## Foreword

Governments are paying increasing attention to international comparisons as they search for effective policies that enhance individuals' social and economic prospects, provide incentives for greater efficiency in schooling, and help to mobilise resources to meet rising demands. As part of its response, the OECD Directorate for Education devotes a major effort to the development and analysis of the quantitative, internationally comparable indicators that it publishes annually in *Education at a Glance*. These indicators enable educational policy makers and practitioners alike to see their education systems in the light of other countries' performances and, together with OECD's country policy reviews, are designed to support and review the efforts that governments are making towards policy reform.

*Education at a Glance* addresses the needs of a range of users, from governments seeking to learn policy lessons to academics requiring data for further analysis to the general public wanting to monitor how its nation's schools are progressing in producing world-class students. The publication examines the quality of learning outcomes, the policy levers and contextual factors that shape these outcomes, and the broader private and social returns that accrue to investments in education.

Education at a Glance is the product of a long-standing, collaborative effort between OECD governments, the experts and institutions working within the framework of the OECD's indicators of education systems (INES) programme and the OECD Secretariat. The preparation of the publication was co-ordinated by the Indicators and Analysis Division of the OECD Directorate for Education with input from the Centre for Educational Research and Innovation, under the responsibility of Andreas Schleicher, in co-operation with Etienne Albiser, Tracey Burns, Eric Charbonnier, Michael Davidson, Bo Hansson, Corinne Heckmann, David Istance, Karinne Logez, Koji Miyamoto, Sophie Vayssettes, Patrick Werquin, and Jean Yip. Administrative support was provided by Sandrine Meireles, and additional advice as well as analytical and editorial support were provided by Pedro Lenin García de León, Niccolina Clements, Diana Toledo Figueroa, Elisabeth Villoutreix and Alexandra Wise. The development of the publication was steered by member countries through the INES Working Party and facilitated by the INES Networks. The members of the various bodies as well as the individual experts who have contributed to this publication and to OECD INES more generally are listed at the end of the book.

While much progress has been accomplished in recent years, member countries and the OECD continue to strive to strengthen the link between policy needs and the best available internationally comparable data. In doing so, various challenges and trade-offs are faced. First, the indicators need to respond to educational issues that are high on national policy agendas, and where the international comparative perspective can offer important added value to what can be accomplished through national analysis and evaluation. Second, while the indicators need to be as comparable as possible, they also need to be as country-specific as is necessary to allow for historical, systemic and cultural differences between countries. Third, the indicators need to be

presented in as straightforward a manner as possible, while remaining sufficiently complex to reflect multi-faceted educational realities. Fourth, there is a general desire to keep the indicator set as small as possible, but it needs to be large enough to be useful to policy makers across countries that face different educational challenges.

The OECD will continue to address these challenges vigorously and to pursue not just the development of indicators in areas where it is feasible and promising to develop data, but also to advance in areas where a considerable investment still needs to be made in conceptual work. The further development of the OECD Programme for International Student Assessment (PISA) and its extension through the OECD Programme for the International Assessment of Adult Competencies (PIAAC), as well as OECD's Teaching and Learning International Survey (TALIS) are major efforts to this end.

The report is published on the responsibility of the Secretary-General of the OECD.

