3	1.5	
ies	Brazil	14	10	7 - 16	32.8	93.0	79.5	22.1	8.4	2.3	
Partner countries	Chile	14	9	8 - 16	30.6	89.5	71.8	m	m	m	
COL P	Israel	15	12	5 - 16	106.2	96.6	64.6	20.3	5.1	0.9	
	<b>Russian Federation</b>	15	9	7 - 14	m	90.4	m	m	m	m	

Table C1.2. Enrolment rates, by age (2004) Full-time and part-time students in public and private institutions

#### Note: Ending age of compulsory education is the age at which compulsory schooling ends. For example, an ending age of 18 indicates that all students under 18 are legally obliged to participate in education. Mismatches between the coverage of the population data and the student/graduate data mean that the participation/graduation rates for those countries that are net exporters of students may be underestimated (for instance, Luxembourg) and those that are net importers may be overestimated.

1. The rates "4 and under as a percentage of the population aged 3 to 4 years old" is overestimated. A significant number of students are younger than 3 years old. The net rates between ages 3 and 5 are around 100%.

2. Excludes the German-speaking Community of Belgium.

Source: OECD. See Annex 3 for notes (www.oecd.org/edu/eag2006).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink: http://dx.doi.org/10.1787/555553154612

-			Age15		Age 16	5		Age 1	7		Age 18	;		Age 19	)		Age 20	)
		Graduation age at the upper secondary level of education	Secondary education	Secondary education	Post-secondary non-tertiary education	Tertiary education	Secondary education	Post-secondary non-tertiary education	Tertiary education	Secondary education	Post-secondary non-tertiary education	Tertiary education	Secondary education	Post-secondary non-tertiary education	Tertiary education	Secondary education	Post-secondary non-tertiary education	Tertiary education
			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
ries	Australia	17-18	98	93	n	n	80	1	4	38	3	26	25	3	35	20	3	37
ount	Austria	17-19	92	90	n	n	77	13	n	47	24	5	18	14	14	6	5	21
OECD countries	Belgium <sup>1</sup>	18-19	102	102	n	n	104	n	1	48	7	36	23	8	46	13	3	48
OEC	Canada <sup>2</sup>	18	m	m	n	n	m	6	4	m	7	19	m	5	37	m	2	37
	Czech Republic	18-19	100	100	n	n	98	n	n	82	5	4	35	12	23	7	8	34
	Denmark	19-20	98	93	n	a	86	n	n	81	n	n	60	n	4	36	n	12
	Finland	19	99	96	n	n	95	n	n	93	n	n	34	n	18	17	n	32
	France	18-20	98	96	n	n	89	n	2	52	n	28	25	n	40	10	n	43
	Germany	19	98	97	n	n	91	n	1	83	n	3	42	18	10	20	14	18
	Greece	18 20	92 99	97 04	a 1	а	68	n	n	17	3	56	34	3	58	n	4	60 25
	Hungary Iceland	18-20 18-20	99 99	94 93	1	n	89 83	1	n	54 75	10	13	20 69	18	30 1	10 39	12	35 17
	Ireland	17-18	100	95 96	n 1	n n	85 76	n 5	n 6	29	n 17	n 37	3	n 15	41	1	n 13	42
	Italy	17-18	95	88	a	a	81	a	a	71	17 a	6	18	1	35	6	1	36
	Japan	18	101	97	a	a	95	a	m	3	m	m	1	m	m	m	m	m
	Korea	17-18	95	98	a	n	93	a	2	12	a	57	1	a	69	n	a	64
	Luxembourg	18-19	90	84	n	m	81	n	m	69	n	m	51	1	m	30	1	m
	Mexico	18	59	50	а	а	38	а	3	18	а	12	8	а	17	4	а	18
	Netherlands	18-19	101	97	n	n	81	n	6	59	n	19	37	n	28	25	n	33
	New Zealand	17-18	96	85	1	1	67	2	4	27	4	25	12	3	35	9	3	40
	Norway	18-19	99	94	n	n	93	n	n	85	n	n	40	1	13	19	1	29
	Poland	18-20	97	97	a	a	94	n	x(10)	86	n	1	39	6	30	17	9	41
	Portugal	18	89	79	n	a	74	n	a	45	n	19	28	n	26	15	n	30
	Slovak Republic	18-19	99	95	n	n	89	n	n	79	n	3	31	1	22	4	1	28
	Spain	17-18	100	92	a	n	81	а	n	41	а	28	22	а	36	12	а	38
	Sweden	19	99	97	n	n	97	n	n	94	n	1	29	1	13	19	1	24
	Switzerland	18-20	97	90	1	n	86	1	n	76	2	2	46	3	8	20	4	16
	Turkey	16-17	58	53	а	n	31	а	4	16	а	13	x(8)	а	20	m	а	21
	United Kingdom	16-18	102	94	<b>x</b> (2)	n	81	x(5)	2	38	x(8)	23	23	x(11)	32	18	x(14)	34
۰.	United States	18	97	92	m	n	83	m	3	21	m	36	5	m	45	1	m	46
	OECD average		95	91	n	n	82	1	2	53	3	17	28	4	28	14	3	33
	EU19 average		97	94	n	n	86	1	1	61	4	16	30	5	28	14	4	34
s	Brazil	17-18	88	86	а	n	80	а	1	59	a	5	40	a	9	27	a	11
Ξ.	Chile	18	96	92	a	n	83	а	n	61	a	m	20	а	m	6	а	m
COL	Israel	17	97	95	n	n	88	n	n	18	n	8	2	1	12	1	1	13
	Russian Federation	18	74	57	m	m	16	m	m	1	m	m	m	m	m	m	m	m

Table C1.3. Transition characteristics from age 15 to 20, by level of education (2004) Net enrolment rates (based on head counts)

Partner

Note: Mismatches between the coverage of the population data and the student/graduate data mean that the participation/graduation rates for those countries that are net exporters of students may be underestimated (for instance, Luxembourg) and those that are net importers may be overestimated. 1. Excludes the German-speaking Community of Belgium.

