

HOW DO EDUCATION SYSTEMS MONITOR SCHOOL PERFORMANCE?

This indicator focuses on the evaluation and accountability arrangements for lower secondary public schools that exist across countries. The focus is upon the collection, use and availability of student and school performance information. This indicator complements the quantitative information relating to teacher salaries and working and teaching time (Indicators D3 and D4), instruction time of students (Indicator D1), and the relationship between number of students and numbers of teachers (Indicator D2) by providing qualitative information on the type and use of particular school accountability and evaluation arrangements.

Key results

- Student assessments in school accountability and evaluation arrangements are increasingly common across OECD countries. Just over half of OECD countries and the partner economy Israel have national examinations that are completed by lower-secondary school students. More common amongst OECD countries are periodic national assessments of students in compulsory education. These occur in two-thirds of OECD countries and the partner economy Israel. In some countries such as Australia, schools implement standardised tests as a requirement to obtain government funding.
- Two-thirds of OECD countries and partner economy Israel have regulations that require lower-secondary schools to be inspected regularly. Slightly fewer countries (19 OECD countries) have regulatory requirements for schools to conduct periodic school self-evaluations.
- Only three OECD countries utilise school evaluation and accountability information to provide financial rewards (Korea and the United States) and/or sanctions to schools (Belgium [Fl.], Korea and the United States).

Policy context

In the last decade, moves toward greater decentralisation of responsibilities in the education sector and attempts to increase the focus of the public sector on outputs, as opposed to inputs, have led to changes in monitoring systems within the public sector. In some countries this is evident in extent and manner in which the operations and performance of schools are evaluated.

The decentralisation of responsibilities and activities to schools can create a need for greater school evaluation and accountability. Activities that were previously conducted centrally need to be monitored to ensure the effectiveness of operations. The greater freedom given to schools to develop the education they offer can create a need for evaluation of school performances in order to ensure that standards are maintained and that improvements are monitored and perhaps more fully developed. Outputs in education can be difficult to measure. Numerous countries have historically utilised school inspectorates to monitor and evaluate the performance of schools. Increasingly, countries are also using student results in standardised tests to gauge the performance of schools.

The objectives of school evaluation and accountability differ across countries. At times, these arrangements are viewed as policy levers that can drive educational effectiveness and school improvements. Other objectives include holding institutions accountable for the use of public funds. An important aspect of this issue is the role of school choice and whether school evaluation and accountability information is used to promote school choice for parents and families. Again, there can be differing objectives for promoting school choice. A general belief that people should have the right to choose the school education that best suits their needs is common in many countries. Moreover, increasing school choice could increase the effectiveness of the school education system and facilitate school improvement. For this to occur it is assumed that parents and students would move to those schools that best suit their needs, assumed to be those schools that are considered to provide the best education. This would act as a signal both to the school that is receiving more students and to the school that students are leaving. It would also provide signals throughout the school education system concerning the school education that best suits the needs of students and families.

Evidence and explanations

Student assessment and performance information

A variety of information can be used to both create a system of school accountability and to evaluate schools. The information can focus on students, teachers and/or schools. Data was collected from countries to identify if and how information on student performance was collected. Three categories of student information were identified: national examinations that have a civil effect on students; periodic national assessments; and, the existence of follow-up statistics on students' post-lower secondary education and labour-market activities.

Just over half of the OECD countries, as well as the partner economy Israel, have national examinations that are completed by lower secondary school students that have some civil effect or consequence (such as proceeding to a higher level of education). More common are periodic national assessments of students in compulsory education that occur in two-thirds of OECD countries as well as partner economy Israel. In some countries, such as Australia, conducting standardised tests are a requirement of the government funding that schools receive.

The reporting of student assessment results also varies across countries, with some countries emphasising minimum standards and others emphasising the proportion of students in schools who have reached specific achievement levels.

Austria, the Czech Republic, Japan, Spain and Switzerland have neither national examinations nor periodic student assessments. In these countries, at least in regard to lower-secondary public schools, there appears to be relatively little information on student performance (as measured through national examinations and assessments).

School inspection and evaluation

Information about the performance and activities within schools, as opposed to the performance of students, can be used in a school accountability and evaluation framework. School inspections and evaluations provide information on the performance of schools in a variety of criteria. They are distinguished from each other through the organisation of the performance evaluation.