# TABLE OF CONTENTS

			Name of the indicator in the
Foreword		3	2008 edition
Editorial		. 13	
Introduction		. 17	
Reader's Guio	le	. 21	
CHAPTER A	THE OUTPUT OF EDUCATIONAL INSTITUTIONS		
	AND THE IMPACT OF LEARNING	25	
Indicator A1	To what level have adults studied?	. 26	<b>A</b> 1
Table A1.1a.	Educational attainment: adult population (2007)	. 37	
Table A1.2a.	Population with at least upper secondary education (2007)		
Table A1.3a.	Population with tertiary education (2007)	. 39	
Table A1.4.	Trends in educational attainment: 25-64 year-old population	4.0	
T11 44 5	(1997-2007)	. 40	
Table A1.5.	Annual average growth in 25-64 year-old population between 1998 and 2006	. 42	
Table A1.6.	Proportion of age cohorts in skilled jobs (ISCO 1-3) by educational attainment (2006, 1998)		
Indicator A2	How many students finish secondary education and access		
	tertiary education?	. 44	A2
Table A2.1.	Upper secondary graduation rates (2007)		
Table A2.2.	Trends in graduation rates (first-time) at upper secondary level		
E11 422	(1995-2007)		
Table A2.3.	Post-secondary non-tertiary graduation rates (2007)	. 58	
Table A2.4.	Entry rates to tertiary education and age distribution	50	
T11 42 5	of new entrants (2007)		
Table A2.5.	Trends in entry rates at tertiary level (1995-2007)	. 60	
<b>Indicator A3</b>	How many students finish tertiary education?		A3, A4
Table A3.1.	Graduation rates in tertiary education (2007)	. 73	
Table A3.2.	Trends in tertiary graduation rates (1995-2007)		
Table A3.3.	Graduation rate at different tertiary levels (2007)	. 75	
Table A3.4.	Completion rates in tertiary education (2005)	. 76	
Indicator A4	What is the profile of 15-year-old top performers in science?	. 78	
Table A4.1a.	Mean score and percentage of top performers in science, reading and mathematics	80	
Table A4.1b.	Percentage of top performers in science, reading and mathematics,	. 67	
Table 11+.10.	by gender	90	
Table A4.2a.	Overlapping of top performers in science, reading and mathematics		
Table A4.2b.	Overlapping of top performers in science, reading and mathematics,		
	by gender		
Table A4.3.	Students' socio-economic background, by performance group		

Name of the indicator in the 2008 edition

		2000 (41(10)
Table A4.4.	Percentage of students by performance group, according to the	
	immigrant status	
Table A4.5.	Percentage of students by performance group, according to the	
	language spoken at home96	
Indicator A5	What are the top performers' attitudes and motivations	
	for science in PISA 2006?	
Table A5.1a.	Index of enjoyment of science for strong performers and	
	top performers	
Table A5.2a.	Index of students' science-related activities for strong performers	
	and top performers	
Table A5.3.	Regular science lessons in school and out-of-school lessons	
	in science for strong performers and top performers111	
Table A5.4a.	Indices of instrumental motivation and future-oriented motivation	
	to learn science for strong performers and top performers113	
Table A5.5.	Importance of doing well in science, mathematics and reading	
	for strong performers and top performers114	
Table A5.6a.	Indices of school preparation of science-related careers and student	
	information on science-related careers for strong performers and	
	top performers	
Table A5.7a.	Enjoyment of learning science	
Table A5.7b.	Science-related activities	
Table A5.7c.	Instrumental motivation to learn science	
Table A5.7d.	Importance of doing well in science	
Table A5.7e.	Future-oriented motivation to learn science	
Indicator A6	How does participation in education affect participation	
	in the labour market?	A8
Table A6.1a.	Employment rates and educational attainment, by gender (2007) 129	
Table A6.2a.	Trends in employment rates of 25-64 year-olds by educational	
	attainment (1997-2007)	
Table A6.3a.	Unemployment rates and educational attainment, by gender (2007)132	
Table A6.4a.	Trends in unemployment rates by educational attainment	
	(1997-2007)	
Indicator A7	What are the economic benefits of education?136	4.0
Table A7.1a.	Relative earnings of the population with income from employment	A9
Table A7.1a.	(2007 or latest available year)144	
Table A7.2a.	Trends in relative earnings: adult population (1997-2007)146	
Table A7.2a. Table A7.2b.		
Table A7.2c.	Trends in relative earnings: male population (1997-2007)	
Table A7.2c.	Trends in relative earnings: female population (1997-2007)	
Table A1.3.	Trends in differences in earnings between females and males	
	(1997-2007)	
Indicator A8	What are the incentives to invest in education?	A10
Table A8.1.	Private net present value for an individual obtaining upper secondary	
	or post-secondary non-tertiary education as part of initial education,	
	ISCED 3/4 (2005) 165	

