

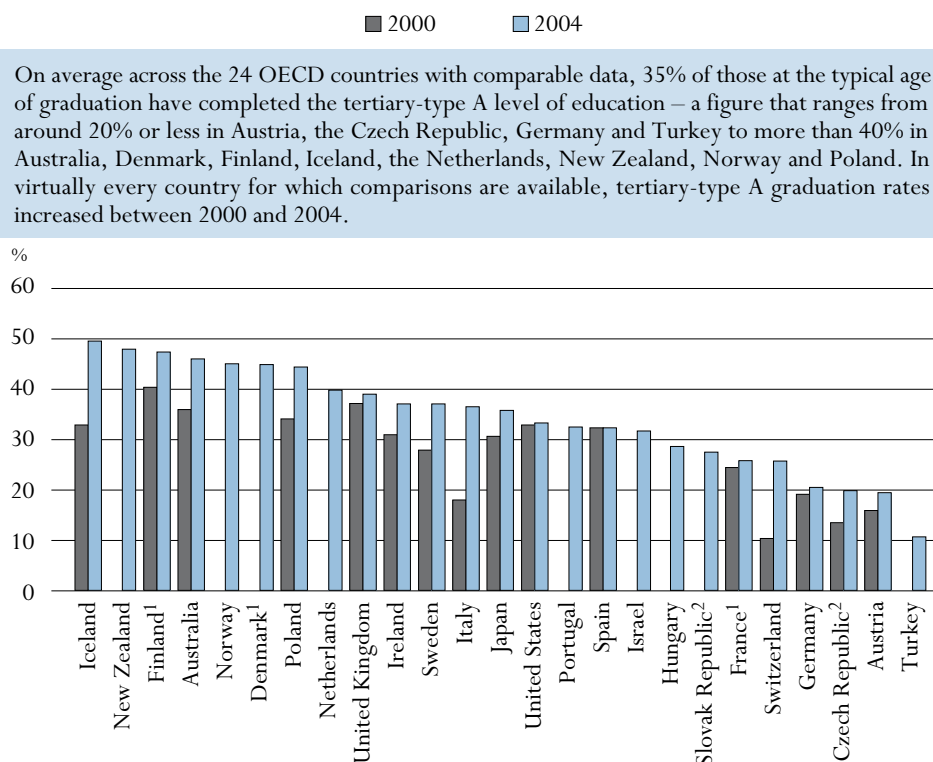
## CURRENT TERTIARY GRADUATION AND SURVIVAL RATES

This indicator first shows the current tertiary graduate output of educational systems, *i.e.* the percentage of the population in the typical age cohort for tertiary education that follows and successfully completes tertiary programmes, as well as the distribution of tertiary graduates across fields of education. The indicator then shows survival rates at the tertiary level, *i.e.* the proportion of new entrants into the specified level of education who successfully complete a first qualification. Tertiary education covers a wide range of programmes, but overall serves as an indicator of the rate at which countries produce advanced knowledge. A traditional university degree is associated with completion of “type A” tertiary courses; “type B” generally refers to shorter and often vocationally oriented courses. The indicator also sheds light on the internal efficiency of tertiary educational systems.

### Key results

#### Chart A3.1. Tertiary-type A graduation rates (2000, 2004)

The charts show the number of students of any age completing tertiary-type A programmes for the first time, in 2000 and 2004, as a percentage of the age-group normally completing each level. Although not all of those completing are in this age band, this figure gives an indication of how many of today’s young people are obtaining a high-level qualification.



1. Year of reference 2003.

2. Gross graduation rate may include some double counting.

Countries are ranked in descending order of the graduation rates for tertiary-type A education in 2004.

Source: OECD. Table A3.1. See Annex 3 for notes ([www.oecd.org/edu/eqg2006](http://www.oecd.org/edu/eqg2006)).