Two-thirds of OECD countries, as well as the partner economy Israel, have regulations that require lower-secondary schools to be inspected regularly. Slightly fewer countries (19 OECD countries) have regulatory requirements for schools to conduct periodic school self-evaluations. One-half of OECD countries have both of these regulatory requirements. In some countries these are used as complementary sources of information. For example, in England, school inspectors utilise school self-evaluation information in designing their inspections of schools and the specific aspects they may focus upon in their inspections. Utilising both sources of data could be viewed as both an efficiency measure and/or as a sign of deeper school evaluation and accountability mechanisms.

In Denmark, Hungary, Japan and Norway there are regulations requiring school self-evaluation but none for a regular school inspection. Conversely, Belgium (Fl.), the Czech Republic, Mexico, Switzerland, Turkey and partner economy Israel have regulations requiring the inspection of lower-secondary schools but no requirements for school self-evaluation (Table D5.1). These systems may choose to focus on specialised inspectors or have a more top-down management approach as opposed to systems that focus on self-evaluations with information being generated and analysed within schools.

The interpretation of these evaluation requirements should be made with caution as the focus is on regulatory requirements that may differ from actual practice. In Austria, for example, there are no requirements for school self-evaluation but it occurs quite frequently and the school inspectorate provides some assistance in such self-evaluations. This assistance is normally in the form of guidance or a 'template' with which schools can perform self-evaluations. In Japan, starting in 2002, the Standard for Lower Secondary School Establishment and other regulations have stipulated that schools must attempt to implement self-evaluation concerning their educational activities and the status of other aspects of school management, and disclose the results. It is also stipulated that schools must actively provide school information to parents and guardians. However, less than 50% of the public schools at the lower secondary level of education disclose or provide the information.

Information was also collected on the organisational framework of evaluation and accountability arrangements. Eighteen OECD countries and partner economy Israel have a specific national or regional school inspectorate. Twenty-four OECD countries and the partner economy Israel have

a specific unit in the central administration that deals with systemic school or student evaluations. To evaluate schools, it is assumed that the person or organisation conducting the evaluation has the required capabilities. It is clear that some countries have these capabilities in the central administration and school inspectorates while other countries either believe these capabilities already exist or are trying to develop them within schools.

Use of school evaluation information

The collection of information is perhaps of little use if nothing is done with that information. Information from student assessments and school evaluation can be used for various ends by different categories of people involved in the educational system. For example, educational authorities such as the central administration might use such information to assess the efficient functioning of the school education system, educational institutions may use the information for school and system development, and parents of students may use the information for school choice. This section looks at the use of this information across countries to facilitate school choice, to provide school rewards and sanctions, and to influence school improvement decisions.

Central to facilitating the development of school choice for parents and families is the availability of information regarding student performance and school inspection and evaluation. If this information is made available to parents and families then it can inform their decisions of which school best meets their needs. Eighteen OECD countries make information on school evaluation available to the local school community or general public. Italy and Turkey make this information available to targeted groups such as parents but not to the general public (Table D5.2).

As discussed above, there are numerous reasons why data on school evaluation is collected and why it could be made available to targeted groups and/or the general public. Ten OECD countries reported making this information available to parents for the purpose of informing school choice. Germany, Mexico, Portugal, and Spain make this information available to the general public or to targeted groups, but the intention in these countries is not to inform school choice. There can be numerous objectives for making information available to parents that may not be related to school choice. For example, providing further information to key stakeholders may be part of broader accountability and evaluation arrangements. In addition, in some countries parents have little choice of schools and some countries reported large variations in the degree of school choice. For example, the degree of school choice can differ substantially between parents and families living in consolidated urban areas and those living in more regional or remote areas with lower population densities. It should also be noted that this data does not rule out the possibility of the information being used by parents to choose the school that best suits their needs. For example, in Belgium (Fl.), school evaluations are not intended by law to be used for school choice, but in reality are used in this manner by parents.

The provision of financial rewards and sanctions can be a feature of systems of school evaluation and accountability. But only Belgium (Fl.), Korea and the United States utilise such information to provide financial rewards and/or sanctions to schools. Across these three countries, different information is used to determine the level of financial rewards and sanctions. In Belgium (Fl.) only financial sanctions can be provided and in most situations, when the result of the evaluation is insufficient, a financial sanction is not immediately imposed. Instead, the school is given a period of three years to work on their weaknesses. After that time, the definitive evaluation

will be conducted. Only in the case of unsatisfactory improvement, can a financial sanction may be imposed.