Name of the indicator in the 2008 edition

			2008 editior
Table A8.2.	Private net present value for an individual obtaining tertiary education		
m.1.1	as part of initial education, ISCED 5/6 (2005)	166	
Table A8.3.	Public net present value for an individual obtaining upper secondary		
	or post-secondary non-tertiary education as part of initial education	1.67	
T11 40 4	(2005)		
Table A8.4.	Public net present value for an individual obtaining tertiary educatio		
	as part of initial education (2005)	168	
<b>Indicator A9</b>	What are the social outcomes of education?	170	
Table A9.1.	Marginal effects of education on self-reported health and		
	political interest	180	
Table A9.2.	Marginal effects of education on self-reported health (with and		
	without controls for age, gender and income)	180	
Table A9.3.	Marginal effects of education on political interest (with and		
	without controls for age, gender and income)	181	
Table A9.4.	Marginal effects of education on interpersonal trust (with and		
	without controls for age, gender and income)	181	
Table A9.5.	Predicted shares of individuals expressing positive self-rated health,		
	political interest and interpersonal trust, by gender	182	
Table A9.6.	Predicted shares of individuals expressing positive self-rated health,		
	political interest and interpersonal trust, by age	183	
Table A9.7.	Predicted shares of individuals expressing positive self-rated health,		
	political interest and interpersonal trust, by income	184	
CHAPTER B	FINANCIAL AND HUMAN RESOURCES INVESTED IN		
	EDUCATION	185	
Indicator B1	How much is spent per student?	188	B1
Table B1.1a.	Annual expenditure on educational institutions per student		
	for all services (2006)	202	
Table B1.2.	Annual expenditure per student on core services, ancillary services		
	and R&D (2006)	203	
Table B1.3a.	Cumulative expenditure on educational institutions per student		
	for all services over the theoretical duration of primary and		
	secondary studies (2006)	204	
Table B1.3b.	Cumulative expenditure on educational institutions per student		
	for all services over the average duration of tertiary studies (2006)	205	
Table B1.4.	Annual expenditure on educational institutions per student		
	for all services relative to GDP per capita (2006)	206	
Table B1.5.	Change in expenditure on educational institutions for all services		
	per student relative to different factors, by level of education		
	(1995, 2000, 2006)	207	
Indicator B2	What proportion of national wealth is spent on education?	208	B2
Table B2.1.	Expenditure on educational institutions as a percentage of GDP,	-	
	by level of education (1995, 2000, 2006)	218	
Table B2.2.	Expenditure on educational institutions as a percentage of GDP,		
		219	