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### Other highlights of this indicator

- Tertiary-type A graduation rates tend to be higher in countries where the programmes provided are mainly of shorter duration.
- The graduation rate is 9% at the tertiary-type B level and 1.3% for programmes leading to advanced research qualifications.
- On average, some 30% of tertiary-type A students fail to successfully complete these programmes though there is marked variation from country to country. The highest tertiary-type A “survival rates” are reported by Ireland, Japan and Korea, at over 80% while the survival rates for Mexico, New Zealand and the United States are just over 50%. Tertiary-type B survival rates are on average lower than those for type A programmes.

## Policy context

Not only is upper secondary graduation becoming the norm, but also, the majority of students are now graduating from upper secondary programmes designed to provide access to tertiary education; this is leading to increased enrolment in tertiary programmes (see Indicators A2 and C2). Countries with high graduation rates at the tertiary level are also the ones most likely to be developing or maintaining a highly skilled labour force.

Moreover, specific skills and knowledge in science are of particular interest as they increasingly represent a principal source of innovation and growth in knowledge-based economies (see Indicator A10). Differences among countries in the output of tertiary graduates by field of education are likely to be influenced by the relative rewards in the labour market for different fields, as well as the degree to which the market drives field selection in a particular country.

Tertiary level drop out and survival rates can be useful indicators of the internal efficiency of tertiary education systems. However, students' specific reasons for leaving a tertiary programme are varied: students may realise that they have chosen the wrong subject or educational programme; they may fail to meet the standards set by their educational institution, particularly in tertiary systems that provide relatively broad access; or they may find attractive employment before completing their programme. Dropping out is not necessarily an indication of failure by individual students, but high dropout rates may well indicate that the education system is not meeting the needs of its clients. Students may not find that the educational programmes offered meet their expectations or their labour market needs. It may also be that programmes take longer than the number of years which students can justify being outside the labour market.

## Evidence and explanations

Tertiary graduation rates show the rate at which each country's education system produces advanced knowledge. But tertiary programmes vary widely in structure and scope among countries. Tertiary graduation rates are influenced both by the degree of access to tertiary programmes and by the demand for higher skills in the labour market. They are also affected by the way in which the degree and qualification structures are organised within countries.

### Graduation rates at the tertiary level

This indicator distinguishes among three different categories of tertiary qualifications: degrees at the tertiary-type B level (ISCED 5B); degrees at the tertiary-type A level (ISCED 5A); and advanced research qualifications at the doctorate level (ISCED 6).

Tertiary-type A programmes are largely theoretically based and are designed to provide qualifications for entry into advanced research programmes and professions with high skill requirements. Countries differ in the way in which tertiary-type A programmes are organised. The institutional framework may be universities or other institutions. The duration of programmes leading to a first tertiary-type A qualification ranges from three years (*e.g.* the Bachelor's degree in many colleges in Ireland and the United Kingdom in most fields of study, and the *Licence* in France) to five years or more (*e.g.* the *Diplom* in Germany).

Whereas in many countries there is a clear distinction between first and second university degrees, (*i.e.* undergraduate and graduate programmes), this distinction does not exist everywhere. In some systems, degrees that are comparable internationally to a Master's degree level are

obtained through a single programme of long duration. To ensure international comparability, it is therefore necessary to compare degree programmes of similar cumulative duration, as well as completion rates for first-degree programmes.

