

Annex

3

SOURCES, METHODS AND TECHNICAL NOTES

Annex 3 on sources and methods is available
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EDUCATION AT A GLANCE

OECD INDICATORS 2006

ANNEX 3: SOURCES, METHODS AND TECHNICAL NOTES

Chapter A: The output of educational institutions and the impact of learning

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**CHAPTER A: THE OUTPUT OF EDUCATIONAL INSTITUTIONS
AND THE IMPACT OF LEARNING**

INDICATOR A1: Educational attainment of the adult population

- **Table A1.1a, A1.1.b (web), A1.1.c (web), A1.2a, A1.2.b (web), A1.2.c (web), A1.3a A1.3.b (web), A1.3.c (web).**

Methodology

Data on population and educational attainment are taken from OECD and EUROSTAT databases, which are compiled from National Labour Force Surveys. Tables by gender (b for males and c for females) are available on the web.

The attainment profiles are based on the percentage of the population aged 25 to 64 years that has completed a specified level of education. The International Standard Classification of Education (ISCED-97) is used to define the levels of education.

Table 1: National Sources

	Stastical agency	Source	Reference period	Coverage	Primary sampling unit
Australia	Australian Bureau of Statistics	Australian Bureau of Statistics Labour Force Survey	May 2004	Data refer to persons aged 15 to 64	Respondents within households
Austria	Statistics Austria	Quarterly Microcensus	The data refer to annual averages of the quarterly Microcensus sample survey	Data refer to persons aged 15 and over	
Belgium	FPS Economy - DG Statistics and Economic Information	Labour Force Survey	Annual average	Data refer to persons aged 15 and over	Households

Canada	Statistics Canada	Monthly Labour Force Survey	The annual data are averages of monthly estimates	Data refer to persons aged 15 and over	Households
Czech Republic	Czech Statistical office (CSU)	Labour Force Sample Survey	Annual average of quarterly estimates	Data refer to persons aged 15 and over	Persons
Denmark	Eurostat	European Labour Force Survey	1st quarter	Data refer to persons aged 15 to 64	Households
Finland	Eurostat	European Labour Force Survey	1st quarter	Data refer to persons aged 15 to 64	Households
France	INSEE	Labour Force Survey	Annual average of quarterly estimates	Data refer to persons aged 15 and over	Households
Germany	Federal Statistical Office	Labour Force Survey (Microcensus)	5-11 May 2004	Data refer to persons aged 15 and over	Households
Greece	Eurostat	European Labour Force Survey	1st quarter	Data refer to persons aged 15 to 64	Households
Hungary	Hungarian Central Statistical Office	Labour Force Survey	2nd quarter	Data refer to persons aged 15 to 74	Households
Iceland	Eurostat	European Labour Force Survey	1st quarter	Data refer to persons aged 15 to 64	Households
Ireland	Eurostat	European Labour Force Survey	1st quarter	Data refer to persons aged 15 to 64	Households
Israel	Israel's Central Bureau of Statistics	Labour Force Survey	Annual average for 2004	Permanent residents aged 15+	Households
Italy	ISTAT	Household Labour Force Survey	The data refer to the second quarter of each year (second week of April)	Data refer to persons aged 15 and over	

Japan	Statistics Bureau, Ministry of Public Management, Home Affairs, Posts and Telecommunications	The Labour Force Survey detailed tabulation	Average of 2003	Data refer to persons aged 15 and over	Households
Korea	National Statistical Office	Monthly Economically Active Population Survey	Annual average of monthly estimates	Data refer to persons aged 15 and over	Households
Luxembourg	Eurostat	European Labour Force Survey	1st quarter	Data refer to persons aged 15 to 64	Households
Mexico	Secretaría del Trabajo y Previsión Social (STPS)	Encuesta Nacional de Empleo (ENE)	Biennial survey since 1991, yearly since 1995	The survey covers civilian resident population aged 12 years and over excluding armed forces when they are resident	Households
Netherlands	Eurostat	European Labour Force Survey	1st quarter	Data refer to persons aged 15 to 64	Households
New Zealand	Statistics New Zealand	Household Labour Force Survey	The annual data are averages of quarterly estimates	Data refer to civilian non- institutionalised persons aged 15 and over	Households
Norway	Statistik Sentralbyraa	Labour Force Survey	Annual average	Persons 16-74 years	Individuals
Poland	Statystyczny	Labour Force Survey	The data are averages of published quarterly figures	Data refer to persons aged 15 and over	Households
Portugal	Instituto Nacional de Estatística	Labour Force Survey	Annual average of quarterly estimates	Data refer to persons aged 15 and over	Households (dwellings)
Slovak Republic	Statistical Office of the Slovak Republic	Labour Force Sample Survey	Annual average of quarterly estimates	Data refer to persons aged 15 and over	Dwellings

Spain	Instituto Nacional de Estadística	Active Population Survey (quarterly)	Yearly average	Data refer to persons aged 16 and over	Enumeration area
Sweden	Statistiska Centralbyran	Labour Force Survey	The annual average	Data refer to persons aged 16-64	Individuals
Switzerland	OFS	Labour Force Survey	The annual data refer to the 2nd quarter (April-June)	Data refer to persons aged 15 and over	Persons with households
Turkey	State Institute of Statistics (SIS)	Household Labour Force Survey	Semi-annual survey since October 1988 Annual average of April and October	Data refer to persons aged 15 and over	Households
United Kingdom	ONS	Labour Force Survey	Spring Labour Force Survey	Data refer to Men aged 16-64 and women aged 16-59	Households
United States	Census Bureau and Bureau of Labour Statistics	March Current Population Survey	Annual data	Data refer to persons aged 15 and over	Households

Table 1: National Sources (continued)

	Size of the sample	Overall rate of non-response	Remarks
Australia	43500	3%	Households are selected and all non-visiting adults aged 15-64 are interviewed.
Austria			
Belgium	Around 92 500 individuals		
Canada	Approx 92 500 persons		

Czech Republic	Around 24 000 households, <i>i.e.</i> approx 60 000 persons, <i>i.e.</i> approx 53 000 persons aged 15 and over	30%	Classification according to LFS questionnaire until 1997 used.
Denmark			
Finland			
France	Around 35 000 households, <i>i.e.</i> approx 75 000 persons aged 15 and over		
Germany	0.45% of households	4% for questions on educational attainment.	
Greece			
Hungary	64 000 persons	20-21%	Armed forces are not included
Iceland			
Ireland			
Israel	Approx 22 500 households	12%	
Italy			The mapping has changed in 2001
Japan			The special survey of the labour Force Survey was integrated into the Labour Force Survey in January 2002
Korea	30 000 households		Annual report on the Economically Active population Survey

Luxembourg			
Mexico	In odds years the survey is representative for state, what increases the sample significantly	Around 15%	
Netherlands			
New Zealand	15 000 households per quarter		8.5%
Norway	24 000 / quarter		10.4%
Poland	24 700 households	About 19%	Since the 1st quarter of 2003, the results of the LFS have been generalized on the basis of the balance of the population compiled using the results of the National Census of the Population 2002. That is why the data are not fully comparable with previous year data
Portugal	Arounds 20 000 households / around 50 000 persons	Around 9%	
Slovak Republic	Around 10 250 dwellings per quarter, i.e. approx 28 900 persons, i.e. approx 24 500 persons aged 15+		7.5% Classification according to LFS questionnaire until 1999 and from 2000 used

Spain	64 072 households (average)	8.6% (average year 2003)	Part of the non-response is treated. Final rate of non-response: (5.0% average year 2003)
Sweden	Based on 212 700 interviews	16.3%	
Switzerland	57 000 (of which 15 000 oversampling of foreign nationals)	30%	The reference person within the household is selected randomly. All data refer only to the reference person (no proxy data)
Turkey	15 000 households in each survey	10% (1 500 households in each survey)	
United Kingdom	60 000	14%	
United States	78 000 households, 16 000 persons	7.2% based on households	

Description of ISCED-97 education programmes and attainment levels and their mappings for each country:

Table 2: Standardised ISCED-97 presentation of national codes on attainment in LFS (2004)¹

	Pre-primary and primary education	Lower secondary education	Upper secondary education				Post-secondary non-tertiary education	Tertiary education			Advanced research programmes
	ISCED 0/1	ISCED 2	ISCED 3C Short	ISCED 3C Long	ISCED 3B	ISCED 3A	ISCED 4	ISCED 5B	ISCED 5A	ISCED 5A/6	ISCED 6
Australia		0/1/2, 2B/2C			3B	3A, 3A/4		5B	5A	5A/6	
Austria		0/1/2			3B	3A	4A, 4B	5B	5A		
Belgium	0/1	2		3C		3A	4	5B	5A		6
Canada	0/1	2				3	4	5B		5A/6	
Czech Republic	0/1	2		3CL		3AB/4				5AB/6	
Denmark (ELFS)	0,1	2		3CL		3A	4	5B	5A		6
Finland	0/1	0/1/2				3	4	5B	5A		6
France	0, 1	2A, 2B	3CS	3CL	3B	3A	4A, 4	5B, 5A1	5A	5A/6	
Germany	1	2A			3B	3A	4	5B	5A		6
Greece	0/1	2	3C	3CL	3B	3A	4C	5B	5A		6
Hungary	1	2		3C		3A	4A	5B	5A		6
Iceland	0/1	2A, 2C	3CS			3A	4C	5B	5A		6
Ireland	0, 1	2				3/3A/3C	4C	5B		5A/6	
Italy	0/1	2	3CS	3CL		3A/3B	4C		5A/5B		6
Japan		OECD estim. from 0/1/2/3				OECD estim. from 0/1/2/3		5B		5A/6	
Korea	0/1	2				3		5B		5A/6	
Luxembourg (ELFS)	0/1	2	3CS	3CL		3/3A,3B	4,4A/4B,4C	5B	5A		6
Mexico	0, 1	2, 2/3A		3CL		3A		5B		5A/6	
Netherlands	0, 1, 1A, 1B, 1C	2, 2A, 2B, 2C		3C		3A,3	4A,4B,4C	5B	5, 5A		6
New Zealand		0, 1		3CL		3A	4C	5B	5A	5A/6	
Norway	0, 1A	2A		3C		3A	4A, 4C	5B	5A		6
Poland		1/2	3CS			3A	4C			5B/5A/6	
Portugal	0/1	2				3		5B	5A		6
Slovak Republic	0, 1	2		3C		3A		5B	5A		6
Spain	0, 1	2A, 2C	3C		3B	3A	4C	5B	5A		6
Sweden	1	2				3A, 3		4/5B	5A	5A/6	
Switzerland	1	2	3CS	3CL	3B	3A	4	5B	5A		6
Turkey	0, 1	2			3B	3A				5A/6	
United Kingdom	0/1	2	3, 3CS	3C, 3CL		3A		5B	5A		6
United States	0/1	2				3		5B, 5A1	5A		6
Israël	0	1/2				3A/3C		5B	5A		6

1. The cells of this table indicate, for each country, the national programme categories that are included in the international levels of education indicated by the column headings. The national codes received do not reflect always perfectly all the national educational system possibilities.
Note: ISCED 5A1 (tertiary-type A, intermediate degree).

■ Notes on specific countries

France: Concerning trend on educational attainment variables coded ISCED97, there is a break between 2002 and 2004. Data are unavailable for 2003 due to a modification in the data collection. Educational variables for 2004 arose from the continuing employment survey which officially replaced, since the first of January 2003, the annual employment survey. This is a new quarterly survey and the data collection takes place throughout the continuing year. Approximately 35 000 households, *i.e.* 75 000 people aged 15 years or more, participate in the survey each quarter. The annual results are obtained by taking the average of the quarterly results.

The methods used for coding the educational variables were improved. In the employment survey, the investigator coded directly the training whereas now he registers directly the heading of the diploma and the training level. Thereafter the automatic coding is carried out and the rejections are treated "manually". Information collected is more detailed that allow bringing the "national" variables closer to ISCED97 definition. These changes explain for some variables the breakdown between 2004 and previous data.

Hungary: From 2000 to 2003 data have been revised. Specification of ISCED 4 is used and data for 3A and 4 are separately provided. ISCED 5B concerns a new type of education that could be completed first since 2000.

Israel: Although pre-academic institutions in Israel are classified under ISCED4 in our national mapping of education, this level remains unaccounted for in this report, since the Labor Force Survey does not include a specific answer category for this level, and it is reported under "other" in the LFS questionnaire.

Japan: The Special Survey of the Labour Force Survey, which had been the source of the Questionnaire III, was abolished, and the Labour Force Survey is used as a source of the Questionnaire III from 2002 data.

The questionnaire of the Labour Force Survey asks the people about their education and select appropriate answer from the following.

- Primary school, junior high school or senior high school (ISCED 1/2/3)
- Junior college (ISCED 5B)
- College or university, including graduate school (ISCED 5A)

Therefore, the data are not distributed by ISCED 0/1/2 and 3.

The distribution between the 0/1/2 and 3/4 levels of education for 2003 and 2002 is based on 2001 one.

Luxembourg: The results apply to the population living in Luxembourg who has passed their education in Luxembourg as well as to them who has passed their education in another country than Luxembourg. This means the figures can not be used as a result for analyzing the national educational system.

Mexico: Revised data series.

Switzerland: In 2003, data were aligned to those data submissions sent to EUROSTAT for it's LFS database. This resulted in a classification change of programmes within ISCED 3C and it's subcategories 3CS and 3CL. At this time, in the EUROSTAT collection, 3CS programmes were defined as being less than 3 years long. Subsequently, EUROSTAT revised this definition and now programmes of less than 2 years in length are defined as 3CS.. This was inline with previous submissions sent to the OECD and those submitted for inclusion in EAG 2006 (year of reference 2004). The database has therefore been retrospectively updated and the data for 2003 revised. However, data presented in the print version of EAG 2004 is no longer correct.

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United Kingdom: Others qualifications which are currently assigned to ISCED3 are assigned as follows 10% to ISCED97 3A (V), 35% to ISCED97 3CL (V 3+), 55% to ISCED97 3CS (V <3 years).

■ Table A1.4

Methodology:

The distribution of tertiary attainment among countries shown in table A1.4 is derived by summing the numbers of persons with tertiary type 5A/6 qualifications across all OECD countries for which there are data and calculating the percentage share of this number that each country represents. The projection to 2014 of these shares, also shown in table A1.4, are obtained by rolling forward the data for each age cohort by ten years, so that a figure applying to the share of 25-to-34-year-olds with tertiary attainment in 2004 would become the figure for 35-to-44-year-olds in 2014. In 2014, the figures for all age groups are therefore the same as those for the preceding cohort ten years earlier. In this way, tertiary education attainment for 35-to-64-year-olds is projected for the year 2014.

■ Table A1.5

Methodology

The calculation of the average number of years in formal education is based upon the weighted theoretical duration of schooling to achieve a given level of education, according to the current duration of educational programmes as reported in the UOE data collection. Hence, it is more an estimate of the “replacement value” of the current supply of human capital than an estimate of the average duration of studies effectively attended by the population in the past.

INDICATOR A2: Current upper secondary graduation rates

■ Table A2.1. Upper secondary graduation rates

Methodology

In order to calculate gross graduation rates, countries identified the age at which graduation typically occurs. The graduates themselves, however, could be of any age. To estimate gross graduation rates, the number of graduates is divided by the population at the typical graduation age (Annex 1). In many countries, defining a typical age of graduation is difficult because ages of graduates vary. Typical ages of graduation are shown in Annex 1.

The *unduplicated count of all ISCED 3 graduates* gives the number of persons who graduate in the reference period from any ISCED 3 programme **for the first time**, *i.e.*, students who have not obtained an ISCED 3 (A, B or C) qualification in **previous** reference periods. For example, students

who graduated from ISCED 3A programmes in the period of reference but obtained a short ISCED 3C graduation in an earlier year should (correctly) be reported as ISCED 3A graduates, but must be excluded from the unduplicated count of graduates in column 2 of Table C2.2. Similar cases may occur in the reporting of vocational and general programmes.

Upper secondary graduation rates for general or for pre-vocational/ vocational programmes are based on all graduates, not first-time graduates.

■ Notes on specific countries

Australia: The growth in the number of foreign students in Australia is definitely a contributing factor in the rise in this indicator over the past few years.

Hungary: The increase of upper secondary graduation rates for ISCED 3 general programmes and the decrease of graduation rates for ISCED 3 pre-vocational/vocational programmes compared to 2003 are due to the change of the ISCED classification of the vocational secondary school programmes. Formerly, they were classified 3A pre-vocational programmes, but the proportion of vocational subjects has dropped below 25% in recent years. Therefore, these programmes have been reclassified as 3A general programmes in the revised UOE questionnaire. At the same time, in Grades 9 and 10 of the vocational school, the proportion of vocational (or rather pre-vocational) subjects was raised somewhat above 25% of the total instruction time. Therefore, this programme (formerly classified as 3C general) was reclassified as 3C pre-vocational.

Luxembourg: A significant proportion of the youth cohort study in neighbouring countries at the ISCED 3 level.

New Zealand: The large increase from the previous year results from a change in 'methodology'. The numerator in the calculation includes those who:

* Graduate from upper secondary school which is interpreted as 'leave secondary school having attained sixth form (year 12) certificate or better' (35895), or

* Successfully complete an ISCED3 programme post secondary school (38520).

The very high ISCED3 graduation reflects a large increase recently in participation in post-secondary courses, many of which are ISCED3 level. This participation has been spread over a wide range of ages and has been particularly noticeable amongst mature age females. When graduates from these programmes are added to those who leave school after having attained sixth form certificate or better, and compare these with the population of a single age cohort, graduation rates well in excess of 100% result, particularly for females.

In the 2003 collection, the school leavers from ISECD3G graduation calculations were not included, almost half the total.

Norway: The 'Total (unduplicated)' figure shows a rather steep increase from last year. The proportion of students graduating from ISCED 3, outside the scope of typical graduation age (18–19) is quite large and influences the denominator whereas the numerator is more stable. Females are more likely to graduate from this level of education than men, and since female tend to graduate more frequently than men in ISCED 3A in particular – column (4) and (5) (also (12) and (13)) will also increase.

Switzerland: The number of graduations in ISCED 4 has decreased from 14958 (in 2003) to 9868 (in 2004) and the number of graduations in ISCED 3 has increased respectively from 50137 to 59961. The

changes in the graduations from ISCED level 4 are due to changes in the educational system: programmes in ISCED 4 are ended and replaced by either programmes in ISCED 3 or 5B. The increase in ISCED 3 is partly due to the aforementioned change in educational systems, but partly also due to a change in methodology.

Spain: Break series in 2003 school year due to the revision of the national population data.

Turkey: Open education is excluded.

■ **Table A2.2. Post-secondary non-tertiary graduation rates**

Methodology

Please see notes of Table A2.1.

Hungary: The decrease in post-secondary graduation rates in 2004 compared to 2003 is due to the fact that 4A programmes (a general programme designed for students who have graduated with a 3C vocational qualification but wanted to pass a maturity examination) ceased to exist in 2003. Students can now enrol in secondary vocational programmes preparing for maturity examinations at Grade level 10 or 11, depending on their study achievements. Graduation rates in post-secondary non-tertiary education refer now only to students enrolled in 4C vocational programmes.

INDICATOR A3: Current tertiary graduation rates

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

Methodology

- **Calculation of the country mean for medium and long tertiary-type A programmes**

Countries which included the graduates of medium tertiary-type A programmes among the graduates of long programmes (*x*-code for short programmes) are counted as zero in the calculation of the country mean for medium programmes. In a similar manner, the countries using an *x*-code for long programmes, caused by inclusion of long programmes in the category for short programmes, are counted as zero in the country average for long programmes. This is necessary in order to ensure that the country averages for short programmes and long programmes add up to the correct country average for all first-stage university programmes.

- **Duration categories**

Tertiary-type A programmes can be sub-classified by the theoretical cumulative duration of programmes. For initial programmes at tertiary level, the cumulative theoretical duration is simply the theoretical full-time equivalent duration of those programmes from the beginning of Level 5. For

second programmes, cumulative duration is calculated by adding the minimum entrance requirements of the programme (*i.e.* full-time equivalent years of prerequisite tertiary education) to the full-time equivalent duration of the programme. For degrees or qualifications where the full-time equivalent duration is unknown (*i.e.* courses of study designed explicitly for flexible or part-time study), cumulative duration is calculated on the basis of the duration of more traditional degree or qualification programmes with a similar level of educational content. The following duration categories are included in ISCED-97:

- Short: 2 to less than 3 years.
- Medium: 3 to less than 5 years.
- Long: 5 to 6 years.
- Very long: more than 6 years.

As “short” programmes would not meet the minimum duration requirement for classification at ISCED 5A, this category is only appropriate for intermediate programmes in the national qualification and degree structure (see below). That is, programmes of less than three years’ duration must be a component or a stage of a longer programme in order to be classified at level 5A. Individuals who complete these short programmes would not be counted as 5A graduates, however.

Typical ages of graduation are shown in Annex 1.

■ Notes on specific countries

Belgium (Flemish community): The second degrees non-university education (ISCED 5A & ISCED 5B second qualification/degree) are not integrated in the data collection. These types of higher education only consider a very small percentage of the total population enrolled in tertiary education which leads to the conclusion that the exclusion of these degrees has only a small impact on this indicator.

Czech Republic: All Bachelor's programmes are now classified as ISCED5A instead of 5B (according to Czech law), hence the increase of ISCED 5A graduates.

Denmark: From the 2005 UOE data collection, some parts of Adult education (part time) have been included according to the revised tables and UOE manual. This explains the high increase in the tertiary-type B entry rates compared to last year and the changes in the distribution of fields of education.

Finland: Due to a structural change in tertiary educational system in Finland ISCED 5B programmes (vocational college) are being phased out. At the same time the volume of polytechnic education (ISCED 5A) has been increased, hence the increase of ISCED 5A graduates.

Hungary: The decrease in tertiary-type A graduation rate in 2004 compared to 2003 is due to the fact that double counts could be eliminated with improved methodology. Tertiary-type B programmes are

relatively new. There is also an increasing number of students who enrol in tertiary-type B programmes.

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

Norway: As the Bachelor–Master system has been introduced, some educational programmes have changed from ISCED 5B to ISCED 5A programmes. This cause a decrease in the number of graduates from ISCED 5B programmes and equally an increase of graduates in 5A programmes.

Spain: Break series in 2003 school year due to the revision of the national population data.

Sweden: There are few students and only five kinds of degrees defined as "second degree" in the Swedish tertiary-type A education system, four of which are dominated by female students.

■ Classification of tertiary programmes

Tertiary graduates are those who obtain a tertiary qualification in the specified *reference year* (graduation at the end of the academic year 2002-2003). 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 degree 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. Programmes included at the tertiary levels are listed below for each country.

Australia:

ISCED5A	
First	"Bachelor's" (Honours) (4 yrs); Bachelor of Dentistry (5 yrs); Bachelor of Veterinary Medicine and Surgery (5 yrs); Bachelor of Medicine and Surgery (7 yrs)
Second	Graduate Diplomas (1.5 yrs); Master's Degree (2 yrs); Doctorate (by course work) (2 yrs)
ISCED 5B	
First	Vocational Education and Training Institutions - Diplomas, Advanced Diplomas (2 yrs); Universities – Undergraduate Diplomas (2 yrs); Associate Degree (2 yrs)
Second	a
ISCED 6	Doctorates (3 yrs)

■ **Austria:**

ISCED 5A	
First	University “Bakkalaureat” (3 yrs); University “Fachhochschulstudium – Magister (FH)/ Diplomingenieur (FH)” (4 yrs); University “Magister/ Diplomingenieur/ Doktor (1 st)” (4-6 yrs)
Second	University “Magisterstudium – Magister/ Diplomingenieur” (2 yrs); Post-graduate studies “MBA, MAS” (2 yrs)
ISCED 5B	
First	Master craftsmen/ foremen courses “Meisterprüfung/ Werkmeisterprüfung” (2 yrs); Technical and vocational education colleges “Diplomprüfung” (2 yrs); Post-secondary colleges for teacher training / medical services/ social work “Lehramtsprüfung/ Diplom”(3 yrs)
Second	Post-secondary colleges for teacher training “Aufbaustudium – Lehramtsprüfung” (1 yr)
ISCED 6	Doctorate “Doktor”(2 yrs)

Belgium (Flemish community)

ISCED 5A	
First	2-cycle higher education provided by colleges of higher education : Hogescholenonderwijs van 2 cycli (4-5 yrs); Basic academic education, 2 cycles : Basisopleidingen aan de universiteiten (4-7 yrs); Basic academic education, Open University : Basisopleidingen, Open Universiteit; Basic academic education, Protestant Theological Faculty : Basisopleidingen aan de Universitaire Faculteit voor Protestantse Godsgeleerdheid (4 yrs); Royal Military Academy : Koninklijke Militaire School (4.5 yrs)
Second	Academic degree in the supplementary studies : Gediplomeerde in de aanvullende studies (1+ yrs); Academic degree in the specialist studies : Gediplomeerde in de gespecialiseerde studies (1+ yrs); Academic teacher training : Academische initiële lerarenopleiding (1 yrs); Advanced studies at the Institute for Tropical Science : Voortgezette opleidingen aan het Instituut voor Tropische Geneeskunde; Advanced studies after 2-cycle higher education provided by 'hogescholen' : Gediplomeerde in de voortgezette studie volgend op hogescholenonderwijs van 2 cycli (1+ yrs); Academic teacher training provided by 'hogescholen' : Initiële lerarenopleiding van academisch niveau (1 yrs); Doctoral training : Doctoraatsopleiding
ISCED 5B	
First	1-cycle higher education provided by colleges of higher education: Hogescholenonderwijs van 1 cyclus (3 yrs); Social advancement higher education: Hoger onderwijs voor sociale promotie
Second	Advanced studies after 1-cycle higher education provided by colleges of higher education : Gediplomeerde in de voortgezette studie volgend op hogescholenonderwijs van 1 cyclus (1+ yr); Specific teacher training : voortgezette lerarenopleiding (0.5-1 years)
ISCED 6	Doctorate, Universities: Doctoraat, universiteiten; Doctorate at the Institute for Tropical Science : Doctoraat aan het Instituut voor Tropische Geneeskunde; Doctoraat aan de Universitaire Faculteit voor Protestantse Godsgeleerdheid

■ **Belgium (French community):**

ISCED 5A	
First	Enseignement supérieur de promotion sociale de type long; Enseignement supérieur de type long (4-5 yrs); Enseignement universitaire (1er et 2e cycle) (4, 5, 6 or 7 yrs); Ecole Royale Militaire (4-5 yrs); Faculté de théologie protestante
Second	Agrégation de l'enseignement secondaire supérieur (2 yrs); Enseignement supérieur de type long : année complémentaire (1 yr); Enseignement universitaire : année complémentaire et 3e cycle (1+ yr)
ISCED 5B	
First	Enseignement supérieur de promotion sociale de type court; Enseignement supérieur de type court (3 yrs); Enseignement artistique supérieur (musique et arts plastiques) (3 yrs)
Second	Enseignement supérieur de type court complémentaire (1 yr)
ISCED 6	Doctorat et Agrégation de l'enseignement supérieur

■ **Canada:**

ISCED 5A	
First	Bachelor's degree (3-5 yrs); Post-graduate certificate programme (1 yr); Post-graduate certificate programme (2 yrs); First Professional degree (1-3 yrs); First Professional Degree (3-5 years)
Second	Academic certificate programme (1-2 yrs); University transfer (2 yrs); University Diploma Programme(2 yrs); University Certificate (1 yr) Master's (1-2 years); Master's (2-3 years)
ISCED 5B	
First	Vocational Diploma (1.5 yrs); College diploma programme (2-3 yrs); Occupational/technology programme(2 yrs); Vocational Diploma (2.25 yrs); College diploma programme (3-4 yrs)
Second	-
ISCED 6	Doctorate(5-7 yrs)

■ **The Czech Republic:**

ISCED 5A	
First	Bachelor University study “bakalář” (3 yrs & 3-4 yrs); Teacher training for primary education Master’s “Magistr” (4 yrs) University Master “magistr umění/ inženýr (architekt)” (5-6 yrs); University Master in (Veterinary) Medicine “doktor (veterinární) medicíny” (6 yrs)
Second	Post-graduate Pedagogical Certificate “osvědčení” (1 yr); Post-graduate Certificate “osvědčení”(2 yrs); University Master “magistr umění/ inženýr” (2-3 yrs)
ISCED 5B	
First	Higher Technical School for technicians, hotel managers, bank clerks, nurses “Vyšší odborná škola” (2-2.5 yrs and 3-3.5 yrs); Performing Arts and Dance Conservatoire Absolutorium (6 yrs & 8 yr)
Second	a
ISCED 6	University Doctoral Study “Doktor” (3 yrs)

■ **Denmark:**

ISCED 5A	
First	Tertiary education medium cycle “Diplomingeniør, maskin- mester, sygeplejerske, folke- skolelærer m.fl.” (3-5 yrs); Bachelor’s Degree (3 yrs); Tertiary education long cycle, museum conservator, e.g. from Music Academy “Konservator, konservatorieuddannelserne” (5-7yr)
Second	Tertiary education long cycle “Cand. Mag., cand. Scient., cand. Polyt., etc.” (2 yrs)
ISCED 5B	
First	Tertiary education short cycle, including technician qualification “Datamatiker/ byggetekniker/ Maskintekniker” (2-3 yrs)
Second	a
ISCED 6	Doctoral Programmes “Ph.D.” (3 yrs); Doctorate “Doktorgrad” (5-10yr)

■ Finland:

ISCED 5A	
First	Lower University Programmes (3 yrs); Polytechnic Programmes (3.5-4.5 yrs); "Polytechnic Postgraduate Programmes (1-1.5 yrs after graduation from Polytechnic Programme)"; Higher University Programmes (5-6 yrs)
Second	Specialists in Medicine/Dentistry/Veterinary Science (5-6 yrs)
ISCED 5B	
First	Vocational College Programmes (2-3 yrs)
Second	a
ISCED 6	
	Doctorate Programmes – "Licentiate" (2 yrs); "Doctor" (4 yrs)

■ France:

ISCED 5A	
First	First University Diploma (First cycle 2 years "DEUG" + Second cycle 1 year "Licence") (3 yrs); Higher engineering school diploma "Diplôme d'ingénieur" (3-4 yrs) and Higher business school diploma "Diplôme d'ingénieur commercial" (3 yrs) including ' les Classes Préparatoires aux Grandes écoles (CPGE)" (2 yrs); Specialised Higher Schools diverse professional diplomas including in architecture, veterinary surgery, art etc "Diplômes professionnels divers (notaire, architecte, vétérinaire, journaliste,...)" (3-4 yrs); University pharmacy diploma "Diplôme de pharmacien" (5 yrs); University Diploma in Medicine/ Dentistry "Docteur en médecine/ Diplôme de dentiste" (7 yrs)
Second	University education 2 nd cycle 2 year "Maîtrise" (1 yr); Teaching in university institute of training Master (IUFM) "CAPES, Professeur des écoles, etc" (2 yrs); Special diploma in Health "Diplôme d'études spécialisées" (3 yrs)
Third	University education 3 rd cycle "Diplôme d'études supérieures spécialisées (DESS) » (1 yr)
ISCED 5B	
First	Specific vocational training diploma "Diplôme universitaire de technologie (DUT) » (2 yrs); Specialised higher school short professional diploma <i>e.g.</i> in special education, laboratory technician, social worker "Diplômes professionnels divers (éducateur spécialisé, laborantin, assistante sociale, infirmier-infirmière, etc.) » (2-3 yrs); High-level technician award (school or school and work-based) "Brevet de technicien supérieur (BTS)" (2 yrs)
Second	
ISCED 6	
	University education 3 rd cycle 1st year "Diplôme d'études approfondies (DEA)" (1 yr); Doctorate Programmes "Diplôme de docteur" (3 yrs)

■ Germany:

ISCED 5A	
First	Bachelor's degrees (3 yrs) University "Fachhochschulen" degree "Diplom (FH)" (4 yrs); University „Universitäten" degree "Diplom oder Staatsprüfung" (5 yrs)
Second	Master's degrees (2 yrs, cumulative duration of 5 yrs)
ISCED 5B	
First	Specialised academies (Bavaria) "Abschluss der Fachakademie/ Fachhochschulreife" (2 yrs); Health sector schools for medical assistants/ nurses "Abschlusszeugnis für medizinische Assistenten, Krankenschwestern/ -pfleger" (3 yrs); Trade and technical schools "Fachschulabschluss, Meister/Techniker, Erzieher" (2 yrs & 3-4 yrs); Colleges of public administration diploma "Diplom (FH)" (3 yrs);
Second	a
ISCED 6	
	Doctoral studies "Promotion" (2-5 yrs)

■ Greece:

ISCED 5A	
First	<p>University (University Sector): Panepistimio;</p> <ol style="list-style-type: none"> University (Panepistimio) (8, 10 or 12 semesters) Technical University (Polytechnio) (10 semesters) School of Fine Arts (Scholi Kalon Technon) (10 semesters) Greek Open University (Elliniko Anoikto Panepistimio-E.A.P.) (12 subject units-4yrs)
Second	<p>University Sector: Post-graduate studies (Master);</p> <ol style="list-style-type: none"> University (Panepistimio) (1-2 calendar yrs) Technical University (Polytechnio) (1-2 calendar yrs) School of Fine Arts (Scholi Kalon Technon) (1-2 calendar yrs) Greek Open University (Elliniko Anoikto Panepistimio-E.A.P.) (3 yrs)
ISCED 5B	
First	<p>Technological Educational Institution (Technological Sector): Technologiko Ekpaideftiko Idryma (T.E.I.); (4 yrs of which 3.5 yrs school-based elements, plus 1 semester work-based elements)</p>
Second	<p>Technological Sector: Post-graduate studies (Master);</p> <ol style="list-style-type: none"> Technological Educational Institutions (offering programmes in cooperation with University Sector Institutions in Greece, subcategory a: Panepistimio) (1-2 calendar yrs) Technological Educational Institutions (offering programmes in cooperation with overseas University Sector Institutions) (1-2 calendar yrs) <p>Note: The data concerning these programmes are reported under ISCED 5A, second qualification.</p>
ISCED 6	
	<p>University Sector (Post-graduate studies): Doctorate programme (Didaktoriko diploma);</p> <ol style="list-style-type: none"> University (Panepistimio) (6 semesters) Technical University (Polytechnio) (6 semesters) School of Fine Arts (Scholi Kalon Technon) (6 semesters) Greek Open University (Elliniko Anoikto Panepistimio-E.A.P.) (6 semesters)
	<p>Post-graduate studies: Post-Doctorate programme (Metadidaktoriko diploma);</p> <ol style="list-style-type: none"> University Sector (Panepistimio) Research Institutions <p>Note: The Greek legislation does not designate information concerning Post-doc programmes such as theoretical duration of the programme under study. Also, Institutions offering Post-doc programmes are not classified into a specific category of Institutions and thus exhaustive list cannot be composed.</p>

■ Hungary:

ISCED 5A	
First	College first programmes (3-4 yrs); University first programmes (4-5 yrs) : university medicine programme–(6 yrs)
Second	University supplementary programmes for college graduates (2 yrs); postgraduate specialization programs (1-2 yrs)
ISCED 5B	
First	Tertiary vocational programmes (1 - 2 yrs)
Second	a
ISCED 6	
Doctoral programmes (Ph.D., DLA) (3 yrs)	

The information on length refers to theoretical duration of the programme.

■ Iceland:

ISCED 5A	
First	First University Degree “Háskólanám 3ja/ 4ra/ 5/ 6 ára til fyrstu gráðu” (3, 4, 5 or 6 yrs); Tertiary Technical Programmes - First University Degree “Háskólanám í tæknifræði til fyrstu gráðu” (3.5-4 yrs);
Second	Master’s degree after 3-4 yrs 1 st degree “Háskólanám, 1,5-2 viðbótarár ofan á 3-4 ár, tekin viðbótargráða” (1.5-2 yrs); Master’s degree after 5-6 yrs 1 st degree “Háskólanám, 2 viðbótarár ofan á 5-6 ár, tekin viðbótargráða” (2 yrs)
ISCED 5B	
First	Tertiary Diploma “Æðra nám í 2 ár án háskólagráðu” (2 or 3 yrs); Fine and Applied Arts at Tertiary Level “Listnám í æðri skóla, 3ja/ 4ra ára” (3 or 4 yrs); Teacher’s Qualification (No degree) “Nám til kennsluréttinda án háskólagráðu” (1 yr)
Second	a
ISCED 6	
Doctoral Programme (Ph.D.) “Doktorsnám” (4 yrs)	

■ **Ireland:**

ISCED 5A	
First	Honours Bachelors Degree (3-4 yrs); Honours Bachelors Degree in (Veterinary) Medicine/ Dental Science/ Architecture (5-6 yrs)
Second	Post-graduate Diploma (1 yr); Masters Degree (taught) (1 yr); Masters Degree (by research) (2 yrs)
ISCED 5B	
First	Higher Certificate (2 yrs); Ordinary Bachelor Degree (3 yrs)
Second	Ordinary Bachelor Degree (3 yrs)
ISCED 6	Doctoral Degree (Ph.D.) (3 yrs)

■ **Israel:**

ISCED 5A	
First	Bachelor's Degree from universities (3 yrs); Bachelor's Degree from the Open University (6 yrs); Teacher training colleges – academic track (2-4 yrs)
Second	University's Second Degree (2 yrs); University's Post-Graduate Diploma (2 yrs); Second Degree from academic colleges (2 yrs); Second Degree from the Open University
ISCED 5B	
First	Post-secondary education (2 yrs); Teacher training colleges – non-academic track (2 yrs)
Second	a
ISCED 6	Third Degree (5-6 yrs)

■ Italy:

ISCED 5A	
First	University Degree "Diploma di Laurea" (4-6 yrs); University Degree "Diploma Universitario" (3 yrs); Diploma di laurea di 1° livello (3 yrs); Diploma di laurea specialistica a ciclo unico (5-6 yrs)
Second	Professional Post-graduate Diploma "Diploma di specializzazione" (2-5 yrs); Post-graduate Certificate "Attestato di partecipazione al Corso di perfezionamento" (1 yr); Master of first and second level "master di 1°/2° livello"; Specialisation course "Specializzazione post-laurea"
ISCED 5B	
First	Diploma from Fine-arts Academy "Diploma di Accademia di Belle Arti" (4 yrs); Dramatic Art Studies Diploma "Accademia di arte drammatica – Diploma di attore o diploma di regista" (3 yrs); Higher Artistic Studies Diploma "Diploma di Istituto Superiore Industrie Artistiche" (4 yrs); Music Conservatory Diploma "Conservatorio musicale (specializzazione di 2 anni)" (2 yrs); Dance Studies Diploma "Accademia di Danza – Diploma di avviamento e/o perfezionamento" (3 yrs)
Second	a
ISCED 6	Doctorate "Titolo di Dottore di ricerca" (3 yrs)

■ Japan:

ISCED 5A	
First	Bachelor's Degree "Gakushi"(4 yrs); Bachelor's Degree in Medicine/Dentistry/Veterinary Medicine "Gakushi" (6 yrs);
Second	Master's Degree "Shushi" (2 yrs); University Advanced Course Certificate of Completion "Daigaku Senkoka" (1 yr+)
ISCED 5B	
First	Specialised Training College Postsecondary Course Technical Associate Qualification "Senmonshi" (1 yr+); Junior College Associate Qualification "Jun-gakushi" (2-3 yrs); College of Technology Associate Qualification "Jun-gakushi" (2 yrs)
Second	Junior College Advanced Qualification "Tanki-daigaku Senkoka" (1+yr); College of Technology Advanced Qualification "Koto-senmon-gakko Senkoka" (1 yr+)
ISCED 6	Doctor's Degree "Hakushi" (5 yrs); Doctor's Degree in Medicine/Dentistry/Veterinary Medicine "Hakushi" (4 yrs)

■ **Korea:**

ISCED 5A	
First	Bangsongtongsin daehak [air and correspondence university (open university)] (2-4 yrs); Daehak(gyo) (university) (4 yrs); Hankuk kwahak kisulwon (Korea advanced institute of science and technology) (4 yrs); Hankuk yeosuljonghap hakgyo (yeosulsa kwajong) (the Korean National University of Arts) (4 yrs); Woikwa deahak,chikwa daehak (university, medical-dentistry) (6 yrs)
Second	Hankuk jeongsin munwha yeonku won (seoksa kwajong) (the Academy of Korean Studies, MA course) (2-3 yrs); Ilbandaehakwon(seoksa kwajong) (graduate school, Master's degree programme, short) (2 yrs); Hankuk kwahak kisulwon (seoksa kwajong) (Korea Advanced Institute of Science and Technology, MA course) (2 yrs); Daehakwon daehak (seoksa kwajong) (university of graduate school) (2 yrs); Hankuk yeosuljonghap hakgyo (jeonmun yeosulsa kwajong) (the Korean National University of Arts, MA course) (2 yrs)
ISCED 5B	
First	Yukkun samsakwan hakgyo (third military academy) (2 yrs); Kakjong-hakgyo (daehak kwajong) (miscellaneous school, undergraduate course) (4 yrs); Sanup daehak (gaebang daehak) (open university, polytechnic university) (4 yrs); Yukkun sakwan hakgyo (military academy) (4 yrs); Geongchal daehak (national college of police) (4 yrs); Gyoyuk daehak (university of education) (4 yrs); Kukkunganho sakwan hakgyo (nursing academy) (4 yrs); Haekun sakwan hakgyo (naval academy) (4 yrs); Kongkun sakwan hakgyo (air force academy) (4 yrs) Jeonmun daehak (junior college) (2-3 yrs); Kinung daehak (polytechnic college) (2 yrs); Kakjong-hakgyo (jeonmun daehak kwajong) (miscellaneous school, junior college course) (2 yrs); Kisul daehak (technical college) (2-4 yrs)
Second	Kukbang daehakwon (school of national securities) (2 yrs); Teuksu daehakwon (graduate school, special) (2-3 yrs); Jeonmun daehakwon (graduate school, professional) (2.5 yrs)
ISCED 6	
	Hankuk kwahak kisulwon(baksa kwajong) (Korea Advanced Institute of Science and Technology) (3 yrs); Hankuk jeongsin munwha yeonku won (baksa kwajong) (Academy of Korean Studies, Ph.D.) (3 yrs); Ilban daehakwon (baksa kwajong) (graduate school, Doctorate programme) (3 yrs); Daehakwon daehak(baksa kwajong) (university of graduate school) (3 yrs)

■ **Luxembourg:**

ISCED 5A	
First	University courses: Cours universitaires 1er cycle :DPCU (2 yrs); Stage pédagogique ; formation obligatoire pour l'accès à une profession de professeur pour l'enseignement secondaire (2 yrs); Stage pédagogique : formation obligatoire pour l'accès à une profession d'avocat avoué (2 yrs)
Second	-
ISCED 5B	
First	Higher technician certificate: Brevet de technicien supérieur (bts) (2 yrs); Short-term course in higher studies of administration or studies of informatics: Cycle court d'études supérieures en gestion ou en informatique (2 yrs)
Second	Training of industrial engineers: Formation à l'ingénieur-industriel (4 yrs); Initial training of primary and pre-primary teachers: Formation des instituteurs (3 yrs); Training of graduated educators, full-time: Formation d'éducateurs gradués (plein temps) (3 yrs); Training of graduated educators, while working: Formation d'éducateurs gradués (en cours d'emploi) (6 yrs)
ISCED 6	Etudes supérieures spécialisées en contentieux communautaires

■ **Mexico:**

ISCED 5A	
First	Educación normal licenciatura [teacher training school programmes (Bachelor's degree programme)] (4 yrs); Licenciatura universitaria [university degree programmes (Bachelor's degree programme)] (4-5 yrs); Licenciatura tecnológica [technological institutes programmes (Bachelor's degree programme)] (4-5 yrs)
Second	Programa de especialización [specialisation degree programme (Master's degree programme) (short)] (0.5-1 yrs); Programa de maestría [Master's degree programme (long)] (2 yrs)
ISCED 5B	
First	Técnico superior [technological universities programmes (vocational associate's degree programmes)] (2 yrs)
Second	-
ISCED 6	Programa de doctorado [Doctoral programme – Doctorate (Ph.D. Research)] (3 yrs)

■ **The Netherlands:**

ISCED 5A	
First and second	higher professional education (long programmes) and university education, fulltime programmes; (Lang) HBO en WO, voltijd (4-6 yrs); higher professional education (long programmes) and university education, parttime programmes, excl. the Open University; (Lang) HBO en WO, deeltijd, excl. the Open University; Open University qualification programmes; Open University, diploma programma's; Education programmes on private institutions on tertiary 5A level; Particulier onderwijs op hbo/wo-niveau
ISCED 5B	
First	Higher professional education, short programmes, fulltime; Kort HBO, voltijd (2 yrs); Higher professional education, short programmes, parttime; Kort HBO, deeltijd; Vocational education on private institutions on tertiary 5B level; Particulier onderwijs op kort-hbo-niveau
Second	-
ISCED 6	research assistants; AIO's (4 yrs)

■ **New Zealand:**

ISCED 5A	
First	Bachelor's Degree "Bachelor, National Diploma (Level 7)" (3 yrs)
Second	Post-graduate qualification "Master's Degree/ Post-graduate Certificate/ Post-graduate Diploma/ Bachelor's Honours" (1-2 yrs)
ISCED 5B	
First	Vocational Diploma "National Diplomas (Levels 5 or 6)" (3 yrs)
Second	a
ISCED 6	Doctorate/ Higher Doctorate (3-5 yrs)

■ **Norway:**

ISCED 5A	
First	First/lower degree (lavere grad), bachelor's degree, short professional education, (3-4 yrs),
Second	Second/higher degree (høyere grad: hovedfag/mag.art (2-3 yrs), master's degree (2 yrs), Long, professional programmes (lange profesjonsutdanninger), integrated master's degrees (integreerte mastergrader): (5 yrs); Very long professional programmes (6 yrs)
ISCED 5B	
First	Tertiary education, < 3 years, 1st degree: Høyere utd., < 3 år, lavere grad (2-2,5 yrs)
Second	-
ISCED 6	Doctorate, ph.d.: Doktorgrad (3 yrs)/ unspecified

■ **Poland:**

ISCED 5A	
First	Professional degree (Licentiate) "Licencjat" (3 yrs); Professional Degree (Engineer) "Inzynier" (3.5-4 yrs); Master's Degree (Art/ Education/ Engineering/ Veterinary Medicine, etc) "Magister" (5-5.5 yrs); Degree in Medicine or Dental Science "Lekarz (Stomatolog)" (6 yrs)
Second	Post-licentiate Master's Degree "Magister" (1.5-2 yrs); Post-graduate Certificate "Studia Podyplomowe" (0.5-2 yrs)
ISCED 5B	
First	Teacher Training Diploma for pre-school, primary and other educational institutions "Kolegium nauczycielskie" (3 yrs); Foreign Language Teacher Training Diploma/ Qualification to teach foreign European languages "Nauczycielskie kolegium języków obcych" (3 yrs)
Second	a
ISCED 6	Scientific Doctorate "Studia Doktoranckie"(4 yrs)

■ Portugal:

ISCED 5A	
First	<p><i>Licenciatura</i> programmes (4 or 5 yrs, 6 yrs in special cases) provided by universities and polytechnics, leading to the <i>licenciado</i> degree</p> <p>The <i>licenciatura</i> programmes provided by polytechnic education in most fields are two cycles/programmes called <i>cursos bietápicos de licenciatura</i>: the first cycle (3 yrs) leads to the <i>bacharel</i> degree (5B first), and the second cycle (1-2 yrs) leads to the <i>licenciado</i> degree (5A first).</p> <p>Universities and polytechnics also offer to <i>bacharéis</i> (5B first), in the fields of teacher training and nursing, 1-2 year programmes leading to the <i>licenciado</i> degree, called <i>cursos complementares de licenciatura</i></p>
Second	<p><i>Especialização de pós-licenciatura</i> (also identified frequently as <i>Pós-Graduação</i>) (1-2 yrs) – Specialised studies taken after <i>licenciatura</i>, leading to a certificate.</p>
ISCED 5B	
First	<p><i>Bacharelato</i> (3 yrs) programmes provided by universities (rarely) and polytechnics, leading to the <i>bacharel</i> degree</p>
Second	–
ISCED 6	<p><i>Mestrado</i> programmes (2 yrs after <i>licenciatura</i>) provided by university education, leading to the <i>mestre</i> degree.</p> <p><i>Doutoramento</i> programmes (variable, usually 3 yrs, sometimes 4 or 5 yrs after <i>mestrado</i> or, in certain conditions, after <i>licenciatura</i>), provided by universities, leading to the <i>doutor</i> degree</p>

■ **The Slovak Republic:**

ISCED 5A	
First	"Bachelor's" Degree 3-4 yrs; "Master's" Degree (4 yrs); "Master's" Degree in Engineering (5-5.5 yrs); Degree in Engineering/Architecture/Medicine/Veterinary Medicine (6 yrs)
Second	Supplementary Educational Study - "Certificate" (2 yrs); Teaching an Additional Subject - "Diploma" (2-4 yrs)
ISCED 5B	
First	Post-secondary Specialisation Study - "Graduate's Diploma" (2-3 yrs); Higher Professional Studies - "Graduate's Diploma" (3 yrs); Dance Conservatory - "Graduate's Diploma" and "Certificate on Maturita Examination" (8 yrs); Conservatory and Secondary Schools Specialising in Arts - "Graduate's Diploma" and "Certificate on Maturita Examination" (6 yrs)
Second	
ISCED 6	Examina Rigorosa - "Academic Degree (JUDr., PaedDr., RNDr., PhDr., etc)" usually (1 yr); Doctorate Study (Ph.D., ArtD.) (3 yrs)

■ Spain:

ISCED 5A	
First	Bachelor's Degree "Diplomado Universitario, Arquitecto Técnico e Ingeniero Técnico" (3 yrs); Conservation and Restoration of Cultural Assets "Conservación y Restauración de Bienes Culturales" (3 yrs); Military Programme - Medium Grade "Militar de carrera de la escala media (Diplomado Universitario)" (3 yrs); University Degree - First and Second Cycle "Licenciado, Arquitecto e Ingeniero" (4-6 yrs); Higher Dramatic Art Studies Degree "Título Superior de Arte Dramático" (4 yrs); Music Studies Advanced Degree "Titulación Superior por especialidad musical" (4 yrs); Military Programme - Medium Grade "Militar de carrera de la escala media (Diplomado Universitario)" (3 yrs); Military Programme - Higher Grade "Militar de carrera de la escala superior (Licenciado universitario)" (5 yrs)
Second	Master's Degree "Licenciado e Ingeniero" (2 yrs)
ISCED 5B	
First	Specific Vocational Training of Plastic Arts and Design - Advanced Level Qualification "Técnico Superior - Ciclos Formativos de Artes Plásticas y Diseño de Grado Superior" (2 yrs); Specific Vocational Training - Advanced Level Qualification "Técnico Superior - Ciclos Formativos de Formación Profesional de Grado Superior" (2 yrs); Specific Vocational Training - Advanced Level (Distance Learning) "Técnico Superior - Ciclos Formativos de Formación Profesional de Grado Superior (Distancia)" (2 yrs); Military Programme Basic Grade "Militar de carrera de la escala básica" (2 yrs);
Second	a
ISCED 6	Doctorate "Doctor" (4-6 yrs)

■ Sweden:

ISCED 5A	
First	Diploma (3-4 yrs); Bachelor's Degree (3 yrs); Master's Degree (4-4.5 yrs); Master's Degree in Pharmacy/ Horticulture/ Forestry/ Landscape Architecture/ Psychology (5 yrs); University Degree in Medicine / Dental Surgery/Veterinary Medicine (5-5.5 yrs)
Second	Nursing Specialisation Qualification (1-1.25 yrs); Midwifery/ Psychotherapy/ Special Education (1.5 yrs)
ISCED 5B	
First	Diploma (2 yrs); Degree Certificate in Advanced Vocational Education (2-3 yrs)
Second	
ISCED 6	"Licentiate" (2 yrs); "Doctorate" (4 yrs)

■ **Switzerland:**

ISCED 5A	
First	Pedagogical University Certificate « Pädagogische Hochschule/ Haute École Pédagogique » (3 yrs); University of Applied Science Diploma “Fachhochschul diplom/ diplôme” (3 yrs); University Diploma and Bachelor's Degree “Hochschulen - Lizentiat, Diplom, Staatsexamen” (4 yrs)
Second	Postgraduate Degree “Fachhochschul Nachdiplom” (1 yr); University Postgraduate Diploma “Nachdiplom/ Diplôme du troisième cycle/ Postgrade” (1 yr)
ISCED 5B	
First	Diploma of Higher Vocational Education - Stage I "Berufsprüfung/ Examen professionnel" (1-2 yrs); Diploma of Technical School "Höhere Fach- und Berufsschule/ École technique" (2 yrs); Teacher's Certificate - Teacher Training II "Primarlehrerpatent/ Fachlehrerpatent" (3 yrs); Polytechnic School Diploma from a Higher Vocational College “Höhere Fachschule/ École Professionnelle Supérieure/ Scuola Professionale Superiore” (3 yrs)
Second	Trade Master's Diploma or equivalent in Higher Vocational Education - Stage II “Höhere Fachprüfung/ Examen Professionnel Supérieur” (1-2 yrs)
ISCED 6	University Doctorate “Doktorat/ Ph.D.” (2 yrs)

■ **Turkey:**

ISCED 5A	
First	University : Üniversite (4 yrs); Integrated higher school for hearing impaired : İşitme Engelliler Entegre Yüksek Okulu; Open training Faculty : Açık Öğretim Fakültesi (4 yrs); Conservatory: : Konservatuar (4 yrs); Medical science, veterinary, dentistry : Eczacılık Veterinerlik ve Tıp Fakültesi (5-6 yrs)
Second	Enstitüler: Mastır (2 yrs); Specialisation in medical science : Tıpta Uzmanlık (4 yrs)
ISCED 5B	
First	Vocational higher Schools : Meslek Yüksek Okulu (2 yrs); Open training Faculty : Açık Öğretim Fakültesi (2 yrs); Integrated higher school for hearing impaired : İşitme Engelliler Entegre Yüksek Okulu (2 yrs)
Second	
ISCED 6	Enstitüler: Doktora (4 yrs)

■ **The United Kingdom:**

ISCED 5A	
First	Bachelor's Degree "BA, BSc, etc" (3-4 yrs); Bachelor of Education "BEd" (4 yrs); Bachelor of Medicine "MB" (5 yrs+)
Second	Master's Degree taught "MA, MSc, MBA, etc" (1 yr); "Postgraduate Diploma/Certificate "PG Dip/PG Cert" (9m); Teaching Qualification - Postgraduate Certificate in Education "PGCE" (1 yr); Master's Degree by Research "Mphil, etc" (2 yrs+)
ISCED 5B	
First	Higher National Certificate "HNC" (1 yr); Diploma of Higher Education "DipHE" (2 yrs); Higher National Diploma "HND" (2 yrs)
Second	a
ISCED 6	Doctor of Philosophy "Ph.D." (3 yrs+)

■ **The United States:**

ISCED 5A	
First	Bachelor's Degree Programme (4 yrs)
Second	Master's degree programme (short) (1-2 yrs); Master's degree programme (long) (2-3 yrs); First Professional Degree Programme (3 yrs); 1st Professional Degree Programme – Medical (4 yrs)
ISCED 5B	
First	Vocational Associate's Degree Programme (2 yrs)
Second	a
ISCED 6	Doctorate (Ph.D. – Research) (5 yrs)

Note: Academic associate's degree programmes (2 yrs) are not included as for international comparisons these degrees are regarded as "intermediate degrees". Post-graduate certificate programmes (e.g. teaching) (1 yr) are not included.

■ **Table A3.2. Survival rates in tertiary education (2004)**

■ **Notes on specific countries**

Belgium (Flemish community): The figures for social advancement education were left out, as well as the students in the Royal Military School, the Open University, the Protestant Theological Faculty, ... Due to these differences in coverage these data can not be compared with the other tables of the UOE data collection (for example ENRL, GRAD and ENTR).

Data refer only to the main enrolments in basic courses and initial teacher training courses ('hogescholen') and to the main enrolments in basic courses (universities)

Since individual records for the students in the Flemish Community are not available, we took into account the theoretical duration of the qualifications.

Entrants = students who are for the first time enrolled in higher education in the Flemish Community.

France: The survival rates presented in *Education at a Glance 2006* do not reflect overall successful completion rates in tertiary education or student re-orientation between ISCED levels 5A and 5B.

The cohort monitoring carried out in France takes into account both the entry programme and the graduation programme of students, therefore providing a precise estimate of students' successful completion in tertiary education. In the currently available calculation, the actual curriculum of graduates is not specified. In particular, as the graduates' entry programme is unknown, classification is based exclusively on their graduation programme, which might create a significant bias.

Consequently, as indicated by the table below (based on the French data collected from the panel sample), 79% of students entering ISCED 5A programmes will obtain a tertiary education degree, whereas 21% of them will merely complete the programme without graduating. The graduation rates for students entering tertiary-type B programmes are equivalent to a share of 79 % of students that will graduate. The data gathered from the panel sample also highlight the usual trend towards student re-orientation between tertiary-type A and tertiary-type B levels, with a 14.5% share starting tertiary-type A programmes and then graduating from tertiary-type B programmes.

	Entry	ISCED 5A Graduates	ISCED 5B Graduates	Total Graduates
Entry				
ISCED 5A	100.0	64.3	14.5	78.8
ISCED 5B	100.0	1.6	77.5	79.2
Total	100.0	38.5	40.5	79.0

Source: Panel sample.

Greece: As for ISCED 5A programme enrolments, the student status is lost only at the event of graduation and award of the respective diploma. Alternatively, by own assertion of the student (negligible). As a result, a significant number of non active students accumulate on the range of 8+ years of study and artificially increase the duration of tertiary studies. A new law is currently under study, which might reduce the duration of study at a predefined number of years.

As for ISCED 5B programme enrolments, the student status is lost either at the event of graduation and award of the respective diploma, or past 2 consecutive/3 random semesters without renewal of enrolment. Alternatively, by own assertion of the student (negligible).

Iceland: With changes that have taken place in the tertiary education system in Iceland, many students and programmes have been transferred from ISCED 5B to 5A.

The number of tertiary students has also increased considerably, so the cross section cohort method proposed to survey university survival rates in the UOE 2005 data collection is not the best method to use. Instead the true cohort method with data from the Statistics Iceland Student Register and Register of Examination has been used.

A rate of 69% has been calculated for tertiary education as a whole. Each graduate is counted once even if he graduates both from 5A and 5B. It is not possible to give a separate survival rate for ISCED 6 because in 1994 there was only one student at ISCED 6 in Iceland.

Table 1: University survival rate in Iceland using the true cohort method

	Entrants in 1994	All graduations 1995-2004			Not graduated
		5A	5B	Total	
5A	1610	1062	20	1082	528
<i>% of total</i>	<i>100</i>	<i>66.0</i>	<i>1.2</i>	<i>67.2</i>	<i>32.8</i>
5B	546	68	345	413	133
<i>% of total</i>	<i>100</i>	<i>12.5</i>	<i>63.2</i>	<i>75.6</i>	<i>24.4</i>
All ISCED 5	1959			1351	608
<i>% of total</i>	<i>100</i>			<i>69.0</i>	<i>31.0</i>

Source : Statistics Iceland.

The total for ISCED 5 for entrants, graduates and not graduated is not the sum of ISCED 5A and 5B. Some new entrants into tertiary-type A had previously entered into tertiary-type B programmes and are therefore not new entrants into tertiary education. Some new entrants into tertiary-type B had previously entered into tertiary-type A programmes and are therefore not new entrants into tertiary education.

Some graduates have graduated from both tertiary-type A and B programmes but they are only counted once in the graduate data. Graduates for 5A and 5B in for ISCED 5 could not be filled in, otherwise there would have been double- counting of graduates.

Italy: The table takes into account the number of graduates divided by the number of new entrants in the typical year of entrance by the duration of the programme. With regard to ISCED 5 level, due to the instability and to the recent reform of the Italian tertiary system the typical year of entrance by the duration of the programme is very difficult to assess. For example, in the last years a lot of students entered in programmes with duration 5 and graduated in programmes with duration 3. Hence, this indicator can not be calculated for Italy.

Switzerland: The calculation of the OECD survival rate depends on a relative stable student population. This means that the entrant cohort and the graduate cohort are composed by the same population. "The methodology is therefore sensitive to the validity of data. In a system which is expanding or diminishing heavily and where the students do not follow the typical pathways and durations and where there are many changes between the programme categories from entrance to graduation the results may be less reliable" (Doc. ESTAT/F4/2006-ETS-06-EN).

