## TOTAL INTENDED INSTRUCTION TIME FOR STUDENTS IN PRIMARY AND SECONDARY EDUCATION

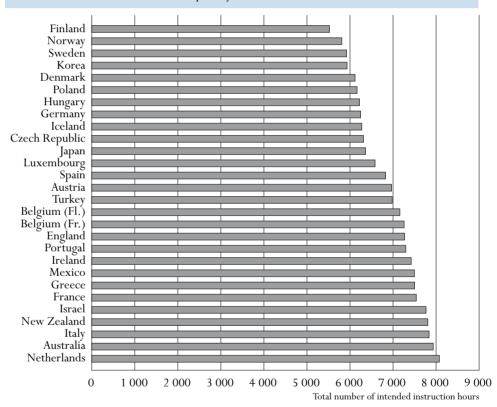
This indicator examines the amount of instruction time that students are supposed to receive between the ages of 7 and 15. It also discusses the relationship between instruction time and student learning outcomes.

# INDICATOR D<sub>1</sub>

## Key results

Chart D1.1. Cumulative number of intended instruction hours in public institutions between the ages of 7 and 14 (2004)

Students in OECD countries are expected to receive, on average, 6 847 hours of instruction between the ages of 7 and 14, of which 1 570 hours are between ages 7 and 8, 2 494 hours between ages 9 and 11, and 2 785 hours between ages 12 and 14 years. The large majority of intended hours of instruction are compulsory.



Countries are ranked in ascending order of total number of intended instruction hours. Source: OECD. Table D1.1. See Annex 3 for notes (www.oecd.org/edu/eag2006).

## Other highlights of this indicator

- In OECD countries, students between the ages of 7 and 8 receive an average of 758 hours per year of compulsory instruction time and 785 hours per year of intended instruction time in the classroom. Students between the ages of 9 and 11 receive about 50 hours more per year and those aged between 12 and 14 receive nearly 100 hours more per year than those aged between 9 and 11.
- On average among OECD countries, the teaching of reading and writing, mathematics and science comprises nearly 50% of the compulsory instruction time of students aged 9 to 11 and 41% for students aged 12 to 14. For 9-to-11-year-olds, there is great variation among countries in the proportion of compulsory curriculum devoted to reading and writing: from 13% or less in Australia and partner countries Chile and Israel to 30% in France, Mexico and the Netherlands.

INDICATOR D1

## **Policy context**

The amount and quality of time that people spend learning between early childhood and the start of their working lives shape much of their lives both socially and economically. Countries make a variety of choices about instruction, concerning the length of time devoted to instruction overall and the subjects that are compulsorily taught at schools. These choices reflect national priorities and preferences for the education received by students at different ages, as well as general priorities placed on different subject areas.

Instruction time in formal classroom settings comprises a large part of the public investment in student learning. Matching resources with students' needs and using time in an optimal manner, from the perspective of the learner and of public investment, are major challenges for education policy. The costs of education primarily include teacher labour, institutional maintenance and other educational resources. The length of time during which these resources are made available to students (as shown in this indicator) is thus an important factor in the allocation of funding.

### **Evidence and explanations**

#### What this indicator shows

Intended instruction time is an important indicator of the public resources invested in education. This indicator captures intended instruction time as a measure of exposure to learning in formal classroom settings as per public regulations. It also shows how instruction time is allocated to different curricular areas. However, the instruction time in classroom settings is only one aspect of student learning time and this indicator does not cover out-of-school learning activities. The indicator is calculated as the intended net hours of instruction for the grades in which the majority of students are 7 to 15 years of age. Although such data are difficult to compare among countries because of different curriculum policies, they nevertheless provide an indication of how much formal instruction time is considered necessary in order for students to achieve the desired educational goals.

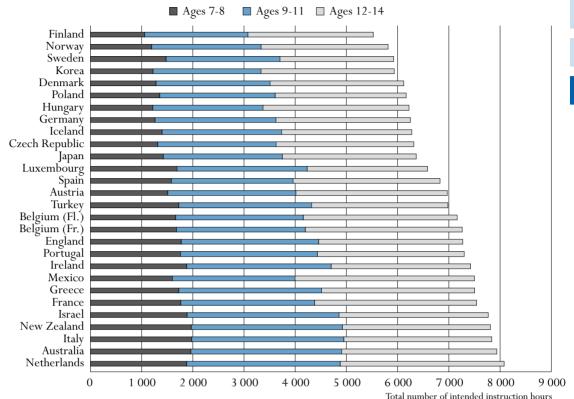
#### Total intended instruction time: an average of 6 848 hours between ages 7 and 14

Total intended instruction time is an estimate of the number of hours during which students are taught both compulsory and non-compulsory parts of the curriculum.