Many more OECD countries use this information to motivate decisions on school improvement. Indeed, nineteen OECD countries and the partner economy Israel utilise information on student assessment and school evaluation for school improvement. The use of this information in this manner is important, considering that the focus of discussion of school evaluation and national student testing is often upon school accountability. However, it should be noted that countries that use information to provide financial rewards or sanctions to schools may also have the ultimate objective of school improvement. A key aspect of these rewards and sanctions may be the incentives created for school improvement. In fact, the three countries (Belgium [Fl.], Korea and the United States) that provide financial rewards and sanctions from this information also used the information to motivate decisions on support for school improvement. This may be an indication of more comprehensive school improvement and accountability systems. However, in some countries such as the United States, the focus may remain on school accountability measures that aim to increase standards.

Definitions and methodologies

Data are from the 2006 OECD-INES Survey on Teachers and the Curriculum and refer to the school year 2004-2005.

Public institutions

An institution is classified as public if it is:

- Controlled and managed directly by a public education authority or agency, or
- Controlled and managed either by a government agency directly or by a governing body (a council, committee, etc.), most of whose members are either appointed by a public authority or elected by public franchise.

National examinations, assessments and follow-up statistics

National examinations are to be seen as assessments that have a formal civil effect for students. Countries were instructed to respond “Yes” irrespective of the scope of the examinations in terms of subject matter areas covered; so the answer should be yes, even if the examinations covers just one or two subject matter areas. As for examinations, national assessments are most likely based on student achievement testing; however, where examinations have a formal civil effect for students, this is not the case for national assessments.

Follow-up statistics may be based on census data, involving all students, or on representative surveys.

School inspections and evaluations

Requirements for school inspection are the legal frameworks that may operate from the central administrative level or from lower administrative levels, such as regional offices or municipalities. A school inspection could be done by inspectors, visitation committees or review panels. School self-evaluation is internal evaluation of schools to improve their own practice and/or to inform parents and the local community.

School evaluation and accountability information

School evaluation and accountability information is defined as any kind of systematic descriptive information to which an evaluative interpretation is given; it may depend on test scores, inspection reports, audits, or statistical data.

Further references

Specific notes on definitions and methodologies regarding this indicator for each country are given in Annex 3 (www.oecd.org/edu/eag2007).

Table D5.1.
 Evaluation of public schools at lower secondary education (lower secondary education, 2005)

	Student information			School information		Organisational framework	
	Existence of national examinations	Existence of a periodical national assessment in compulsory education	Existence of follow-up statistics on student careers ¹	Requirements that schools be regularly inspected ²	Requirement that schools conduct regular self-evaluation ³	Existence of national/regional school inspectorate	Central administration undertakes systemic school or student evaluations ⁴
OECD countries	Australia	■	■	■	■	■	■
	Austria		■	■		■	■
	Belgium (Fl.)		■	■	■		
	Belgium (Fr.)	m	m	m	m	m	m
	Czech Republic				■		■
	Denmark	■	■	■		■	■
	England		■	■	■	■	■
	Finland		■				■
	France	■	■	■	■	■	■
	Germany ⁵	■	■		■	■	■
	Greece	■			■	■	■
	Hungary		■			■	■
	Iceland	■	■		■	■	■
	Ireland	■		■	■	■	■
	Italy		■	■			■
	Japan					■	
	Korea	■	■	■	■	■	■
	Luxembourg	■	■	■	■	■	■
	Mexico	■	■	■	■	■	■
	Netherlands	■		■	■	■	■
	New Zealand	■		■	■	■	■
	Norway	■	■	■		■	■
	Poland	m	m	m	m	m	m
	Portugal	■	■		■	■	■
	Scotland	■	■	■	■	■	■
	Slovak Republic	m	m	m	m	m	m
	Spain				■	■	■
	Sweden	■	■	■	■	■	■
Switzerland				■		■	
Turkey	■	■		■		■	
United States		■					
Partner economies	Brazil	m	m	m	m	m	m
	Chile	m	m	m	m	m	m
	Estonia	m	m	m	m	m	m
	Israel	■	■		■		■
	Russian Federation	m	m	m	m	m	m
	Slovenia	m	m	m	m	m	m

■: Exists in the country.

1. Existence of follow-up statistics on student careers in follow-up education or/and labour market.

2. Existence of a legal or formal administrative framework that requires schools to be inspected regularly.

3. Existence of a legal or formal administrative framework that requires schools to carry out school self-evaluation regularly.