2. Year of reference 2002.

Source: OECD. See Annex 3 for notes (www.oecd.org/edu/eag2006).

Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

StatLink: http://dx.doi.org/10.1787/555553154612

# References

**Coulombe, S., J-F. Tremblay** and **S. Marchand** (2004), *Literacy Scores, Human Capital and Growth across Fourteen OECD Countries*, Statistics Canada/Human Resources and Skills Development Canada, Ottawa.

**Cosnefroy, O.** and **T. Rocher** (2004), "Le redoublement au cours de la scolarité obligatoire: nouvelles analyses, mêmes constats", Éducation & formations, No. 70.

**De la Fuente, A.** and **A. Ciccone** (2003), *Human Capital in a Global and Knowledge-Based Economy: Final Report*, European Commission, DG Economic Affairs, Brussels.

Feinstein, et al. (2005), "The Effects of Education on Health: Concepts, Evidence and Policy Implications", paper presented at the OECD/CERI Symposium on the Social Outcomes of Learning, Copenhagen, 23-24 March 2006.

Friedman T. (2005), The World Is Flat – A Brief History of the Twenty-First Century, Farrar, Straus & Giroux, New York.

Garet, M.S. and B. Delaney (1988), "Students' Courses and Stratification", Sociology of Education, Vol. 61, pp. 61-77.

**Groot, W.** and **H.M. van den Brink** (2004), "The Health Effects of Education: Survey and Meta-Analysis", SCHOLAR Working Paper 50/04, Department of Economics, University of Amsterdam, Amsterdam.

Grossman, M. and R. Kaestner (1997), "Effects of Education on Health" in J.R. Behrman and N. Stacey (eds.), *The Social Benefits of Education*, The University of Michigan Press, Ann Arbor, Michigan.

Hammond, C. (2002), "Learning to be Healthy", Brief No. RCB07, Institute of Education, London.

Jackson, G. (1975), "The Research Evidence on the Effects of Grade Retention", *Review of Educational Research*, Vol. 45, pp. 613-635.

**Jimerson, S.R.** (2001), "Meta-Analysis of Grade Retention Research: Implications for Practice in the 21<sup>st</sup> century", *School Psychological Review*, Vol. 30, No. 3, pp. 420-437.

Kelo, M., U. Teichler and B. Wächter (eds.) (2005), "EURODATA: Student Mobility in European Higher Education", Verlags and Mediengesellschaft, Bonn, 2005.

**Krueger, A.B.** and **M. Lindhal** (2001), "Education and Growth: Why and for Whom?", *Journal of Economic Literature*, Vol. 39, No. 4, American Economic Association, Nashville Tennessee, pp. 1101-1136.

Lucas, S.R. (2001), "Effectively Maintained Inequality: Education Transitions, Track Mobility, and Social Background Effects", *American Journal of Sociology*, Vol. 106, pp. 1642-1690.

**Ministry of Education of China, Department of Planning** (2006), "Essential Statistics of Education in China", Chinese Ministry of Education, Beijing.

The Nuffield Foundation (2004), "Time Trends in Adolescent Well-Being", 2004 Seminars on Children and Families: Evidence and Implications, The Nuffield Foundation, London.

**OECD (Organisation for Economic Co-operation and Development)** (2001a), *The New Economy: Beyond the Hype*, OECD, Paris.

OECD (2001b), Education at Glance: OECD Indicators - 2001 Edition, OECD, Paris.

OECD (2003a), Education at Glance: OECD Indicators - 2003 Edition, OECD, Paris.

OECD (2003b), The Sources of Economic Growth in OECD Countries, OECD, Paris.

OECD (2004a), Learning for Tomorrow's World – First Results from PISA 2003, OECD, Paris.

**OECD** (2004b), Problem Solving for Tomorrow's World – First Measures of Cross-Curricular Competencies from PISA 2003, OECD, Paris.

**OECD** (2004c), Education at Glance: OECD Indicators – 2004 Edition, OECD, Paris.

OECD (2004d), Internationalisation and Trade in Higher Education: Opportunities and Challenges, OECD, Paris.

**OECD** (2005a), Trends in International Migration – 2004 Edition, OECD, Paris.

OECD (2005b) School Factors Related to Quality and Equity, OECD, Paris.

OECD (2005c), PISA 2003 Technical Report, OECD, Paris.

OECD (2005d), Education at Glance: OECD Indicators - 2005 Edition, OECD, Paris.

OECD (2005e), Are Students Ready for a Technology-RichWorld? What PISA Studies Tell Us, OECD, Paris.