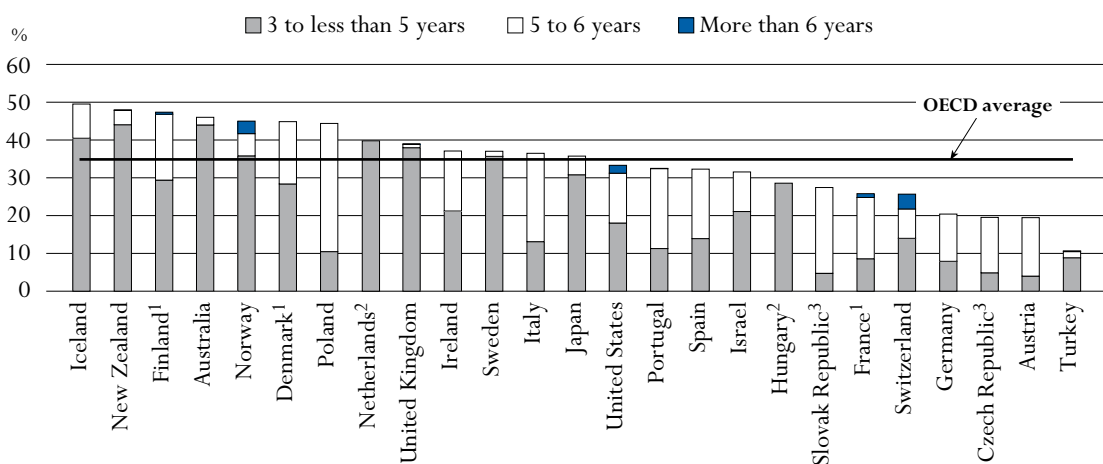
To allow for comparisons that are independent of differences in national degree structures, tertiary-type A degrees are subdivided in accordance with their total theoretical durations of studies. Specifically, the OECD classification divides degrees into those of medium (three to less than five years), long (five to six years) and very long (more than six years) duration. Degrees obtained from short programmes of less than three years' duration are not considered equivalent to the completion of the tertiary-type A level of education and are therefore not included in this indicator. Second-degree programmes are classified according to the cumulative duration of the first- and second-degree programmes. Those individuals who already hold a first degree are netted out.

### *Tertiary-type A graduation rates*

On average across the 24 OECD countries with comparable data, 35% of persons at the typical age of graduation completed tertiary-type A education in 2004. This figure ranged from around 20% or less in Austria, the Czech Republic, Germany and Turkey to more than 40% in Australia, Denmark, Finland, Iceland, the Netherlands, New Zealand, Norway and Poland (Table A3.1).

In virtually every country for which comparable data are available, tertiary-type A graduation rates increased between 2000 and 2004, often quite substantially. The most significant increase in type A graduation rates was reported in Italy where the rate doubled to 37%, though this was largely a result of structural change. Reform in the Italian tertiary system in 2002 allowed university students who had originally enrolled on programmes with a long duration to attain a degree after three years of study (Chart A3.1).

**Chart A3.2. Tertiary-type A graduation rates, by duration of programme (2004)**  
Percentage of tertiary-type A graduates to the population at the typical age of graduation



1. Year of reference 2003.

2. 3-to-less-than-5-year programmes include 5-to-more-than-6-year programmes.

3. Gross graduation rate may include some double counting.

Countries are ranked in descending order of tertiary-type A graduation rates.

Source: OECD. Table A3.1. See Annex 3 for notes ([www.oecd.org/edu/eag2006](http://www.oecd.org/edu/eag2006)).

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Similarly, in Switzerland, the increase in tertiary-type A graduation rates is largely due to reforms in the system which not only shortened the duration of the first degree but also created new universities focusing on applied sciences.

### ***Tertiary-type A: the shorter the programme, the higher the participation and graduation rates***

There is considerable variation in the form and structure of tertiary-type A programmes among countries, notably in the length of programmes that are offered (Chart A3.2). What is evident is that overall, tertiary-type A graduation rates tend to be higher in countries where the programmes provided are mainly of a shorter duration. For example, in Austria, the Czech Republic, France, Germany, the Slovak Republic and Switzerland, the majority of students complete programmes of at least five years' duration and the tertiary-type A graduation rates are below 30%. In contrast, type A graduation rates are around 40% or more in Australia, New Zealand and the United Kingdom, where programmes of three to less than five years are the norm. Turkey provides a notable exception to this trend: despite typically providing short tertiary-type A programmes, its tertiary-type A graduation rate is the lowest among OECD countries.