In 1998 the transformation of selected Higher Vocational Schools and Colleges, especially Colleges of Engineering and Colleges of Economics and Administration (formerly ISCED 5B) into Universities of Applied Sciences (newly ISCED 5A) took place. Due to this reform process, entrance and graduate population changed in Switzerland from 1998 to 2003.

Nevertheless, national survival and drop out rates in the higher education system for ISCED 5A (3 to 5 years) and ISCED 5A (5 to 6 years) can be calculated from a longitudinal analysis of an individual student cohort (with a personal identification number for each student). The calculation is carried out according to the national classification of the different

types of higher educational institutions. It does not exist data for ISCED 6 and ISCED 5B actually.

ISCED 5A					
First degree					1st and 2nd degree
	Total	3 to less than 5 years*	5 to 6 years**	More than 6 years	First-time 5A, (unduplicated)
Survival rates	m	72%	68%	m	m
Drop out	m	24%	28%	m	m
Remaining in the system	m	4%	4%	m	m

* Student cohort 1999: only students in universities of applied science and most pedagogical universities;

** Student cohort 1994: only students in universities and colleges of advanced technology.

The criterion is the successful completion of the study programmes by obtaining a first degree.

Survived: students of the entrance cohort which have successfully obtained a first degree in higher education after 5 or 10 year respectively.

Drop out: students which are not longer enrolled in the specific type of higher education without obtaining a degree after 5 or 10 years respectively.

Remaining in the system: students of the entrance cohort, which are after 5 or 10 years respectively, still enrolled in the study programmes and haven't so far completed their studies. In this group, it is still possible that the students are obtaining a degree, but it might be also possible that some student will drop out without the successful completion.

Data and calculation methods:

The entrance cohort is composed of students who enrolled for the first time at a specific type of higher education at the ISCED 5A level, independently whether they had been already enrolled in another type of higher education institution:

- For the universities of applied science and most pedagogical universities (ISCED 5A programmes with 3 to 5 years duration), the survival rate is calculated five years after the student entrance (most recent entrance cohort 1999);
- For the universities and colleges of advanced technology (ISCED 5A programmes with 5 to 6 years), the rate is calculated 10 years after the entrance (most recent entrance cohort 1994).

The criteria for the 5 and 10 year period respectively is the proportion of students which still remaining in the system after a certain time period. This proportion has to be less than 5% of the entrance cohort. For the ISCED 5A 3 to 5 year programmes this is the case after 5 years and for the ISCED 5A 5 to 6 year programmes this is the case after 10 years.

The definition and the different cohorts do not allow the calculation of a total of the two programmes types («3 to less than 5 years» and «5 to 6 years»). Foreign students with prior education outside Switzerland are excluded from the student cohort according to data restrictions.

ISCED 5A (3 to 5 years) Entrance cohort 1999		Cohort	Graduates of the cohort (survival rate)	Drop outs of the cohort	Students remaining in the system of the cohort	Total
Total	percent		71.76	24.14	4.11	100
	number	6401	4593	1545	263	6401
ISCED 5A (5 to 6 years) Entrance cohort 1994						
Total	percent		67.9	27.81	4.3	100
	number	11440	7767	3181	492	11440

Tables A3.3. Tertiary graduates by field of education, and A3.4. Percentage of tertiary qualifications awarded to females

Please see notes of table A3.1.

Classification

Tertiary graduates who receive their qualification in the reference year are classified by fields of education based on their subject of specialisation. These figures cover graduates from all tertiary degrees reported in Table A3.1. The 25 fields of education used in the UOE data collection instruments follow the revised ISCED classification by field of education. The same classification by field of education is used for all levels of education. For definitions and instructions refer to the ISCED Classification (UNESCO, 1997). The classification is in accordance with the fields of training defined in the *Fields of Training – Manual* (EUROSTAT, 1999).

■ Notes on specific countries:

Hungary: This table is based on graduations rather than graduates. In Education, students often graduate in two subjects, which means that the double counting causes the increase. Before, these students were weighted 0.5 in each subject. Increase in the field of Health and Welfare is due to a tertiary-type 5B programme which attracts primarily women.

Sweden: There are few students and only five kinds of degrees defined as "second degree" in the Swedish tertiary-type A education system, four of which are dominated by female students.

■ **Table A3.5. Sciences graduates, by gender**

Please see notes of tables A3.1, A3.3 and A3.4.

The labour force data used are taken from the OECD Labour Force database, compiled from National Labour Force Surveys and European Labour Force Surveys.

INDICATORS A4-A7: PISA and TIMSS

For any needed information, please refer to the website from PISA (www.pisa.oecd.org) and TIMSS (www.timss.org).

INDICATOR A8: Labour force participation by level of educational attainment

■ **Table A8.1a, A8.1b (web), A8.2a, A8.2b (web), A.8.3a, A8.3.b (web), A8.3.c (web), A8.4a A8.4.b (web), A8.4.c (web).**

Methodology

Data on population and educational attainment are taken from OECD and EUROSTAT databases, which are compiled from National Labour Force Surveys.

For sources and classification programmes, please see notes of table A1.1a.

Definitions

The labour force participation rate for a particular age group is equal to the percentage of individuals in the population of the same age group who are either employed or unemployed, as defined according to the guidelines of the International Labour Office (ILO). The employment rates used for this indicator are calculated in the same way but for the employed only.

The unemployed are defined as individuals who are without work, actively seeking employment and currently available to start work. The employed are defined as those who during the survey reference week: i) work for pay (employees) or profit (self-employed and unpaid family workers) for at least one hour, or ii) have a job but are temporarily not at work (through injury, illness, holiday, strike or lock-out, educational or training leave, maternity or parental leave, etc.) and have a formal attachment to their job.

■ **Table A.8.3a, A8.3.b (web), A8.3.c (web)**

■ **General notes**

Historical data on educational attainment are only available for the three major levels of education:

Less than upper secondary education -- 0/1/2 (ISCED97 equivalent levels)

Upper secondary and Post-secondary education -- 3/4 (ISCED97 equivalent levels)

Tertiary non-university and university -- 5/6 (5A/5B/6 ISCED97 equivalent levels)

Before 1997, educational attainment levels were coded according to international mapping ISCED 76. The ISCED 76 levels have been allocated to ISCED97 levels.

Sources

National Labour Force Surveys except for Belgium (1997-1999), Denmark (1998-2001); Luxembourg (1998-2001) and the Netherlands (1998-1999) for which data come from European Labour Force Survey.

■ **Notes on specific countries:**

Austria: Break in time series between 2003 and 2004 due to changes in methodology.

Czech Republic: from 1994 to 1996, distributions are adjusted considering the 1997 distribution.

Denmark: There is a break in the time series between 1994 and 1995. There has been a revision of the Danish ISCED97 implementation. The revision is due to reforms of the education system. As a result of these reforms most medium-cycle higher education programmes (with a duration of at least 3 years) have been moved from ISCED 5B to ISCED 5A. Furthermore, the majority of short-cycle higher education programmes are now classified as ISCED 5B. The ISCED mapping has been revised.

Ireland: Data provided for the period 1999-2002 are revised figures.

Portugal: From 1991 to 1996, the distribution of the “unknown” category has been adjusted on the basis of the known distribution.

Sweden: There is a break in the time series between 2000 and 2001. This is a result of new data sources and improved information about immigrants.

Switzerland: Please refer to the note in A1 regarding changes in methodology relating to the 2003 data submission. New mapping was introduced in 2001.

Deleted: in

United States: For 1991, the distribution is adjusted on the basis of the 1992 distribution.

INDICATOR A9: The returns to education: Education and earnings■ **Tables A9.1a, A9.1b, A9.2a (web), A9.2b (web), A9.2c (web), A9.3 (web), A9.4a, A9.4b, A9.4c***Methods and definitions*

The total (M+F) average is NOT the simple average of the Male and Female figures, but rather the average based on earnings of the total population. This overall average weights the average figure separately calculated for men and for women by the share of men and women at different levels of attainments ((and therefore of earnings).

■ **Notes on specific countries**

Earnings data for the Czech Republic, Hungary, Luxembourg and Poland exclude part time work. Moreover earnings data for Hungary, Luxembourg and Poland exclude part year or seasonal employment.

Earnings are considered before income tax except for Belgium and Korea where data are after income tax.

The length of the reference period is one week for Australia, New Zealand and United Kingdom; one month for Belgium, France, Hungary, Ireland, Germany, and Portugal; the calendar year for Canada, Czech Republic, Denmark, Finland, Italy, Luxembourg, Netherlands, Norway, Spain and Sweden; and other 12-month period for Korea, Switzerland and United States.

Original earnings data are expressed in national currencies.

United Kingdom: Previously the earnings for women over the pension age (60+) were derived from women aged 55 to 59, however earnings are collected for women over 60 who are in employment so these figures have been input here. Moreover, previously the category “unknowns” were apportioned to education levels and this change in the methodology caused a significant change over a two year period comparison for table A9.1.

Sources

Australia	: Survey of Education and Training.
Belgium	: Labour Force Survey.
Canada	: Survey of Labour and Income Dynamics (SLID).
Czech Republic	: Microcensus.
Denmark	: a) Income register (end of 2001); b) Register of educational attainment (October 2001).
Finland	: The Register-based Employment Statistics.
France	: French life force survey.
Germany	: German socioeconomic panel study (GSOEP).
Hungary	: Individual Salary and Earnings of Employees.
Ireland	: Living in Ireland Survey.
Italy	: Bank of Italy Survey on Household Incomes and Wealth.
Korea	: Survey on wage structure.
Luxembourg	: Structure of earnings survey (every four years).

Netherlands	: Structure of Earnings Survey.
New Zealand	: Labour Market Statistics.
Norway	: Income Statistics for Persons and Families.
Portugal	: List of Personnel.
Spain	: European Household Panel, Eight wave.
Sweden	: National income register.
Switzerland	: Labour Force Survey.
United Kingdom	: Labour Force Survey.
United States	: 2003 March Current Population Survey.

■ **Tables A9.5 to A9.8**

Methodology

I. Introduction

The rate of return represents a measure of the economic benefits obtained, over an individual's working life, relative to the cost of obtaining higher levels of education. Rates of return can be measured from either the individual's or society's point of view. Private rates of return measure the future net economic payoff to an individual investing in obtaining a higher level of education. Public rates of return measure the net fiscal benefits to society of an individual obtaining a higher level of education. The formulae for calculating both types of return are the same, although the costs and benefits included differ between the two.

II. Technical definition of the Internal Rate of Return (IRR)

The internal rate of return (IRR) calculation is based on the actuarial method of calculating *net present value* (NPV) over time of making an investment relative to the benefits that the investment produces. NPV is a traditional criterion for making investment choices, in that provides an estimate of the future value of investments in terms of their economic benefits, after accounting for the costs of the investments. NPV is calculated as follows:

NPV is calculated as follows:

$$NPV = -\sum_{t=0}^{d-1} C_t / (1+i)^t + \sum_{t=d}^{64-a-d} B_t / (1+i)^t$$

where:

C_t = costs at period t (t ∈ 0, d-1)

B_t = benefits at period t (t ∈ d, 64-a-d)

i = the discount rate at which future costs and benefits are valued in the present

d = the duration of studies (in years)

- a = age at the beginning of education/training
 64 = age at the last year of activity in the labour market.

The IRR is the discount rate at which $NPV=0$. Given a stream of assumed costs and benefits over time, the IRR represents the rate of return on investment expressed as an interest rate (i) that a given investment produces in terms of assumed benefits. In project evaluation, a key criterion for project approval is to accept the project if the IRR is greater than the (opportunity) cost of capital that could be used in alternative investments (*e.g.* building facilities).

III. The composition of costs and benefits

The cost elements are the following:

1. Forgone earnings

Foregone earnings are the value of earnings that would have been obtained if the individual had worked, at the lower level of education, instead of making the investment in education.

2. Training costs

Three forms of educational expenditure are taken into account in the analysis:

- Public expenditures on education (for infrastructure, teachers' wages, as well as subsidies, etc.).
- Private expenditures (tuition, other fees, etc.).

3. Additional tax payments resulting from an education-induced increase in taxable income.

These costs can be grouped as follows:

Private costs:

Foregone earnings + direct private expenditures + increased future taxes

Public costs:

Lost tax receipts during the training + public expenditures

In the calculation of private rates of return, private costs are included; and in the calculation of public rates of return, public costs are included.

The benefits associated with the individual's decision to invest in training are the following:

1. Increased earnings levels arising from a higher level of education

2. A higher probability of being employed associated with higher education.
3. For the public sector, additional tax receipts.

These can be grouped as follows:

Private benefits:

Increases in earnings+ higher probability of being employed

Public benefits:

Additional tax receipts

In calculating the private rates of return, private benefits are included. In calculating the public rates of return, public benefits are included.

IV. Data and model assumptions

This model calculates IRR from the point of view of the individual and society.

Data:

1. Earnings correspond to an annual reference period in Canada, the Czech Republic, Denmark, Finland, Ireland, Italy, Korea, Luxembourg, Norway, Spain, Sweden and the United States. Earnings have a weekly reference period in Australia, New Zealand and the United Kingdom, and a monthly reference period in Belgium, France, Germany, Hungary, Poland and Switzerland. Data on earnings are before income tax, while earnings for Belgium and Korea are net of income tax. Data on earnings for individuals in part-time work are excluded for the Czech Republic, Hungary, Luxembourg and Poland, while data on part-year earnings are excluded for Hungary, Luxembourg and Poland. The source of these data is Statistics Sweden.

2. Lifetime earnings streams are estimated from cross-section data. The average annual earnings for each age group were assigned to the midpoint of the interval. Between 2 midpoints, earnings have been adjusted to fit a straight line using the method of least squares, along a linear trend. In cross-section data, earnings differentials between age cohorts reflect accumulated work experience, additional training investments made on the job and technological change. Earnings are likely to increase over time, so labour productivity in the business sector is used as the basis for making earnings projections. This approach is in line with the acknowledged link between earnings increases and productivity increases in the economy as a whole (as shown by a relatively stable functional distribution of income, i.e. between the capital and labour shares)

over long periods. Hence, the average annual earnings of today's population cohorts adjusted by the productivity growth rate are taken to represent a reasonable estimate of future average annual earnings (using cross-sectional data further assumes that changes of participation rates in higher education will not affect the earnings patterns over time).

3. Tax rates on earnings are taken from the OECD database on Benefits and Wages, provided by the Directorate for Employment, Labour and Social Affairs.

The assumptions of the model

- The typical starting and ending age by level of education (up to upper secondary level of education) are based on indicator B1 EAG2006.
- The average duration of tertiary studies are taken from B1.3 EAG 2005.
- The growth rate of productivity (to reflect the impact of technological progress on average real annual earnings) is fixed at the country-specific growth of labour productivity in the business sector. It is assumed that the growth rate is the same for all levels of education.
- Employment probabilities (1 minus the unemployment rate) are applied to average annual earnings for each education, sex and age group cohort.
- The earnings of the individual during the training period are assumed to be zero in the scenario when, following initial education, the individual has continued directly to the next highest level of education before entering the labour market. In the second scenario, when attaining the next highest level of education has been postponed until the age of 40, the earnings of the individual during the training period are assumed to be equal to unemployment benefits over a duration stipulated by national norms. After this period they are taken as being equal in magnitude to social assistance benefits, up to the end of the training period.
- The earnings of the individual after the training period are assumed to be 10 % more than at the previous level of education. Earnings increase in a linear fashion over 2 years until reaching parity with those of individuals who had already attained the higher level of education.

Education at a Glance

OECD Indicators 2006

Annex 3: Sources, methods and technical notes

Chapter B: Financial and human resources invested in education

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CHAPTER B: FINANCIAL AND HUMAN RESOURCES INVESTED IN EDUCATION

■ Changes in the coverage of all indicators introduced in EAG 2006

France: Compared to previous years, the finance indicators for 2003 include the following modifications:

- Change in the geographic area covered with the inclusion of overseas départements (i.e. DOM: Départements d’Outre-mer). Indicators for 2003 refer to France as a whole and are therefore coherent with the area covered in national accounting aggregates (GDP, public spending, etc.).
- Change in the R&D spending areas covered so as to match the coverage of R&D spending on higher education used in the DSTI/OCDE data collection (reference to the Frascati manual).
- Update of the treatment methods used for information sources and of the statistical tools employed; in particular, overhaul of assessment techniques for certain types of spending such as spending on payroll taxes, spending by local authorities (towns and cities, départements, regions) or spending by households.

INDICATOR B1: Educational expenditure per student

See also notes on Indicator B2.

■ General notes

Methodology

• Reference period

Adjustments were made for countries in which the financial year and the school year do not coincide. In order to match the enrolment data with the financial year 2003, a weighted average of the enrolment data for the academic years 2002/03 and 2003/04 was calculated. The data were weighted in accordance with the proportion of each school year that fell within the financial year 2003 (see Annex 2).

- **Estimation of expenditure per tertiary student over the duration of studies.**

Two alternative methods were employed to calculate the average duration of tertiary studies: the approximation formula and the chain method. For both methods, it should be noted that the result does not give the average duration needed for a student to graduate since all students participating in tertiary education are taken into account, including drop-outs. Hence, the figure can be interpreted as the average length of time for which students stay in tertiary education until they either graduate or drop out. However, in the case of countries with low drop-out rates (see Indicator A2), the result can serve as a good proxy for duration until graduation.

The estimates of cumulative expenditure on education over the average duration of tertiary studies were obtained by multiplying annual expenditure per student by an estimate of the average duration of tertiary studies.

Using the **approximation formula**, the latter estimate was approximated by the rate of turnover of the existing stock of enrolments, obtained from the ratio of flow data (entrants and leavers) to the corresponding numbers of students enrolled. The formula $D = (S_{t-1} + S_t)/(Z_t + A_t)$ was used for this calculation, where S_t is the number of students enrolled at the end of year t , S_{t-1} is the number of students at the beginning of year t (approximated by the number of students enrolled at the end of the preceding school year), Z_t is the number of students who are in their first year of study in year t , and A_t is the number of leavers in school year t (approximated by $S_{t-1} + Z_t - S_t$). Full-time equivalents were used to estimate enrolments. The number of entrants to full-time programmes was used to estimate the inflow. All participants were included, even those who might not obtain a degree.

The estimate is based on a number of simplifying assumptions: first, it is assumed that transition rates are constant over time. Second, expenditure in the current reference year is assumed to be typical of the total duration of studies.

Using the **chain method**, the duration of study is defined as the sum of the probabilities, for each year of study, that a student who has entered tertiary education will still be enrolled in that year of study.

The duration is therefore defined as $D = \sum_{i=1}^{10} q_i$, where q_i is the probability that a student will reach the i -

th year of study, *i.e.* the proportion of individuals in the i -th year of study relative to those studying in the first year $i-1$ years before. With the chain method all conditional probabilities are derived from data for two adjacent years, the reference year and the preceding year. Given the number of students s in year i of study in year t and the number of students in year $i-1$ of study in year $t-1$, the transition rates can be calculated for each year of study as $a_{i,t} = s_{i,t}/s_{i-1,t-1}$. The transition rates give, for each year of study, the probability that a student in year $i-1$ will continue studying in year i . The product of all transition rates 1 to I gives the probability, for year i of study, that a student who started $i-1$ years before will still be enrolled in year i of study. Finally, the sum of all conditional probabilities gives an estimate of the average duration of tertiary education. Expenditure in the current reference year is assumed to be typical of the total duration of studies.

- **Data for the financial year 1995**

The data on expenditure for 1995 were obtained by a special survey conducted in 2001 and updated in 2003. OECD countries were asked to collect the 1995 data according to the definitions and the

coverage of the UOE 2005 data collection. All expenditure data, as well as the GDP for 1995, are adjusted to 2003 prices using the GDP price deflator.

■ Notes on specific countries

Coverage

See also notes on Indicator B2.

Australia: Previously, university enrolments included some students in overseas campuses. These have been excluded, starting with EAG 2001. This correction affects the number of tertiary students, and consequently the expenditure per student, by 2.8 per cent. There are breaks in series in ISCED 2, 3, 4 and 5B enrolments in the Vocational Education and Training sector; from 1999, data are based on the Australian Qualification Framework (AQF) rather than the stream classification.

Austria: Expenditure on R&D in the tertiary sector is partially excluded. Some expenditure by public institutions other than the Ministry of Education is excluded (social insurance bodies, chambers of trade and crafts, and federal funds - *Sozialversicherungsträger, Kammern, Bundesfonds*).

France: Research expenditure has been tuned for the first-time with the DSTI-data, so it now includes all the R&D expenditure (HERD) without any exclusion.

Ireland: Some expenditure on R&D, which is reported to DSTI, is excluded from UOE reporting (16.5 million IEP). This accounts for approx. 10% of all expenditure on tertiary R&D, and for 2% of total expenditure on ISCED 5 and 6.

Israel: Expenditure on R&D can not be separated of total expenditure but are included in UOE data collection.

Korea: Expenditure on educational programmes provided by ministries other than the Ministry of Education is excluded (KAIST, Police College, College of External Affairs, Tax Officers' College and Military Academy).

Luxembourg: The low difference between general and vocational programmes is due to the fact that the expenditure occurred during the time spent in class are considered. All other expenditures (for example expenditures of private enterprises) are not included in the calculation therefore costs of vocational programs (especially dual programs) are underestimated.

Mexico: Only expenditure on separated funded or separated budgeted research.

Netherlands: Underestimation of the expenditures of private enterprises on dual vocational programmes.

Russian Federation: Expenditure per student at the tertiary level of education is underestimated due to missing private expenditure while tuition fees are paid exclusively from private funds for about one-third of tertiary type-A students and tertiary type-B students.

United Kingdom: Upper secondary vocational students are excluded from the calculation of expenditure per student, as they were counted on a “whole year” rather than on a “snapshot” basis.

United States: Funds for major federal R&D centres administered by universities are excluded.

- **Estimation of the duration of tertiary education calculated using the chain method**

Austria, Germany and Italy: No distinction is made between part-time and full-time studies at the university level. However, for expenditure over the duration of studies the effect balances out, since reporting part-time students as full-time students leads both to an underestimate of annual expenditure and to an overestimate of duration of studies.

Austria: The estimation of the average duration is affected by methodological changes over time. Data underlying the estimated duration in table B1.5b were collected separately on ISCED 5A and 6 for the first time in the UOE data collection 2005. The duration, however, was calculated for ISCED 5A/6 combined, taking into account explicitly entrants to level 5A as well as to level 6. In previous years, in contrast, only entrants to university education in total (i.e. to level 5A/6 combined) were reported; continuing students, who progressed to level 6 without having left university after completion of level 5A, were not counted as entrants. Therefore the current results are not directly comparable with those published in EAG 2006.

France: Panel data were used to estimate average duration of tertiary studies

Germany: Up to EAG 2006, the average duration of university studies calculated by the chain method does not include students in the 11th year of study and more in the denominator. As a consequence the calculated average duration and the costs of university studies are about 7 % too high. This method is intended to be modified in the next edition of Education at a Glance.

Greece: The 5th year of tertiary-type B study includes the 6th year and beyond. The 7th year of tertiary-type A and advanced research programmes includes the 8th year and beyond. This leads to an underestimate of duration.

Hungary: Distribution is estimated between ISCED levels 1, 2, and 3.

Iceland: Data were partly estimated, as students in programmes at level 5A (2nd degree) and level 6 are often not signed up for thesis credits until the thesis is completed. Data were therefore adjusted to correct for consequent overestimating of the number of part-time students and underestimating of full-time equivalents.

Korea: The maximum duration of Tertiary-Type B education is 4 years. The 6th and 8th years and beyond of university education are included in the 7th year of study.

United Kingdom: The chain method was amended slightly in order to use the available UK data. Average durations were calculated separately using the chain method for each of the main types of course at tertiary level. To take account of the fact that many students go on to take a further course after their initial course, these figures were then combined according to the numbers of students following each of the main pathways at tertiary level. The total average durations shown for university and all tertiary levels are therefore weighted averages of the individual average durations of each type

of course. Coverage excludes those studying in further education institutions, though these account for less than 10% of all students at the tertiary level.

Interpretation

Changes in expenditure per student between EAG 2003, 2004, 2005 and 2006

Austria: Due to different reporting standards between the UOE-questionnaire and Austrian accounting systems, figures on expenditure per student as published in Education at a Glance differ considerably from expenditure per student that are calculated and published in Austria.

Belgium: Data on pensions are included for the first time in EAG 2004 and lead to an increase of the figures published in the financial chapter compared to EAG 2003 and also to former editions of EAG. Data correspond to pensions paid to the currently retired educational personnel, rather than an estimate of government/employer contributions for future pensions of the currently employed educational personnel.

Flemish community of Belgium: Data on indirect public transfers and payments to the private sector have been updated in the UOE 2004 and UOE 2005 data collections. Expenditure for child allowance for youngsters older than 18 years in secondary and post-secondary non-tertiary education has been included in the UOE 2004 and UOE 2005.

Denmark: Part of the increase in expenditure per student between EAG 2003 and EAG 2004-EAG 2006 is due to a multi-year agreement on financing of medium-cycle higher education (2001-2004), which increased the grants for medium-cycle higher education. An extension of the coverage of expenditure on tertiary education also explained the change. Thus, the increase between 1995 and 2003 in expenditure on tertiary education is partly due to a change in coverage of tertiary institutions in the accounting system.

Finland: In EAG 2006 Finland reports for the third time students at ISCED 5A/6 divided to full-time/part-time students based on their study activities. Also for the third time full-time equivalent data (FTE) is reported at ISCED 5A/6. Previously all students were reported as full-time students. The division to full-time and part-time students is made based on the study credits which students have been taken during the academic year. Moreover, for the average duration, data on full-time equivalent (FTE) students is partially estimated in EAG 2005 whereas in EAG 2006 data is based on actual study credit data collected from universities and polytechnics.

Expenditure data on educational programmes preparing for further and specialist vocational qualifications at ISCED 3/4 are for the third time included in EAG 2006.

Germany: Coverage of ancillary services at tertiary-Type A level of education has been improved in EAG 2006. As a consequence, expenditure in ISCED 5A/6 is 1.100 Mio EUR higher than in EAG 2005.

New estimation of pre-primary expenditure based on wage relations between certain categories of pre-primary institutions has been made compared to EAG 2005.

Italy: For ISCED levels 0,1,2,3, the most important reason of the increase in expenditure per student observed in EAG 2004 to EAG 2006 compared to EAG 2003 is due to the increase in teachers' remunerations appeared during the financial year 2001 of the previous year 2000. Another reason is

due to the fact that the data to allocate by level in EAG 2003 are split for the second time between ISCED levels 0 to 3 and 5b in EAG 2006.

Korea: The increase between EAG 2003 and more recent editions in expenditure as a percentage of GDP and expenditure per student is due to the implementation of a new school accounting system for ISCED 1-3 from year 2001. Due to this new accounting system, private expenditure on all the ancillary services are now included in the calculation. Secondly, the government put in place in July 2001 and the next 3 years a new policy and budget in order to reduce the class size under 35.

Switzerland: Expenditure per student is very high at the university level in EAG 2004- EAG 2005 and EAG 2006. This is mainly due to the structure of the university system: a high number of universities in relation to the size of the country (partly due to the three language regions), the small size of some universities, a wide range of provision at each university, and relatively low student/teaching staff ratios. Furthermore, teachers' salaries at university level are comparatively high. Advanced research programmes are not included in tertiary education.

INDICATOR B2: Expenditure on educational institutions relative to Gross Domestic Product

■ General notes

Methodology

The “domestic” approach (reference to the GDP) is preferred to the “national” one (reference made to the GNP) in the calculation of Indicator B2 because it is consistent with other concepts used in education statistics and in the 2005 UOE data collection. Thus, educational programmes and providers and student mobility are considered in the UOE data collection from the domestic point of view. For example, funds from international agencies and other foreign sources are counted in the educational expenditure requested to be reported (see the OECD Handbook, 4.6.2 and 4.6.3); the coverage of the statistics on enrolment or on the activities of education institution is made on a domestic basis, *i.e.* the host country must report foreign students' enrolment and educational activities of foreign institutions. However, if the GNP was taken as reference in place of GDP, expenditure in percentage of GNP will be at least 5% higher than expenditure in percentage of GDP in Czech Republic, and New Zealand and would be more than 19% higher in the case of Ireland (see Table 1)

Table 1: Differences between Gross Domestic Product and Gross National Product (reference period: calendar year 2003, 2002 current prices)

	Gross Domestic Product	Gross National Product
Australia	838 251	814 248
Austria	226 968	222 277
Belgium	274 582	274 729
Canada	1 197 494	1 170 575
Czech Republic	2 555 783	2 457 123
Denmark	1 401 891	1 369 303
Finland	143 807	140 380
France	1 585 172	1 582 606

Germany	2 163 400	2 121 190
Greece	154 153	154 854
Hungary	18 650 788	m
Iceland	827 863	812 586
Ireland	139 097	116 806
Italy	1 300 929	1 315 962
Japan	497 485 000	505 276 400
Korea	724 675 000	721 976 800
Luxembourg	23 956	m
Mexico	6 891 434	6 915 368
Netherlands	476 349	471 049
New Zealand	139 225	132 210
Norway	1 576 745	1 569 392
Poland	814 922	817 275
Portugal	130 511	137 960
Slovak Republic	1 201 196	1 213 403
Spain	780 550	766 019
Sweden	2 459 413	2 460 527
Switzerland	434 562	458 858
Turkey	359 763	356 681
United Kingdom	1 105 919	1 120 940
United States	10 918 500	10 867 900

Source: OECD Analytical Data Base, January 2006.

- **GDP data**

The theoretical framework underpinning the calculation of GDP has been provided for many years by the United Nations' publication *A System of National Accounts*, which was released in 1968. An updated version was released in 1993 (commonly referred to as SNA93).

Statistics on educational expenditure relate to the financial year 2003. For countries where GDP is not reported for the same reference period as data on educational finance, GDP is estimated as: $w_{t-1} (GDP_t - 1) + w_t (GDP_t)$, where w_t and w_{t-1} are the weights for the respective portions of the two reference periods for GDP which fall within the educational financial year. Adjustments were made for **Australia, Canada, Japan, the United Kingdom and the United States** (see Annex 2).