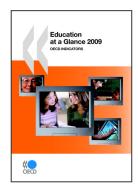
		Name of the indicator in the 2008 edition
Table B2.3.	Expenditure on educational institutions as a percentage of GDP (2006), proportion of the population at basic ages of primary to tertiary education (school year 2006/2007) and demographic trends	
Table B2.4.	(2000-2015)	
Indicator B3	How much public and private investment is there	
Table B3.1.	in education?	В3
Table B3.2a.	Relative proportions of public and private expenditure on educational institutions, as a percentage, by level of education (2000, 2006)232	
Table B3.2b.	Relative proportions of public and private expenditure on educational institutions, as a percentage, for tertiary education (2000, 2006)233	
Table B3.3.	Trends in relative proportions of public expenditure on educational institutions and index of change between 1995 and 2006 (2000=100), for tertiary education (1995, 2000, 2002, 2003, 2004, 2005, 2006)234	
Indicator B4	What is the total public spending on education?236	<b>B</b> 4
Table B4.1.	Total public expenditure on education (1995, 2000, 2006)241	
Indicator B5	How much do tertiary students pay and what public	
	subsidies do they receive? 242	В5
Table B5.1a.	Estimated annual average tuition fees charged by tertiary-type A	
	educational institutions for national students	
T11 DF 2	(academic year 2006/2007)	
Table B5.2.	Distribution of financial aid to students compared to amount of tuition	
Table DE 2	fees charged in tertiary-type A education (academic year 2006/2007)257	
Table B5.3.	Financial support to students through public loans in tertiary-type A	
Table B5.4.	education (academic year 2004/2005)258 Public subsidies for households and other private entities	
Table D3.7.	as a percentage of total public expenditure on education and GDP,	
	for tertiary education (2006)	
Indicator B6	On what resources and services is education funding spent?262	В6
Table B6.1.	Expenditure on educational institutions by service category	
	as a percentage of GDP (2006)270	
Table B6.2a.	Expenditure on educational institutions by resource category	
	in primary and secondary education (2006)271	
Table B6.2b.	Expenditure on educational institutions by resource category and level of education (2006)272	
Indicator B7	Which factors influence the level of expenditure?274	В7
Table B7.1.	Contribution of various factors to salary cost per student at primary	D/
<u> </u>	level of education (2006)285	
Table B7.2.	Contribution of various factors to salary cost per student at lower	
	secondary level of education (2006)287	
Table B7.3.	Contribution of various factors to salary cost per student at upper	
	secondary level of education (2006)	

			Name of the indicator in the 2008 edition
CHAPTER C	ACCESS TO EDUCATION, PARTICIPATION AND		
	PROGRESSION	291	
Indicator C1	Who participates in education?	292	C2
Table C1.1.	Enrolment rates, by age (2007)		
Table C1.2.	Trends in enrolment rates (1995-2007)		
Table C1.3.	Transition characteristics from age 15-20, by level of education (2007)	303	
Table C1.4.	Upper secondary enrolment patterns (2007)		
Table C1.5.	Students in primary and secondary education by type of institution or mode of study (2007)		
Table C1.6.	Students in tertiary education by type of institution or mode of study (2007)		
Indicator C2	Who studies abroad and where?	308	C3
Table C2.1.	Student mobility and foreign students in tertiary education (2000, 2007)		CS
Table C2.2.	Distribution of international and foreign students in tertiary education by country of origin (2007)	on,	
Table C2.3.	Citizens studying abroad in tertiary education, by country of destination (2007)		
Table C2.4.	Distribution of international and foreign students in tertiary education by level and type of tertiary education (2007)		
Table C2.5.	Distribution of international and foreign students in tertiary education by field of education (2007)		
Table C2.6.	Trends in the number of foreign students enrolled outside their country of origin (2000 to 2007)	334	
Indicator C3	How successful are students in moving from education to work?	336	C4
Table C3.1a.	Expected years in education and not in education for 15-29 year-olds (2007)		CŦ
Table C3.2a.	Percentage of the youth population in education and not in education (2007)		
Table C3.3.	Percentage of the cohort population not in education and unemployed (2007)		
Table C3.4a.	Trends in the percentage of the youth population in education and not in education (1995, 1997-2007)		
Table C3.5.	Proportion of long-term unemployed among unemployed 25-34 year-olds (2003 and 2007)		
Table C3.6.	Part-time and involuntary part-time work among 25-34 year-olds, by educational attainment (2007)		
CHAPTER D	THE LEARNING ENVIRONMENT AND ORGANISATION OF SCHOOLS	357	
T 12 / 54			
Indicator D1 Table D1.1.	How much time do students spend in the classroom?		D1
Table D1.1.	Compulsory and intended instruction time in public institutions (2007)	500	