To summarise this trend, the tertiary-type A graduation rate for OECD countries where the majority of first degrees are obtained in shorter programmes averages some 40% of the typical age cohort, compared with 29% for OECD countries where the majority of first degrees are obtained in programmes of long or very long duration.

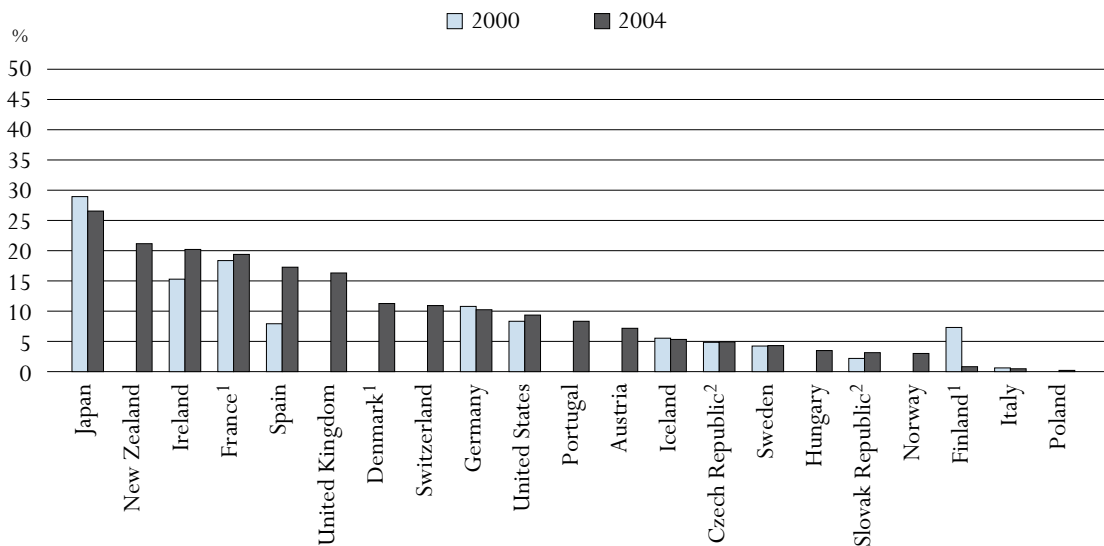
### ***Tertiary-type B graduation rates***

Tertiary-type B programmes are classified at the same level of competencies as tertiary-type A programmes, but are more occupationally oriented and usually lead to direct labour market access. The programmes are typically of shorter duration than type A programmes – usually two to three years – and generally are not intended to lead to university-level degrees. Graduation rates for tertiary-type B programmes averaged some 9% of an age cohort amongst the 21 OECD countries with comparable data. (Table A3.1). In fact, graduation from tertiary-type B programmes is a sizeable feature of the tertiary system in only a few OECD countries, most notably in Ireland, Japan and New Zealand, where over 20% of the age cohort obtained type B qualifications in 2004.

Trends in the provision of and graduation from tertiary-type B programmes are variable among countries (Chart A3.3). For instance, in Spain, a sharp rise in type B graduation rates between 2000 and 2004 is attributable to the development of a new advanced level, specific vocational training programmes. In contrast, type B programmes in Finland are being phased out and the proportion of the age cohort graduating from these programmes has consequently fallen rapidly over the same period.

### ***Advanced research qualification rates***

Across the 29 OECD countries with comparable data, an average of 1.3% of the population obtained an advanced research qualification (such as a PhD) in 2004. The percentages range from 0.1% in Mexico to over 2% in Austria, Germany, Portugal, and Switzerland, to over 3% in Sweden (Table A3.1).

**Chart A3.3. Tertiary-type B graduation rates (2000, 2004)***Percentage of tertiary-type B graduates to the population at the typical age of graduation*

1. Year of reference 2003.

2. Gross graduation rate may include some double counting.

Countries are ranked in descending order of the graduation rates for tertiary-type B education in 2004.