The total number of instruction hours that students are intended to receive between ages 7 and 14 averages 6 848 hours among OECD countries. However, formal requirements range from 5 523 hours in Finland to over 8 000 hours in the Netherlands. These hours comprise compulsory and non-compulsory hours during which the school is obliged to offer instruction to students. Whereas the total intended instruction time within this age range is a good indicator of students' theoretical workload, it cannot be interpreted as actual instruction students receive over the years they spend in initial education. In some countries with greater student workload, the age band of compulsory education is less and students drop out of the school system earlier, whereas in other countries a more even distribution of study time over more years amounts in the end to a larger number of total instruction hours for all. Table D1.1 shows the age range at which over 90% of the population is in education and Chart D1.2 shows the total amount of intended instruction time students receive between ages 7 and 14.

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Chart D1.2. Total number of intended instruction hours in public institutions between the ages of 7 and 14 (2004)



Countries are ranked in ascending order of total number of intended instruction hours. Source: OECD. Table D1.1. See Annex 3 for notes (www.oecd.org/edu/eag2006). StatLink: http://dx.doi.org/10.1787/076822220227

In some countries, intended instruction time varies considerably among regions or different types of schools. In many countries, local education authorities or schools can determine the number and allocation of hours of instruction. Additional teacher time is often planned for individual remedial teaching or enhancement of the curriculum. On the other hand, time may be lost due to a lack of qualified substitutes to replace absent teachers, or due to student absences.

Annual instruction time should also be examined together with the length of compulsory education, which measures the time during which young people receive full-time educational support from public resources, and during which more than 90% of the population participates in education (see Indicator C1). Intended instruction time does not capture the quality of learning opportunities being provided nor the level or quality of human and material resources involved (for some insight on human resources, see indicator D2, number of teachers relative to the student population).

#### Compulsory instruction time: an average of 6 624 hours between ages 7 and 14

Total compulsory instruction time is an estimate of the number of hours during which students are taught both the compulsory core and compulsory flexible parts of the curriculum.

For 7-to-8-year-olds and 9-to-11-year-olds, total intended instruction time equals total compulsory instruction time in most countries, while for older age groups this is less frequently the case. Intended instruction time is fully compulsory for all age groups between 7 and 14 years in the Czech Republic, Denmark, Germany, Greece, Iceland, Japan, Korea, Luxembourg, Mexico, the Netherlands, Norway, Spain and Sweden. In these countries, except for Greece, Japan and Mexico, education is also fully compulsory at age 15.

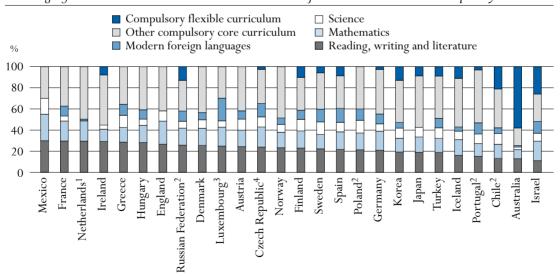
Within the formal education system, OECD countries show an average annual amount of total compulsory instruction time in classroom settings of 758 hours for 7-to-8-year-olds, 808 hours for 9-to-11-year-olds and 894 hours for 12-to-14-year-olds. The average number of compulsory instruction hours per year is 910 for the typical programme in which most 15-year-olds are enrolled (Table D1.1).

# Teaching of reading and writing, mathematics and science: at least 41% of compulsory instruction time, on average

In OECD countries students aged 9 to 11, for which study areas are not necessarily organised as separate subject classes, spend an average of nearly 50% of the compulsory curriculum to three basic subject areas: reading and writing (24%), mathematics (16%) and science (9%). On average, 8% of the compulsory curriculum is devoted to modern foreign languages. Together with social studies, the arts and physical education, these seven study areas form part of the curriculum in all OECD countries for these age cohorts (Table D1.2a and Chart D1.3a).