Ready, D.D., V.L. Lee and K.G. Welner (2004), "Educational Equity and School Structure: School Size, Overcrowding, and Schools-within-Schools", *Teachers College Record*, Vol. 10, No. 106, pp. 1989-2014.

Rudd, R.E., B.A. Moeykens and T.C. Colton (1999), "Health and Literacy: A Review of Medical and Public Health Literature", in J. Comings., B. Garners and C. Smith. (eds.), *Annual Review of Adult Learning and Literacy*, Jossey-Bass, New York.

Schleicher, A. (2006) "The Economics of Knowledge: Why Education Is Key for Europe's Success", Lisbon Council Policy Brief, The Lisbon Council absl, Brussels.

Schleicher, A. and K. Tremblay (2006), "Dragons, Elephants and Tigers: Adjusting to the New Global reality", in *Challenge Europe*, European Policy Centre, Brussels.

Sianesi, B. and J. Van Reenan (2003), "The Returns to Education: Macroeconomics", *The Journal of Economic Surveys*, Vol. 17, No. 2, Blackwell Publishing Ltd., Oxford, pp. 157-200.

**Tremblay, K.** (2005) "Academic Mobility and Immigration", *Journal of Studies in International Education*, Vol. 9, No. 3, Association for Studies in International Education, Thousands Oaks, pp. 1-34.

**United States National Science Board** (2003), *The Science and EngineeringWorkforce – Realizing America's Potential*, National Science Foundation, Washington, D.C.

Wösmann, L. (2003), "Specifying Human Capital", *Journal of Economic Surveys*, Vol. 17, No. 3, Blackwell Publishing Ltd., Oxford, pp. 239-270.

Zhen G. (2006), "First Results from a Survey on Chinese Students' Learning Time", Shanghai Jiao Tong University mimeo.

# Contributors to this Publication

Many people have contributed to the development of this publication. The following lists the names of the country representatives, researchers and experts who have actively taken part in the preparatory work leading to the publication of *Education at a Glance – OECD Indicators 2006*. The OECD wishes to thank them all for their valuable efforts.

#### National Co-ordinators

Mr. Brendan O'REILLY (Australia) Mr. Mark NEMET (Austria) M. Dominique BARTHÉLÉMY (Belgium) Ms. Maddy BOLLEN (Belgium) Ms. Oroslinda Maria GOULART (Brazil) Mr. Atilio PIZARRO (Chile) Mr. Lubomir MARTINEC (Czech Republic) Mr. KenTHOMASSEN (Denmark) Ms. Sylvia KIMMEL (Estonia) Mr. Matti KYRÖ (Finland) M. Claude SAUVAGEOT (France) Ms. Barbara MEYER-WYK (Germany) Ms. Evelyn OBELE (Germany) Mr. Gregory KAFETZOPOULOS (Greece) Ms. Judit KÁDÁR-FÜLÖP (Hungary) Ms. Margrét HARÐARDÓTTIR (Iceland) Mr. Pat MAC SITRIC (Ireland) Mr. Yosef GIDANIAN (Israel) Mr. Antonio Giunta LA SPADA (Italy)

Mr. Kenji SAKUMA (Japan) Ms. Chun-Ran PARK (Korea) M. Jérôme LEVY (Luxembourg) Mr. Rafael FREYRE MARTINEZ (Mexico) Mr. Marcel SMITS VAN WAESBERGHE (Netherlands) Mr. David LAMBIE (New Zealand) Mr. Kjetil MÅSEIDE (Norway) Mr. Jerzy WISNIEWSKI (Poland) Mr. João Trocado MATA (Portugal) Mr. Mark AGRANOVITCH (Russian Federation) Mr. Vladimir POKOJNY (Slovak Republic) Mrs. Helga KOCEVAR (Slovenia) Mrs. Carmen MAESTRO MARTIN (Spain) Mr. Dan ANDERSSON (Sweden) Ms. Dominique Simone RYCHEN (Switzerland) Mr. Ibrahim Z. KARABIYIK (Turkey) Ms. Janice ROSS (United Kingdom) Ms. Valena White PLISKO (United States)

#### **Technical Group on Education Statistics and Indicators**

Mr. Brendan O'REILLY (Australia) Mr. Adrian PAWSEY (Australia) Ms. Sabine MARTINSCHITZ (Austria) Mr. Wolfgang PAULI (Austria) Ms. Ann VAN DRIESSCHE (Belgium) Mr. Philippe DIEU (Belgium) Ms. Nathalie JAUNIAUX (Belgium) Mr. Liës FEYEN (Belgium) Mr. Guy STOFFELEN (Belgium) Mr. Raymond VAN DE SIJPE (Belgium) Mr. Johan VERMEIREN (Belgium) Ms. Carmilva FLORES (Brazil) Ms. Vanessa NESPOLI DE OLIVEIRA (Brazil) Ms. Lynn BARR-TELFORD (Canada) Mr. Jean-Claude BOUSQUET (Canada) Mr. Eduardo CORREA (Chile) Mr. Cesar MUÑOZ HERNANDEZ (Chile)