Source: OECD. Table A3.1. See Annex 3 for notes ([www.oecd.org/edu/eag2006](http://www.oecd.org/edu/eag2006)).

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### Box A3.1. Graduation rates by field of education and gender

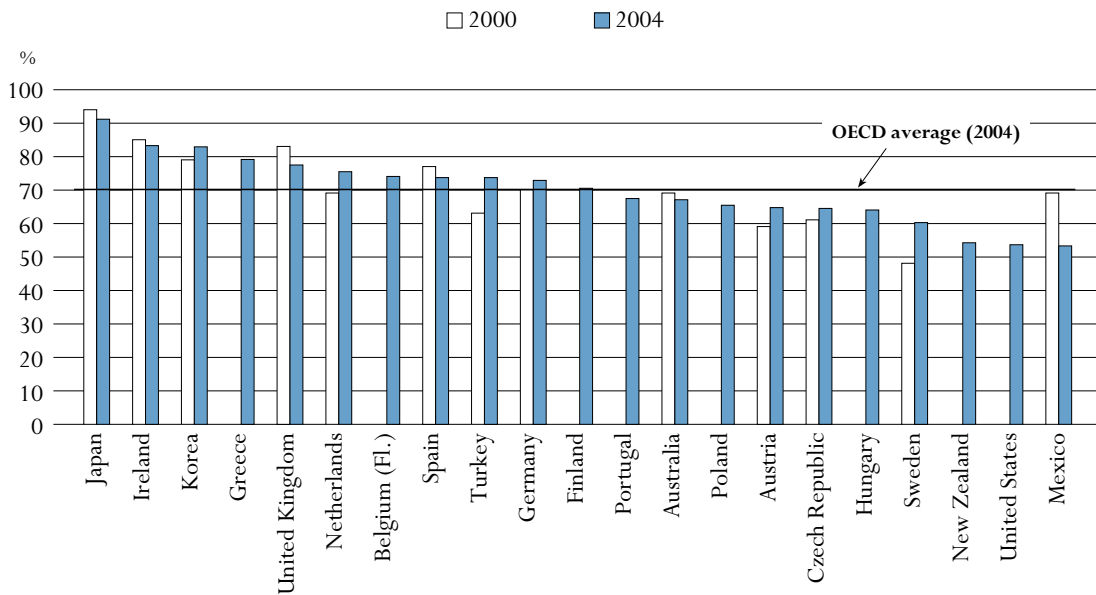
Changing opportunities in the job market, differences in earnings among occupations and sectors, and the admission policies and practices of tertiary education institutions may all affect in which field students choose to study. In turn, the relative popularity of the various fields of education affects the demand for courses and teaching staff, as well as the supply of new graduates. The distribution of tertiary graduates across fields sheds light on the relative importance of the different fields from country to country, as well as on the relative proportion of female graduates in those fields. For more information, see *Education at a Glance 2004* (OECD, 2004c), Tables A4.1 and A4.2. For a data update, see *Education at a Glance 2006* Tables A3.3, A3.4 and A3.5 on the Web at <http://dx.doi.org/10.1787/436145613668>.

### Survival rates at the tertiary level

On average across 21 OECD countries for which data are available, some 30% of tertiary-type A students fail to successfully complete the programmes they undertake. Survival rates differ widely among OECD countries. In Mexico, New Zealand and the United States only just over 50% of those who enter tertiary-type A programme go on to successfully complete their programmes in contrast to their counterparts in Ireland and Korea where the survival rates are 83% and in Japan where the rate is 91% (Chart A3.4).

**Chart A3.4. Survival rates in tertiary-type A education (2000, 2004)**

Number of graduates divided by the number of new entrants in the typical year of entrance to the specified programme



Countries are ranked in descending order of tertiary-type A survival rates in 2004.  
Source: OECD. Table A3.2. See Annex 3 for notes ([www.oecd.org/edu/eag2006](http://www.oecd.org/edu/eag2006)).