Chart D1.3a. Instruction time per subject as a percentage of total compulsory instruction time for 9-to-11-year-olds (2004)

Percentage of intended instruction time devoted to various subject areas within the total compulsory curriculum



- 1. Includes 9- and 11-year-olds only.
- 2. Includes 10-to-11-year-olds only.
- 3. German as a language of instruction is included in "Reading, writing and literature" in addition to the mother tongue Luxemburgish.
- 4. For 9-to-10-year-olds, social studies is included in science.

Countries are ranked in descending order of the number of intended instruction hours devoted to reading, writing and literature. Source: OECD. Table D1.2a. See Annex 3 for notes (www.oecd.org/edu/eag2006).

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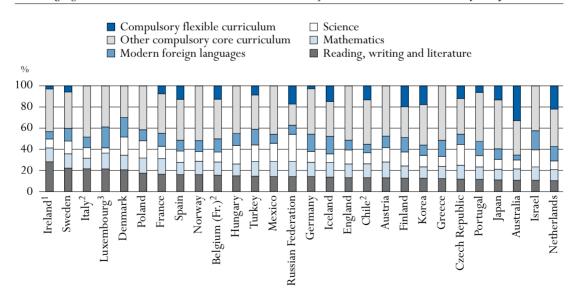
On average, reading and writing account for the greatest share of the curriculum for 9-to-11-year-old students, but the variation in this share among countries is greater than for other subjects; reading and writing accounts for 13% or less of instruction time in Australia and partner countries Chile and Israel, compared with 30% in France, Mexico and the Netherlands. Sizeable variation is also evident in modern foreign languages, which account for 1% or less of instruction time in Australia, England, Japan and Mexico but represent 21% of total compulsory instruction time in Luxembourg.

For 12-to-14-year-old students in OECD countries, an average of 41% of the compulsory curriculum is devoted to three basic subject areas: reading and writing (16%), mathematics (13%) and science (12%). In these age cohorts, a relatively larger part of the curriculum is devoted to modern foreign languages (12%) and social studies (12%), whereas somewhat less time is devoted to the arts (8%). Together with physical education, these seven study areas form part of the compulsory curriculum in all OECD countries for lower secondary students (Table D1.2b and Chart D1.3b).

The variation between countries in the percentage share of subjects within the curriculum for 12-to-14-year-olds is less than it is for 9-to-11-year-olds. Again, the greatest variation is evident in reading and writing with a range from 10% in the Netherlands to 28% in Ireland (reading and writing includes both English and Irish).

Chart D1.3b. Instruction time per subject as a percentage of total compulsory instruction time for 12-to-14-year-olds (2004)

Percentage of intended instruction time devoted to various subject areas within the total compulsory curriculum



- 1. For 13-to-14-year-olds, arts is included in non-compulsory curriculum.
- 2. Includes 12-to-13-year-olds only.
- 3. German as a language of instruction is included in "Reading, writing and literature" in addition to the mother tongue Luxemburgish.

Countries are ranked in descending order of the number of intended instruction hours devoted to reading, writing and literature. Source: OECD. Table D1.2b. See Annex 3 for notes (www.oecd.org/edu/eag2006).

There is also substantial variation in the percentage of compulsory instruction time devoted to particular subjects for 9-to-11-year-olds compared to 12-to-14-year-olds. On average across OECD countries, the time of compulsory instruction for 12-to-14-year-olds devoted to reading, writing and literature is 33% lower than for 9-to-11-year-olds. Conversely, the time devoted to social studies and modern foreign languages is 33% higher than for 9-to-11-year-olds.

For some countries, these differences are larger than in other countries. The percentage of compulsory instruction time devoted to reading, writing and literature for 12-to-14-year-olds is less than half of that for 9-to-11-year-olds in the Czech Republic, England, Greece, Mexico and the Netherlands. Yet, for Ireland and partner countries Chile and Israel, the difference between the shares is less than 5%. Clearly, countries place a different emphasis upon particular subjects and when those subjects should be taught to students.