- **Calculation of index in Table B2.2 and B2.3**

Table B2.2 shows the changes in expenditure on educational services between 1995 and 2003. All expenditure reported for 1995 was expressed in 2003 constant dollars, adjusted to the price level of 2001 using the GDP deflator (see Annex 2). The data on expenditure for 1995 were obtained by a special survey in 2002 and updated in 2003.

Table B2.3 also shows the Index of change between 2000 and 2003 in expenditure on educational institutions from public and private sources. Data for calendar years 2000, 2001 and 2002 were already collected in previous versions of EAG.

Interpretation

Norway: The measured decline in expenditure between 1995 and 2003 is due to a substantial change in the price deflator at the level of total GDP, caused primarily by an increase in oil prices. The Table thus does not reflect the changes in real expenditures.

■ **Notes on specific countries**

Coverage

Australia: Starting with EAG 2001, data on educational finance are reported on an academic/calendar year basis and not on a financial year (from July to June) basis, which was used in previous editions. The financial data for 1999, 2000 and 2001 are not comparable with data from previous finance returns. The major reasons for differences between the 1998 and 1999 finance data are the introduction of accrual accounting in the government school sector, the attribution of expenditure on transport subsidies to institutional spending rather than being classified as government grants to households, changes to methodologies in attributing expenditure in the government school sector between ISCED 2 and ISCED 3; and using the Australian Qualification Framework rather than 'stream' in the Vocational Education and Training sector to allocate students to ISCED levels. The 1995 data were compiled using the same methodology.

Australia: The index of expenditures (1995 to 2003) is 93 for the public expenditure on tertiary institutions and 185 for private expenditure on educational institutions. The main reason for the increase in the private share of spending on tertiary institutions for Australia was changes to the Higher Education Contribution Scheme (HECS) that took place in 1997. A further change/HECS increase took effect in 2006 and will impact on future indicator results. The changes in HECS were part of a reform process aimed at providing more funds in total for higher education, partly through increased student/former student contributions.

Australia: Most of the HECS payments made to universities are funded in the first instance by the government. In 2003, of about \$1.9 billion in HECS charges paid to universities, only about \$310 million was paid up front by students. These students received a 25% subsidy (about \$103 million from the Government), which was paid direct to universities on their behalf and most of the balance comprised HECS loans from Government paid direct to universities. In the Indicator, the \$103 million in HECS subsidies for those who paid up front, and all the HECS loans are treated as transfers from Government. Subsequently all of the \$1.9 billion in HECS is counted as private final expenditure on universities.

Australia: The contribution households in funding educational institutions is also overstated by indicators B2 and B3 because the results are also affected by the inclusion of fees paid by a substantial numbers of foreign students (about \$1 billion), and the lack of recognition in the indicators of HECS interest subsidies and HECS debts that are never repaid.

Belgium: Data on the German-speaking Community are not integrated into the data for Belgium in the 2005 UOE data collection.

Czech Republic: Data from the Ministries of Justice, Defence and Internal Affairs are not included.

Denmark: The allocation of expenditure on early childhood, primary and lower secondary education is estimated on the basis of the corresponding enrolments. Expenditure on pre-primary education includes some expenditure on day care. Day care activities are fully integrated into the school day and not costed separately. It is debatable whether this expenditure should be classified as educational or not but **Denmark, Finland and Sweden** exclude expenditure on similar programmes.

Finland: The coverage of expenditure on pre-primary education changed considerably in comparison with previous editions starting from EAG 2001. Estimated kindergarten expenditure on day care and child care for 3 to 6-year-olds was excluded. Expenditure on apprenticeship training was included for the first time in EAG 2001. The OECD/DSTI/HERD data was used as a source for the definition of research expenditure at tertiary education starting from EAG 2002. Expenditure data on educational programmes preparing for further and specialist vocational qualifications at ISCED 3/4 are for the third time included in EAG 2006. These changes in reporting are also implemented in the trend data presented in EAG 2006 in order to ensure the best possible comparability over time.

Government transfers and payments to private entities, except financial aid to students, are excluded.

France: All expenditure include for the first time in EAG 2006 overseas departments (*départements d'outre mer*, DOM). Gross domestic product and total public expenditure were adjusted accordingly.

Germany: Expenditure made by enterprises in the “so-called Dual-System” (*i.e.* programme that combine school and work based) are included in this indicator and in B1.

Greece: Expenditure on early childhood education is included in expenditure on primary education.

Israel: Scholarships and other grant to students include the gross amount of student loans due to lack of data on repayment of such loans.

Expenditure by own sources of non-profit institutions is not included.

Japan: Expenditure on special training colleges, “miscellaneous schools” and educational administration are not allocated by level.

Netherlands: Figures, as shown in the chapter B are influenced to a considerable degree by three changes in the Dutch FINANCE data submission for the years 1999, 2000 and 2001 made by Statistics Netherlands. These changes (which were discussed during the 2nd Finance Comparability Study visit), compared to 1998, are:

- A lower proportion of public subsidies are attributed to ‘public grants attributable for tuition fees to educational institutions’ and by consequence more to public grants NOT attributable for tuition fees to educational institutions. This new division is based on the calculation standards in our student grant system. As a consequence the net private expenditure to all educational institutions is considerably higher compared to EAG2001.
- Private expenditure on R&D (3^e geldstroom onderzoek) is included. As a consequence, the total educational expenditure on tertiary institutions is higher, also the private expenditure to tertiary institutions is considerably higher compared to EAG2001.
- A substantial part of student loans in the Netherlands are loans that will be converted into grants when students pass their exams. We estimate the conversion rate of these so called

‘prestatiebeurzen’ (performance grants) at more than 90%. In the 1998 data, these loans/performance grants were reported as student loans. In the 1999 data these loans/performance grants are reported as grants. As a consequence the proportion of loans in the total public expenditure is lower since EAG 2002.

Norway: At pre-primary level of education, expenditure on care are included leading to slight over-estimation of expenditure in percentage of GDP.

Portugal: Regional and local transfers to the private sector are not included. Local direct expenditure on educational institutions is not included.

Turkey: Regional and local (except Special Provincial Administration) direct expenditure on educational institutions is not included. Transfers are also not included.

Sources

See Indicator B1.

INDICATOR B3: Relative proportions of public and private investment in educational institutions

■ **Notes on specific countries**

See notes on Indicators B1 and B2.

Coverage

Flemish community of Belgium: Data on indirect public transfers and payments to the private sector have been updated in the UOE 2004 and 2005 data collections. Expenditure for child allowance for youngsters older than 18 years in secondary and post-secondary non-tertiary education has been included for the first time in the UOE 2004 data collection.

INDICATOR B4: Total public expenditure on education

• **Data on total public expenditure**

The theoretical framework underpinning the calculation of total public expenditure has been provided for many years by the United Nations’ publication *A System of National Accounts*, which was released in 1968. An updated version was released in 1993 (commonly referred to as SNA93). Notes on specific countries.

Total public expenditure on all services, excluding education, includes expenditure on debt servicing (e.g. interest payments) that are not included in public expenditure on education. The reason for this

exclusion is that some countries cannot separate interest payment outlays for education from those for other services. This means that public expenditure on education as a percentage of total public expenditure can be underestimated in countries where interest payments represent a high proportion of total public expenditure on all services.

See notes on Indicator B2.

INDICATOR B5: Support for students and households through public subsidies

Methodology

Data on tuition fees charged by educational institutions were collected through a special survey undertaken in 2006 and refer to the school year 2003/2004. Amounts of tuition fees result from the weighted average of the main Tertiary-type A programmes and do not cover all the educational institutions. The figures reported can be considered as good proxies and show the difference among countries in tuition fees charged by main educational institutions and for the majority of students.

■ **Notes on specific countries**

See notes on Indicator B2.

Canada, Denmark and Germany and Sweden: Subsidies in kind, such as free or reduced-price travel on public transport systems, is excluded.

Czech Republic: Scholarships are included in direct expenditure for educational institutions.

Ireland: Students in tertiary education benefit from subsidised travel on the bus and rail systems, which are owned and funded by the State. The expenditure involved in this subsidy is currently unknown. Students in tertiary colleges and universities can make use of limited on-campus medical facilities funded both from central (exchequer) grants and from registration fees paid by the students themselves. The level of government funding in this area is not known.

Switzerland: Fees for health insurance are publicly subsidised for students from low-income backgrounds. These subsidies amount to several tens of millions of Swiss francs but are excluded.

INDICATOR B6: Expenditure on institutions by service category and by resource category

See also notes on Indicators B1 and B2.

■ Notes on specific countries

Coverage of ancillary services

Expenditure by educational institutions on ancillary services, such as student meals, boarding and housing on campus and student transportation should include fees paid by students and families for those services. However, countries have uneven coverage of private spending on ancillary services. While a number of countries exclude private spending on ancillary services, Australia, France, Hungary, Spain, Turkey and the United States provide information on private spending on ancillary services.

Ireland: Ancillary services at the primary to post-secondary non-tertiary level include only school transport.

Israel:

Ancillary services are included in total expenditure on educational institutions

R&D coverage (see indicator B1)

Notes on distribution of current and capital expenditure

Hungary: The significant decrease in government support for capital expenditure in tertiary education can be attributed to the fact that substantial investments were made in the previous year, 1997.

Israel: Total personnel compensation includes taxes on employment and current expenditure other than compensation of personnel includes consumption of fixed capital.

Expenditure by own sources of non-profit institutions is included in UOE data collection.

Italy: In comparison with previous editions, educational expenditure by resource category shows a lower percentage of staff compensation (for teaching and non-teaching staff) and a higher percentage of other current expenditure. This is due to the introduction of a new tax, "IRAP", and to the concurrent abolition of some additions to gross salaries.

Sweden: School and university buildings are rented. Payments for rent are included in current expenditure.

Sources

See Indicator B1.

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ANNEX 3: SOURCES, METHODS AND TECHNICAL NOTES
Chapter C: Access to education, participation and progression

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CHAPTER C: ACCESS TO EDUCATION, PARTICIPATION AND PROGRESSION

INDICATOR C1: Enrolment in education from primary education to adult life

■ General notes

Methodology

• Reference dates

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

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

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

■ Table C1.1. Education expectancy

Methodology

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

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

■ Notes on specific countries

Australia: Students participating in Open Learning Courses are excluded from tertiary enrolments. University enrolments exclude all students in overseas campuses. There are breaks in series in ISCED 2, 3, 4 and 5B enrolments in the Vocational Education and Training sector; from 1999, data are based on the Australian Qualification Framework (AQF) rather than the stream classification. At the ISCED 0 level, all pupils are reported as part-time.

Austria: The breakdown by part-time/full-time is not available.

Belgium: Data on the German-speaking Community are not integrated into the data for Belgium in the 2005 UOE data collection. Data on independent private institutions are not available.

Belgium (Fr): Data concerning entrepreneurship training courses is classified in ISCED 4C (professional).

Canada: Only 2002 data were available for UOE data collection 2005. The breakdown by age is not available from ISCED 0 to ISCED 3.

Finland: The division to full-time/part-time students is done only at ISCED levels 5A/6. At other ISCED levels all students are classified as full-time students. The division to full-time and part-time students is made based on the study credits which students have been taken during the academic year.

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

Germany:

Regular vocational education in Germany (Duales System) is a 3B programme. But a part of the graduates from 3A programmes tends to transfer to 3B programmes at the age of 18 or 19 what leads to a longer education phase and those students are counted as attaining an ISCED 4A qualification. Further vocational education programmes (Meister, Techniker) at ISCED level 5B are mostly attended after some years at work.

Hungary:

In Hungary, some of the vocational programmes are considered ISCED 4 programmes, whereas others are ISCED3 programmes. Again others are ISCED 5B programmes offered mainly by higher education institutions.

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

Ireland: Most but not all adult education is excluded. Adult education includes part-time studies at ISCED 3 and 5 undertaken by persons returning to education after an interruption of some years. Coverage of part-time enrolment data is uneven. Only full-session part-time students (doing courses

lasting approximately the full year) have been *included* in the data. Many part-time students in independent private colleges at ISCED levels 3 and 5 have been *excluded*.

Italy: Age distribution is not available for advanced research programmes and for adult literacy courses (this affected ISCED levels 1 and 2)..

Luxembourg: An important part of students in *ISCED levels 2 and 3* are going to school in neighbour countries and are therefore not included in the UOE data collection so that the enrolment rates in these categories are under-estimated.

Tertiary students do only one year in Luxembourg itself but three to four years more in neighbouring countries. Therefore, schooling expectancy is underestimated at that level.

Spain: Break series in the 2003 school year due to the revision of the national population data. In the 2005 UOE data collection, Post-secondary non-tertiary programmes have disappeared and have been replaced by tertiary-type B programmes (specific vocational training – advanced level). This change explains the 96% index of primary, secondary and post-secondary non-tertiary education. In 1995 post-secondary non-tertiary education enrolment represented the 5,3% of total enrolment for ISCED levels 1-4. Also a minor effect of population data exists, the index is 98,3% when revised population data for 1995 are used.

Turkey: Data for under 5-year-olds and under (3-5 years) are included in pre-primary education.

United States: There is not a standard, federally determined age at which one can leave school in the U.S. Every state can choose the age, and in general it ranges from 15 to 17.

■ Table C1.2. Enrolment rates, by age

■ Notes on specific countries

Belgium: Data on the German-speaking Community are not integrated in the data for Belgium in the UOE data collection 2005. Data on independent private institutions are not available.

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

Canada: The ending age of compulsory education is 16 except in the cases of New Brunswick (18 since 1999).

Germany: Full-time education is compulsory until age 16; from 16-to-18 years old part-time education is compulsory.

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

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

Italy: Participation and school expectancy increase in Italy is largely due to the fact that compulsory schooling was extended to the age of 15 in the 1999/2000 school year. Legislation on compulsory schooling has progressively changed since then and Italy moved away from the concept of compulsory school attendance until a required age to the principle of the right and obligation to receive education or training until the age of 18. This principle has been fully enforced in 2003.

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

The Netherlands:

The lower enrolment rate for 3-and-4-year-olds in the Netherlands, as compared to 2002, has been caused by a change of reference date. In the Netherlands children can enrol in group 1 of pre-primary education from the moment that they are 4 years of age, on every day of the school year. From 2003 on, the reference date for the number of pupils changes from 31 December to 1 October of the school year, subsequently leading to a decrease in the number of 4-year-olds counted in pre-primary education.

Participation in education drops below 90% for students aged 17 and 18 since part-time enrolment is allowed. Indeed, compulsory education ends late in the Netherlands, but beyond age 16 the compulsion is partial.

New Zealand: Break series in 2004 due to change in methodology.

Poland: Full-time compulsory education normally continues until pupils are 16 years old (*i.e.* the age of the completion of the lower secondary level (gymnasium). Part-time compulsory education, however, in the school or out-of school forms, lasts until 18 years of age (based on the constitution of the Republic of Poland adopted in 1997).

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

Break series in 2003 school year due to the revision of the national population data.

Switzerland: Entrance age and enrolments in early childhood education vary considerably among Swiss cantons. The entrance itself is often left at the choice of parents.

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

United Kingdom: The figures can be misleading because of differing definitions of the end of compulsory schooling. For example, compulsory education in England and Wales finishes at the end of the academic year in which a pupil's sixteenth birthday occurs. Pupils in the final year of compulsory education in England and Wales are aged 15 on 1 September and turn 16 during the academic year. Those in the first post-compulsory year are aged 16 on 1 September. Those among this group of post-compulsory 16-year-olds not participating are being reported as not enrolled, but they are not part of the relevant population. In Scotland if a pupil's sixteenth birthday occurs between 1 March and 30 September compulsory education ends on the 31 May between those two dates. If a pupil's sixteenth birthday occurs between 1 October and 29 February compulsory education ends the day before the Christmas holidays before those two dates.

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

From this year, the United Kingdom has refined its methodology so that the data for this latest round is not strictly comparable with that supplied in previous years. In particular:

- The new treatment of younger children allocated to ISCED level 1 (the 4- and rising 5-year-olds referred to above)
- The more accurate allocation of children outside the typical age range to the correct ISCED category
- The inclusion for the first time of students on apprenticeship courses

United States: There is not a standard, federally determined age at which one can leave school in the U.S. Every state can choose the age, and in general it ranges from 15 to 17.

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

■ **Table C1.3. Transition characteristics from age 15 to 20**

■ **Notes on specific countries**

Belgium: Data on the German-speaking Community are not integrated in the data for Belgium in the 2005 UOE data collection.

Israel: Due to compulsory military service, enrolment rates are significantly low at ages 18-21 for men, and 18-20 for women.

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

Spain: Break series in EAG 2005 due to the revision of the population data.

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

■ **Table C2.1. Entry rates into tertiary education and age distribution of new entrants**

Methodology

• **Calculation of net entry rates**

The net entry rates given in Table C2.1 represent the proportion of persons of a synthetic age cohort who enter a certain level of tertiary education at one point during their lives. The net entry rate is defined as the sum of net entry rates for single ages. The total net entry rate is therefore the sum of the proportions of new entrants to tertiary-type A and B aged i to the total population aged i , at all ages.

Since data by single year are only available for ages 15 to 29, the net entry rates for older students are estimated from data for 5-year age bands.

- **Calculation of gross entry rates**

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

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

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

- **Notes on specific countries**

Austria: Most students who were enrolled on ISCED 5A in a previous year and started in the year of reference an ISCED 6 programme for the first time were not counted as new entrants, due to technical reasons.

Belgium: Data on the German speaking Community are not integrated in the data for Belgium in the UOE data collection 2005.

Germany: Entry rates into tertiary education for ISCED 5B is calculated as a gross ratio because information on the age structure of entrants is available only for the programme "Verwaltungsfachhochschulen" (Colleges of Public Administration). Information by age is available in 2004 for instance for 11 463 or 7.9 % of all 145 442 new entrants in ISCED 5B.

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

Spain: Break series in 2003 school year due to the revision of the national population data.

Table C2.2. Expected years in tertiary education and changes in tertiary enrolment

Methodology

- **Change in total tertiary enrolment**

The change in total tertiary enrolment is expressed as an index, the base year of which is 1995 (100). The number of tertiary students in 2004 is therefore expressed as a percentage of the number of tertiary students in 1995. The impact of demographic change on total enrolment is calculated by applying the enrolment rates measured in 1995 to the population data for 2004: population change was taken into account while enrolment rates by single year of age were kept constant at the 1995 level. The impact of changing enrolment rates is calculated by applying the enrolment rates measured in 2004 to the population data for 1995, i.e., the enrolment rates by single year of age for 2004 are multiplied by the population by single year of age for 1995 to obtain the total number of students that could be expected if the population had been constant since 1995.

■ Notes on specific countries

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

Belgium: Data on the German-speaking Community are not integrated in the data for Belgium in the 2005 UOE data collection.

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

Belgium (Fr): Data concerning entrepreneurship training courses is classified in ISCED 4C (professional). Data for independent private institutions are not collected by the education department.

Germany: Excludes advanced research programmes.

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

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

Spain: Break series in 2003 school year due to the revision of the national population data.

Turkey: Excludes open university.

United Kingdom: Many of the students enrolled in vocational programmes are not school based but are attending “further education” programmes.

Tables C2.3 and C2.4: Students in tertiary education or in primary and secondary education by type of institution or mode of study (2004)

Classification

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

■ Notes on specific countries

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

Turkey: Excludes open university faculties.

Table C2.5. Upper secondary enrolment patterns

■ Notes on specific countries

Belgium: Data on the German-speaking Community are not integrated in the data for Belgium in the UOE data collection 2005. Data on independent private institutions are not available.

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

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

INDICATOR C3: Student mobility and foreign students in tertiary education

General notes

Methodology

Previous versions of indicator C3 have focused on foreign students in tertiary education, defined as non-citizens of the country for which the data are collected. Although practical, this concept of foreign students is inappropriate to measure student mobility to the extent that foreign students who are permanent residents in their country of study as a result of immigration – by themselves or by their parents – are included in the total.

In an effort to improve the measurement of student mobility and the comparability of internationalisation data, the OECD now gathers data on student mobility and internationally mobile students. The term “international students” refers to students who have crossed borders expressly with the intention to study. The measurement of student mobility depends to a large extent on country-specific immigration legislations and data availability constraints. Hence countries are free to define international students as those who are not residents of their country of study or alternatively students who received their prior education in another country, depending on which operational definition is most appropriate in their national context.

The number of students studying abroad (Table C3.3) is obtained from the report of the countries of destination. Students studying in countries which did not report to the OECD or UNESCO Institute for Statistics are not included in this indicator.

Time series and trend analyses (Tables C3.1, C3.6 and C3.8) are based on numbers of foreign students (not international students) at different points in time since no time series on student mobility are available yet.

■ Notes on specific countries

■ Table C3.1

Definition

Australia: International students are defined by residence.

Foreign students, on the other hand, are defined by citizenship.

Austria: International students are defined by residence.

Foreign students, on the other hand, are defined by citizenship.

Belgium: International students are defined by residence. However, some students coming from outside the European Union reside in Belgium prior to starting their tertiary education in the country for visa purposes. The residence criterium is therefore an imperfect proxy of student mobility and the number of tertiary students who came to Belgium for the purpose of study is likely *underestimated*.

Foreign students, on the other hand, are defined by citizenship.

Canada: International students are defined by residence, *i.e.* foreign citizens excluding landed immigrants (permanent residents).

Foreign students, on the other hand, are defined by citizenship.

Czech Republic: Foreign students are defined by citizenship hence include children of permanent residents in the country. In the absence of data on international students, data on foreign students is an imperfect proxy of student mobility. It *overestimates* the number of tertiary students who came to the Czech Republic for the purpose of study.

Denmark: International students are defined by residence, *i.e.* foreign citizens who have lived in Denmark less than one year prior to starting an educational programme. Students who have completed a bachelor degree as international students and subsequently enrol in a second programme (*e.g.* master programme) are not counted as international students. This *underestimates* the number of tertiary students who came to Denmark for the purpose of study.

Foreign students, on the other hand, are defined by citizenship.

Finland: International students are defined by their country of prior education.

Foreign students, on the other hand, are defined by citizenship.

France: Foreign students are defined by citizenship hence include children of permanent residents in the country. In the absence of data on international students, data on foreign students is an imperfect proxy of student mobility. It *overestimates* the number of tertiary students who came to France for the purpose of study.

Germany: International students are defined by their country of prior education.

Foreign students, on the other hand, are defined by citizenship.

Greece: Foreign students are defined by citizenship hence include children of permanent residents in the country. In the absence of data on international students, data on foreign students is an imperfect proxy of student mobility. It *overestimates* the number of tertiary students who came to Greece for the purpose of study.

Hungary: International students are defined by residence.

Foreign students, on the other hand, are defined by citizenship.

Iceland: Foreign students are defined by citizenship hence include children of permanent residents in the country. In the absence of data on international students, data on foreign students is an imperfect proxy of student mobility. It *overestimates* the number of tertiary students who came to Iceland for the purpose of study.

Ireland: Students at tertiary level of education are classified by domiciliary address. At the secondary and post-secondary non-tertiary levels however, international students are defined by nationality.

Foreign students, on the other hand, are defined by citizenship.

Italy: Foreign students are defined by citizenship hence include children of permanent residents in the country. In the absence of data on international students, data on foreign students is an imperfect proxy of student mobility. It *overestimates* the number of tertiary students who came to Italy for the purpose of study.

Japan: International students are defined by residence.

Foreign students, on the other hand, are defined by citizenship.

Korea: Foreign students are defined by citizenship hence include children of permanent residents in the country. In the absence of data on international students, data on foreign students is an imperfect proxy of student mobility. It *overestimates* the number of tertiary students who came to Korea for the purpose of study.

Netherlands: International students are defined by their country of prior education.

Foreign students, on the other hand, are defined by citizenship.

New Zealand: Foreign students are defined by citizenship hence include children of permanent residents in the country. In the absence of data on international students, data on foreign students is an imperfect proxy of student mobility. It *overestimates* the number of tertiary students who came to New Zealand for the purpose of study.

Norway: International students are defined by residence.

Foreign students, on the other hand, are defined by citizenship.

Poland: Foreign students are defined by citizenship hence include children of permanent residents in the country. In the absence of data on international students, data on foreign students is an imperfect proxy of student mobility. It *overestimates* the number of tertiary students who came to Poland for the purpose of study.

Portugal: Foreign students are defined by citizenship (students who do not have Portuguese citizenship) hence include children of permanent residents in the country. In the absence of data on international students, data on foreign students is an imperfect proxy of student mobility. It *overestimates* the number of tertiary students who came to Portugal for the purpose of study.

Slovak Republic: Foreign students are defined by citizenship hence include children of permanent residents in the country. In the absence of data on international students, data on foreign students is an imperfect proxy of student mobility. It *overestimates* the number of tertiary students who came to the Slovak Republic for the purpose of study.

Spain: International students are defined by residence, *i.e.* students with a foreign domiciliary address.

Foreign students, on the other hand, are defined by citizenship.

Sweden: International students are defined by residence.

Foreign students, on the other hand, are defined by citizenship.

Switzerland: International students are defined by their country of prior education.

Foreign students, on the other hand, are defined by citizenship.

Turkey: Foreign students are defined by citizenship hence include children of permanent residents in the country. In the absence of data on international students, data on foreign students is an imperfect

proxy of student mobility. It *overestimates* the number of tertiary students who came to Poland for the purpose of study.

United Kingdom: International students are defined by residence, *i.e.* students reporting a foreign home address.

Foreign students, on the other hand, are defined by citizenship.

United States: International students are defined by residence, *i.e.* foreign citizens excluding immigrants (permanent residents) and refugees.

Coverage

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

Austria: Data on international and foreign students do not include those enrolled at tertiary type B level.

Belgium: Data on international and foreign tertiary students do not include those enrolled in the German-speaking Community, neither those enrolled in independent private institutions of the French and Flemish Communities. In both cases, the corresponding foreign enrolments are thought to be marginal.

In addition, data on international tertiary students do not include students of social promotion education in the French Community, and students of the Open University and social advancement education in the Flemish Community. Therefore the coverage of international and foreign students is different and the data cannot be compared.

Finland: Data on international students do not include those enrolled at tertiary type B level. However tertiary-type B programmes are being phased out in Finland. Thus the number of students in tertiary-type B education is at the moment negligible.

France: There is a break in time series between 2002 and 2003 for data on foreign students. Until 2002, data were partial with coverage of about 81% of all foreign students. Hence this break in times series needs to be borne in mind when interpreting changes in the number of foreign students between 2000 and 2004.

Germany: Data on international students do not include those enrolled in tertiary-type B and advanced research programmes.

Data on foreign students do not include those enrolled in advanced research programmes.

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

Ireland: Data on international students include only full-time enrolments.

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

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

Poland: Data on foreign students do not include those enrolled in advanced research programmes and most of those enrolled in tertiary type B programmes.

Spain: Data on international students do not include those enrolled at tertiary type B level.

Switzerland: Data on international students do not include those enrolled at tertiary type B level.

Turkey: Data on tertiary foreign students do not include those enrolled in tertiary-type A second degrees and advanced research programmes.

Russian Federation: Data on foreign students do not include those enrolled in advanced research programmes.

■ Table C3.2

Coverage

Australia: The numbers of international students comprises only the Higher Education sector, *i.e.* ISCED 5A/6 and the higher education component of tertiary type B level. Therefore, their distribution by country of origin corresponds to this partial coverage.

Austria: Data on foreign students do not include those enrolled at tertiary type B level. In addition, foreign students' data do not distinguish resident from non-resident foreign students at the tertiary level. Therefore, their distribution by country of origin reflects this partial coverage as well as the geographic composition of the resident immigrant population.

Belgium: Foreign students' data do not distinguish resident from non-resident foreign students at the tertiary level. Therefore, their distribution by country of origin gives more importance to countries of origin with an important resident population in Belgium.

Canada: The country of origin of more than 20% of international students is unknown.

Czech Republic: Data on foreign students do not distinguish resident from non-resident foreign students at the tertiary level.

The country of origin of more than 20% of foreign students is unknown.

Finland: Data on foreign students do not distinguish resident from non-resident foreign students at the tertiary level. Therefore, their distribution by country of origin reflects the geographic composition of the resident immigrant population.

France: Data on foreign students do not distinguish resident from non-resident foreign students at the tertiary level. Therefore, their distribution by country of origin reflects the geographic composition of the resident immigrant population.

Germany: Data on international students do not include those enrolled in tertiary type B and advanced research programmes. Their distribution by country of origin corresponds to this partial coverage.

Greece: Data on foreign students do not distinguish resident from non-resident foreign students at the tertiary level. Therefore, their distribution by country of origin reflects the geographic composition of the resident immigrant population.

Hungary: Data on foreign students do not distinguish resident from non-resident foreign students at the tertiary level. Therefore, their distribution by country of origin reflects the geographic composition of the resident immigrant population.

Iceland: Data on foreign students do not distinguish resident from non-resident foreign students at the tertiary level. Therefore, their distribution by country of origin reflects the geographic composition of the resident immigrant population.

Italy: Data on foreign students do not distinguish resident from non-resident foreign students at the tertiary level. Therefore, their distribution by country of origin reflects the geographic composition of the resident immigrant population.

Japan: Data on foreign students do not distinguish resident from non-resident foreign students at the tertiary level. Therefore, their distribution by country of origin reflects the geographic composition of the resident immigrant population.

Korea: Data on foreign students do not distinguish resident from non-resident foreign students at the tertiary level. Therefore, their distribution by country of origin reflects the geographic composition of the resident immigrant population.

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

The country of origin of more than 20% of international students is unknown.

New Zealand: Data on foreign students do not distinguish resident from non-resident foreign students at the tertiary level. Therefore, their distribution by country of origin reflects the geographic composition of the resident immigrant population.

The country of origin of more than 20% of foreign students is unknown.

Norway: Data on foreign students do not distinguish resident from non-resident foreign students at the tertiary level. Therefore, their distribution by country of origin reflects the geographic composition of the resident immigrant population.

The country of origin of more than 20% of foreign students is unknown.

Poland: Data on foreign students do not include those enrolled in advanced research programmes and most of those enrolled in tertiary type B programmes. In addition, foreign students' data do not distinguish resident from non-resident foreign students at the tertiary level. Therefore, their distribution by country of origin reflects this partial coverage as well as the geographic composition of the resident immigrant population.

Spain: Data on international students do not include those enrolled in tertiary type B programmes. Their distribution by country of origin corresponds to this partial coverage.

Sweden: The country of origin of more than 20% of international students is unknown.

Switzerland: Data on international students do not include those enrolled in tertiary type B programmes. Their distribution by country of origin corresponds to this partial coverage.