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Notably, in each of the three countries where survival rates are highest, tertiary-type A programmes are predominantly of a shorter duration; three to five years. Interestingly, entry rates to tertiary-type A programmes for these countries are below the OECD average, whereas in New Zealand, Sweden and the United States – where survival rates are among the lowest in comparison – entry rates are relatively high. Mexico, on the other hand, has one of the lowest entry rates to type-A programmes among OECD countries and the highest failure rate from these programmes.

Tertiary-type B survival rates are, at 62%, somewhat lower than those for tertiary-type A programmes, and again there is wide country variation. Type B survival rates range from above 80% in the Flemish Community of Belgium and Japan to below 40% in Greece. In general, tertiary-type B programmes are of a shorter duration than tertiary-type A programmes. However, interestingly, in the Flemish community of Belgium, the majority of students graduate from medium length type B programmes (the only tertiary-type B programme option) and the country has the second highest survival rates at the tertiary-type B level, just after Japan, for which the breakdown by the duration of studies is not available (Table A3.2).

Among the 12 OECD countries with comparable data, survival rates from advanced research programmes range from 34% in Greece to almost 90% in Italy, Japan and Mexico.

### Definitions and methodologies

The data for the academic year 2003-2004 are based on the UOE data collection on education statistics that is administered annually by the OECD.

Tertiary graduates are those who obtain a tertiary qualification in the specified reference year. This indicator distinguishes among different categories of tertiary qualifications: *i*) tertiary-type B qualifications (ISCED 5B); *ii*) tertiary-type A qualifications (ISCED 5A); and *iii*) advanced research degrees of doctorate standard (ISCED 6). For some countries, data are not available for the categories requested. In such cases, the OECD has assigned graduates to the most appropriate category (see Annex 3 at [www.oecd.org/edu/eq2006](http://www.oecd.org/edu/eq2006) for a list of programmes included for each country at the tertiary-type A and tertiary-type B levels). Tertiary-type A degrees are also subdivided by their corresponding total theoretical duration of studies, to allow for comparisons that are independent of differences in national degree structures.

In Table A3.1, graduation rates for first tertiary programmes (tertiary-type A and tertiary-type B) are calculated as gross graduation rates. In order to calculate gross graduation rates, countries identify the age at which graduation typically occurs (see Annex 1). The number of graduates, regardless of their age, is divided by the population at the typical graduation age. In many countries, defining a typical age of graduation is difficult, however, because graduates are dispersed over a wide range of ages.

A net graduation rate is calculated for advanced research programmes (where duplication of certificates awarded does not pose a problem) as the sum of age-specific graduation rates. The net graduation rate can be interpreted as the percentage of persons within an age cohort who obtain a tertiary qualification and is thus unaffected by changes in population size or typical graduation age. Gross graduation rates are presented for those countries that cannot provide such detailed data.

The survival rate is calculated as the ratio of the number of students who graduated from an initial degree during the reference year to the number of new entrants into this degree  $n$  years before, with  $n$  being the number of years of full-time study required to complete the degree. The calculation of the survival rate is not defined from a cohort analysis. This estimation assumes constant student flows at the tertiary level, implied by the need for consistency between the graduate cohort in the reference year with the entrant cohort  $n$  years before. This assumption may be an oversimplification of the reality in countries (see Annex 3 at [www.oecd.org/edu/eq2006](http://www.oecd.org/edu/eq2006)).

Dropouts are defined as those students who leave the specified level without graduating from a first qualification at that level. The first qualification refers to any degree, regardless of the duration of study, obtained at the end of a programme which does not have a previous degree at the same level as a pre-requisite.

### Further references

Examining the number of science graduates per 100 000 25-to-34-year-olds in employment provides another way of gauging the recent output of high-level skills from different education systems. For more information, see *Education at a Glance 2005* (OECD, 2005c), Table A3.2. For a data update, see *Education at a Glance 2006*, Table A3.5 on the Web at <http://dx.doi.org/10.1787/436145613668>.