Mr. Vladimir HULIK (Czech Republic) Ms. Michaela KLENHOVÁ (Czech Republic) Mr. Felix KOSCHIN (Czech Republic) Mr. Leo JENSEN (Denmark) Mr. Ken THOMASSEN (Denmark) Ms. Birgitta ANDRÉN (EUROSTAT) Mr. Pascal SCHMIDT (EUROSTAT) Mr. Timo ERTOLA (Finland) Mr. Miikka PAAJAVUORI (Finland) Mr. MikaTUONONEN (Finland) Mr. Matti VAISANEN (Finland) Mr. Jean-Michel DURR (France) Ms. Michèle JACQUOT (France) Ms. Christine RAGOUCY (France) Mr. Heinz-Werner HETMEIER (Germany) Ms. Kirsten OTTO (Germany) Mr. Alexander RENNER (Germany)

Mr. Ingo RUSS (Germany) Ms. Vassilia ANDREADAKI (Greece) Mr. Angelos KARAGIANNIS (Greece) Mr. Konstantinos STOUKAS (Greece) Ms. Judit KOZMA-LUKÁCS (Hungary) Mr. László LIMBACHER (Hungary) Ms. Judit LUKÁCS (Hungary) Ms. Asta URBANCIC (Iceland) Ms. Mary DUNNE (Ireland) Mr. Muiris O'CONNOR (Ireland) Mr. Yosef GIDANIAN (Israel) Ms. Dalia SPRINZAK (Israel) Ms. Gemma DE SANCTIS (Italy) Ms. Giuliana MATTEOCCI (Italy) Ms. Maria Pia SORVILLO (Italy) Mr. Paolo TURCHETTI (Italy) Ms. Nozomi HARAGUCHI (Japan) Ms. Midori MIYATA (Japan) Mr. Tokuo OGATA (Japan) Mr. Satoshi TAKAHASHI (Japan) Mr. Jérôme LEVY (Luxembourg) Ms. Manon UNSEN (Luxembourg) Mr. David VALLADO (Luxembourg) Ms. ErikaVALLE BUTZE (Mexico) Mr. Marcel A.M. SMITSVAN WAESBERGHE (Netherlands) Mr. Dick TAKKENBERG (Netherlands) Ms. Pauline THOOLEN (Netherlands) Mr. Paul GINI (New Zealand) Ms. Marie ARNEBERG (Norway)

#### **Network A on Educational Outcomes**

Lead Country: United States Network Leader: Mr. Eugene OWEN Ms. Wendy WHITHAM (Australia) Mrs. Helene BABEL (Austria) Mr. Jürgen HORSCHINEGG (Austria) Mrs. Christiane BLONDIN (Belgium) Mr. Luc VAN DE POELE (Belgium) Ms. Oroslinda Maria GOULART (Brazil) Mr. Don HOIUM (Canada) Ms. Tamara KNIGHTON (Canada) Mr. Jerry MUSSIO (Canada) Mr. Lubomir MARTINEC (Czech Republic) Ms. Pavla ZIELENIECOVA (Czech Republic) Mr. Joern SKOVSGAARD (Denmark) Mr. Aki TORNBERG (Finland) Mr. Thierry ROCHER (France) Ms. Evelyn OBELE (Germany) Ms. Kirsten OTTO (Germany) Mr. Botho PRIEBE (Germany) Mr. Panyotis KAZANTZIS (Greece) Ms. Zsuzsa HAMORI-VACZY (Hungary) Mr. Julius K. BJORNSSON (Iceland) Mr. Gerry SHIEL (Ireland)

Ms. Birgitta BØHN (Norway) Mr. Kjetil DIGRE (Norway) Mr. Geir NYGARD (Norway) Mr. Terje RISBERG (Norway) Ms. Alina BARAN (Poland) Ms. Anna NOWOZYNSKA (Poland) Mr. Jose PAREDES (Portugal) Mr. João PEREIRA DE MATOS (Portugal) Ms. Natalia KOVALEVA (Russian Federation) Mr. Mark AGRANOVITCH (Russian Federation) Ms. Alzbeta FERENCICOVÀ (Slovak Republic) Mr. Vladimir POKJNY (Slovak Republic) Ms. Elena REBROSOVA (Slovak Republic) Ms. Helga KOCEVAR (Slovenia) Ms. Tatjana SKRBEC (Slovenia) Mr. Fernando CELESTINO REY (Spain) Mr. Eduardo DE LA FUENTE (Spain) Mr. Jesus IBANEZ MILLA (Spain) Ms. Karin ARVEMO-NOTSTRAND (Sweden) Mr. Henrik ENGSTROM (Sweden) Ms. Christina SANDSTROM (Sweden) Ms. Katrin HOLENSTEIN (Switzerland) Ms. Nilgün DURAN (Turkey) Ms. Alison KENNEDY (UNESCO) Mr. Steve HEWITT (United Kingdom) Mr. Steve LEMAN (United Kingdom) Ms. Mary Ann FOX (United States) Ms. Catherine FREEMAN (United States)