Turkey: Data on foreign students do not distinguish resident from non-resident foreign students at the tertiary level. Therefore, their distribution by country of origin reflects the geographic composition of the non citizen population, including the resident immigrant population.

Chile: Data on foreign students do not distinguish resident from non-resident foreign students at the tertiary level. Therefore, their distribution by country of origin reflects the geographic composition of the resident immigrant population.

■ Table C3.4

Coverage

Australia: The numbers of international students comprises only the Higher Education sector, *i.e.* ISCED 5A/6 and the higher education component of tertiary type B level. Therefore, their distribution by level and type of tertiary education corresponds to this partial coverage.

Austria: Data on international students by level and type of tertiary education are based on the number of registrations, not head counts. In addition, they do not include those enrolled at tertiary type B level. Therefore, their distribution by level and type of tertiary education reflects this partial coverage.

Belgium: Data on international tertiary students by level and type of tertiary education do not include students of social promotion education in the French Community, and students of the Open University and social advancement education in the Flemish Community. Therefore, their distribution by level and type of tertiary education reflects this partial coverage.

Czech Republic: Data on foreign students includes resident foreign students.

Finland: Data on international students do not include those enrolled at tertiary type B level. Therefore, their distribution by level and type of tertiary education reflects this partial coverage.

However tertiary-type B programmes are being phased out in Finland. Thus the number of students in tertiary-type B education is at the moment negligible.

France: Data on foreign students include resident foreign students. Therefore, their distribution by level and type of tertiary education reflects the participation patterns of the resident immigrant population.

Germany: Data on foreign students do not include those enrolled in advanced research programmes, but include resident foreign students. Therefore, their distribution by level and type of tertiary education reflects this partial coverage as well as the participation patterns of the resident immigrant population.

Greece: Data on foreign students include resident foreign students. Therefore, their distribution by level and type of tertiary education reflects the participation patterns of the resident immigrant population.

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

Iceland: Data on foreign students include resident foreign students. Therefore, their distribution by level and type of tertiary education reflects the participation patterns of the resident immigrant population.

Italy: Data on foreign students include resident foreign students. Therefore, their distribution by level and type of tertiary education reflects the participation patterns of the resident immigrant population.

Netherlands: Data on international students do not include those enrolled at the Open University or in advanced research programmes. Therefore, their distribution by level and type of tertiary education reflects this partial coverage.

New Zealand: Data on foreign students include resident foreign students. Therefore, their distribution by level and type of tertiary education reflects the participation patterns of the resident immigrant population.

Poland: Data on foreign students do not include those enrolled in advanced research programmes and most of those enrolled in tertiary type B programmes, but include resident foreign students. Therefore, their distribution by level and type of tertiary education reflects this partial coverage as well as the participation patterns of the resident immigrant population.

Slovak Republic: Data on foreign students include resident foreign students. Therefore, their distribution by level and type of tertiary education reflects the participation patterns of the resident immigrant population.

Spain: Data on international students do not include those enrolled at tertiary type B level. Therefore, their distribution by level and type of tertiary education reflects this partial coverage.

Switzerland: Data on international students do not include those enrolled at tertiary type B level. Therefore, their distribution by level and type of tertiary education reflects this partial coverage.

Turkey: Data on foreign students include resident foreign students. Therefore, their distribution by level and type of tertiary education reflects the participation patterns of the non citizen population, including the resident immigrant population.

Russian Federation: Data on foreign students do not include those enrolled in advanced research programmes, but include resident foreign students. Therefore, their distribution by level and type of tertiary education reflects this partial coverage as well as the participation patterns of the resident immigrant population.

■ Table C3.5

Coverage

Australia: The numbers of international students comprises only the Higher Education sector, *i.e.* ISCED 5A/6 and the higher education component of tertiary type B level. Therefore, their distribution by field of education corresponds to this partial coverage.

Austria: Data on international students are based on the number of registrations, not head counts. In addition, they do not include those enrolled at tertiary type B level. Therefore, their distribution by field of education reflects this partial coverage.

Belgium: Data on international students do not include students of social promotion education in the French Community, and students of the Open University and social advancement education in the Flemish Community. Therefore, their distribution by field of education reflects this partial coverage.

Canada: Data on international students do not include those enrolled at tertiary type B level. Therefore, their distribution by field of education reflects this partial coverage.

Czech Republic: Data on foreign students include resident foreign students.

Finland: Data on international students do not include those enrolled at tertiary type B level. Therefore, their distribution by field of education reflects this partial coverage. However tertiary-type B programmes are being phased out in Finland. Thus the number of students in tertiary-type B education is at the moment negligible.

Germany: Data on international students do not include those enrolled at tertiary type B level and in advanced research programmes. Therefore, their distribution by field of education reflects this partial coverage.

Hungary: Data on international students in tertiary type B programmes include only those enrolled in colleges and universities. Therefore, their distribution by field of education reflects this partial coverage.

Iceland: Data on foreign students include resident foreign students. Therefore, their distribution by field of education reflects the participation patterns of the resident immigrant population.

Italy: Data on foreign students include resident foreign students. Therefore, their distribution by field of education reflects the participation patterns of the resident immigrant population.

Netherlands: Data on international students do not include those enrolled at the Open University or in advanced research programmes. Therefore, their distribution by field of education reflects this partial coverage.

New Zealand: Data on foreign students include resident foreign students. Therefore, their distribution by field of education reflects the participation patterns of the resident immigrant population.

Poland: Data on foreign students do not include those enrolled in advanced research programmes and most of those enrolled in tertiary type B programmes, but include resident foreign students. Therefore, their distribution by field of education reflects this partial coverage as well as the participation patterns of the resident immigrant population.

Slovak Republic: Data on foreign students include resident foreign students. Therefore, their distribution by field of education reflects the participation patterns of the resident immigrant population.

Spain: Data on international students do not include those enrolled at tertiary type B level. Therefore, their distribution by field of education reflects this partial coverage.

Switzerland: Data on international students do not include those enrolled at tertiary type B level. Therefore, their distribution by field of education reflects this partial coverage.

Turkey: Data on foreign students include resident foreign students. Therefore, their distribution by field of education reflects the participation patterns of the non citizen population, including the resident immigrant population.

Russian Federation: Data on foreign students do not include those enrolled in advanced research programmes, but include resident foreign students. Therefore, their distribution by field of education reflects this partial coverage as well as the participation patterns of the resident immigrant population.

Table C3.7

Coverage

Belgium: Data on foreign graduates do not include graduates from the Open University in the Flemish Community.

■ **Table C3.8**

Coverage

France: There is a break in time series between 2002 and 2003 for data on foreign students. Until 2002, data were partial with coverage of about 81% of all foreign students. Hence this break in times series needs to be borne in mind when interpreting changes in the number of foreign students between 2000 and 2004.

■ **Additional data**

Please see <http://dx.doi.org/10.1787/501101611002> for additional web tables under Indicator C3.

INDICATOR C4: Education and work status of the youth population

■ **General notes**

Data on population and educational attainment are taken from OECD and EUROSTAT databases, which are compiled from National Labour Force Surveys. Tables by gender (b for males and c for females) are available on the web.

■ **Tables C4.1a C4.1b (web), C4.2a, C4.2b (web), C4.2c (web), C4.3, C4.4a, C4.4b (web) and C4.4c (web)**

Methods and definitions

This data request expands the request on labour force status by completed level of education (ISCED-97) and aims at describing the transition process of youngsters aged 15 to 29 years from school to work.

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

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

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

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

The ISCED level refers to the ISCED mapping used to code the LFS (See Indicator A3). For those in education, this refers to the level of education of the program attended. For those not in education, this refers to the completed level of education. More explicitly this means that those in education are *attending* the given level of education but those who are not in education have *attained* this level. This difference has led to a change in the calculation of table C4.3 in 2004 as this indicator requires a total population variable by level of education. As this cannot be derived from the Transition questionnaire (summing those who have attained a certain level of education with those that are attending that same level could lead to an overestimation of the population variable); the population by level of education variable is now taken from the NEAC questionnaire (see indicators A1 and A8 for more information on the NEAC data collection).

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

■ Notes on specific countries

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

France: Because of the implementation of the continuing survey, these indicators are not comparable with those of 2002 nor are data available for 2003. The participation in training in 2004 is lower than in 2002 (overall for the 15-to-19-year-olds). This break is essentially due to 1°) a correction of the ages. In 2004, the ages correspond to the completed age at the end of the reference week period, while in 2002, it was the age reached in March 2002, and 2°) important changes on the "continuing studies" questions, that also have an effect on the delimitation of the concept of "employment-studies programs".

Finland: In previous editions of EAG data published for Finland in C4.3 have been misleading due to the inclusion of military conscripts in the category "not in education" and "not in employment". This led to an overestimation of this indicator for males particularly in the youngest age group 15 – 19 year

olds. As from 2003, the source for this data is now the EUROSTAT data collection. Data previous to 2003 are at present unavailable.

Israel: Work-study programmes do exist, but only apply to a very small part of the population (currently 4% of secondary students are enrolled in such programmes). The Labor Force Survey does not include a specific answer category for these programmes, and they are reported as ISC3a in the LFS questionnaire.

Sources

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

United Kingdom: The work study programmes definition includes:

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

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

INDICATOR C5: Participation in continuing education and training

■ **General notes**

The indicator examines the participation of adults in lifelong learning, as well as their investment according to the form and the purpose of the learning undertaken.

For the European countries the data are compiled from the ad hoc module on Lifelong Learning of the 2003 EU Labour Force Survey.

■ Notes on specific countries

Canada: The 2003 Adult Education and Training Survey (AETS) is used for this indicator. It collected detailed information on job-related courses and programs. Programs are learning activities with the objective of getting a high school diploma or its equivalent, a registered apprenticeship certificate, a trade or vocational diploma or certificate, a college or CEGEP diploma or certificate, a university degree, diploma or certificate. Courses are the other training activities that involve structured learning, such as formal courses, workshops or seminars. As for training for personal-interest, the survey only measured incidence (whether the individual was a participant or not) without making a distinction of whether it was a course or a program. Consequently, data related to intensity of training include the number of hours only for job-related training.

In order to come as close as possible to the definitions retained in the European Union Lifelong Learning module used for data from European countries, Canada adopted the following:

Formal training: participation in programs (as defined above). As participation in training activities for personal interest cannot be identified separately by program and course, all such activities have been considered as non-formal (see below).

Non-formal training: participation in courses (as defined above). When data on training for personal interest are used (Tables C6.1a and C6.1b), as participation in programs and courses cannot be separated, participants in all training activities taken for personal interest were considered as participants in non-formal training. The rationale is that participation in programs for personal interest is likely to be lower than participation in courses, especially when considering that the survey collects data for individuals 25 years old and older.

In Tables 6.2 to 6.6, non-formal training has been defined solely with participants who took job-related courses (with their corresponding number of hours).

Informal training: the 2003 Adult Education and Training Survey asked a question on self-development that includes 5 categories, with a 4-week reference period. Two categories out of 5 were similar to the OECD standard categories. They related to the use or consultation of reference material and technology to find more information for the purpose of skill improvement. The other three categories available in the survey were referring to individuals' intervention into the learning process (seeking advice, observing someone performing a task, or by experimenting). For the purpose of this publication, these three categories are not included.

Employed respondents: For the indicators in this publication, the reference period to define the labour force status is the week prior to the interview. AETS also uses a variable based on the labour force status in the previous calendar year (in this case 2002).

United States: The source for this indicator was the 2003 Adult Education Survey of the National Household Education Survey, a program of the National Center for Education Statistics, U.S. Department of Education.

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Annex 3: Sources, methods and technical notes

Chapter D: The learning environment and organisation of schools

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CHAPTER D: THE LEARNING ENVIRONMENT AND ORGANISATION OF SCHOOLS

INDICATOR D1: Total intended instruction time

■ General notes

Methodology

Instruction time in Indicator D1 refers to intended instruction timed based on policy documents (*e.g.* curricula) in countries where a formal policy exists. In countries, where such formal policies do not exist, the number of hours was estimated from survey data. Data are based on countries' responses to questionnaire CURR 1 of the system level annual data collection of INES Network C Survey of Teachers and the Curriculum. Data were collected on classroom sessions per year in public institutions, by subject in the modal grades of students age 7 to 15 for the referenced school year 2003/2004. Hours lost when schools were closed for festivities and celebrations, such as national holidays, were excluded. Intended instruction time does not include non-compulsory time outside the school day, homework, individual tutoring, or private study done before or after school.

List of study areas (subjects) used in the questionnaire:

Reading, writing, and literature: reading and writing, (and literature) in the mother tongue, reading and writing (and literature) in the language of instruction, reading and writing in the tongue of the country (region) as a second language (for non natives), language studies, public speaking, literature.

Mathematics: mathematics, mathematics with statistics, geometry, algebra, etc.

Science: science, physics, physical science, chemistry, biology, human biology, environmental science, agriculture/horticulture/forestry.

Social studies: social studies, community studies, contemporary studies, economics, environmental studies, geography, history, humanities, legal studies, studies of the own country, social sciences, ethical thinking, philosophy.

Modern foreign languages: languages different from the language of instruction

Technology: orientation in technology, including information technology, computer studies, construction/surveying, electronics, graphics and design, keyboard skills, word processing, workshop technology / design technology

Arts: arts, music, visual arts, practical art, drama, performance music, photography, drawing, creative handicraft, creative needlework.

Physical education: physical education, gymnastics, dance, health

Religion: religion, history of religions, religion culture, ethics

Practical and vocational skills: vocational skills (preparation for specific occupation), technics, domestic science, accountancy, business studies, career education, clothing and textiles, driving, home economics, polytechnic courses, secretarial studies, tourism and hospitality, sloyd (handicraft).

Other: Subjects that cannot be classified under one of the above headings.

■ Notes on specific countries

Coverage

Austria: For 11 to 14-year-olds a weighted mean of the general secondary school (Hauptschule) and the lower branch of the academic secondary schools (AHS) was calculated on basis of the distribution of the students enrolled in these two programmes. For the typical program of the 15 year-olds the upper branch of the general academic schools was used. For the least demanding program of the 15 year-olds the pre-vocational year at secondary schools was taken under consideration.

Modern foreign languages, for 7- and 8-year-olds: 32 classroom sessions per year are devoted to “modern foreign languages” and are integrated into other subjects (except reading and writing own language). Practical and vocational skills for 7- to 10-year-olds: 10 classroom sessions per year are devoted to “behaviour in traffic” and are integrated into other subjects. Modern foreign languages for 15-year-olds: in some schools Latin can be chosen additionally to a modern language.

Czech Republic: Optional subjects may be introduced in grade 7, but must be included in grades 8 and 9. Each optional subject is taught for at least one semester. They include foreign languages, conversation in a foreign language, computer science, technical education, technical drawing, introduction to economics and accounting, seminar from social sciences, seminar and practical work from geography, seminar and practical work from natural sciences, administrative services and home economics. This list of optional subjects may be extended by the school head in accordance with the facilities and staffing available at the school and the interests of the pupils, as long as they observe the Basic Educational Standard.

Denmark: Modern foreign languages: English is compulsory for all students from grade 3 on. For grades 7, 8 and 9 (13 to 15-year-olds) it is compulsory to choose German or French if students are going to have access to general upper secondary education. Only 10 per cent of these students do not choose German or French. In that case it is compulsory to choose another subject.

England: *Other* includes: PSHE (Personal, Social and Health Education), Citizenship, Sex and Relationships.

Finland: Science includes geography. Physical education includes health. Practical and vocational skills include student counselling and home economics. Optional language is possible in the 5th and 6th class (11 and 12-year-olds). At the upper stage (13-year-olds and up) schools may provide the following subjects as elective subjects (non-compulsory curriculum): applied and advanced studies in common subjects, interdisciplinary modules, languages and subjects related to information technology. These elective subjects are not defined by the national time allocation. They have a total maximum however, but as it is not possible to give an estimation as they are coded as 'm' in the tables.

Greece: For students aged 10 and 11 years, *Other* includes the subject 'civil education' (one hour per week). For students aged 12, 13, 14 and 15, *Other* includes the subjects ancient Greek literature (Grade 7: four hours per week, Grade 8: four hours per week, Grade 9: four hours per week, Grade 10: four hours per week), civil education (Grade 9: two hours per week) and domestic economics (Grade 7: one hour per week, Grade 8: two hours per week).

Hungary: Geography is divided between science and social studies.

Iceland: All 15-year-olds are following the mainstream program in compulsory education so there is no entry in the 'Age 15 minimum required programme' column.

Ireland: The curriculum for primary schools is an integrated curriculum and envisages an integrated learning experience for children. The learning experiences organised for children should facilitate cross-curricular activity. To assist schools in planning the implementation of the curriculum, a time framework is suggested that allocates a minimum time to each of the curriculum areas. Four hours each day must be set aside for secular instruction. A period of two hours per week of 'discretionary time' is allowed in order to accommodate different school needs and circumstances, and to provide for the differing aptitudes and abilities of the pupils. This is included under 'compulsory flexible curriculum'.

Time allocation is based on the following weekly framework for a 36.6-week school year in primary education: English (4.5 hours), Irish (3 hours), mathematics (3 hours), social, environment and scientific education (3 hours, divided between Science and Social Sciences), social, personal and health education (0.5 hours, included in *Other*), physical education (1 hour), arts education (3 hours), discretionary curriculum time (2 hours), religious education (2.5 hours), assembly/ roll call (2.5 hours, included in *Other*) and small breaks (0.8 hours, included in *Other*). Total 25.8 hours. Recreation (typically 2.5 hours) is not included in the curriculum tables.

The whole curriculum in primary education is obligatory for all pupils except those with special educational needs. Learning support measures are available for such pupils. Children are granted exemption from religious instruction at the request of their parents or guardians. The figures on 'Other' include social, personal and health education, assembly time, roll call and small breaks.

The Curriculum for the 12-to-15-year-olds age group consists of compulsory subjects and approved subjects. The compulsory subjects are Irish, English, mathematics and social studies (includes history, geography and civic, social and political Education). In Tables D1.2a and D1.2b (available on the internet only for 2005), the total compulsory part of the curriculum includes English and Irish,

mathematics and social studies (history, geography, and civics, social and political education). Students must also take two subjects from the following list of approved subjects: Latin, Greek, Spanish, Italian, French, German, science, technology, home economics, music, art/craft/design, materials technology, metalwork, technical graphics, business studies, typewriting and environmental studies. In practice, most schools offer and take three rather than two of the above list of approved subjects. Because most students take science and at least one foreign language from the list of approved subjects, these two subjects have been entered in the data as compulsory subjects and the third subject taken by most students has been entered under non-compulsory curriculum. It is intended that religion and physical education should form part of the curriculum in all schools. There are no regulations governing the precise amount of time to be spent each year on teaching the individual subjects of the curriculum.

Italy: In primary education, schools and teachers have a large flexibility in the curriculum table. Religion is optional for students. In lower secondary education, within the 30 lesson periods per week, Religion is optional but followed by most students.

Japan: In elementary schools 2nd grade (7 years old) Life study is divided into “science” and “social studies”. “Technology” consists of the technology field in the subject technology/ home economics in lower secondary school 1st-3rd grade (12 to 14-year-olds). “Arts” consists of music and craft (in elementary school) or music and fine art (in secondary school). “Other” consists of home economics (in elementary school 5th-6th grade; 10 to 11-year-olds), home economic field (as part of technology / home economics), moral education, class activities in special activities and period of integrated study.

Korea: The data reflect the education curriculum implemented in 2004. For 7-year-olds, only the total amount of annual instruction time is reported because the national education curriculum was designed to be interdisciplinary for this age group, which makes it very hard to partition the total instruction hours by subject matters except reading, writing and literature and mathematics.

Luxembourg: The mother tongue of the students is the Luxembourg language (Letzebuergesch). This language is also used and taught in pre-primary education. From Primary education onwards, the language of instruction is German, whereas French is taught as a foreign language. In primary education 1 hour per week is spent on Luxembourg language (Letzebuergesch). ‘Reading, writing and literature’ includes both Letzebuergesch and German, although in Luxembourg German is considered to be a foreign language.

Netherlands: The duration of one classroom session may vary in primary education (*i.e.* for students aged 9 to 11).

Norway: Although the compulsory curriculum is shown in Table D1.2 (available on the internet only for 2005) as entirely core, there is in practice some flexibility for schools *i.e.* for pupils aged 6 to 12, 38 lessons are compulsory flexible curriculum and for the lower secondary stage 152 lessons are compulsory flexible curriculum.

Poland: “Geography” is covered by “Science”.

Portugal: Grades 5 and 6 (10 and 11-year-olds): The time allocated to ‘Reading, writing and literature’, ‘Social Sciences’ and ‘Foreign Languages’, as well as the time allocated to ‘Mathematics’ and ‘Science’ is flexible and depends on the priorities schools define. E.g. in grade 5 the number of class sessions can range from 70.4 to 88 in Math and from 35.2 to 52.8 in Science.

Grade 9 (14-year-olds): In the compulsory flexible curriculum students can choose between a 2nd Foreign Language, Technology Education or Musical Education.

Grade 10 (15-year-olds in typical programme): In the compulsory flexible curriculum students in the Humanistic and Arts branches can choose between Mathematics and Quantitative Methods.

Religion: This school year, the option between Religion and Social and Personal Development was compulsory in grades 9 and 10 (typical programme). In the other grades it was attended on a volunteer basis.

Scotland: In primary schools, 15 per cent of instruction time is allocated to environmental studies, which refers to science, social subjects (history, modern studies etc.), technical education and home economics. Fifteen per cent of instruction time is allocated to ‘expressive arts’, which refers to music, art, physical education and drama. Other categories contain personal and social development and health education. In lower secondary education, 30 per cent of instruction time is allocated to environmental studies, 15 per cent of instruction time is allocated to ‘expressive arts’ and 15 per cent of time is allocated to ‘Religious and Moral Education’

Spain: ‘Reading, writing and reading’ includes both Spanish language and the language of the community, in those communities with another official language besides the Spanish.

For all age groups, the category ‘Other’ refers to the subject matter ‘Tutorial’; it consists of a class where the tutor teacher can work with the group in a wide variety of aspects as those related to social skills, class climate, effective study techniques, career counselling, civics, drugs prevention, etc. according to a plan designed together with the Department of Counselling.

The non-compulsory curriculum consists of a non-compulsory elective subject that students are entitled to above the compulsory hours of teaching. This possibility is negligible in all Autonomous Communities.

15-year-old students in the typical programme must choose two subjects out of Natural Sciences, Plastic and Visual Arts, Music and Technology. As it is a students’ choice, the time devoted to this subjects was considered as compulsory flexible curriculum.

The less demanding programme for 15-year-olds consists of the same programme with the same objectives as for the general students but with some relevant adaptations of the curriculum contents and methodology and smaller groups. It is devoted to those students who have presented learning difficulties or problems to follow the normal classes. The possibilities to choose among the different subjects of the compulsory core curriculum are higher, being this decision made by the teachers. This programmes lead to the same certification as the regular programme.

Interpretation

Australia: The non-compulsory curriculum estimate should be taken as a minimum. Non-compulsory activities are more likely to be instigated by individual schools than regional bodies. The Australian States and Territories education systems have for some time moved to an outcomes-based system, and therefore the flexible part of the curriculum has increased, while the compulsory core subject times have decreased. The data included in the “Compulsory Core Curriculum” are indicative only.

Austria: Considering the distribution of the different subjects within the compulsory curriculum the figures can be seen as typical (schools have some flexibility). However, the total sum of the compulsory curriculum must not be exceeded and is therefore a maximum. For the non-compulsory curriculum the figures can be considered as typical (electives and remedial courses).

Belgium (Flemish Community): In the Flemish Community of Belgium, the government prescribes the attainment targets that must be strived for and reached by the majority of pupils in the level and the discipline they are in. The teaching methods, the curricula and the timetables are the responsibility of the organising bodies of the schools. The curricula, however, have to include the (subject-related) attainment targets whilst timetables in secondary education must respect a basic training composed of a certain number of general subjects. This part of the study package, the common part, is equal for all pupils of the same year. In addition, pupils can select several specific subjects, depending on line of study; this is the optional part.

The hours spent on the (compulsory/not compulsory) subjects are not specified but the time allocated must be sufficient to meet curriculum requirements. It is therefore not possible to provide data concerning the curriculum.

Number of lesson periods (of 50 minutes each) per week: Pre-primary and primary (up to 11-year-olds): 28. Secondary (12-year-olds and up): 33.8.

Age 15 years in minimum required programme: the law of 29 June 1983 relating to compulsory education provided for the creation of part-time vocational secondary education (DBSO). In DBSO, the timetable is reduced to 14.8 lesson periods of 50 minutes weekly (social-general/technical/vocational training). Part-time secondary education is provided by Centres for Part-time Vocational Education (Centra voor Deeltijds Beroepsonderwijs), of which there are 46 in the Flemish Community. They are linked to secondary schools that offer technical and vocational education. Pupils can also attend courses organised by the Flemish Institute for Entrepreneurship (Vlaams Instituut voor Zelfstandig Ondernemen) (VIZO). From the age of at least 15 years old on, young people may enter an apprenticeship contract with an employer-instructor. The student gets the opportunity to learn the profession in the day-to-day practice of the enterprise, four days a week. The apprentice spends the fifth day in a VIZO training centre, where the pupil obtains an additional vocational training and a general and social education course.

Belgium (French Community): In primary education, teaching is organised in cycles of two to three years of which each is characterized by competences to work or study. Every provider has autonomy outside of the hours reserved for physical training, religion or to a foreign language.

Age 15 typical programme: the indicated number of hours corresponds to the obligatory maximum periods.

Czech Republic: The number of lessons for all subjects and their organisation in grades 6 to 9 (11 to 14-year-olds) is determined by the school head in agreement with the teachers so that all subjects in the curriculum are taught in the given year. The minimum number of lessons per subject must be respected, as well as the stipulated number of lessons per week.

Age 15 in typical programme (grade 10): School heads are allowed to deviate from the official documents. They may alter their curriculum observing certain rules, usually by no more than 10 per cent of the total number of hours. The curriculum in individual subjects may be altered by up to 30 per

cent of the total number of teaching hours. Schools may form their own curricula that can be used after an approval by the Ministry of Education.

Age 15 years in least demanding programme (grade 10): in vocational educational programmes, pupils learn 26 lessons per week (total 1004.4 hours in this year), including 18 work-based learning lessons per week. The work-based lessons are excluded from the instruction time in Table D1.1.

Denmark: The minimum number of lessons for each grade is regulated by law, but not the number of lessons for each subject, which is decided at the municipal level. The breakdown of figures in the table follows the national guidelines for the distribution of lessons. The national guidelines are made for the public schools (Folkeskolen) but generally speaking the guidelines are followed also by the private schools.

From school year 2003/2004 to school year 2005/2006 the number of lesson periods will be gradually increased, for grades 1, 2 and 3 respectively. Compared to school year 2002/2003, in school year 2003/2004, 1 further lesson a week (=30 hours a year) in Danish and 1 further lesson in Mathematics has been introduced for grade 1 (7-year-olds)

Finland: National regulations define the minimum number of hours of instruction for compulsory subjects at the lower and upper stages of comprehensive school. Within these limits schools decide themselves how to distribute them during the six years at the lower stage and three years at the upper stage. The upper three years of the comprehensive school curriculum include a considerable amount of flexibility in the form of elective subjects.

France: For 2003/2004, there is a new compulsory core curriculum for CM1 students (9-year-olds), as follow-up on the new curriculum for 8-year-olds in 2002/2003.

Greece: The figures on instruction time are derived from estimates of the average duration of one classroom session. For 15-year-olds the total number of compulsory, flexible and intended instruction hours per year is available. The first grade of upper secondary education (at the age of 15-year-olds) is a grade of programme orientation, which will generally include lessons with total duration of 30 instructional hours per week and optional lessons as well. From the optional lessons the student is obliged to choose one two-hour duration lesson per week. That is, the students of the first grade of upper secondary education will attend compulsory lessons which will have 32 hours duration per week. Additionally, every student, if s/he wants, can attend one more two-hour lesson per week of his choice (Ministerial Decision Γ2/5410/27-12-2000 and Γ2/4685/7-9-2001).

Hungary: The National Core Curriculum 1995 and the Decree on Frame Curriculum 2000 were in force simultaneously in the reference year (Frame Curricula are only recommended from 2002 on). In 2003 new (also recommended). Frame Curricula were introduced for grades 5, 9 and 10 (11, 15 and 16-year-olds respectively).

Iceland: 10 years of compulsory schooling, starting at age 6.

Israel: The data in Table D1.1 of last years' EAG (EAG 2005) were wrong. They should have been multiplied by 0.75.

Italy: Although data on total numbers of hours and on non-compulsory curriculum are different from the data reported in previous years, the situation did not change. This is only caused by a different translation from a more complex system to the simplified tables as reported by the OECD.

Netherlands: 40 per cent of 14- and 15-year-olds follow vocational education. These students were excluded.

New Zealand: In New Zealand all decisions about the allocation of time for curriculum (national or local curriculum) is decided at the level of the individual school, and this information is not collected centrally.

The national curriculum is specified through seven learning area statements. State and state integrated schools are required to provide programmes of learning based on the statements of all students in years 1-10. However how the schools do this is not prescribed either in terms of time allocations or programme/timetable arrangements.

In Year 11 (typically aged 15), 12 and 13 there is no compulsory curriculum. Generally students will set their own policies concerning compulsory subjects. These are typically English (or te Reo Maori) and mathematics and in many cases science and physical education.

Poland: The curriculum for the first 3 years in primary school is an integrated curriculum. The school is obliged to provide 54 sessions (each session is 45 minutes) plus 6 sessions of religion in a 3 year instruction period. The teachers allocate the number of hours per particular study area. Compulsory flexible curriculum is at the discretion of the head teacher.

All 15-year-olds follow the mainstream programme in compulsory education.

Portugal: The curricular reform of lower secondary education in 2002/2003 addresses grades 7 and 8 (12 and 13-year-olds). A new curriculum was designed, new priorities were set and time was re-allocated in a different way. Data applies to schools providing the regular curricula irrespective to their types.

Scotland: It is impossible to calculate the number of class sessions undertaken by students at each stage every year, as this is not prescribed in any documentation. It is up to individual schools and educational authorities how they divide their lessons. Guidance is provided on the minimum percentage of the curriculum that should be given to subject areas. In primary education this is 20% language, 15% mathematics, 15% environmental studies, 15% expressive arts, 15% religious and moral education and 20% left for flexibility. For lower secondary schools, the guidance is 20% language, 10% mathematics, 30% environmental studies, society, science and technology, 15% expressive arts, 5% religious and moral education and 20% left for flexibility.