4. Existence, in the central administration, of unit(s) that deal with systemic, school or student evaluations.

5. A positive response if 50% or more of the reporting Lander provided a positive response.

Source: OECD. See Annex 3 for notes (www.oecd.org/edu/eag2007).

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


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Table D5.2.
Use of information from school evaluation and accountability of public schools
(lower secondary education, 2005)


	Availability of school evaluation and accountability information			Use of school-evaluation information by higher administrative levels	
	Information made available to the local school community or the general public	Information made available to targeted groups (e.g. parents)	Information made available to parents to inform school choice	To provide financial rewards or sanctions to the school	To motivate decisions on support for school improvement
OECD countries					
Australia	■	■	■		■
Austria	a	a	a	a	a
Belgium (Fl.)	■	■	■	■	■
Belgium (Fr.)	m	m	m	m	m
Czech Republic	■	■	a		■
Denmark	■	■	■		■
England	■	■	■		■
Finland	a	a	a	a	a
France	■	■	a	a	■
Germany ¹	■	■			■
Greece					■
Hungary					
Iceland	■	■	a		■
Ireland					■
Italy		■	■		
Japan					
Korea			a	■	■
Luxembourg	■	■	a		■
Mexico	■	■			
Netherlands	■	■	■		m
New Zealand	■	■	■		■
Norway	■	■	a		■
Poland	m	m	m	m	m
Portugal	■	■			■
Scotland	■	■	■		■
Slovak Republic	m	m	m	m	m
Spain	■	■			■
Sweden	■	■	■		■
Switzerland					
Turkey		■	a		
United States	■	■	■	■	■
Partner economies					
Brazil	m	m	m	m	m
Chile	m	m	m	m	m
Estonia	m	m	m	m	m
Israel					■
Russian Federation	m	m	m	m	m
Slovenia	m	m	m	m	m

■: Exists in the country.

1. A positive response if 50% or more of the reporting Lander provided a positive response.

Source: OECD. See Annex 3 for notes (www.oecd.org/edu/eag2007).

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

StatLink  <http://dx.doi.org/10.1787/068530238142>

READER'S GUIDE

Coverage of the statistics

Although a lack of data still limits the scope of the indicators in many countries, the coverage extends, in principle, to the entire national education system (within the national territory) regardless of the ownership or sponsorship of the institutions concerned and regardless of education delivery mechanisms. With one exception described below, all types of students and all age groups are meant to be included: children (including students with special needs), adults, nationals, foreigners, as well as students in open distance learning, in special education programmes or in educational programmes organised by ministries other than the Ministry of Education, provided the main aim of the programme is the educational development of the individual. However, vocational and technical training in the workplace, with the exception of combined school and work-based programmes that are explicitly deemed to be parts of the education system, is not included in the basic education expenditure and enrolment data.

Educational activities classified as “adult” or “non-regular” are covered, provided that the activities involve studies or have a subject matter content similar to “regular” education studies or that the underlying programmes lead to potential qualifications similar to corresponding regular educational programmes. Courses for adults that are primarily for general interest, personal enrichment, leisure or recreation are excluded.

Calculation of international means

For many indicators an OECD average is presented and for some an OECD total.

The OECD average is calculated as the unweighted mean of the data values of all OECD countries for which data are available or can be estimated. The OECD average therefore refers to an average of data values at the level of the national systems and can be used to answer the question of how an indicator value for a given country compares with the value for a typical or average country. It does not take into account the absolute size of the education system in each country.

The OECD total is calculated as a weighted mean of the data values of all OECD countries for which data are available or can be estimated. It reflects the value for a given indicator when the OECD area is considered as a whole. This approach is taken for the purpose of comparing, for example, expenditure charts for individual countries with those of the entire OECD area for which valid data are available, with this area considered as a single entity.

Note that both the OECD average and the OECD total can be significantly affected by missing data. Given the relatively small number of countries, no statistical methods are used to compensate for this. In cases where a category is not applicable (code “a”) in a country or where the data value is negligible (code “n”) for the corresponding calculation, the value zero is imputed for the purpose of calculating OECD averages. In cases where both the numerator and the denominator of a ratio are not applicable (code “a”) for a certain country, this country is not included in the OECD average.

For financial tables using 1995 data, both the OECD average and OECD total are calculated for countries providing both 1995 and 2004 data. This allows comparison of the OECD average and OECD total over time with no distortion due to the exclusion of certain countries in the different years.