Mrs. Anna Maria CAPUTO (Italy) Mr. Ryo WATANABE (Japan) Ms. Mee-Kyeong LEE (Korea) Ms. Iris BLANKE (Luxembourg) Mr. Felipe MARTINEZ RIZO (Mexico) Dr. Jules L. PESCHAR (Netherlands) Dr. Paul VAN OIJEN (Netherlands) Ms. Lynne WHITNEY (New Zealand) Ms. Anne-Berit KAVLI (Norway) Ms. Glória RAMALHO (Portugal) Mr. Vladislav ROSA (Slovak Republic) Ms. Mar GONZALEZ GARCIA (Spain) Mr. Ramon PAJARES BOX (Spain) Ms. Anna BARKLUND (Sweden) Ms. Anita WESTER (Sweden) Mr. Erich RAMSEIER (Switzerland) Mr. Sevki KARACA (Turkey) Mr. Jason TARSH (United Kingdom) Ms. Marit GRANHEIM (United States) Mr. Jay MOSKOWITZ (United States) Ms. Elois SCOTT (United States) Ms. Maria STEPHENS (United States)

Mr. Thomas SNYDER (United States)

#### Network B on Education and Socio-economic Outcomes

Lead country: Sweden Network Leader: Mr. Dan ANDERSSON Ms. Oon Ying CHIN (Australia) Mr. Brendan O'REILLY (Australia) Mr. Mark NÉMET (Austria) Ms. Ariane BAYE (Belgium) Ms. Isabelle ERAUW (Belgium) Ms. Oroslinda Maria GOULART (Brazil) Mr. Patrice DE BROUCKER (Canada) Ms. Shannon DELBRIDGE (Canada) Ms. Zuzana POLAKOVA (Czech Republic) Mr. Steffen BANG (Denmark) Ms. Irja BLOMOVIST (Finland) Ms. Aila REPO (Finland) Ms. Pascale POULET-COULIBANDO (France) Ms. Christiane KRÜGER-HEMMER (Germany) Mr. Nikolaos BILALIS (Greece) Mr. Evangelos INTZIDIS (Greece) Ms. Éva TÓT (Hungary) Ms. Asta URBANCIC (Iceland) Mr. Philip O'CONNELL (Ireland) Mrs. Paola UNGARO (Italy) Ms. Ikuko ARIMATSU (Japan)

Ms. Jihee CHOI (Korea) Mr. Jérôme LEVY (Luxembourg) Mme. Astrid SCHORN (Luxembourg) Mr. Roy TJOA (Netherlands) Mr. Johan VAN DER VALK (Netherlands) Mr. Marcel SMITS VAN WAESBERGHE (Netherlands) Ms. Cheryl REMINGTON (New Zealand) Mr. Erik Dahl (Norway) Ms. Anne Brit UDAHL (Norway) Mr. Terje RISBERG (Norway) Ms. Malgorzata CHOJNICKA (Poland) Mr. Jorge BARATA (Portugal) Ms. Raquel ÁLVAREZ-ESTEBAN (Spain) Mr. Dan ANDERSSON (Sweden) Ms. Anna JÖNSSON (Sweden) Mr. Kenny PETERSSON (Sweden) Mr. Russell SCHMIEDER (Sweden) Ms. Anna BORKOWSKY (Switzerland) Mr. Ali PANAL (Turkey) Mr. David MCPHEE (United Kingdom) Mr. Stephen LEMAN (United Kingdom) Ms. Lisa HUDSON (United States) Mr. Dan SHERMAN (United States)

#### Network C on School Features and Processes

Lead Country: Netherlands Network Leader: Mr. Jaap SCHEERENS Mr. Lars STAHRE (Australia) Mr. Christian KRENTHALLER (Austria) Mr. Philippe DELOOZ (Belgium) Ms. Ann VAN DRIESSCHE (Belgium) Mr. Peter VAN PETEGEM (Belgium) Ms. Maria Aparecida CHAGAS FERREIRA (Brazil) Ms. Oroslinda Maria GOULART (Brazil) Ms. Nelly MCEWEN (Canada) Ms. Michaela KLENHOVA (Czech Republic) Mr. Lubomir MARTINEC (Czech Republic) Ms. Pavlina STASTNOVA (Czech Republic) Mr. Jørgen Balling RASMUSSEN (Denmark) Ms. Maria HRABINSKA (European Commission) Mr. Hannu-Pekka LAPPALAINEN (Finland) Mrs. Dominique ALLAIN (France) Mr. Gerd MÖLLER (Germany) Mr. Vassilios CHARISMIADIS (Greece) Ms. Anna IMRE (Hungary) Mr. Pat MAC SITRIC (Ireland)

Mrs. Caterina VEGLIONE (Italy) Ms. Sung Eun KIM (Korea) Mme Astrid SCHORN (Luxembourg) Mr. Jean-Claude FANDEL (Luxembourg) Ms. Erika VALLE BUTZE (Mexico) Ms. Maria HENDRIKS (Netherlands) Mr. Marcel SMITS VAN WAESBERGHE (Netherlands) Mr. Paul GINI (New Zealand) Ms. Bodhild BAASLAND (Norway) Mr. Jerzy CHODNICKI (Poland) Ms. Maria DO CARMO CLIMACO (Portugal) Mr. Helder GUERREIRO (Portugal) Mr. Ignacio ÁLVAREZ PERALTA (Spain) Ms. Ulla LINDQVIST (Sweden) Mrs. Annika HAGLUND (Sweden) Mr. Eugen STOCKER (Switzerland) Ms. Nilgün DURAN (Turkey) Ms. Alison KENNEDY (UNESCO) Mr. Jason TARSH (United Kingdom) Mr. Joel SHERMAN (United States) Mrs. Kerry GRUBER (United States)