Spain: Through official regulations, the Ministry of Education establishes the national minimum core curriculum, which must be implemented in the Autonomous Communities (55-65 % of instruction time). The rest up to 100 per cent of instruction time is regulated by each Autonomous Community, according to their own priorities. The foreign language in the first two years of primary education has been experimentally introduced in some Autonomous Communities. Regarding lower secondary education, the Ministry of Education changed the national minimum core curriculum by the end of the year 2000, which made the Autonomous Communities reorganize their own timetables in order to incorporate the changes at national level.

Sweden: Intended instruction time per year for each school subject as well as the duration of one classroom session is not regulated nationally in Sweden, but decided on locally. The data on Sweden has been estimated (for more details see the methodology section).

Methodology

Australia: The data are based on weighted averages of State and Territory responses, which derive the data from relevant industry awards. The weights are based on the number of public school enrolments for each State or Territory. For the duration of one class session, missing data are excluded from the calculation and weights are based on States or Territories who responded to the particular question. For curriculum estimates are based on a weighted average of all States/Territories.

Austria: One year is calculated as 37 weeks of instruction (37 weeks = 38 weeks minus 6 days schools are closed for festivities).

Belgium (French Community): The data concern the schools financed by the French Community. Private teaching or teaching organised by international institutions is not included.

England: Data are collected in a National Sample Survey, the Monitoring Curriculum and Assessment Project, Autumn 2003, Spring 2004

France: Data are based on national statistics.

Finland: All the figures are estimates based on theoretical average.

Germany: Data are based on weighted means.

Greece: The number of lessons is based on 40 teaching weeks in primary education and 38 teaching weeks in secondary education (ISCED 2 and 3).

Iceland: Number of lessons per week multiplied by 35 weeks. Minimum numbers of sessions and weeks according to law and regulations.

Ireland: In primary education, the duration of one lesson may vary. The average lesson unit is of 30 minutes duration. In lower secondary education, the allocation of instruction time represents an estimation of what is the general practice in schools, based on an average individual class unit of 40 minutes duration. The yearly figures are calculated with reference to the Rules and Programme for Secondary Schools and on an estimate of their application in a typical school of 700/800 students. The flexible compulsory part of the curriculum is calculated by assuming that all schools offer two additional subjects from the list of approved subjects and allocate four teaching periods of 40 minutes to each of these subjects.

For purposes of this data collection, the total compulsory part of the curriculum includes English and Irish, Mathematics, Social Studies (History, Geography, and Civics, Social and Political Education. Schools, which are administered by Vocational Education Committees, may substitute one or more practical subjects for History and Geography as part of the core curriculum.

A major review of the curriculum of the curriculum by the Statutory Curriculum and Assessment Board has been ongoing for almost ten years. New and revised syllabi have been adopted and are gradually introduced following in-service training programs.

Israel: Only official education is included.

Italy: In primary education the data reported are based on 33 weeks per year and 27 hours per week, which optimally may be extended with 3 hours per week for a foreign language in the first cycle. Timetables are based on 33 weeks/year and 30 hours/week in the second cycle. In most schools the weekly hours are spread over 6 week days, in others over 5 week days. Some schools offer a timetable called ‘tempo pieno’, which is based on 40 hours a week spread over 5 week days, but which includes transport and canteen services. These schools are attended by 23 per cent of the students and are not included in the reported curriculum tables.

In lower secondary education, the data reported are based on 33 weeks per year and 30 hours per week. In some schools the weekly hours are spread over 5 week days, in others over 6 week days. Some schools offer a timetable called ‘tempo prolungato’, which is based on 36-40 hours a week and includes canteen service. These schools are attended by 29 per cent of the students and are not included in the reported curriculum tables.

For upper secondary education, it is not possible to estimate the exact number of hours as students are allowed to choose among various school types.

Japan: The instruction time allocated for “Compulsory flexible curriculum” for 12-to-14-year-olds can be decided by each school in the allowable range specified by Chugakko-Gakushu-Shido-Yoryo (The Course of Study in Lower Secondary Schools 2002). The instruction time for “Compulsory flexible curriculum” for 12-to-14-year-olds is an average of the minimum and maximum hours.

The instruction time allocated for “special activities” other than “class activities” is estimated from survey data this year since it is not specified in the courses of study and schools can allocate appropriate instruction time.

Instruction time for the period of integrated study for lower secondary school 1st-3rd grade (12 to 14-year-olds) is an average of the minimum and maximum hours.

Poland: The number of class sessions by grade per week was calculated on the basis of a 3 year instruction period for each subject. There are such 3 year instruction periods regulations for grades 1-3 of primary education, grades 4-6 of primary education and grades 1-3 of lower secondary education.

Portugal: The number of classroom sessions per year was calculated on a basis of 35.2 weeks of intended instruction time, except for the students aged 15 (attending the least demanding programme), where 37 compulsory weeks were considered.

Spain: All figures represent averages of the number of hours per year devoted to each subject in each Autonomous Community in 2003/2004, weighted by the number of students in each Community in the respective ISCED level. In the Autonomous Communities of Navarra and the Basque Country, there are different educational “models” depending on the dominating teaching language. In these models the number of hours devoted to Spanish language and the Basque language vary, and consequently, so

do the number of hours for some other subjects. Here the models in which the majority of students participate are considered.

Sweden: Intended instruction time per year for each school subject is not regulated nationally and the duration of one classroom session may vary. It is decided locally. Thus, intended instruction time for students aged 7 to 15 has been estimated by dividing the total number of hours per required school subject over the nine years of compulsory education. This may mean that in a given year, the intended instruction time for certain school subjects may be overestimated (*e.g.* reading and writing in Mother tongue or in Arts) and underestimated in other grades and subjects (*e.g.* science).

Turkey: The data presented are the average of social specified subject programmes and science specified subject programmes for 10th grade.

Sources and references

Indicator D1- Instruction time: sources and references

Country	Source and reference period
Australia	State and Territory Education Departments. <i>Year:2004. Age reference is 30/06/04</i>
Austria	Law or policy document based on law ("Lehrplan"). <i>School year: 2003/2004.</i>
Belgium (Fl.)	Decrees and resolutions. <i>School year: 2003/2004.</i>
Belgium (Fr.)	Circulaire no 65 (horaire des élèves et des enseignants) - Décret de la Communauté française du 13 juillet 1998, Directives pour l'année scolaire 2003-2004 : organisation, stuctures, encadrement, Ministère de la Communauté française, Direction générale de l'enseignement obligatoire. <i>School year: 2003/2004.</i>
Czech Republic	Curriculum specification documents, National statistics (data on enrolments). <i>School year: 2003/2004.</i>
Denmark	Act on the <i>folkeskole</i> . <i>School year: 2003/2004.</i>
England	Monitoring Curriculum and Assessment Project. <i>School year: 2003/2004</i> Basic Education Act (1998/628); Decree (1998/852); The Council of State Decision (1993/834) on the comprehensive school distribution of lesson hours; National Board of Education: Framework Curriculum for the Comprehensive school (1994); Ministry of Education: Education in Finland, Basic Education. <i>School year: 2003/2004.</i>
Finland	
France	Law and policy documents based on law. <i>School year: 2003/2004.</i>
Germany	Secretariat of the Standing Conference of the Ministers of Education and Cultural Affairs of the Länder in the Federal Republic of Germany. <i>School year: 2003/2004.</i>
Greece	Law and policy documents (data based on formal arrangements). <i>School year: 2003/2004.</i>
Hungary	Public Education Act 1993, The Amendment of the Public Education Act 1996, 1999, 28/2000. Ministerial decree on the Frame Curriculum., 10/2003. <i>School year: 2003/2004.</i>
Iceland	Act on Compulsory Education no. 66/1995 and Regulation on Enforcement of National Curriculum in Compulsory Schools no. 43/1996. <i>School year: 2003/2004</i>
Ireland	Department of Education and Science statistical reports and circulars; Primary School Curriculum – Introduction; Rules and programme for Secondary Schools. <i>School year: 2003/2004.</i>
Israel	Data are based on formal arrangements, by the Ministry of Education. <i>School year 20032-2004.</i>
Italy ¹	Law and policy documents based on law. Testo Unico, D.lgs n. 297 of 14.4.1994. <i>School year: 2003-2004.</i>
Japan	Shogakko-Gakushu-Shido-Yoryo (The Course of Study in Elementary Schools 2002), and Chugakko-Gakushu-Shido-Yoryo (The Course of Study in Lower Secondary Schools 2002, Ministry of Education, Science, Sports and Culture. <i>School year: 2003/2004.</i>
Korea	The 7th Primary School Curriculum (1997), by the Ministry of Education. <i>School year: 2004.</i>
Luxembourg	Ministry of Education. Plan d'Etudes, Horaires et Programmes. <i>School year: 2003/2004.</i>
Mexico	Law and policy documents based on law. Secretaría de Educación Pública, Normas de inscripción, reinscripción, regularización y certificación para escuelas primarias oficiales y particulares incorporadas al sistema educativo nacional periodo escolar 2002/2003, Agosto 2002, México. Secretaría de Educación Pública, Normas de inscripción, reinscripción, regularización y certificación para escuelas secundarias oficiales y particulares incorporadas al sistema educativo nacional periodo escolar 2000-20001, Agosto 2000, México. <i>School year: 2003/2004.</i>
Netherlands	Primary education is based on empirical data (PRIMA cohort) and lower secondary education is based on law (WVO). <i>School year: 2003/2004.</i>
New Zealand	<i>School year: 2004.</i>
Norway	The Curriculum for the 10-year compulsory school in Norway. <i>School year: 2003/2004.</i>
Poland	Laws and regulations. <i>School year 2003-2004.</i>

Portugal	Law/Policy document: i) Despacho Conjunto nº 25/SERE/SEAM/88, Despacho Normativo nº 24/2000, Despacho nº 12 110/2000, Despacho nº 13 859/2002 - Organization of the School Year; ii) Decreto-Lei nº 286/89, Basic and Secondary National Curricula Decreto-Lei 6/2001 (Reform of basic education), Despacho 13 779/2001, Despacho Conjunto 665/2001 (10 th grade vocational programme). <i>School year: 2003/2004.</i>
Scotland	The structure and balance of the Curriculum 5-14. Curriculum Design for the Secondary Stages: Guidelines for schools. <i>School year: 2003/2004.</i> The national Royal Decrees establishing the national core curriculum are: Royal Decree 1006/1991, of June 14 th , which sets the minimum core curriculum for primary education, Royal decree 3473/2000, of December 29 th , which modifies the Royal Decree 1007/1991, of June 14 th , which sets the minimum core curriculum for lower secondary education. Each Autonomous Community publishes, in the respective bulletins, their own official regulations regarding instruction time in primary and lower secondary education based on the above-mentioned Royal Decrees. In 2002 was approved the ORGANIC LAW 10/2002, of December 23 rd , for the Quality of Education (LOCE), which modifies the past ORGANIC LAE 1/1990, of October 3 rd , of the General Ordination of the Educational System (LOGSE). Nevertheless, this law was quickly paralysed by the new administration in government in May 2004, although it has been partially implemented by some Autonomous Communities. <i>School year: 2003/2004.</i>
Spain	
Sweden	Law or policy document based on law (data on formal arrangements). <i>School year: 2003/2004.</i>
Turkey	Regulations of Primary Education Institutions, 1992; Primary School Lesson Table weekly, 1998; General High Schools Lesson Tables weekly, 1998; Instructions and Regulations of Secondary Education, 2002 Institutions. <i>School year: 2003/2004.</i>

INDICATOR D2: Average class size and ratio of students to teaching staff

■ General notes

Methodology

The ratio of students to teaching staff is calculated by dividing student numbers in full-time equivalents by the number of teaching staff in full-time equivalents. Teaching staff refers to professional personnel directly involved in teaching students (and whose primary function is teaching) but excludes Teachers' aides and teaching/research assistants.

■ Notes on specific countries

Coverage

Austria: Data on trainers in the work-based element of combined school and work-based programmes are not available. Therefore the number of students in combined school and work-based programmes is converted using a factor of 0.3 in the calculation of the ratio of students to teaching staff.

Belgium: Data concerning personnel working in secondary education refer to all secondary education (including personnel from ISCED levels 2 and 3) and post-secondary non-tertiary education (ISCED level 4). In the case of personnel working in "hogescholenonderwijs" (non-university tertiary education) it is not possible to make a distinction between type 5A and type 5B programmes (in both the Flemish and French Communities). However, all "hogescholenonderwijs" personnel are included in the total for higher education.

Data exclude students and teachers from the German-speaking Community whose distribution by level of education is not possible. Data relating to the French Community exclude teachers and students from social advancement education that are not reported in ISCED levels 2, 3 and 5.

Finland: Upper secondary education *includes* teachers in all vocational and technical programmes. Teachers at post-secondary non-tertiary and tertiary-type B levels (ISCED 4 and 5B), and teachers in vocational programmes at tertiary-type A level (ISCED 5A), are included in upper secondary education. However, the number of tertiary-type A and B students in these programmes is negligible.

Germany: As data on the work-based element of combined school and work-based programmes are not available, the number of students in combined school and work-based programmes is converted using a factor of 0.4 (e.g. [Dual System](#)) in the calculation of the ratio of students to teaching staff. [The factor of 0.4 corresponds to the share of the week usually spent at school.](#)

[Data on teaching staff for Vocational Academies \(ISCED 5B\) are not available.](#) Data on advanced research programmes (ISCED 6) are not included in Table D2.2.

Iceland: Students in multi-grade classes are included but were excluded previously to EAG 2005.

Ireland: Programmes at lower secondary, upper secondary and post-secondary non-tertiary levels are generally provided in the same institutions (*i.e.* secondary schools) and are taught by personnel who teach at more than one level and in many cases at all three levels. It is therefore not feasible to provide a breakdown for teachers by level of education. Thus, the distribution of teachers by age group in upper secondary education *includes* teachers in lower secondary and post-secondary non-tertiary education.

Italy: Teaching staff *excludes* teachers working in regional vocational education (Formazione professionale regionale) and those in tertiary type-B private institutions. The coverage of personnel in ISCED level 5B programmes has increased by 95% in comparison to previous year, leading to a decrease of the student to teaching staff ratio at this level of about 40%.

Mexico: In the ratio of students to teaching staff in table D2.2, teaching staff includes instructional personnel whose primary function is teaching, whereas in EAG 2004, it also included personnel whose primary function is not teaching but have some teaching responsibilities - at least 0.25 FTE (only their teaching activities where included). This change has led to a decrease of the teaching staff included in the ratio as in Mexico, management personnel in rural schools have teaching responsibilities too. As a consequence, the ratio increased by 27%.

Norway: The breakdown of classroom teachers between ISCED levels 1 and 2 is estimated (67.8 % are distributed to ISCED 1 and the remaining 32.2 % are distributed to ISCED 2). This estimation results in the same values at ISCED levels 1 and 2 for the age distribution of teachers (table D6.1) and the gender distribution of teachers (table D6.2).

Portugal: As in EAG 2005, class size in table D2.1 excludes data from the regions Azores and Madeira

Sweden: Data on class sizes are not collected on a national level in Sweden.

Switzerland: The breakdown of teachers working at more than one level of education between ISCED levels 0, 1, 2, 3 and 4 has been estimated on the basis of the distribution of students enrolled in these levels of education. For cantons which did not deliver data for the school year 2003/04, the number of missing teachers and full-time equivalents are estimated on the basis of the cantonal ratio students/teachers' full-time equivalents calculated at the end of the 90's (*i.e.* last known ratios).

For *pre-primary* education, the estimated teachers amount to 24% of the total. The estimated full-time equivalents amount to 24% of the total.

For *primary* education, the estimated teachers amount to 18% of the total. The estimated full-time equivalents amount to 22% of the total.

For *lower secondary* education, the estimated teachers amount to 16% of the total. The estimated full-time equivalents amount to 23% of the total.

For *upper secondary* education (general programmes), the estimated teachers amount to 30% of the total. The estimated full-time equivalents amount to 26% of the total.

Special education teachers are not included.

United Kingdom: Students to teaching staff ratios at secondary level only refer to secondary general education. Upper secondary vocational (further education) student data are based on a "whole-year

count” (of students enrolled at any point in the year). Students enrolled for only part of the year, on “short courses” lasting a few weeks or months, are included in the further education student count. Including these students would distort calculations of students to teaching staff ratios at secondary level.

INDICATOR D3: Teachers' salaries

■ General notes

The indicator draws on data from the system level data collection of Network C on Teachers and the Curriculum datasheets

CURR 3: Annual statutory teacher compensation by level of education, programme orientation and number of years and level of teaching experience

CURR 4: Years to grow from minimum to maximum salary, by level of education and programme

CURR 5: Criteria for additional bonuses in public institutions

■ Notes on specific countries

■ Table D3.1

Coverage and methodology

Australia: The data are based on weighted averages of State and Territory responses, which derive the data from relevant industry awards. The weights are based on the number of public school enrolments for each State or Territory. Weights are based on States or Territories who responded to the particular question.

Austria: At the beginning of their service Austrian teachers are allocated to remuneration or pay groups on the basis of their level of qualifications. For Austrian teachers six different remuneration groups are stipulated which differ in the level of compensation. To obtain reasonable figures, weighted means were determined for the respective ISCED-levels using the distribution of teachers on the existing remuneration groups. For teachers with maximum qualifications only the highest possible pay group was considered.

To obtain figures for the school year 2003/2004 weighted means of the 2003 and 2004 salaries were calculated ($1/3 * \text{salary } 2003 + 2/3 * \text{salary } 2004$).

Belgium (French and Flemish Communities): PPP and GDP per capita for the whole Belgium have been used for calculations relating to both the French Community and the Flemish Community.

Belgium (Flemish Community): The Flemish Community decided not to include the 'haard- en standplaatsvergoeding' ('home and local allowance') in the gross salaries. These allowances are awarded under certain conditions if the index-linked gross salary does not exceed a fixed sum. Only the index-linked gross salaries of teachers in pre-primary, primary and lower secondary education at the beginning of their teaching careers are below the fixed sum. Consequently, only those teachers can receive a 'haard- en standplaatsvergoeding'

Belgium (French community): The salaries are calculated on the basis of the scales which are applied at the beginning of the school year. Additional amounts for holiday and end of year allowances are included.

Czech Republic: Average instead of maximum amount is given for additional bonuses.

Denmark: Data on salaries include the teacher's contribution to the pension fund, deducted by the employer, which is 5.4 per cent of the salary. The employer's contribution to the teachers' pension, which is 10.8 per cent of the salary, is excluded. In addition to the salary, which is given in accordance with the general salary scale as a part of the collective agreements, each teacher can have – and often will have – personal bonuses given and decided on at the school level or by the local authorities. In accordance with the collective agreements, the personal bonuses have increased as a portion of the total salary of teachers.

England: Teachers can get different types of bonus and in different combinations so it is not possible to give a typical bonus or even a meaningful maximum. The various types of bonus are as follows: for working in inner London, £3417 (there are smaller amounts for outer London and the so-called London fringe); the maximum management allowance is £10,572; there is recruitment and retention allowance of £5415 and £3312 for teaching special needs children. Obviously few beginning teachers would get all these. For teachers at the top of the main pay scale there is, in addition, an "upper pay scale" where access and progress up the scale are partly dependent on performance rather than being automatic. The upper pay scale starts at £28,668 and goes up to £33,150. Most teachers at the top of the main pay scale get some type of management allowance so the 15 yrs/top of scale are lower than most teachers would receive in practice. Also, almost all teachers who are at the top of the main scale do move to the upper scale.

Qualified classroom teachers start on a six-point main scale and normally move yearly to the next point on the scale. On reaching the top of the main scale teachers may apply for access to the 3-point upper scale. If they succeeded, as most teachers do, they would move up this scale every two years to the next point. So teachers reach the top of the main scale after 5 years and those teachers admitted to the upper scale need at least another 5 years (1+2+2), for at least 10 years in total to reach the top of the upper scale. The reported data on 'years to grow from minimum to maximum salary' refer to the main scale only.

Germany: The data are based on weighted averages. The salary has decreased because extra payments (vacation payment, Christmas allowance) have been reduced.

Greece: According to the Reform Act 2470/1997 salaries at various ISCED levels are the same from 1 January, 2000 onwards.

Hungary: Data are averages based on a yearly survey. The survey on teachers' earnings covers all institutions in the public sector. The survey covers all employees in educational institutions maintained by municipality, and it is also representative of employees in institutions belonging directly to the central administration (Ministry). As the overwhelming majority of public educational institutions belong to municipalities the "sample" is nearly 100 per cent for the public sector. Following the nearly 50 per cent average increase in the scheduled wages in September 2002, reflected in data for calendar year 2003 included in last years' report, there were no scheduled wage increases in 2004.

Iceland: Salary per month multiplied by 12. Not including any bonuses or possible extra payments. All figures are based on basic salaries only, in accordance with the salary scales in the wage contracts for appropriate unions in January 2001. Additional bonuses can vary.

Ireland: Teachers with 2 years full-time pre-service training start on the first point of a 25-point scale, those with 3 years full-time training on the 2nd point (typical for ISCED 0 and 1); those with 4 years full-time training on the 3rd point (typical for ISCED 2 and 3 teachers who require a 1-year professional course on top of a 3-year primary degree to be eligible for appointment as a teacher).

There is no difference between minimum and maximum levels of training/qualifications in the common basic scale used for teachers across ISCED levels 0-3 inclusive. Qualifications held that exceed the minimum required for eligibility to be recognised as a teacher are compensated for as additional bonuses to base salaries of which only 2 from a menu may be held simultaneously at one time.

Israel: Salary data do not include reimbursed expenses for administrative responsibilities, salary for counselling, incentive payments or salary as a special education teacher or a teacher of gifted pupils. Teachers who have a Ph.D. degree are included in the maximum qualifications category. The salaries provided do not include a reduction of the work load due to age, level of education or supplementary payments to teachers preparing students for matriculation exams. Salary related to in-service training included in the category "Maximum additional bonuses to base salary".

Italy: The minimum level of training for ISCED 3 means that teachers have "upper secondary school diploma" and they are assistants in laboratories, etc. (in Italian: insegnanti tecnico-pratici)

Additional bonuses are calculated per hour and for activities outside the official teaching time. The amount per hour is €28 for teaching activities.

Japan: The gross annual salaries include a general bonus, equivalent to 4.4 months' salary.

Luxembourg: The salaries include a 13th month bonus salary. Pre-primary and primary teachers are in the same category of salaries. Lower and upper secondary teachers are in the same category of salaries. Maximum qualifications are considered as "typical" and minimum level of training refers to starting teachers. The salaries after 15 years of experience are based on estimated averages.

As salaries are a result of combined in-service training years and age, the number of years to grow from minimum to maximum salary is undefined. An average value might be 20 to 25 years.

Mexico: Bonuses are included in the gross salary amounts. For ISCED 0 and ISCED 1 the salaries correspond to 40 hours per week. For ISCED 2 the salaries correspond to 25 hours per week.

Netherlands: The salaries include the monthly salary, the 8% holiday allowance and 4.17% + € 100 single payment at the end of the year. Teachers at top of salary scale get € 306 gratification, which is also included in the reported salaries. It is possible for the School Board to deviate from this pattern: a teacher can get an extra increment, during the career, or at the top of the scale.

New Zealand: Additional 'bonuses' are calculated on the basis of the maximum additional salary available under the terms of the relevant employment agreement. The additional bonuses for teachers

include a notional maximum of 6 units for primary and 9 units for secondary based on a review of the highest number of units allocated to individual teachers in the respective sectors.

Poland: The basic salary does not depend only on the level of education, but is determined on the basis of educational qualification and professional experience. The data on teachers' salaries don't include any bonuses or additional payments. Additional bonuses are granted by local self-government entities (school governing authority).

Teachers with basic qualifications (of all levels of education) need a minimum of 10 years to reach the maximum salary which depends on teachers' professional qualifications. There are four grades of teacher professional classification. To be promoted (and thus to get a salary increase) the teacher is obliged to fulfil specific requirements: to undertake teaching practice (9-33 months), to get a positive assessment of his/her professional skills and achievements and to pass an exam before the appointed board.

Portugal: Annual salaries comprise 14 equal payments: four months plus Christmas in 2003 + eight months plus Summer Holidays in 2004. The salary amounts are lower than the reported amounts for the previous year, because for the previous year the amounts referred to classroom teachers who hold Principal duties as well, and not merely classroom teachers.

Scotland: Salaries of unpromoted primary and secondary teachers are contained on a common scale, which is why the salaries for the two sectors are the same. Salary increments do not depend on training. The figure of £28,707 is the maximum point on the common scale: there are no additional incremental points beyond this figure.

Teachers in Scotland are on a seven-point incremental salary scale (Points 0-6). Teachers start on point 0 and remain on this salary point until the completion of their probationary period. This is normally one academic session, although it can take longer. Assuming a teacher completes his probation within the normal timescale, it would take a teacher starting on point 0 of the scale 6 years to reach the maximum.

Spain: Since 2001, every Autonomous Community in Spain establishes its teachers' salaries and pays salaries to teachers from their own Community Budget. They do this within the basic general guidelines for teachers' salaries given in the National General Budget, which set the common base salaries and 'trienios' for all civil servants at different professional levels all over the country. Apart from the base salary, there are "general" and "teaching" salary supplements whose amounts vary in the different Autonomous Communities in such a way that the variations in final teachers' salaries between the different Communities are, in many cases, quite substantial.

For the salaries in public education, the average teachers' salaries for Spain have been calculated as weighted means of the salaries in the different Autonomous Communities according to the number of teachers in each Community by level of education. The salary for lower secondary teachers is a weighted mean of the Autonomous Communities and also of primary and secondary education teachers because some primary education teachers also teach at the first two years of lower secondary education (25 per cent of teachers teaching in lower secondary education are primary education teachers). Calculation method: Salary at lower secondary education = (salary of primary education teachers teaching at ISCED 2 * 0.25) + (salary of lower and upper secondary teachers * 0.75).

The gross annual salaries include the end-of-year and holiday bonuses and – deviating from the definition as used by the OECD – it includes also the employers' contribution to retirement as well as social insurance programmes.

Sweden: The figures reported are actual average salaries. Data on “maximum qualifications” are not available for Sweden. Data are not reliable enough to be reported yet due to the fact, that registers only contain the extent of studies included in degrees from 1995 onwards.

Comments on years from minimum to maximum salary: No data available on a national level since salaries are regulated in local agreements and on an individual basis.

Switzerland: Teacher with minimum level of training and 15 years of experience: the available data refer to the 11th year of experience, not to the 15th

Special education teachers are not included.

Data are weighted national averages of cantonal data. For Cantons which did not provide data for the school year 2003/2004, the number of full-time teachers is estimated on the basis of the cantonal ratio ‘students/ full-time equivalent of a teacher’ calculated at the end of the 90’s (i.e. last known ratios).

Turkey: Salaries calculation based on Law and Regulation. In addition, because of the differences in salaries between classroom teachers (1-5 grade) and subject matter teachers (6-8 grade) in primary education, a weighted mean is calculated for primary education.

United States: Data on 15 years of teaching experience are based on the median salary amounts earned by teachers with 14, 15 or 16 years of experience, in order to have larger sample sizes and more robust estimates.

Comment on years to grow from minimum to maximum salary: Salary schedules are set at the school district level. There are about 15,000 districts in the Unites States. There is no single pattern for the amount of time it takes to achieve the maximum salary.

Comments on additional bonuses: Bonuses are not uniform as each school district can set these separately. Education and years of experience are built into the salary schedule and 93 per cent of school districts have a salary schedule.

Interpretation

New Zealand: Schools are not divided into lower and upper secondary. Primary school is from Year 1 to 8 and secondary school is from year 9 to 13. Data for lower secondary education are the average of primary education and upper secondary education.

In New Zealand, any teacher who has been teaching for 15 years is considered to be at the top of the salary scale. Progression is on an annual basis subject to competent performance (a test situation against national professional standards), so a teacher would be expected to progress one step each year. Entry points differ according to the level of qualification upon entry into the service. In addition, the number of years it takes a teacher to progress to the maximum salary step is dependent upon their

qualifications. Teachers with a Bachelors' degree or higher could progress to a new maximum step from February 2003.

The number of years to grow from minimum to maximum salary is based on the assumption that there is an annual progression of one step a year on the salary scale from the entry at step 6 to step 14, introduced in February 2003. In practice the progression is subject to attestation against national professional standards.

Spain: Besides the “general” and “teaching” salary supplements, there are two other supplements related to the number of years of experience:

i) ‘Trienios’ - a small salary supplement added to the salary of teachers after every three-year period. In pre-primary and primary education the maximum years of experience is 43 (teachers beginning their career at 22), *i.e.* 14 trienios. In lower and upper secondary education, due to a longer initial training requirements, a maximum experience of 41 years is possible (teachers starting their career at 24), *i.e.* 13 trienios.

ii) ‘Sexenios’ - salary supplements added after each six-year period and related to the in-service training (a minimum of 100 hours of officially recognized in-service training activities). Typically, all teachers fulfil this in-service requirement to be awarded with a ‘sexenio’. A maximum of 5 sexenios can be received. The ‘sexenios’ don’t exist in all Autonomous Communities (*i.e.* not in Basque Country, Navarra and the Canary Islands).

No salary supplements for higher qualified teachers exist in pre-primary and primary education. In lower and upper secondary education, teachers with the ‘catedrático condition’ receive a salary supplement. ‘Catedráticos’ were formerly a distinct teacher level with the same qualifications but higher entry requirements. Since 1990, the ‘catedrático condition’ refers to a specific in-service attained qualification which entails a salary supplement for the rest of a teacher’s career. Only about 15 per cent of the teachers have the ‘catedrático condition’.

Two types of teachers teach at the lower secondary level: secondary education teachers and primary education teachers (25 per cent of the teachers in the first two years of lower secondary education). Secondary education teachers teach at both lower and upper secondary education, having the same pre-service and in-service training requirements and also receiving the same salaries.

Years to grow from minimum to maximum salary: In primary education it is assumed that teachers can start their professional career at age 22 and therefore accumulate a maximum of 14 ‘trienios’ (salary supplement after every three-year period) in 42 years till the retirement age at 65. In general secondary education the initial training requirements are higher, so teachers can start their professional career at age 24, being able to accumulate a maximum of 13 ‘trienios’ in 39 years.