For many indicators an EU19 average is also presented. It is calculated as the unweighted mean of the data values of the 19 OECD countries that are members of the European Union for which data are available or can be estimated. These 19 countries are Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Italy, Ireland, Luxembourg, the Netherlands, Poland, Portugal, the Slovak Republic, Spain, Sweden and the United Kingdom.

■ **Classification of levels of education**

The classification of the levels of education is based on the revised International Standard Classification of Education (ISCED-97). The biggest change between the revised ISCED and the former ISCED (ISCED-76) is the introduction of a multi-dimensional classification framework, allowing for the alignment of the educational content of programmes using multiple classification criteria. ISCED is an instrument for compiling statistics on education internationally and distinguishes among six levels of education. The glossary available at www.oecd.org/edu/eag2007 describes in detail the ISCED levels of education, and Annex 1 shows corresponding typical graduation ages of the main educational programmes by ISCED level.

■ **Symbols for missing data**

Six symbols are employed in the tables and charts to denote missing data:

- a* Data is not applicable because the category does not apply.
- c* There are too few observations to provide reliable estimates (*i.e.* there are fewer than 3% of students for this cell or too few schools for valid inferences). However, these statistics were included in the calculation of cross-country averages.
- m* Data is not available.
- n* Magnitude is either negligible or zero.
- w* Data has been withdrawn at the request of the country concerned.
- x* Data included in another category or column of the table (*e.g.* *x*(2) means that data are included in column 2 of the table).
- ~ Average is not comparable with other levels of education.

■ **Further resources**

The website www.oecd.org/edu/eag2007 provides a rich source of information on the methods employed for the calculation of the indicators, the interpretation of the indicators in the respective national contexts and the data sources involved. The website also provides access to the data underlying the indicators as well as to a comprehensive glossary for technical terms used in this publication.

Any post-production changes to this publication are listed at www.oecd.org/edu/eag2007.

The website www.pisa.oecd.org provides information on the OECD Programme for International Student Assessment (PISA), on which many of the indicators in this publication draw.

Education at a Glance uses the OECD's StatLinks service. Below each table and chart in *Education at a Glance 2007* is a url which leads to a corresponding Excel workbook containing the underlying data for the indicator. These urls are stable and will remain unchanged over time. In addition, readers of the *Education at a Glance* e-book will be able to click directly on these links and the workbook will open in a separate window.

Codes used for territorial entities

These codes are used in certain charts. Country or territorial entity names are used in the text. Note that in the text the Flemish Community of Belgium is referred to as "Belgium (Fl.," and the French Community of Belgium as "Belgium (Fr.)."

AUS Australia	ITA Italy
AUT Austria	JPN Japan
BEL Belgium	KOR Korea
BFL Belgium (Flemish Community)	LUX Luxembourg
BFR Belgium (French Community)	MEX Mexico
BRA Brazil	NLD Netherlands
CAN Canada	NZL New Zealand
CHL Chile	NOR Norway
CZE Czech Republic	POL Poland
DNK Denmark	PRT Portugal
ENG England	RUS Russian Federation
EST Estonia	SCO Scotland
FIN Finland	SVK Slovak Republic
FRA France	SVN Slovenia
DEU Germany	ESP Spain
GRC Greece	SWE Sweden
HUN Hungary	CHE Switzerland
ISL Iceland	TUR Turkey
IRL Ireland	UKM United Kingdom
ISR Israel	USA United States

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TABLE OF CONTENTS

	Name of the indicator in the 2006 edition
Foreword	3
Editorial	11
Introduction	15
Reader's Guide	19
CHAPTER A THE OUTPUT OF EDUCATIONAL INSTITUTIONS AND THE IMPACT OF LEARNING	23
Indicator A1 To what level have adults studied?	24
Table A1.1.a. Educational attainment: adult population (2005)	36
Table A1.2.a. Population that has attained at least upper secondary education (2005)	37
Table A1.3.a. Population that has attained tertiary education (2005)	38
Table A1.4. Fields of education (2004)	39
Table A1.5. Ratio of 25-to-34-year-olds with ISCED 5A and 30-to-39-year-olds with ISCED 6 levels of education to 55-to-64-year-olds with ISCED 5A and 6 levels of education, by fields of education (2004)	40
Indicator A2 How many students finish secondary education?	42
Table A2.1. Upper secondary graduation rates (2005)	50
Table A2.2. Trends in graduation rates at upper secondary level (1995-2005)	51
Table A2.3. Post-secondary non-tertiary graduation rates (2005)	52
Indicator A3 How many students finish tertiary education?	54
Table A3.1. Graduation rates in tertiary education (2005)	67
Table A3.2. Trends in tertiary graduation rates (1995-2005)	68
Table A3.3. Percentage of tertiary graduates, by field of education (2005)	69
Table A3.4. Science graduates, by gender (2005)	70
Table A3.5. Relationship between motivation in mathematics at 15 years old (PISA 2003) and tertiary-type A graduation rates, by gender	71
Table A3.6. Survival rates in tertiary education (2004)	72
Indicator A4 What are students' expectations for education?	74
Table A4.1.a. Percentage of students expecting to complete different levels of education (2003)	84
Table A4.2.a. Percentage of students expecting to complete ISCED levels 5A or 6, by mathematics performance level (2003)	85
Table A4.3.a. Percentage of students expecting to complete ISCED levels 5A or 6, by gender (2003)	86
Table A4.4. Odds ratios that students expect to complete ISCED levels 5A or 6, by socio-economic status (2003)	87
Table A4.5. Odds ratios that students expect to complete ISCED levels 5A or 6, by immigrant status (2003)	88