			Name of the indicator in the 2008 edition
Table D1.2a.	Instruction time per subject as a percentage of total compulsory	267	
Table D1.2b.	Instruction time for 9-11 year-olds (2007)	.36/	
Table D1.2b.	Instruction time per subject as a percentage of total compulsory instruction time for 12-14 year-olds (2007)	.368	
Indicator D2	What is the student-teacher ratio and how big are classes?	.370	D2
Table D2.1.	Average class size, by type of institution and level of education (2007)	.382	
Table D2.2.	Ratio of students to teaching staff in educational institutions (2007)	.383	
Table D2.3.	Ratio of students to teaching staff, by type of institution (2007)		
Table D2.4a.	Teaching staff and non-teaching staff employed in primary and secondar		
T11 D2 41	educational institutions (2007)	.385	
Table D2.4b.	Teaching staff and non-teaching staff employed in tertiary educational institutions (2007)	286	
. II . D.			
Indicator D3	How much are teachers paid?		D3
Table D3.1.	Teachers' salaries (2007)		
Table D3.2. Table D3.3a.	Decisions on payments for teachers in public institutions (2007)		
	How much time do teachers spend teaching?		D4
Table D4.1.	Organisation of teachers' working time (2007)		
Table D4.2.	Number of teaching hours per year (1996, 2007)	.413	
Indicator D5	How much appraisal and feedback do teachers receive,		
T11 D5 4	and what is the impact?		
Table D5.1.	Frequency and type of school evaluations (2007-08)		
Table D5.2.	Outcomes of teacher appraisal and feedback (2007-08)	.424	
Table D5.3.	Teacher perceptions of the appraisal and/or feedback they received (2007-08)	.425	
Table D5.4.	Teacher perceptions of the personal impact of teacher appraisal		
TII DEE	and feedback (2007-08)		
Table D5.5.	Teacher appraisal and feedback and school development (2007-08)	.427	
Indicator D6	How do teacher practices, beliefs and attitudes		
	measure up?		
Table D6.1.	Correlation between time on task and classroom disciplinary climate		
	about teaching (2007-08)	.443	
ANNEX 1	CHARACTERISTICS OF EDUCATIONAL SYSTEMS	.445	
Table X1.1a.	Upper secondary graduation rate: typical graduation ages and		
	method used to calculate graduation rates (2007)		
Table X1.1b.	Post-secondary non-tertiary graduation rate: typical graduation ages		
T-11 374 4	and method used to calculate graduation rate (2007)	.448	
Table X1.1c.	Tertiary graduation rate: typical graduation ages and method used	110	
Table X1.2a.	to calculate graduation rates (2007)	, <del>11</del> フ	
Table A1.2d.	School year and financial year used for the calculation of indicators, OECD countries	451	
Table X1.2b.	School year and financial year used for the calculation of indicators,	131	
	partner countries	.452	
Table X1.3.	Summary of completion requirements for upper secondary		
	· · · · · · · · · · · · · · · · · ·		

#### Name of the indicator in the 2008 edition

ANNEX 2	REFERENCE STATISTICS	455
Table X2.1.	Overview of the economic context using basic variables	
	(reference period: calendar year 2006, 2006 current prices)	456
Table X2.2.	Basic reference statistics (reference period: calendar year 2006,	
	2006 current prices)	457
Table X2.3a.	Reference statistics used in the calculation of teachers' salaries,	
	by level of education (1996, 2007)	458
Table X2.3b.	Reference statistics used in the calculation of teachers' salaries	
	(1996, 2007)	460
Table X2.3c.	Teachers' salaries (2007)	461
ANNEX 3	SOURCES, METHODS AND TECHNICAL NOTES	463
References		465
Contributors	s to this Publication	467
Related OEC	D Publications	471



#### From:

# Education at a Glance 2009 OECD Indicators

### Access the complete publication at:

https://doi.org/10.1787/eag-2009-en

### Please cite this chapter as:

OECD (2009), "Foreword", in Education at a Glance 2009: OECD Indicators, OECD Publishing, Paris.

DOI: <a href="https://doi.org/10.1787/eag-2009-1-en">https://doi.org/10.1787/eag-2009-1-en</a>

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

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

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