Bonuses: Teachers in the Canary Islands, Balearic Islands, and Spanish North African cities (Ceuta and Melilla) receive an additional supplement to their salary as location allowances. Teachers in non-capital Canary Islands and Spanish North African cities also receive an extra three-year bonus (apart from the general three-year supplement, Ceuta and Melilla (pre-primary and primary education). As all teachers working in the mentioned areas receive these supplements, they were considered as a regular part of the salary of these teachers and, therefore, they were taken into consideration to calculate the national average salaries.

The figures for ‘maximum additional bonuses’ correspond to those bonuses received by teachers in Ceuta and Melilla, which are the highest in the country. These teachers represent only 0.48 per cent of the teachers in primary education and 0.40% in secondary education. Teachers in the position of Head of Department (general secondary education) receive a bonus of € 752.51 per year. This bonus has also been taken into consideration for the calculation of the ‘maximum additional bonuses’ to the base salary.

The criteria for additional bonuses are mostly the same in all Autonomous Communities (except for the location allowances and the family status), but the amount of the bonuses varies among Communities.

Sweden: A “starting teacher” has been interpreted as teachers having worked for 1-2 years. “Minimum level of training” has been interpreted as teachers with pedagogical qualifications. “Top of salary scale” has been interpreted as teachers belonging to the 90th percentile, which means that 10 per cent of the teachers have higher or the same salary as the 90th percentile. “Typical qualifications” has been interpreted as teachers with minimum level of training, *i.e.* fully qualified teachers with pedagogical education. The data for 2003 (reported in EAG 2005 and EAG 2006) are not directly comparable with the data provided for 2001, since the specifications of data have been changed in order to allow for better alignment to the data being asked for by OECD.

Switzerland: The methodology has changed compared to last year’s data reporting. Teachers working at different levels of education are attributed to one particular level of education according to the number of students. In addition to this, the methodology used for the computation of the data 2004 for secondary education has been adapted. Therefore comparisons between the 2004 figures and data reported before are no longer possible.

Turkey: The additional teaching hour salary per week for preparation and planning duties is not included in the gross salary.

United States: Because salary schedules in the U.S. are set up by degree level as well as by years of experience, the salary for a beginning teacher with a bachelor’s and no experience is the same for primary as for secondary teachers. But secondary teachers in the U.S. are more likely to have a master’s degree as a beginning teacher than are primary teachers. The maximum salary for teachers with minimum credentials does not make sense in the United States, since, over teacher’s careers, they are expected to attain at least a master’s degree, if they do not start out with one. Few teachers end their career with only a bachelor’s degree, which is the minimum credential.

■ **Table D3.2- Criteria for adjustments to base salary**

Interpretation

Australia

Holding an initial educational qualification higher than the minimum qualification required to enter the teaching profession: Teachers with higher than minimum qualifications may have a higher starting salary. For example teachers with a post graduate qualification are likely to start on a higher pay schedule. A longer duration of initial training (*i.e.* 5 years rather than 4 years) may result in a higher commencing salary.

Holding an initial educational qualification in multiple subjects: One state/territory indicated that a local authority may provide extra pay under this criterion

Successful completion of professional development activities: One state/territory indicated that a local authority may provide extra bonus under this criterion.

Outstanding performance in teaching: One state/territory rewards teachers for exemplary practice.

Management responsibilities in addition to teaching duties: Management responsibilities may be associated with promotion. Specific management positions may have associated extra payments or bonus type payments.

Holding a higher than minimum level of teacher certification or training obtained during professional life: Remuneration varies by State and Territory, with some regions granting higher increments or commencing salaries due to postgraduate qualifications, industry or practical experience.

Teaching students with special education needs: Allowance in special school or special students in a regular school.

Teaching more classes or hours than required by full-time contract: Additional time and classes are handled in a number of ways by states and territories. For extended hours/classes the teacher can be compensated by either extra payment of salary or the teacher may agree to extended hours of duty as time in lieu. School teachers involved in rostered after hours student supervision may also receive an annual allowance to compensate for additional duties.

Special activities: One state/territory provides allowances for special activities.

Special tasks: Teacher university education commonly requires successful in-school experience to complete their qualifications. The training teacher may either be paid on a daily or annual allowance either by the universities supervising the student. Home School Liaison Officers and Aboriginal Student Liaison Officers receive additional recreation leave to compensate for after hours work and travel time. Annual allowances may be paid to teachers who take on additional welfare responsibilities, *e.g.* year advisors and supervisors of female staff.

Teaching in a disadvantaged, remote or high cost area: Allowance given mainly for teaching in schools that are considered remote or isolated. Occasionally allowances are given for teaching in difficult to staff schools.

Family status: Some family allowance due to remote areas.

Other Experienced Teacher or Senior Teacher: On achieving prescribed number of years teaching a teacher may apply to become Experience or Senior Teacher.

Austria

Holding an initial educational qualification higher than the minimum qualification required to enter the teaching profession: In a limited number of subjects different scales may apply depending on the level of educational qualification.

Holding an initial educational qualification in multiple subjects: the multiple subject qualification is a standard requirement.

Management responsibilities in addition to teaching duties: Appointments to management positions are decided by the regional or national authorities depending on the type of school involved; the appointee has a statutory right to a reduction of the teaching load (or exemption from teaching obligation) and to an allowance depending on the salary scale, seniority and the size of the school (with a supplement for long term exercise of the function). Teachers entrusted with more limited administrative or coordinating functions are remunerated by a flat rate compensation or a reduction of teaching load which are fixed centrally and apply whenever such a function is assigned (normally by the principal). There is a certain pool of extra pay (flat rate remuneration) for extra duties available for assignment by the principal. For specific projects the Ministry for Education, Science and Culture may grant a reduction of the teaching load.

Outstanding performance in teaching: Outstanding performance or involvement in a particular successful project may be rewarded with a lump sum bonus if means are available.

Teaching more classes or hours than required by full-time contract (e.g. overtime compensation): Statutory bonus for regular over time teaching assignments and for substituting for absent colleagues.

Special activities (e.g. sports and drama clubs, homework clubs, Summer school etc.): Statutory bonus only for specific out of school activities complementing the curriculum.

Special tasks (e.g. training student teachers, guidance counselling): Statutory allowance for training student teachers.

Family status (e.g. married, number of children): Statutory allowance for each dependent child.

Age (independent of years of teaching experience): Supplement to the allowance for principals for long-term exercise of the function.

Other: Some other criteria exist, *i.e.* statutory allowance for teaching classes with pupils of different grades, statutory allowance for teaching pupils of different performance groups and statutory bonus for special counselling duties.

Belgium (Flemish Community)

Holding a higher than minimum level of teacher certification or training obtained during professional life (this specific bonus is integrated for the first time in this category; in previous editions of EAG, the bonuses covered here have been integrated in the category “other”): There are specific bonuses for teachers who have a specific diploma (for instance Diploma of Higher Educational Studies or a Certificate of Advanced Educational Studies).

Teaching more classes or hours than required by full-time contract (e.g. overtime compensation): The hours achieved above the maximum hours of a duty are paid in the same way as the hours within the duty. This regulation applies only on the total number of periods allocated by the Flemish Community for funding purposes. The school head or the group of school divides the total number of periods allocated for funding purposes among the teaching staff. This regulation applies to all the teachers of secondary education and those of primary education with a duty of education at home (Flemish parliament act of 8 June 2000 laying down various urgent measures concerning the teaching profession).

Other (Family status combined with gross salary): The Flemish Community decided not to include the ‘*haard- en standplaatsvergoeding*’ (‘home and local allowance’) in the gross salaries. These allowances are awarded under certain conditions if the index-linked gross salary does not exceed a fixed sum. Only the index-linked gross salaries of teachers in pre-primary, primary and lower secondary education at the beginning of their teaching careers are below the fixed sum. Consequently, only those teachers receive a ‘*haard- en standplaatsvergoeding*’.

Other (Special status of Brussels Capital): Teachers working in primary education in the bilingual area Brussels Capital may receive a bonus. In order to receive this bonus they need to have a specific certificate concerning a profound knowledge of the compulsory second language, French, in primary education. This bonus is € 565.10 a year. This bonus was implemented for the first time in September 2002.

Other (Specific diploma or certificate in special education): Teachers with a specific diploma or certificate who have a teaching job in the special education receive a bonus.

Belgium (French Community)

Special tasks: The French Community grants an allowance to the teachers who welcome trainees of the Schools of Formation of the Teachers. The concerned schools must have concluded a contract of collaboration.

Other: The French Community provides young teachers with a supplementary allowance (allowance of home or residence) according to the family situation provided that his gross income doesn't pass a fixed sum.

Czech Republic

Reaching high scores in the qualification examination: No official examination system is used in Czech Republic.

Management responsibilities in addition to teaching duties: This bonus is awarded to deputy school principal. Law states the range of the amount of this bonus, however only as a range.

Teaching students with special educational needs: This bonus is paid to teachers of special classes within regular schools.

Teaching more classes or hours than required by full-time contract: Law dictates the amount of this bonus.

Age: The head teacher decides if a single bonus is awarded to a teacher when he/she reaches 50 years-of-age or retires.

Denmark

Management responsibilities in addition to teaching duties: Teachers' teaching hours will be reduced and sometimes an extra payment over the period of work will be given for serving as a member of the school-management team.

England

Outstanding performance in teaching: It is possible, though very unusual, to "double jump" points on the main scale, for excellence.

Teaching courses in a particular field: In the sense that schools can pay recruitment and retention allowances for scarce subject skills though few do.

Teaching in a disadvantaged, remote or high cost area: There are nationally agreed supplements for London. Schools can pay recruitment and retention supplements in disadvantaged areas (but in other areas too).

Finland

Outstanding performance in teaching: According to the General Agreement, the local authorities and education providers have an opportunity to encourage individual teachers in their work by personal cash bonuses on the basis of individual professional proficiency and performance at work (e.g. exceptional cooperation skills, special responsibility and other locally regulated criteria).

Germany

Management responsibilities in addition to teaching duties: Teachers with management responsibilities can enter a higher salary group or receive allowances as part of the basic salary.

Teaching more classes or hours than required by full-time contract (e.g. overtime compensation): Bonuses are awarded only for teaching more hours.

Family status: Family allowance is included in the salary. The family allowance varies according to the salary group and the family circumstances of the civil servant (e.g. married and widowed civil servants without children fall under level 1, while married and widowed teachers with one child fall under level 2).

Age: The basic salary depends on the salary group and the seniority grade. The seniority grade is based on the age of the teacher at the time that he/she became a civil servant, with the teacher's training period also being taken into account.

Note: Teachers are entitled to have a reduction in the number of periods for performing certain duties, such as administrative work in the case of head teachers or their deputies. The number of periods is also reduced for members of staff carrying out special tasks, such as teacher training, preparation of timetables and running of libraries.

Greece

Holding an initial educational qualification higher than the minimum qualification required to enter the teaching profession: All teachers must have acquired a university degree, with the exception of some categories of teachers in Technological and Vocational Schools (TEE-ISCED 3) in which they may have degrees from Technological Education Establishments (ISCED 5B).

Holding a higher than minimum level of teacher certification or training obtained during professional life (e.g. master teacher; holding an advanced certificate rather than an ordinary certificate): There is a salary adjustment for teachers with a master's degree or Ph.D. If a teacher has a master's degree s/he takes an additional benefit of € 352 per year and if s/he has a Ph.D degree s/he takes € 634 per year.

Teaching more classes or hours than required by full-time contract (e.g. overtime compensation): There is overtime compensation when a teacher teaches more hours than required in a normal situation.

Special tasks: Teachers receive additional bonuses for teaching seminars or training programmes, depending on the time and the subject.

Teaching in a disadvantaged, remote or high cost area (location allowance): There are three categories of location allowances for teachers in Greece. (a) Disadvantaged regions of category B: € 387 per year (b) Disadvantaged regions of category A: € 528 per year and (c) Disadvantaged and borderland regions: € 880 per year.

Family status: Teachers receive additional bonuses, depending on marital status and the number of children: marriage € 423 per year, first child € 211 per year, second child € 211 per year, third child € 423 per year, fourth child € 563 per year and above the fifth child € 880 per year.

Hungary

Successful completion of professional development activities: Participation in in-service training is compulsory for teachers once every seven years. Teachers who have met this requirement can increase by one category in the salary scale a year earlier.

Management responsibilities in addition to teaching duties: Teachers are entitled to this additional bonus by the Government Decree (138/1992.). However, the school principals take a decision about the amount of additional bonuses within the given financial category.

Outstanding performance in teaching: This additional bonus is awarded only for the definite period of time.

Teaching courses in a particular field: This additional bonus is awarded only for the definite period of time.

Teaching students with special educational needs (in regular schools): Teachers are entitled to this additional bonus by the Government Decree (138/1992.). However, the school principals take a decision about the amount of additional bonuses within the given financial category.

Special activities: This additional bonus is awarded only for the definite period of time.

Special tasks: Teachers are entitled to this additional bonus by the Government Decree (138/1992.). However, the school principals take a decision about the amount of additional bonuses within the given financial category.

Teaching in a disadvantaged, remote or high cost area (location allowance): The local authorities ensure the sum of money for the additional bonus within the framework defined by the central budget.

Other (non-compulsory adjustments, e.g. catching up, teaching in merged class, dormitory teachers): Teachers are entitled to this additional bonus by the Government Decree (138/1992.). However, the school principals take a decision about the amount of additional bonuses within the given financial category.

Other: (Financial aid for purchasing professional literature).

Iceland

All applicable criteria: The level of decision depends on the ISCED level. In general, decisions at ISCED levels 0, 1 and 2 are generally made by local or regional authorities, while decisions at ISCED level 3 are generally made by the national authority.

Ireland

Holding an initial educational qualification higher than the minimum qualification required to enter the teaching profession: All teachers have a common basic salary scale; point of entry is determined by number of years training.

Management responsibilities in addition to teaching duties: Additional payments are paid to principals, deputy principals, holders of posts of responsibility (assistant principals, special duties teachers).

Holding a higher than minimum level of teacher certification or training obtained during professional life: Extra payments are made for additional academic qualifications, e.g. a Master's or doctorate degree.

Teaching in a disadvantaged, remote or high cost area (location allowance): Payable to teachers in Gealtacht (Irish speaking) districts and on offshore islands.

Other (long service): 35 years of service = 10 years at maximum of the scale.

Italy

Management responsibilities in addition to teaching duties: Criteria are decided by the teaching staff in each school.

Teaching more classes or hours than required by full-time contract (e.g. overtime compensation): According to the Teacher National Collective Contract.

Special activities (e.g. sports and drama clubs, homework clubs, Summer school etc.): Criteria are decided by the teaching staff in each school.

Special tasks (e.g. training student teachers, guidance counselling): Criteria are decided by the teaching staff in each school.

Teaching in a disadvantaged, remote or high cost area: According to the Teacher National Collective Contract.

Family status: According to the Teacher National Collective Contract.

Japan

Management responsibilities in addition to teaching duties: An allowance of 200 yen per day is allocated to chief teachers, who are in charge of management.

Teaching students with special educational needs: This allowance is allocated to teachers who are in charge of special classes or who work in Special Education Schools (about 6 per cent of salary).

Special activities: This allowance is allocated to teachers who take emergency work in case of disaster (3 200 yen/time).

Teaching in a disadvantaged, remote or high cost area (location allowance): Allowances are paid to teachers living in areas with a high cost of living.

Family status: This allowance is allocated to teachers with dependants.

Other: All teachers receive an allowance, which is equivalent to 4.40 months' salary, an allowance for teaching more classes or hours than required (about 4 per cent of their salary), and an allowance for teaching in compulsory education (about 3.5 per cent of their salary).

An allowance is available for teachers who commute from a distance over 2 km or remote area work or take posts in a city that is more than 60 km from home; a housing allowance is provided to teachers if their rent is more than 12 000 yen; an allowance is allocated to the teachers of multi-grade classes; a cold area allowance is provided, an allowance is provided to teachers on day and night duty, an allowance is allocated to the high school teachers who are in charge of industrial education of agriculture, fisheries, industry and merchant vessel; and an allowance is allocated to the high school teachers who are in charge of day/evening and correspondence education. The amount of allowance for each of the latter two conditions is 10 per cent of the salary.

Mexico

Holding an initial educational qualification higher than the minimum qualification required to enter the teaching profession: Primary and lower secondary education: Teachers receive additional bonuses for academic level, or the maximum level of studies attained by the teacher, and seniority, or the years of performance in the Basic Education teaching service. Upper secondary education: Bonuses are based on the academic grade of the Program of Evaluation and Allocation of the Stimulus to the Educational Performance.

Reaching high scores in the qualification examination: Primary and lower secondary education: This corresponds to the knowledge required by the teacher to perform his/her duties. It is evaluated by means of an instrument designed and applied by educational authorities. Upper secondary education: Performance programme

Successful completion of professional development activities: Primary and lower secondary education: This corresponds to the knowledge required by the teacher to perform his/her duties. It is evaluated by means of an instrument designed and applied by educational authorities.

Management responsibilities in addition to teaching duties: Upper secondary education: Management Position Compensation.

Holding a higher than minimum level of teacher certification or training obtained during professional life: Primary and lower secondary education: Additional bonuses are provided for completing modernisation courses and professional development, which are run at state and national levels. Upper secondary education: Teacher promotion process.

Outstanding performance in teaching: Primary and lower secondary education: Bonuses to teachers are based on evaluations of learning achievement of students in the class or subject. Upper secondary education: Bonuses are based on the academic grade of the Program of Evaluation and Allocation of the Stimulus to the Educational Performance...

Teaching courses in a particular field: Upper secondary education: Linked courses, courses imparted from teachers to other teachers. Long distance education programme (Master degree of basic sciences).

Teacher more classes or hours than required: Upper secondary education: Working hours on Saturday or Sunday.

Special tasks: Upper secondary education: The bonuses are based on special tutorials, instruction assessment of teachers of partial time and on the factor of dedication to teaching. The last one is part of the Program of Evaluation and Allocation of the Stimulus to the Educational Performance.

Teaching in a disadvantaged, remote or high cost area: at primary and lower secondary education, additional bonuses are provided for teachers that work in areas of low development in the country.

Other: Primary and lower secondary education: Remuneration are provided for teachers involved in educational support, which refers to the research, updating and material preparation activities that contribute to improving the teaching-learning process and procedures.

Netherlands

Teaching students with special educational needs (in regular schools): These teachers are placed on a higher salary scale in primary education.

New Zealand

Holding an initial educational qualification higher than the minimum qualification required to enter the teaching profession: Higher starting salaries are available to teachers with higher than the minimum required level of teacher training qualification.

Management responsibilities in addition to teaching duties: Schools are able to allocate a certain number of "units" dependent upon size and level of the school to recognise management responsibilities. Each unit is worth \$3000 p.a. (as at 5/2/2004) to the teacher. Teachers can receive a multiple number of units.

Holding a higher than minimum level of teacher certification or training obtained during professional life: Teachers who improve their qualifications may be entitled to progress to a higher qualifications maximum salary. Teachers in upper secondary education (and some primary teachers) can receive the Service Increment Allowance under some circumstances if they have improved their qualifications since entering the service.

Outstanding performance in teaching: Units may be awarded to reward individual teachers for performance.

Teaching courses in a particular field: Teachers of an approved Māori language immersion programme, who teach a minimum of 31 per cent of their classes in Te Reo Māori, are entitled to the Maori Immersion Teacher Allowance of 1 unit (\$3000).

Teaching students with special educational needs: Designated teachers of students with special educational needs may receive the Special Duties Increment Allowance at the value of one salary step (variable) or \$995 p.a. when the teacher is at their qualification maximum.

Special activities: Teachers may be awarded one or more Units in recognition of their undertaking specific activities related to extra-curricular or pastoral duties.

Special tasks: An associate teacher allowance is available to primary teachers (\$5.160 per week) or to secondary teachers (\$3.19 per hour) who are responsible for overseeing trainee teachers on placement. A Careers Adviser Allowance (\$1054 p.a.) is payable to secondary teachers appointed as a careers adviser.

Teaching in a disadvantaged, remote or high cost area (location allowance): A location allowance (up to \$3032 p.a.) is available to primary teachers employed in remote schools. The Staffing Incentive Allowance (\$966 p.a. in Secondary/ \$995 in Primary) is available to teachers in schools able to demonstrate difficulties in attracting staff.

Other: Teachers in Normal or Model Schools (*i.e.* primary schools that have a relationship to a specific teacher--training provider) are eligible for the Normal School Allowance \$1636 p.a.

N.B. Some allowances are available under the terms of the national employment agreements, but eligibility relates to (school) level decisions.

Norway

Holding an initial educational qualification higher than the minimum qualification required to enter the teaching profession: Teachers can gain one or more increments.

Management responsibilities in addition to teaching duties: Teachers may gain one or more increments and obtain a reduction in working hours, for example as a main teacher for a class. Local authorities can give additional bonuses for example for coordinators in special education needs.

Holding a higher than minimum level of teacher certification or training obtained during professional life: Teachers may gain one or more increments.

Teaching more classes or hours than required by full-time contract: Teachers are paid at an hourly rate.

Special tasks: Teachers who are training student teachers are given a reduction in teaching hours.

Teaching in a disadvantaged, remote or high cost area (location allowance): Teachers in certain areas, particularly in northern Norway, receive a fixed amount in addition to their salary.

Poland

Other bonuses: Motivation bonus.

Portugal

Holding an initial educational qualification higher than the minimum qualification required to enter the teaching profession: Teachers' career is structured in ten levels. Undergraduate teachers begin their career in level one, while graduate teachers begin in level three.

Successful completion of professional development activities: Teachers must complete a certain amount of professional development credits in order to progress in their careers.

Management responsibilities in addition to teaching duties: While in position, principals receive an increase in salary, whereas educational guidance managers (heads of curriculum departments, class tutors' co-ordinators and tutors) receive a reduction of their teaching time. The school board defines the criteria to distribute the statutory available amount of time among the educational guidance structures.

Holding a higher than minimum level of teacher certification or training obtained during professional life: In addition to the requirement of a university degree, a master's degree adds a bonus corresponding to four years of career progression; a doctorate adds a bonus corresponding to 6 years of career progression.

Outstanding performance in teaching: After 15 years of teaching and after receiving an appraisal of 'good' by the school, teachers may apply for a special appraisal of their *curriculum vitae* and receive an increase of two years in their career progression. However, teachers apply seldom to this bonus possibility.

Teaching students with special educational needs (in regular schools): Teachers holding a certified qualification in special needs teaching are rewarded with a bonus corresponding to one year in their career progression, when teaching special needs children. Very often, they have a reduction in the teaching time.

Teaching more classes or hours than required by full-time contract: Teachers are paid extra for the classes/hours taught beyond teachers' statutory working time. In general, this situation occurs due to the difference between individual teaching load and the curriculum hours to teach. The first extra hour is paid 25 per cent above the cost of the ordinary hour and each of the following extra hours is paid 50 per cent above the ordinary one.

Special activities: Teachers in charge of school non-curricular activities can be given a reduction in the teaching time. The School Pedagogic Council defines the criteria for the distribution of the global time credit among the teachers in charge of these activities.

Special tasks: Teachers responsible for teacher training receive a salary increase and a reduction in teaching time.

Family status: Family status is not specific to teachers, but corresponds to a social allowance to every family with children.

N.B. Bonuses are given on a monthly basis and they are supposed to last for the whole school year.

Scotland

Holding a higher than minimum level of teacher certification or training obtained during professional life: August 2003 saw the introduction of the Chartered Teacher Programme. A qualification-based grade of teacher categorisation which awards additional salary increments if teachers undertake voluntary study modules and developmental activities, in addition to their contractual hours of Professional Development. A salary increment is awarded for every second module completed. Previous learning and experience can be accredited.

Teaching in a disadvantaged, remote or high cost area (location allowance): Within the Scheme of Salaries and Conditions of Service document for teachers employed in education authority schools, there is provision for such allowances to be made in respect of remote schools and distant islands. These figures are updated by the Scottish Negotiating Committee for Teachers (SNCT) and set out in SNCT Circulars. With reference to Part 5 of the Scheme the annual allowances payable under the following headings are:

(a) Remote schools: £918 per annum or £1,716 per annum

(b) Distant Islands: £1,479 per annum

A distant island is any of the Orkney Islands, of the Shetland Islands, or of the Outer Hebrides and the islands of Colonsay, Tiree, Coll, Muck, Eigg, Rhum, Canna and Soay.

Spain

Successful completion of professional development activities: For public schools' teachers a supplement called 'sexenio' does exist. It is a salary supplement added after each period of six years of experience and related to in-service training (teachers must complete 100 hours of in-service training courses recognized by the educational administration during each six-year period to receive this supplement). Typically, all teachers fulfil this requirement to be awarded with a 'sexenio', so that these supplements were computed to calculate the statutory salaries. A maximum of five sexenios are recognized.

Management responsibilities in addition to teaching duties: In lower and upper secondary education there is a Head in each Didactical Department. In case there is a teacher with a recognized senior teaching position ("Catedrático condition") he/she is the Head of the Department. In case there are more than a "catedrático", the Department may suggest to the school principal one of these teachers to be the Head but, in any case, the school principal makes the definitive nomination and the high local education authority makes the final decision. In case there is not any teacher with the "catedrático condition" in a certain Department, any of the other teachers can become Head of Department (usually teachers rotate in this position). All the Department Heads receive a fixed salary supplement during the time they have that responsibility. The standard duration of each 'mandate' as Department Head is four years. In primary education any teacher can be the co-ordinator of the teachers in the cycle, and this position can also be awarded with any salary supplement.

Special tasks: In some communities the schools are allowed to designate a teacher for the coordination of ICT. Teachers with this responsibility receive a salary supplement. In some communities, such as the North African Spanish cities (Ceuta and Melilla), tutorial duties entitle for a small supplement too.

Teaching in a disadvantaged, remote or high cost area: These location allowances are a fixed amount paid to all teachers in Canary Islands, Balearic Islands and North African cities (Ceuta and Melilla). Location allowances are sometimes paid also to teachers in some rural schools or working with disadvantaged population (itinerary population, immigrants...).

Family status: Only in the Autonomous Community of Navarra teachers receive a salary supplement when they are married or have children or handicapped children. The teachers in this Community represent 1.48 per cent of the total in primary education and 1.33 per cent in secondary education.

Note: The criteria for additional bonuses are the same in all the Autonomous Communities (except for the location allowances and the family status), but the amounts of the bonuses vary among Communities.

Sweden

In Sweden, teachers are awarded individual salaries and there is no fixed salary scale. Additional bonuses in the true sense of the concept are rare and difficult to isolate because of the individual setting of salaries.

Switzerland

Management responsibilities in addition to teaching duties: This criterion does not apply in all cantons.

Teaching students with special educational needs (in regular schools): This criterion does not apply in all cantons.

Teaching more classes or hours than required by full-time contract (e.g. overtime compensation): This criterion does not apply in all cantons.

Special activities: This criterion does not apply in all cantons.

Special tasks: This criterion does not apply in all cantons.

Family status: This criterion applies in all cantons.

Note: The salary scale - determined by the years of experience - is not applied. Teachers receive less than the base salary for a given number of years of experience. This criterion does not concern all cantons (temporary measure).

Turkey

Holding an initial educational qualification higher than the minimum qualification required to enter the teaching profession: A teacher who holds a Master's or PhD qualification from any department of the faculty of education is placed on the upper degree of the first-year salary scale. In addition, teachers with a master's degree are awarded an additional 25 per cent per teaching hour if they teach additional hours, and an extra 40 per cent per teaching hour for teachers with a PhD.

Successful completion of professional development activities: A teacher reaching a level (A, B, C) from National Public Staff Foreign Language Exam gets additional bonus according to the level.

Outstanding performance in teaching: Teachers who achieve high levels of success in their profession are evaluated by the Provincial Directorate of National Education and by the Ministry, and are awarded an additional bonus.

Teaching more classes or hours than required by full-time contract: Teachers must teach more hours than that which is stated in the full-time contract if it is required by the school administration. Any additional teaching hours are paid to the teachers per teaching hour/lesson hour.

Special activities: In grades six to eight in primary and secondary education, teachers are paid for three additional teaching hours if involved in special activities.

Special tasks: Teacher trainers are paid per teaching hour if appointed as a lecturer in courses or seminars, although these take place outside of education and training time.

Teaching in a disadvantaged, remote or high cost area (location allowance): Additional bonuses are paid to teachers working in areas that have been given priority with regard to development.

Family status: An additional bonus is paid to a teacher if the teachers' wife or husband is unemployed or has children (maximum of two children who are less than 18-year-olds).

Other: A teacher who doesn't live in a flat belonging to government takes contribution to live in a rented flat monthly.

United States

Holding an initial educational qualification higher than the minimum qualification required to enter the teaching profession: Teachers with a master's degree or Ph.D. would have higher base salaries than teachers with a bachelor's degree.

Management responsibilities in addition to teaching duties: This concerns additional duties as specified in a contract.

Holding a higher than minimum level of teacher certification or training obtained during professional life: Master's degree rather than bachelor's degree, or additional graduate credits beyond master's degree, or a Ph.D. degree.

Outstanding performance in teaching: Achieving the National Board for Professional Teaching Standards certification or for increase in student achievement test scores.

Teaching courses in a particular field: Based on determination of subjects that are in teaching shortage.

Teaching students with special educational needs Based on determination of special education areas that are in teaching shortage.

Special activities: Additional activities may, but not always, be specified for additional pay in contracts. For example, coaching a sports team or summer school duty are usually paid; while club sponsors are not.

Teaching in a disadvantaged, remote or high cost area: Depends upon designation of teaching shortage area.

Sources and references

Indicator D3- Teachers' salaries: Sources and references

Country	Sources	Reference period
Australia	Data are sourced from the respective State and Territory education departments.	<i>Teacher compensation:</i> 2004 <i>Age reference:</i> 30/06/2004.