#### Others contributors to this publication

Mr. Donald HIRSCH (Consultant) Ms. Tracey STRANGE (Editor) Ms. Fung-Kwan TAM (Layout)

# Related OECD Publications

Where Immigrant Students Succeed: A Comparative Review of Performance and Engagement in PISA 2003 ISBN 92-64-02360-7

Are Students Ready for a Technology-Rich World?:What PISA Studies Tell Us ISBN 92-64-03608-3

Learning for Tomorrow's World – First Results from PISA 2003 (2004) ISBN 92-64-00724-5

Problem Solving for Tomorrow's World – First Measures of Cross-Curricular Competencies from PISA 2003 (2004) ISBN 92-64-00642-7

From Education to Work: A Difficult Transition for Young Adults with Low Levels of Education (2005) ISBN 92-64-00918-3

Education Policy Analysis 2005 (Forthcoming) ISBN 92-64-02269-4

OECD Handbook for Internationally Comparative Education Statistics: Concepts, Standards, Definitions and Classifications (2004) ISBN 92-64-10410-0

Completing the Foundation for Lifelong Learning: An OECD Survey of Upper Secondary Schools (2004) ISBN 92-64-10372-4

OECD Survey of Upper Secondary Schools: Technical Report (2004) ISBN 92-64-10572-7

Internationalisation and Trade in Higher Education: Opportunities and Challenges (2004) ISBN 96-64-01504-3

Classifying Educational Programmes: Manual for ISCED-97 Implementation in OECD Countries (1999) ISBN 92-64-17037-5

OECD publications can be browsed or purchased at the OECD Online Bookshop (www.oecdbookshop.org).

# TABLE OF CONTENTS

			Name of the indicator in the 2005 edition
Foreword		. 3	
Editorial		13	
Introduction		19	
Reader's Guid	l <b>e</b> 2	23	
CHAPTER A	THE OUTPUT OF EDUCATIONAL INSTITUTIONS	7	
T 1º 4 A1	AND THE IMPACT OF LEARNING		
	Educational attainment of the adult population 22 Educational attainment: adult population (2004)		A1
	Population that has attained at least upper secondary education (2004)		
Table A1, 3a	Population that has attained tertiary education (2004)		
	Distribution of population aged $35$ -to-64 with tertiary type $5A/6$		
	qualifications by country (2004 and projected to 2014)4	10	
Table A1.5	Educational attainment expressed in average number of years in formal education (2004)	+1	
Indicator A2	Current upper secondary graduation rates4	+2	A2
Table A2.1	Upper secondary graduation rates (2004)		
Table A2.2	Post-secondary non-tertiary graduation rates (2004)4	19	
Indicator A3	Current tertiary graduation and survival rates	50	A3
Table A3.1	Tertiary graduation rates (2000, 2004)		
Table A3.2	Survival rates in tertiary education (2004)		
Indicator A4	What 15-year-olds can do in mathematics	50	A4
Table A4.1	Percentage of students at each level of proficiency		
	on the OECD PISA mathematics scale (2003)	70	
Table A4.2	Mean student performance and variation on different aspects	- 4	
Table A4.3	of the OECD PISA mathematics scale (2003)	/1	
Table A4.5	Mean score and variation in student performance on the OECD PISA mathematics scale (2003)	72	
- 1		~	
Indicator A5	Between- and within-school variation in the mathematics	74	AC
Table A.5.1	performance of 15-year-olds	·+	A6
fuble fig.f	performance on the OECD PISA mathematics scale (2003)	30	
Indicator A6	Fifteen-year-old students who perform at the lowest levels		
Indicator Au	of proficiency in mathematics (2003)	32	
Table A6.1	Odds ratios of the likelihood of students with the lowest		
	socio-economic status to be lowest mathematics performers relativ	ve	
	to the likelihood of students with the highest socio-economic statu		
	to be lowest mathematics peformers (2003)	¥1	

#### TABLE OF CONTENTS

Name of
the indicator
in the
2005 edition

Table A6.2	Reading performance of lowest mathematics	
T.I.I. A.C. 2	performers (2003)	
Table A6.3	1 0	
	performers (2003)	
Indicator A7	Institutional differentiation, socio-economic status and	
	15-year-old students' mathematics performance (2003)	
Table A7.1	Institutional differentiation, variance in mathematics	
	performance, and economic, social	
	and cultural status (ESCS), (2003)102	
Indicator A8	Labour force participation by level of	
	educational attainment	A8
Table A8, 1a	Employment rates and educational attainment,	
lubicitio, iu	by gender (2004)	
Table A8 2a	Unemployment rates and educational attainment,	
Table 110.2a	by gender (2004)114	
Table 48 3a	Trends in employment rates, by educational attainment	
Table A0. Ja	(1991-2004)	
Table 18 1a	Trends in unemployment rates, by educational attainment	
Table A0.+a	(1991-2004)	
	(1991-200+)	
Indicator A9	The returns to education: education and earnings	A9
Table A9.1a	Relative earnings of the population with income from	
	employment (2004 or latest available year)	
Table A9.1b	Differences in earnings between females and males	
	(2004 or latest available year)137	
Table A9.2a	Trends in relative earnings: adult population (1997-2004)138	
	Trends in differences in earnings between females and males	
	(1997-2004)	
Table A9.4a	Distribution of the 25-to-64-year-old population,	
	by level of earnings and educational attainment	
	(2004 or latest available year)141	
Table A9.4b	•	
	and educational attainment (2004 or latest available year)	
Table A9.4c	Distribution of the 25-to-64-year-old females by level of earnings	
	and educational attainment (2004 or latest available year)	
Table A9.5	Private internal rates of return for an individual obtaining an	
	upper secondary or post-secondary non-tertiary education,	
	ISCED 3/4 (2003)	
Table A9-6	Private internal rates of return for an individual obtaining	
Tuble 119.0	a university-level degree, ISCED 5/6 (2003)	
Table A9.7		
14010119.1	an upper secondary or post-secondary non-tertiary education,	
	ISCED 3/4 (2003)	
Table A 9 8	Public internal rates of return for an individual obtaining	
10010112.0		
	a university-level degree, ISCED 5/6 (2003)151	