Table A3.1.  
Tertiary graduation rates (2000, 2004)

Percentage of tertiary graduates to the population at the typical age of graduation, by programme destination and duration

	Tertiary-type B programmes (first-time graduation)	Tertiary-type A programmes (first-time graduation)				Advanced research programmes <sup>2</sup>	All programmes (2000) (first-time graduation)	
		All programmes	3 to less than 5 years <sup>1</sup>	5 to 6 years <sup>1</sup>	More than 6 years		Tertiary-type B programmes	Tertiary-type A programmes
<b>OECD countries</b>								
Australia	m	46.4	44.4	2.0	n	1.7	m	36.3
Austria	7.1	19.6	4.0	15.6	a	2.1	m	16.0
Belgium	m	m	m	m	m	1.1	m	m
Canada	m	m	m	m	m	0.8	m	27.9
Czech Republic <sup>3</sup>	4.9	19.7	4.9	14.8	a	1.1	4.8	13.6
Denmark <sup>4</sup>	11.2	45.3	28.6	16.7	n	1.0	m	m
Finland <sup>4</sup>	0.8	47.8	29.6	17.6	0.6	1.8	7.3	40.7
France <sup>4</sup>	19.3	26.0	8.6	16.4	1.0	1.1	18.3	24.6
Germany	10.2	20.6	8.0	12.6	a	2.1	10.7	19.3
Greece	m	m	m	m	m	0.8	m	m
Hungary	3.5	28.8	x(2)	x(2)	x(2)	0.6	m	m
Iceland	5.3	50.0	40.8	9.2	n	0.2	5.5	33.2
Ireland	20.1	37.4	21.4	16.0	x(4)	1.1	15.2	31.2
Italy <sup>5</sup>	0.5	36.8	13.3	23.6	a	0.7	0.6	18.1
Japan	26.5	36.1	31.1	5.0	a	0.8	28.8	30.9
Korea	m	m	m	m	m	1.1	m	m
Luxembourg	m	m	m	m	m	m	m	m
Mexico	m	m	m	m	m	0.1	m	m
Netherlands	a	40.2	x(2)	x(2)	a	1.4	m	m
New Zealand	21.0	48.4	44.5	3.8	0.2	1.1	m	m
Norway	3.0	45.4	36.1	6.0	3.3	1.1	m	m
Poland	0.2	44.8	10.6	34.3	n	0.9	m	34.4
Portugal	8.3	32.8	11.4	21.3	0.1	2.5	m	m
Slovak Republic <sup>3</sup>	3.1	27.7	4.8	22.9	a	1.1	2.2	m
Spain	17.2	32.6	14.1	18.5	n	1.2	7.9	32.6
Sweden	4.3	37.4	36.0	1.4	a	3.1	4.2	28.1
Switzerland	10.9	25.9	14.1	7.9	4.0	2.7	m	10.4
Turkey	m	10.8	8.9	1.6	0.2	0.2	m	m
United Kingdom <sup>6</sup>	16.3	39.3	38.3	0.9	0.1	1.9	m	37.5
United States	9.3	33.6	18.2	13.3	2.1	1.3	8.3	33.2
<b>OECD average</b>	<b>9.2</b>	<b>34.8</b>	<b>21.4</b>	<b>12.8</b>	<b>0.5</b>	<b>1.3</b>	<b>9.5</b>	<b>27.5</b>
<b>EU19 average</b>	<b>7.9</b>	<b>33.4</b>	<b>16.7</b>	<b>16.6</b>	<b>0.1</b>	<b>1.4</b>	<b>7.9</b>	<b>26.9</b>
<b>Partner countries</b>								
Brazil	m	m	m	m	m	m	m	m
Chile	m	m	m	m	m	0.1	m	m
Israel	m	31.8	21.3	10.6	a	1.3	m	m
Russian Federation	m	m	m	m	m	m	m	m

Notes: 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. Excluding students who subsequently completed a longer programme.