Indicator A5	What are students' attitudes towards mathematics?	90	
Table A5.1.	Means on students' attitudes towards mathematics, approaches to learning, and school-related indices (2003).....	99	
Table A5.2a.	Relationship between students' attitudes towards mathematics and mathematics performance (2003).....	100	
Table A5.2b.	Relationship between students' approaches to learning and mathematics performance (2003).....	101	
Table A5.2c.	Relationship between school-related indices and mathematics performance (2003).....	102	
Indicator A6	What is the impact of immigrant background on student performance?	104	
Table A6.1a.	Differences in mathematics performance, by immigrant status (2003)....	113	
Table A6.2a.	Percentage of native students at each level of proficiency on the mathematics scale (2003).....	113	
Table A6.2b.	Percentage of second-generation students at each level of proficiency on the mathematics scale (2003).....	114	
Table A6.2c.	Percentage of first-generation students at each level of proficiency on the mathematics scale (2003).....	114	
Table A6.3.	Index of instrumental motivation in mathematics and student performance on the mathematics scale (2003).....	115	
Indicator A7	Does the socio-economic status of their parents affect students' participation in higher education?	116	
Indicator A8	How does participation in education affect participation in the labour market?	124	A8
Table A8.1a.	Employment rates and educational attainment, by gender (2005).....	132	
Table A8.2a.	Unemployment rates and educational attainment, by gender (2005)....	134	
Table A8.3a.	Trends in employment rates, by educational attainment (1991-2005)...	136	
Table A8.4a.	Trends in unemployment rates by educational attainment (1991-2005).....	138	
Indicator A9	What are the economic benefits of education?	140	A9
Table A9.1a.	Relative earnings of the population with income from employment (2005 or latest available year).....	156	
Table A9.1b.	Differences in earnings between females and males (2005 or latest available year).....	158	
Table A9.2a.	Trends in relative earnings: adult population (1997-2005).....	159	
Table A9.3.	Trends in differences in earnings between females and males (1997-2005).....	160	
Table A9.4a.	Distribution of the 25-to-64-year-old population by level of earnings and educational attainment (2005 or latest available year).....	162	
Table A9.5.	Private internal rates of return for an individual obtaining an upper secondary or post-secondary non-tertiary education, ISCED 3/4 (2003).....	165	
Table A9.6.	Private internal rates of return for an individual obtaining a university-level degree, ISCED 5/6 (2003).....	165	