		Name of the indicator in the 2005 edition
Indicator A10	The returns to education: links between education,	
	economic growth and social outcomes152	A10
	Impact of demographic trends on education provision160 Demographic trends between 2005 and 2015 and indicative impact on educational expenditure, student enrolments and graduate numbers	
CHAPTER B	FINANCIAL AND HUMAN RESOURCES INVESTED IN EDUCATION 167	
Indicator B1	Educational expenditure per student	B1
	Annual expenditure on educational institutions per student for all services (2003)	
Table B1.1b	Annual expenditure on educational institutions per student	
	for all services, by type of programme (2003)187	
	Annual expenditure per student on core services, ancillary services and R&D (2003)	
Table B1.2	Distribution of expenditure (as a percentage) on educational institutions compared to number of students enrolled	
Table B1.3a	at each level of education (2003)	
Table B1.3b	secondary studies (2003)	
Table B1.4	over the average duration of tertiary studies (2003)	
Table B1.5	Change in expenditure on educational institutions for all services per student relative to different factors, by level of education (1995, 2003)	
Indicator B2	Expenditure on educational institutions relative to Gross Domestic Product194	B2
Table B2.1a	Expenditure on educational institutions as a percentage of GDP, for all levels of education (1995, 2000, 2003)205	D2
Table B2.1b	Expenditure on educational institutions as a percentage of GDP, by level of education (1995, 2000, 2003)	
Table B2.1c	Expenditure on educational institutions as a percentage of GDP, by level of education (2003)	
Table B2.2	Change in expenditure on educational institutions (1995, 2003)	
Table B2.3	Change in expenditure on educational institutions (1995, 2000, 2001, 2002, 2003)	
Indicator B3	Public and private investment in educational institutions210	B3
Table B3.1	Relative proportions of public and private expenditure on educational institutions for all levels of education	63
	(1995, 2003)	

		Name of the indicator in the 2005 edition
Table B3.2a	Relative proportions of public and private expenditure on educational institutions, as a percentage, by level of education (1995, 2003)	
Table B3.2b		
Table B3.3	Trends in relative proportions of public expenditure on educational institutions, for tertiary education (1995, 2000, 2001, 2002, 2003)	
<b>Indicator B4</b> Table B4.1 Table B4.2	Total public expenditure on education222Total public expenditure on education (1995, 2003)228Distribution of total public expenditure on education (2003)229	B4
Indicator B5	Tuition fees charged by tertiary institutions and support	DF
Table B5.1	for students and households through public subsidies	B5
Table B5.2	educational institutions (school year 2003-2004)	
Indicator B6	Expenditure in institutions by service category and	
Table B6.1	by resource category	B6
Table B6.2	Expenditure on educational institutions by resource category and level of education (2003)	
CHAPTER C	ACCESS TO EDUCATION, PARTICIPATION AND PROGRESSION 255	
Indicator C1	Enrolment in education from primary education	
Table C1 1	to adult life	C1
	Education expectancy (2004)	
	Transition characteristics from age 15 to 20,	
	by level of education (2004)	
Indicator C2	Participation in secondary and tertiary education	C2
Table C2.1	Entry rates into tertiary education and age distribution	
	of new entrants (2004)	
Table C2.2	Expected years in tertiary education and changes	
Table C2 3	in tertiary enrolment (2004)	
Table C2.3	Students in tertiary education by type of institution or mode of study (2004)	
Table C2.4	Students in primary and secondary education by type of	
• •	institution or mode of study (2004)	
Table C2.5	Upper secondary enrolment patterns (2004)	

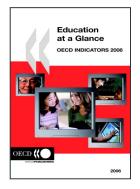
#### Name of the indicator in the 2005 edition