Austria	Legal documents (statutory pay schemes).	School year 2003/2004.
Belgium (Flemish Community)	Education Department, Ministry of the Flemish Community.	School year 2003-2004.
Belgium (French Community)	Entreprise publique des Technologies Nouvelle de l'Informatique et de la Communication (ETNIC)	School year 2003-2004.
Czech Republic	Institute for Information on Education; Government decree.	School year 2003-2004.
Denmark	Collective agreements with teacher-unions.	2004
England	National pay agreement (pay scales).	January 2004.
Finland	<i>Teacher compensation:</i> Statistics Finland, salaries of Teachers in the Municipal sector. Total data base <i>Bonuses:</i> General agreement for teachers 2003-2004.	October 2004.
France	Nature of Law and policy documents based on law, national statistics.	School year 2003-2004.
Germany	Secretariat of the Standing Conference of the Ministers of Education and Cultural Affairs of the Länder in the Federal Republic of Germany. Nature of Law and policy documents based on law, national statistics.	School year 2003-2004.
Greece	<i>Teacher compensation:</i> Salary Reform Act 2470/1997. <i>Years to grow from minimum to maximum salary:</i> Nature of Law and policy documents (data on formal arrangements).	Fiscal Year 2003 (1 January to 31 December). School Year 2003-2004.
Hungary	<i>Teacher compensation:</i> Annual statistical survey on individual earnings, carried out in May each year <i>Years to grow from minimum to maximum salary:</i> Act XXXIII on Public Employees 1992. <i>Additional bonuses:</i> Public Education Act 1993, Act XXXIII on Public Employees 1992, 138/1992 Government Decree.	2004.
Iceland	Wage contracts in effect 01.01.2001: a) between the Icelandic Teachers' Union (pre-primary school teachers) and the Wage Committee of Municipalities, b) between the Icelandic Teachers' Union (compulsory school teachers) and the Wage Committee of Municipalities, c) between the Icelandic Teachers' Union (upper secondary school teachers) and the State.	2003/2004.
Ireland	Department of Education and Science payroll/salary agreements and circulars.	2003/2004.
Israel	Ministry of education. Data are based on formal arrangements	2003/2004.
Italy	<i>Salaries:</i> C.C.N.L. Comparto Scuola 2002-2005. <i>Bonuses:</i> Teacher National Collective Contract 2002-2005, DPR 275/1999	2004.
Japan		School year 2003/2004.
Korea	1) The presidential degree of public servant compensation and allowance, 2) the reference for compilation of the national budget.	2004
Luxembourg	<i>Salaries:</i> Ministry of Education, service du Personnel, Ministry of Education, service administratif	2003/2004.
Mexico	Teacher salaries were calculated on information from the Secretariat of Public Education.	School year 2003/2004.
Netherlands	<i>Salaries:</i> Publicatie: Financiële arbeidsvoorwaarden per 1 maart 2003. Ministerie van OCenW. <i>Bonuses:</i> Rechtspositiebesluit Onderwijs	1 January, 2004
New Zealand	Relevant National Employment Agreements: Secondary Teachers Collective Employment Contract 2002; Primary Teachers Collective Employment Contract 2002.	1 January 2004
Norway	Agreements between government and the Teachers' unions.	2003/2004
Poland	Law and regulations (after the last stage of teachers' salary reform).	School year 2003/2004.
Portugal	<i>Salaries:</i> Gabinete de Gestão Financiera do Ministério de Educação (Office for Financial Management). <i>Additional bonuses:</i> Office for Financial Management, Law/policy document: Decreto-Lei nº 139-A/90 and Decreto-Lei nº 1/98 – Teachers' Career Statute; Decreto Regulamentar nº 10/99.	School year 2003/2004.
Scotland	<i>Salaries:</i> The 2001 teachers agreement: "Teaching Profession for the 21 st Century" <i>Bonuses:</i> Circulars SNCT/27 and SNCT/29 issued by Scottish Negotiating Committee for Teachers.	School year 2003/2004.
Spain	Official Bulletins and salary tables provided by the Education Departments of the Autonomous Communities.	2003/2004.

Sweden	<p><i>Salaries:</i> Data on actual teacher salaries are reported. The main source is the Register of Teachers managed by Statistics Sweden (SCB), combined with other data on salaries also managed by Statistics Sweden. Data from the two registers are combined using a personal code for each individual. Teachers on ISCED level 0 were not included in the register in 1999. Therefore the data on this level are not as reliable as for the other ISCED levels.</p> <p><i>Bonuses:</i> Communications with Teachers' unions and the Swedish Association of Local Authorities.</p>	<p>Salaries: 2003. Bonuses: 2003/2004.</p>
Switzerland	<p>i) Lehrkräftestatistik, Bundesamt für Statistik, ii) LCH Dachverband Schweizer Lehrerinnen und Lehrer.</p> <p><i>Nature of sources:</i> i) National statistics (data on populations), ii) law or policy documents (data on formal arrangements).</p>	<p>i) 2003/2004, ii) 2004.</p>
Turkey	<p>The Law Numbered 657 of Public Staff - MNE Fundamental Principals Related to Salaried Teaching Hours of Teachers and Administrators.</p>	<p>School year 2003/2004.</p>
United States	<p>2003/2004 Schools and Staffing Survey; Public school teacher questionnaire. (sample survey of self-administered questionnaires to a representative sample of public school teachers)</p>	<p>School year 2003-2004.</p>

INDICATOR D4: Teachers teaching and working time

■ General note

The indicator draws on data from the annual system level data collection of Network C on Teachers and the curriculum, data sheet

CURR 2: Teaching and working time of teachers by level of education

Interpretation

Austria: From the beginning of the school year 2001/02 a new legal framework was introduced for teachers employed by the Länder (compulsory school system), which defines not only the teaching time but also the total working time on a yearly basis. Teachers working for the federal state (advanced schools) still work on the basis of a legally defined weekly teaching time only.

Belgium (Flemish Community): Only hours of teaching are formally set. The additional non-teaching hours within the school are set at the school level. There are no regulations regarding lesson preparation, correction of tests and marking students' papers, etc. The government defines the minimum and maximum number of teaching periods (of 50 minutes each) per week at each level of education. Teaching time consists of a minimum of 24 and a maximum of 27 lessons per week in pre-primary and primary education, 22 to 24 lessons per week in lower secondary education, 21 to 23 lessons in the first two years of upper secondary education, and 20 to 22 lessons in the last two years of upper secondary education.

Teachers have a special statute, not comparable to civil servants.

Belgium (French Community): The data on teaching time refer to the maximum numbers of lessons of 50 minutes each: 28 lessons in pre-primary education and in primary education, 24 lessons in lower secondary education, and 22 lessons in upper secondary education (general subjects).

Czech Republic: The teaching duties of school principals and deputies are reduced according to school size and vary between 13 and 24 hours in pre-primary education, 5 to 16 lessons in primary and lower secondary education and 2 to 6 lessons in upper secondary education.

Teaching time and total working time of teachers is prescribed by law. Teachers' working time at school is determined by the school head and differs from school to school.

England: Statutory working hours comprise 1265 hours a year. Teachers are required to work 195 days a year, of which 190 must be spent in school and available to teach; the other 5 days (32.5 hours) are training days and can be worked in school or elsewhere. No statutory teaching hours or contact time is established on the national level.

Finland: Teaching and working time have been agreed in the Collective agreement for teachers.

Germany: The reported data refer to 15 Oct 2003. In most of the German Länder working time has increased beginning from 1 Feb 2004.

Greece: There is a reduction of teaching hours in line with years of service. When the teachers are appointed the teaching time is 21 teaching hours per week. After 6 years the teaching time is 19 teaching hours per week. After 12 years the teaching time is 18 teaching hours per week and finally after 20 years the teaching time is 16 teaching hours per week. However, the remaining hours of the working time of teachers' obligation have to be spent within school (The legislation is: Degree 1566/85 and 2413/96).

Iceland: For teachers in primary and lower secondary education there are 150 hours assigned for in-service education each year.

Ireland: Number of days a teacher teachers per annum: minimum length of school year for pre-primary and primary education = 183 days; for the school year for secondary education = 167 days. In actual terms, minimum = maximum.

Number of hours a teacher teaches per day: primary education: (5 hours 40 min). – (30 mins. recreation) = (5hrs 10 min) = 5.17 hrs; For pre-primary one hour less teaching is required, so 4.17 hrs. For secondary education 22 hours per week (maximum) is required = 4.4 teaching hours on average per day

Working time at school: In pre-primary and primary education all teachers are required to be in attendance for full pupil day of 5 hrs. 40 mins. and responsible for teaching and supervisory duties; teachers in pre-primary education use the additional one hour non-teaching time for classroom management and preparation activities.

Israel: Short breaks are included for all educational levels.

Italy: Instruction time and teachers' teaching time don't correspond: instruction time, *i.e.* time pupils attend lessons, is usually spread over 6 days per week, while teachers' teaching time is spread over 5 days per week.

The reported scheduled non-teaching time of 80 hours is the maximum time. The minimum is 40 hours.

Korea: There is no policy on how many hours teachers should teach in a week or a month or a year. The data on teaching time is based on the annual administrative data collection and refer to the time teachers usually teach per week during the school year. Teachers are civil servants and their working time is regulated within that framework. Whereas there are national regulations on the length of the school year and on the working hours of civil servants, which apply to teachers during the school year period, teachers work during the summer and winter vacations following self-regulated schedules of professional developmental training. These self-regulated schedules are excluded from the figures.

Mexico: In upper secondary education different kinds of services exist with different organizations of teaching time and working time. The data refer to averages: teaching time per day varies from 4.0 – 6.5 hours with a mean of 4.9 and a standard deviation of 1.1; working time at school varies from 692 to 1600 hours per year with a mean of 971 and a standard deviation of 422.

Netherlands: School boards for secondary education have a large degree of autonomy on decision making, including on teaching time. An increasing number of secondary schools have introduced a maximum number of 750 clock hours per year for teaching. Almost all schools now have this

maximum. This has been interpreted as 180 days a year with an average of 5 class sessions of 50 minutes each per day. This is less than before. The total working time is regulated on the national level.

A teacher can work more hours than a full-time appointment, with a maximum of 120 per cent of a full-time appointment and a corresponding higher salary.

Portugal: Pre-school and first cycle primary school teachers (students aged 6-9 years) have a teaching load of 25 hours per week, while second cycle primary school teachers and the first two grades of lower secondary school teachers (students aged 10-11 years and 12-13 years, respectively) have twelve 90 minute-sessions and the third grade of lower secondary school teachers and upper secondary school teachers (grades 9 and higher; students aged 14 years and more) twenty 50 minutes sessions. In upper secondary education, teachers who teach 12th grade students have less teaching weeks, due to national examinations.

Primary school teachers (first cycle, grades 1-4) usually supervise students' breaks by turns, according to the schools' internal regulations.

Concerning teachers' scheduled teaching time for lower secondary education, the reported data of 18.75 hours per week refers to grades 7 and 8 (students aged 12-13). In grade 9, teachers teach 18.33 hours per week, i.e. 645 hours per annum.

Teachers in lower- and upper secondary education who have a reduced teaching time (due to their age, number of years in the career, appointment to a position, etc.) have their teaching schedule distributed over four days a week very often. Due to this, their daily working load may be above the calculated mean.

The calculation of the number of instruction days was based on the intended 176 days of instruction for pre-primary, primary and lower and upper secondary education and 166 days for upper secondary education 12th grade. In the least demanding upper secondary education programme, it is compulsory that teachers fulfil the statutory amount of time allocated to each subject, which requires 37 working weeks. The total working hours per annum was calculated on a basis of 223 working days, common for all education levels.

Scotland: The school is open for 39 working weeks per year, but each teacher undertakes 5 days of in-service training per year. A 35-hour working week for all teachers was introduced in August 2001, as set in the Teachers Agreement "A Teaching Profession for the 21st Century". The agreement also set out a phased reduction in the maximum class contact time to 22.5 hours per week by 2006, equalised across all sectors. In school year 2003/2004, the maximum class contact time in Primary, Secondary and Special education is 25 hours, 23.5 hours and 22.5 hours respectively. There is no distinction between upper and lower secondary.

During the phasing period, the class contact commitment of a teacher will be complemented by an allowance, no less than one third of the teacher's actual class contact time, of personal time for preparation and correction. The use of remaining time, that is, beyond class contact commitment and preparation and correction time, is subject to agreement at school level. It will include, for example, activities such as parents meetings, staff meetings, formal assessment and additional supervised pupil activities.

All tasks which do not require the teacher to be on school premises can be carried out a time and a place the teacher's choosing, giving appropriate notification to line management.

Spain: In 2002 was approved the ORGANIC LAW 10/2002, of December 23rd, for the Quality of Education (LOCE), which modifies the past ORGANIC LAW 1/1990, of October 3rd, of the General Ordination of the Educational System (LOGSE). The new law establishes a general new calendar for the Education, raising the number of days that a teacher teaches per annum in lower secondary education up to the same amount of days than in primary education. This regulation has not affected anyway the total number of class sessions per year, due to the fact that these sessions were already de facto above the educational legislation.

Sweden: Working time is regulated in formal agreements between the Swedish Association of Local Authorities and teachers' unions. There may be local agreements that differ from this, especially in "förskoleklassen", which is the last year of the pre-primary school. The usual agreement for "förskoleklassen" is the same as the national agreement for primary schools.

Coverage and methodology

Australia: Data are based on weighted average State and Territory responses, which derive the data from relevant industry awards. The weights are based on the number of public school teachers for each State or Territory. Missing data are excluded from the calculation and weights are based on States or Territories who responded.

Austria: Teaching time: For all the teachers at different educational levels the teaching time is defined in legal documents. But it has to be noted that the legal frameworks for teachers at the compulsory school system and for teachers at the medium and advanced schools are different. For the first group the teaching time (but also the total working time) is defined on a yearly basis. The teachers of the other group are employed on the basis of a weekly defined teaching time (but there is no total working time defined). In primary education only teachers of the first group can be found. In secondary education both systems occur. Therefore a weighted mean was calculated on the basis of the distribution of the teachers on the two systems.

Working time at school: In neither of the two systems is the working time at school defined.

Total working time: The total working time is only defined for teachers working in the compulsory school system. As this applies to 100% of the teachers in primary education the respective figure is given. In lower secondary education, both systems can be found but more than 75% of the teachers work at compulsory schools (Hauptschulen). Therefore, the total working time is given at this level. Also in upper secondary education the two systems apply. However, only a very small minority of the teachers at this level work according to a legally defined total working time. Thus code "a" is the most appropriate option.

Belgium (Flemish Community): *Primary education:* Teaching time consists of minimum 24 and maximum 27 lessons of 50 minutes per week. The school assignment consists of maximum 26 hours (60 minutes) per week. Teaching time = (maximum lesson hours (22.5 * 60 minutes) * (37 teaching weeks – 1.33 weeks of festivities = 35.67 weeks). *Lower secondary education:* Teaching time consists of minimum 22 and maximum 24 lessons of 50 minutes per week. Teaching time is calculated as the (maximum lesson hours (20* 60 minutes) * (37 teaching weeks – 1.11 week of festivities). *Upper*

secondary programmes (general programmes): Teaching time consists of minimum 21 and maximum 23 lesson hours (50 minutes) per week in the first two years of general upper secondary education (the so called 'second stage'). In the last two years ('third stage') teaching time consists of minimum 20 and maximum 22 lesson hours (50 minutes) per week. The numbers 21/23 in the second stage become 20/22 when the person involved has at least a half assignment in the third stage. The average maximum assignment is 22.5 hours per week (50 minutes) * (37 teaching weeks – 1.11 week for festivities).

The number of days a teacher teaches per week has been reported as 4.5 days, whereas it has been reported as 5 days in previous years (in the French Community, the reported number of days a teacher teaches per week is 5, which explains the difference comparing both Communities). This concerns only a more realistic description of the situation because no real changes have taken place. Consequently the number of days a teacher teaches per annum is lower than before, although the number of hours a teacher teaches per year did only change marginally, because of a different number of days the school is closed for festivities.

Czech Republic: Teaching duties are set in number of lessons per week. The duration of one lesson is 45 minutes, except for pre-primary education, where it is 60 minutes.

For pre-primary education, it is 31 lessons per week.

For primary education it is 22 lessons per week, with exception of teachers that teach 1st class (20-22 lessons per week). Short breaks are added to this for the computation of the teaching time.

For lower secondary education the formal teaching duty is 21 lessons, but the actual teaching duty is usually higher. For upper secondary general education the formal teaching duty is 20 lessons per week, but the actual teaching duty is usually higher. For lower- and upper secondary education an estimate of the actual teaching time is reported.

Denmark: The data are estimated by the Ministry of Finance in cooperation with the Ministry of Education based on collective agreements for the teachers and on national statistics.

Finland: Based on legislation the schools are closed for festivities 3 days per year if the festivities are not on Saturday or Sunday. In 2003/2004 the school was closed because of that for only one day. (Note: In previous years the days closed for festivities have not been reported).

The number of hours a teacher teaches per annum is an average of the minimum and maximum amount and does not describe the real situation of all teachers. There is great variation between teachers according to the subject they are teaching. Teaching time in lower secondary education varies between 513 – 684 hours and in upper secondary education between 456 – 655.5 hours per annum. In addition teachers make on average 3 - 4 extra hours per week and for joint planning teachers use much more hours than is stated in the collective agreement.

Germany: Data are based on computation of weighed means.

Greece: According to the legislation every teacher (in pre-primary, primary and secondary education) must work 37.5 working hours per week and must teach 25 teaching hours per week for (pre-) primary education and 21 teaching hours per week for secondary education. The examinations period (about 2

weeks for lower and upper secondary education), Christmas and Easter holidays (about 4 weeks), are not included in the number of weeks of instruction.

Italy: Regions have some flexibility on the closure of schools for holidays and festivities. Therefore the number of days closed for festivities have been calculated in the number of weeks a teacher teaches per annum. The number of 33 weeks corresponds to an estimated average based on legislation, which foresees a minimum of 200 days of instruction per year for schools where instruction time is spread over 6 days/week. As teaching time is spread over 5 days/week for full time teachers and time pupils attend lessons (instruction time) is mostly spread over 6 days/week, the number of teaching days/weeks has been coded as missing.

Japan: In the 1st grade of primary education a teacher teaches 34 weeks per annum.

Number of hours a teacher teaches per annum is derived from the number of hours a teacher teaches per week according to the 'Survey Report on School Teachers' plus an additional number of hours for moral education and special activities (class activities). Short breaks are not included in teaching time. The number of days a teacher teaches per annum is estimated from survey data as 200 days. In order to preserve consistency between the regulated number of days a teacher teaches per week and the number of weeks a teacher teaches per annum, this indicator has been coded as missing ('m').

Statutory working time includes periods of school holidays/vacations.

Korea: Since there is no formal policy on how many hours teachers should teach in a week or a month or a year, the data on teaching time was prepared on the basis of the annual administrative data collection which was designed for the entire teaching staff in Korea and refers to the actual time teachers usually teach per week during the school year.

For the working hours of teachers, only the working hours during the school year were included. The calculation of working hours during the school year was based on the national regulations on the length of the school year and the working hours of civil servants, which apply to teachers during this period. The working hours during the summer and winter vacations was excluded because teachers work on the self-regulated schedules of professional developmental training during this period, making it very hard to estimated the exact working time in this period.

New Zealand: Data reported are based on the translation of the number of half-days on which schools are required by law to be open for instruction. One half day represents 2.5 hours (under the Education Act a half-day is a minimum of 2 hours, but in practice it is usually 2.5 hours). Schools are closed on public holidays ('festivities') so these are not included as days on which the school is open for instruction.

Twenty-five hours per week is the most common number of timetabled hours for teachers - though it is up to individual school boards to develop school and teacher timetables and they do not have to be based on a 25-hour week.

There is no data available on the number of non-teaching hours.

New Zealand schools are not divided into lower and upper secondary - primary school is from Year 1 - 8 and secondary school is from years 9-13. Therefore the midpoint between primary and upper secondary has been used for lower secondary data.

Poland: Only hours of teaching are formally set, and do not depend on the level of education. The daily teaching hours are set at the school level. There are no regulations regarding lesson preparation, corrections, assignments and tests, etc. At each level of education teachers are required to work 40 hours a week.

At each level of education the breaks are counted as teaching time because the teachers are responsible for the class.

Scotland: The figures shown are approximations based on the assumption that teachers teach for close to their maximum number of hours, as specified in the Teachers Agreement “A Teaching Profession for the 21st Century”.

Slovak Republic: In primary education, teaching time includes 15 minutes before the lesson begins plus two short 5 minutes breaks during which the teacher is in the classroom and supervises the students. The civil servants’ working time was calculated for teachers at the secondary level.

There were only 2 public holidays, all other public holidays are as a rule prolonged by an additional few days for students, and according to the national legislation, they are considered as school holidays.

Spain: Teachers of all levels are required to be at school for 30 hours per week from September 1st to June 30th (excluding the holiday periods and the days the schools are closed for festivities); in total, 38 weeks per year. Calculation of working time: 38 weeks * 37.5 hours per week= 1425 working hours per year.

The information provided is based on the general national regulations. The Autonomous Communities may have made some adaptations to these regulations for their own teachers.

Sweden: See the text on Sweden under the heading “Interpretation”.

Turkey: For primary education, the information provided is a weighted mean of classroom teachers’ teaching time and subject teachers’ teaching time for the number of hours a teacher teaches per day. As primary education is continuous in Turkey and it also includes lower secondary education, 6, 7 and 8th grade teachers (*i.e.* math, science etc.) who are not classroom teachers but subject teachers.

United States: The data are based on a sample survey that is representative of each state in the United States and of each type of private school. The data reported in the 2003-04 survey are for self-reported hours worked per week and instructional hours per week. In each case, the hours per week were multiplied by the typical number of instructional weeks per year. A direct question on instructional hours taught was added in the 2003/2004 SASS. For previous EAG reports, the data did not come from a direct question about the number of instructional hours: rather, time spent on lunch or planning was subtracted from the total hours required to work each week, and that was multiplied by the typical number of instructional hours per year. The new data show fewer hours per year than the previous data but there should not be any inference made that this was due to a major change in instructional practices. Rather, the 2003-04 data are based on a more direct measure of teachers’ instructional time and may take into account the amount of non-instructional time in the school week more accurately than the previous estimates.

*Sources and reference period***Indicator D4- Teachers' teaching and working time:
Sources and references**

Country	Source	Reference period
Australia	Respective State and Territory education departments.	
Austria	Legal documents.	School year 2003/2004.
Belgium (Flemish Community)	Decrees and resolutions.	School year 2003/2004.
Belgium (French Community)	Décret de la Communauté française du 13/07/98.	School year 2003/2004.
Czech Republic	Government decree.	School year 2003/2004.
Denmark	Kvalitet i uddannelsessystemet, Finansministeriet 1998.	1997.
England	National pay agreements. No statutory regulation.	
Finland	Basic Education Act (1998/628). Collective agreement for teachers (based on legislation).	School year 2003/2004.
France	Nature of the sources: Law and policy document based on law; national statistics.	School year 2003/2004.
Germany	Secretariat of the Standing Conference of the Ministers of Education and Cultural Affairs of the Länder in the Federal Republic of Germany.	School year 2003/2004
Greece	Law and policy documents based on law, data on formal arrangements.	School year 2003/2004.
Hungary	Public Education Act 1993; The Amendment of the Public Education Act 1996., Act XXXIII of 1992 on Public Employees; The order of the school year 200//02, Act XXXIII. Of 12992 on Public Employees.	School year 2003/2004.
Iceland	Wage contracts in effect 01.01.2001: a) between the Icelandic Teachers' Union (pre-primary school teachers) and the Wage Committee of Municipalities, b) between the Icelandic Teachers' Union (compulsory school teachers) and the Wage Committee of Municipalities, c) between the Icelandic Teachers' Union (upper secondary school teachers) and the State.	School year 2003/2004.
Ireland	Department of Education and Science circulars; Primary Curriculum – Introduction.	School year 2003/2004.
Israel	Ministry of Education, data based on formal arrangements	School year 2003/2004
Italy	Teacher National Collective Contract.	School year 2003/2004.
Japan	Number of weeks a teachers teaches per annum: Shogakko-Gakushu-Shido-Yoryo (The Course of Study in Elementary Schools 2002), and Chugakko-Gakushu-Shido-Yoryo (The Course of Study in Lower Secondary Schools 2002), and Kotogakko-Gakushu-Shido-Yoryo (The Course of Study in Upper Secondary Schools 1989), Ministry of Education, Culture, Sports, Science and Technology. Civil servants' working time: Law concerning Working Hours and Leave of Absence of Employees in the Regular Service.	School year 2003/2004.
Korea	Ministry of Education & Human Resources Development Republic of Korea & Korean Educational Development Institute (2004). Statistical Yearbook of Education/ Korean Educational Statistics Database System.	2004.
Luxembourg	Ministry of Education, Horaires et Programmes.	School year 2003/2004.
Mexico	Teaching time: Secretaría de Educación Pública (SEP), Calendario escolar 2003-2004, Agosto 2003, México.	School year 2003/2004.
Netherlands	CAO, decentralised per school board.	School year 2003/2004.

New Zealand	Education Act 1989, Secondary Teachers' Collective Agreement 2002, Primary Teachers' Collective Agreement 2002.	School year 2004.
Norway	Agreement between the Ministry of Education and the Teachers' Unions on working hours and teaching conditions.	School year 2003/2004.
Poland	Teaching and working time are based on law and regulations.	School year 2003/2004.
Portugal	Law/Policy document: i) Decreto-Lei nº 139-A/90 and Decreto-Lei nº 1/98- Teachers' Career Statute; ii) Despacho nº 13781/2001 - Teachers'schedule (ISCED 1 grades 5 and 6, ISCED 2/3), iii) Despacho Normativo nº 24/2000, Despacho nº 12 110/2000, Despacho nº 10 317/2001 - Organization of the Schoolyear; 1v) Decreto-Lei 100/99 , Decreto-Lei nº 157/2001- public servants' holidays.	School year 2003/2004.
Scotland	The 2001 Teachers Agreement "A Teaching Profession for the 21st Century".	School year 2003/2004.
Spain	RESOLUTION of April 27, 1995 of the Secretary of State for the Public Administration, giving instructions about the working time and time schedules of the civil servants of the National General Administration (National Official Bulletin, May 10, 1995). // ORDERS of June 29, 1994, giving instructions which regulate the organization and functioning of pre-primary, primary and secondary education schools (National Official Bulletin, July 5, 1994). // ORDER of February 29, 1996, which modifies the Orders of June 29, 1994. (National Official Bulletin, March 9, 1996). // ORGANIC LAW 10/2002, of December 23 rd , for the Quality of Education (LOCE), which modifies ORGANIC LAW 1/1990, of October 3 rd , of the General Ordination of the Educational System (LOGSE).	School year 2003/2004.
Sweden	Collective agreement between the Swedish Association of Local Authorities and teachers' unions.	School year 2003/2004
Turkey	Working Calendar for Formal and Non-Formal Educational Institutions, 2002; Regulations Related Secondary Education, 1983; Regulations Related Primary Education Institutions, 1992; Regulations Related Pre-Primary Education Institutions, 1999, The Law Numbered 657 of Public Staff, MNE Fundamental Principals Related to Salaried Teaching Hours of Teachers and Administrators.	School year 2003/2004.
United States	Schools and Staffing Survey 2003/2004, Teacher questionnaire data	School year 2003/2004.

INDICATOR D5: Access to and use of ICT

■ General note

The reported figures are taken from Figures 2.8, 2.9, and 3.2 of the report *Are students ready for a technology rich world? What PISA Studies Tell Us* (OECD, 2006). Questions relating to ICT were an option in PISA 2003. All OECD countries except for France, Luxembourg, Netherlands, Norway and Spain participated in this option.

For more information on the methodology involved in the survey, please see the above report or the *PISA 2003 Technical Report* (OECD 2005). PISA data are also available on the PISA website: www.pisa.oecd.org.

■ Notes on specific countries

INDICATOR D6: Teachers' age and gender and staff employed in education

■ **General note**

Data on age and gender derive from the UOE Questionnaire 2005, reference year 2003/2004. Characteristics are measured as the percentage of teachers in each of the five age groups, by level of education. Data for 1998 included in Table D6.3 derive from the UOE Questionnaire 2001 and refer to the school year 1997/1998. **This indicator is only available from the website www.oecd.org/edu/eag2006 and is not published in the printed book**

■ **Notes on specific countries**

See notes on indicator D2.

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Annex 3: Sources

SOURCES IN UOE DATA COLLECTION

2005 UNESCO/OECD/EUROSTAT (UOE) data collection on education statistics. National sources are:

Australia:

- Department of Education, Science and Training, Higher Education Group, Canberra;
- Australian Bureau of Statistics (data on Finance; data on class size from a survey on Public and Private institutions from all states and territories).

Austria:

- Statistics Austria, Vienna;
- Federal Ministry for Education, Science and Culture, Vienna (data on Graduates);
- The Austrian Federal Economic Chamber, Vienna (data on Graduates).

Belgium:

- Flemish Community: Ministry of the Flemish Community, Education Department, Brussels;
- French Community: Ministry of the French Community, Education, Research and Training Department, Brussels;
- German-speaking Community: Ministry of the German-speaking Community, Eupen.

Canada:

- Statistics Canada, Ottawa.

Czech Republic:

- Institute for Information on Education, Prague;
- Government of the Czech Republic, Prague (data on Finance: Closing Account);
- Ministry of Education, Youth and Sports, Prague (data on Finance);
- Ministry of Agriculture, Prague (data on Finance).

Denmark:

- Ministry of Education, Budget Division, Copenhagen;
- Statistics Denmark, Copenhagen.

Finland:

- Statistics Finland, Helsinki;
- National Board of Education, Helsinki (data on Finance).

France:

- Ministry of National Education, Higher Education and Research, Directorate of Evaluation and Planning, Paris.

Germany:

- Federal Statistical Office, Wiesbaden.

Greece:

- Ministry of National Education and Religious Affairs, Directorate of Investment Planning and Operational Research, Athens.

Hungary:

- Ministry of Education, Budapest;

- Ministry of Finance, Budapest (data on Finance);

Iceland:

- Statistics Iceland, Reykjavik.

Ireland:

- Department of Education and Science, Statistics Section, Dublin.

Israel:

- Central Bureau of Statistics

- Ministry of Education, Culture and Sport (Data on The Learning Environment and Organisation of Schools)

Italy:

- National Institute of Statistics (ISTAT), Roma

- Ministry of Education, Statistical Service, Roma

Japan:

- Ministry of Education, Culture, Sports, Science and Technology, Tokyo

Korea:

- Korean Educational Development Institute

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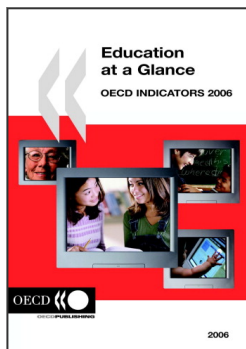
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