		Name of the indicator in the 2006 edition
Table A9.7.	Public internal rates of return for an individual obtaining an upper secondary or post-secondary non-tertiary education, ISCED 3/4 (2003).....	166
Table A9.8.	Public internal rates of return for an individual obtaining a university-level degree, ISCED 5/6 (2003).....	166
CHAPTER B FINANCIAL AND HUMAN RESOURCES INVESTED IN EDUCATION.....		
Indicator B1 How much is spent per student?.....		B1
Table B1.1a.	Annual expenditure on educational institutions per student for all services (2004).....	186
Table B1.1b.	Annual expenditure per student on core services, ancillary services and R&D (2004).....	187
Table B1.2.	Distribution of expenditure (as a percentage) on educational institutions compared to number of students enrolled at each level of education (2004).....	188
Table B1.3a.	Cumulative expenditure on educational institutions per student for all services over the theoretical duration of primary and secondary studies (2004).....	189
Table B1.3b.	Cumulative expenditure on educational institutions per student for all services over the average duration of tertiary studies (2004).....	190
Table B1.4.	Annual expenditure on educational institutions per student for all services relative to GDP per capita (2004).....	191
Table B1.5.	Change in expenditure on educational institutions for all services per student relative to different factors, by level of education (1995, 2004).....	192
Indicator B2 What proportion of national wealth is spent on education?.....		B2
Table B2.1.	Expenditure on educational institutions as a percentage of GDP, by levels of education (1995, 2000, 2004).....	205
Table B2.2.	Expenditure on educational institutions as a percentage of GDP, by level of education (2004).....	206
Table B2.3.	Change in expenditure on educational institutions (1995, 2000, 2001, 2002, 2003, 2004).....	207
Table B2.4.	Expenditure on educational institutions as a percentage of GDP, by source of fund and level of education (2004).....	208
Indicator B3 How much public and private investment is there in education?.....		B3
Table B3.1.	Relative proportions of public and private expenditure on educational institutions for all levels of education (1995, 2004).....	219
Table B3.2a.	Relative proportions of public and private expenditure on educational institutions, as a percentage, by level of education (1995, 2004).....	220
Table B3.2b.	Relative proportions of public and private expenditure on educational institutions, as a percentage, for tertiary education (1995, 2004).....	221
Table B3.3.	Trends in relative proportions of public expenditure on educational institutions and index of change between 1995 and 2004 (1995=100, constant prices), for tertiary education (1995, 2000, 2001, 2002, 2003, 2004).....	222

Indicator B4	What is the total public spending on education?	224
Table B4.1.	Total public expenditure on education (1995, 2004).....	230
Table B4.2.	Distribution of total public expenditure on education (2004).....	231
Indicator B5	How much do tertiary students pay and what public subsidies do they receive?	232
Table B5.1a.	Estimated annual average tuition fees charged by tertiary-type A educational institutions for national students (academic year 2004-2005).....	244
Table B5.1b.	Distribution of financial aid to students in tertiary-type A education (academic year 2004-2005).....	246
Table B5.1c.	Financial support to students through public loans in tertiary-type A education (academic year 2004-2005).....	248
Table B5.2.	Public subsidies for households and other private entities as a percentage of total public expenditure on education and GDP, for tertiary education (2004).....	250
Indicator B6	On what resources and services is education funding spent? ...	252
Table B6.1.	Expenditure on institutions by service category as a percentage of GDP (2004).....	260
Table B6.2.	Expenditure on educational institutions by resource category and level of education (2004).....	261
Indicator B7	How efficiently are resources used in education?	262
Table B7.1.	Estimates of technical efficiency for primary and lower secondary public sector education	268
CHAPTER C	ACCESS TO EDUCATION, PARTICIPATION AND PROGRESSION	269
Indicator C1	How prevalent are vocational programmes?	270
Table C1.1.	Upper secondary enrolment patterns (2005).....	277
Table C1.2.	Annual expenditure on educational institutions per student for all services, by type of programme (2004).....	278
Table C1.3.	Performance of 15-year-old students on the PISA mathematics scale by programme orientation (2003).....	279
Indicator C2	Who participates in education?	280
Table C2.1.	Enrolment rates, by age (2005).....	291
Table C2.2.	Trends in enrolment rates (1995-2005).....	292
Table C2.3.	Transition characteristics from age 15 to 20, by level of education (2005).....	293
Table C2.4.	Entry rates to tertiary education and age distribution of new entrants (2005).....	294
Table C2.5.	Trends in entry rates at the tertiary level (1995-2005).....	295
Table C2.6.	Students in tertiary education by type of institution or mode of study (2005).....	296
Indicator C3	Who studies abroad and where?	298
Table C3.1.	Student mobility and foreign students in tertiary education (2000, 2005).....	317