Indicator C3	Student mobility and foreign students in tertiary education	C3
Table C3.1	Student mobility and foreign students in tertiary education	US
Table C3.2	(2000, 2004)	
Table C3.3	education, by country of origin (2004)	
	by country of destination (2004)	
	education, by level and type of tertiary education (2004)	
Table C3.5	Distribution of international and foreign students in tertiary education, by field of education (2004)	
Table C3.6	Trends in the number of foreign students enrolled outside their country of origin (2000 to 2004)	
Table C3.7	Percentage of tertiary qualifications awarded to international and foreign students, by type of tertiary education (2004)	
Indicator C4	Education and work status of the youth population	C4
Table C4.1a	Expected years in education and not in education for 15-to-29-year-olds (2004)	
Table C4.2a	Percentage of the youth population in education	
Table C4.3	and not in education (2004)	
Table C4.4a	and unemployed (2004)	
	in education and not in education (1995-2004)	
Indicator C5	Participation in adult learning	C6
Table C5.1a	Participation rate and expected number of hours in non-formal job-related education and training, by level of educational	
	attainment (2003)	
Table C5.1b	Expected number of hours in non-formal job-related education	
	and training, by age group and labour force status (2003)	
	Expected number of hours in non-formal job-related education and training, by level of educational attainment (2003)	
CHAPTER D	THE LEARNING ENVIRONMENT AND ORGANISATION OF SCHOOLS 347	
Indicator D1	Total intended instruction time for students in primary	
	and secondary education	D1
Table D1.1	Compulsory and intended instruction time in public institutions (2004)	DI
Table D1.2a	Instruction time per subject as a percentage of total	
Table D1.2b	compulsory instruction time for 9-to-11-year-olds (2004)	
	compulsory instruction time for 12-to-14-year-olds (2004)358	

			Name of the indicator in the 2005 edition
Indicator D2	Class size and ratio of students to teaching staff	360	D2
Table D2.1	Average class size, by type of institution and level		
	of education (2004)	370	
Table D2.2	Ratio of students to teaching staff in educational		
	institutions (2004)	371	
Table D2.3	Ratio of students to teaching staff by type of institution (2004)	372	
Indicator D3	Teachers' salaries	374	D3
Table D3.1	Teachers' salaries (2004)	384	
	Adjustments to base salary for teachers		
	in public institutions (2004)	386	
Table D3.2b	Adjustments to base salary for teachers in public institutions		
	made by school principal (2004)	388	
Table D3.2c	Adjustments to base salary for teachers in public institutions		
	made by local or regional authority (2004)	390	
Table D3.2d			
	made by the national authority (2004)		
Table D3.3	Change in teachers' salaries (1996 and 2004)		
Indicator D4	Teaching time and teachers' working time	396	D4
Table D4.1	Organisation of teachers' working time (2004)		Di
Indicator D5	Access to and use of ICT		
Table D5.1	Various ICT resources in secondary schools and percentage		
	of various types of computers in schools (2003)	414	
Table D5-2	Percentage of students in secondary schools whose principals		
Tuble D3.2	report that instruction is hindered by a shortage		
	of ICT resources (2003)	415	
Table D5.3			
Table D3.5	school or other places, by frequency of use (2003)		
	school of other places, by frequency of use (2005)	1 /	
ANNEX 1	Characteristics of Educational Systems	419	
Table X1.1a		420	
Table X1.1b	Typical graduation ages in post-secondary non-tertiary		
	education		
Table X1.1c	Typical graduation ages in tertiary education	422	
Table X1.2a	School year and financial year used for the calculation		
	of indicators	423	
Table X1.2b	School year and financial year used for the calculation		
	of indicators	424	
Table X1.3	Summary of completion requirements		
	for upper secondary (ISCED 3) programmes	425	
ANNEX 2	Reference Statistics	429	
	Overview of the economic context using basic variables		
10010 112.1	(reference period: calendar year 2003, 2003 current prices)	430	
Table X2-2	Basic reference statistics		
14010 112,2	(reference period: calendar year 2003, 2003 current prices)	431	

#### Name of the indicator in the 2005 edition

Table X2.3	Basic reference statistics	
	(reference period: calendar year 1995, 1995 current prices)432	
Table X2.4	Annual expenditure on educational institutions per student	
	for all services (2003)	
Table X2.5	Annual expenditure on educational institutions per student	
	for all services (2003)	
Table X2.6a	Reference statistics used in the calculation of	
	teachers' salaries, by level of education (1996, 2004)435	
Table X2.6b	Reference statistics used in the calculation of teachers' salaries	
	(1996, 2003)	
Table X2.6c	Teachers' salaries (2004)	
ANNEX 3 (Sou	urces, Methods and Technical Notes)441	
References		
Contributors	to this Publication	
Related OECE	Publications	



# From: Education at a Glance 2006 OECD Indicators

Access the complete publication at: https://doi.org/10.1787/eag-2006-en

## Please cite this chapter as:

OECD (2006), "Enrolment in Education from Primary Education to Adult Life", in *Education at a Glance 2006:* OECD Indicators, OECD Publishing, Paris.

DOI: https://doi.org/10.1787/eag-2006-19-en

This work is published under the responsibility of the Secretary-General of the OECD. The opinions expressed and arguments employed herein do not necessarily reflect the official views of OECD member countries.

This document and any map included herein are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

You can copy, download or print OECD content for your own use, and you can include excerpts from OECD publications, databases and multimedia products in your own documents, presentations, blogs, websites and teaching materials, provided that suitable acknowledgment of OECD as source and copyright owner is given. All requests for public or commercial use and translation rights should be submitted to rights@oecd.org. Requests for permission to photocopy portions of this material for public or commercial use shall be addressed directly to the Copyright Clearance Center (CCC) at info@copyright.com or the Centre français d'exploitation du droit de copie (CFC) at contact@cfcopies.com.