2. Net graduation rate is calculated by summing the graduation rates by single year of age except for France, Italy, Japan, Korea, Mexico, the Netherlands and the United States.

3. Gross graduation rate may include some double counting for tertiary-type A and B programmes.

4. Year of reference 2003.

5. Year of reference 2003 for advanced research programmes.

6. The graduation rate for tertiary-type B programmes includes some graduates who have previously graduated at this level and it therefore represents an over-estimate of first-time graduation.

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

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

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Table A3.2.

**Survival rates in tertiary education (2004)**

Calculated separately for tertiary-type A and tertiary-type B programmes: number of graduates from these programmes divided by the number of new entrants to these programmes in the typical year of entrance, by duration of programme

	Tertiary-type A education				Tertiary-type B education				Advanced research programmes
	All programmes	Duration of programmes			All programmes	Duration of programmes			
		3 to less than 5 years	5 to 6 years	More than 6 years		2 to less than 3 years	3 to less than 5 years	5 years or more	
		(1)	(2)	(3)		(4)	(5)	(6)	
OECD countries									
Australia	67	x(1)	x(1)	x(1)	m	m	m	m	67
Austria	65	x(1)	x(1)	a	m	m	m	a	m
Belgium (Fl.)	74	75	71	82	85	a	85	a	m
Canada	m	m	m	m	m	m	m	m	m
Czech Republic	65	74	60	a	61	66	60	a	44
Denmark	m	m	m	m	m	m	m	m	m
Finland	71	x(1)	x(1)	x(1)	m	m	a	a	m
France	m	m	m	m	m	m	m	a	m
Germany	73	92	65	a	79	87	72	a	m
Greece	79	78	83	a	35	a	35	a	34
Hungary	64	64	x(2)	x(2)	48	48	m	a	37
Iceland	m	m	m	m	m	m	m	m	m
Ireland	83	x(1)	x(1)	x(1)	69	x(5)	x(5)	x(5)	m
Italy	m	m	m	m	m	m	m	m	88
Japan	91	91	90	a	87	87	x(6)	x(6)	89
Korea	83	83	100	a	m	m	m	a	76
Luxembourg	m	m	m	m	m	m	m	m	m
Mexico	53	53	x(2)	x(2)	63	63	a	a	87
Netherlands	76	76	x(2)	a	a	a	a	a	m
New Zealand	54	55	m	m	42	42	x(6)	x(6)	66
Norway	m	m	m	m	m	m	m	m	m
Poland	66	65	66	a	74	a	74	a	m
Portugal	68	62	72	a	58	a	58	a	65
Slovak Republic	m	m	m	a	77	80	70	a	m
Spain	74	71	76	a	79	79	a	a	m
Sweden	60	x(1)	x(1)	a	68	x(1)	a	a	m
Switzerland	m	m	m	m	m	m	m	m	m
Turkey	74	74	x(2)	a	79	79	a	a	75
United Kingdom	78	78	84	53	53	x(5)	x(5)	x(5)	70
United States	54	x(1)	m	a	m	m	m	m	m
<i>OECD average</i>	<i>70</i>	<i>73</i>	<i>77</i>	<i>8</i>	<i>62</i>	<i>45</i>	<i>35</i>	<i>m</i>	<i>67</i>
<i>EU19 average</i>	<i>71</i>	<i>74</i>	<i>72</i>	<i>11</i>	<i>60</i>	<i>36</i>	<i>41</i>	<i>m</i>	<i>56</i>

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

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# 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-Rich World? 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 absI, 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 Engineering Workforce – 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.

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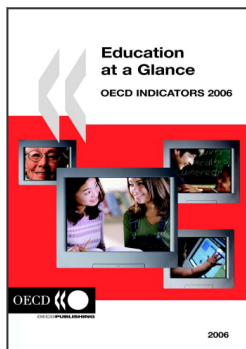
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