B4

B5

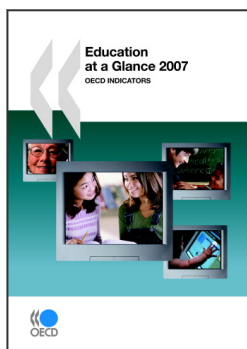
B6

C1, C2

C3

		Name of the indicator in the 2006 edition
Table C3.2.	Distribution of international and foreign students in tertiary education, by country of origin (2005).....	318
Table C3.3.	Citizens studying abroad in tertiary education, by country of destination (2005).....	320
Table C3.4.	Distribution of international and foreign students in tertiary education, by level and type of tertiary education (2005).....	322
Table C3.5.	Distribution of international and foreign students in tertiary education, by field of education (2005).....	323
Table C3.6.	Trends in the number of foreign students enrolled outside their country of origin (2000 to 2005).....	324
Table C3.7.	Percentage of tertiary qualifications awarded to international and foreign students, by type of tertiary education (2005).....	325
Indicator C4	How successful are students in moving from education to work?	C4
Table C4.1a.	Expected years in education and not in education for 15-to-29-year-olds (2005).....	335
Table C4.2a.	Percentage of the youth population in education and not in education (2005).....	337
Table C4.3.	Percentage of the cohort population not in education and unemployed (2005).....	339
Table C4.4a.	Trends in the percentage of the youth population in education and not in education (1995-2005).....	341
Indicator C5	Do adults participate in training and education at work?	C5
Table C5.1a.	Participation rate and expected number of hours in non-formal job-related education and training, by level of educational attainment (2003).....	353
Table C5.1b.	Expected number of hours in non-formal job-related education and training by age group and labour force status (2003).....	355
Table C5.1c.	Expected number of hours in non-formal job-related education and training, by level of educational attainment (2003).....	357
 CHAPTER D THE LEARNING ENVIRONMENT AND ORGANISATION OF SCHOOLS		
Indicator D1	How much time do students spend in the classroom?	D1
Table D1.1.	Compulsory and intended instruction time in public institutions (2005).....	369
Table D1.2a.	Instruction time per subject as a percentage of total compulsory instruction time for 9-to-11-year-olds (2005).....	370
Table D1.2b.	Instruction time per subject as a percentage of total compulsory instruction time for 12-to-14-year-olds (2005).....	371
Indicator D2	What is the student-teacher ratio and how big are classes?	D2
Table D2.1.	Average class size, by type of institution and level of education (2005).....	381
Table D2.2.	Ratio of students to teaching staff in educational institutions (2005).....	382
Table D2.3.	Ratio of students to teaching staff, by type of institution (2005).....	383

Indicator D3	How much are teachers paid?	384	D3
Table D3.1.	Teachers' salaries (2005).....	396	
Table D3.2.	Change in teachers' salaries (1996 and 2005).....	398	
Table D3.3a.	Adjustments to base salary for teachers in public institutions (2005).....	399	
Table D3.4.	Contractual arrangements of teachers (2005).....	401	
Indicator D4	How much time do teachers spend teaching?	402	D4
Table D4.1.	Organisation of teachers' working time (2005).....	411	
Indicator D5	How do education systems monitor school performance?	412	
Table D5.1.	Evaluation of public schools at lower secondary education (2005).....	418	
Table D5.2.	Use of information from school evaluation and accountability of public schools (lower secondary education, 2005).....	419	
ANNEX 1	Characteristics of Educational Systems	421	
Table X1.1a.	Typical graduation ages in upper secondary education.....	422	
Table X1.1b.	Typical graduation ages in post-secondary non-tertiary education.....	423	
Table X1.1c.	Typical graduation ages in tertiary education.....	424	
Table X1.2a.	School year and financial year used for the calculation of indicators, OECD countries.....	425	
Table X1.2b.	School year and financial year used for the calculation of indicators, partner economies.....	426	
Table X1.3.	Summary of completion requirements for upper secondary (ISCED 3) programmes.....	427	
ANNEX 2	Reference Statistics	429	
Table X2.1.	Overview of the economic context using basic variables (reference period: calendar year 2004, 2004 current prices).....	430	
Table X2.2.	Basic reference statistics (reference period: calendar year 2004, 2004 current prices).....	431	
Table X2.3.	Basic reference statistics (reference period: calendar year 1995, 1995 current prices).....	432	
Table X2.4.	Annual expenditure on educational institutions per student for all services (2004, USD).....	433	
Table X2.5.	Annual expenditure on educational institutions per student for all services (2004, EUR).....	434	
Table X2.6a.	Reference statistics used in the calculation of teachers' salaries, by level of education (1996, 2005).....	435	
Table X2.6b.	Reference statistics used in the calculation of teachers' salaries (1996, 2005).....	437	
Table X2.6c.	Teachers' salaries (2005).....	438	
Table X2.7.	Tax revenue of main headings as percentage of GDP (2004).....	439	
ANNEX 3	Sources, Methods and Technical Notes	441	
References		443	
Contributors to this Publication		445	
Related OECD Publications		449	



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