On average among OECD countries, the non-compulsory part of the curriculum comprises 3 to 4% of the total intended instruction time for 9-to-11-year-old students as well as for 12-to-14-yearold students. However, among partner countries, non compulsory curriculum represents nearly a third of the compulsory instruction time in Israel for 9-to-11-year-old students. Nevertheless, a considerable amount of additional non-compulsory instruction time can sometimes be provided. For 9-to-11-year-olds, all intended instruction time is compulsory for students in most countries, but the additional non-compulsory part is as high as, 20% in Poland and Turkey, and 15% in Hungary and 32% in partner country Israel. For 12-to-14-year-old students, non-compulsory instruction time is a feature in Australia, the French Community of Belgium, England, Finland, France, Hungary, Ireland, Italy, Poland, Portugal and Turkey, and ranges from 2% in Finland and Portugal to 28% in Hungary (Tables D1.2a and D1.2b).

On average, 4% of compulsory instruction time belongs to the flexible part of the curriculum in the grades where most students are 9-to-11 years of age while the corresponding proportion is 8% for students aged 12 to 14.

In most OECD countries, the number of hours of compulsory instruction is defined. Within the compulsory part of the curriculum, students have varying degrees of freedom to choose the subjects they want to learn. However, for 9-to-11-year-olds, 58% of the compulsory curriculum is operated on a flexible basis in Australia, and up to 81% in the French Community of Belgium. For 12-to-14-year-olds, Australia again has the highest degree of flexibility in the compulsory curriculum (33%), although several other countries allow more than 10% flexibility in the compulsory curriculum (the French Community of Belgium, the Czech Republic, Finland, Iceland, Japan, Korea, the Netherlands and Spain, and the partner countries Chile and the Russian Federation) (Tables D1.2a and D1.2b).

#### **Definitions and methodologies**

Data on instruction time are from the 2005 OECD-INES Survey on Teachers and the Curriculum and refer to the school year 2003-2004.

Instruction time for 7-to-15-year-olds refers to the formal number of 60-minute hours per school year organised by the school for class instructional activities for students in the reference school year 2003-2004. For countries with no formal policy on instruction time, the number of hours was estimated from survey data. Hours lost when schools are closed for festivities and celebrations, such as national holidays, are 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.

- Compulsory curriculum refers to the amount and allocation of instruction time that almost
  every public school must provide and almost all public sector students must attend. The
  measurement of the time devoted to specific study areas (subjects) focuses on the minimum
  common core rather than on the average time spent on study areas, since the data sources
  (policy documents) do not allow more precise measurement. Total compulsory curriculum
  comprises the compulsory core curriculum as well as the compulsory flexible curriculum.
- The non-compulsory part of the curriculum refers to the average time of instruction to which students are entitled above the compulsory hours of instruction. These subjects often vary from school to school or from region to region, and may take the form of "non-compulsory elective" subjects.
- Intended instruction time refers to the number of hours per year during which students receive instruction in the compulsory and non-compulsory parts of the curriculum.

For 15-year-olds in Table D1.1, typical instruction time refers to the programme in which most 15-year-olds are enrolled. This can be a programme in lower or upper secondary education, and in most countries it refers to a general programme. If the system channels students into different programme types at this age, an estimation of the average instruction time may have been necessary for the most important mainstream programmes weighted by the proportion of students in the grade level where most 15-year-olds are enrolled. Where vocational programmes are also taken into account in typical instruction time, only the school-based part of the programme should be included in the calculations.

The instruction time for the least demanding programme refers to programmes stipulated for students who are least likely to continue studying beyond mandatory school age or beyond lower secondary education. Such programmes may or may not exist in a country depending on streaming and selection policies. In many countries students are offered the same amount of instruction time in all or most programmes, but there is flexibility in the choice of study areas or subjects. Often such choices have to be made quite early if programmes are long and differ substantially.

#### **Further references**

Specific notes on definitions and methodologies regarding this indicator for each country are given in Annex 3 at <a href="https://www.oecd.org/edu/eag2006">www.oecd.org/edu/eag2006</a>. In addition, a more comprehensive analysis of decision making was published in Indicator D6 of <a href="https://education.org/edu/eag2004">Education at a Glance 2004</a> (OECD, 2004c). Information on the underlying decision-making survey is available in <a href="https://education.org/edu/eag2004">Education at a Glance 2004</a>, Annex 3 (<a href="https://www.oecd.org/edu/eag2004">www.oecd.org/edu/eag2004</a>) under the heading "Indicator D6 Locus of decision making at lower secondary levels". The complete decision-making data are available under the heading "Underlying data on decision making for indicator D6".

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Table D1.1. Compulsory and intended instruction time in public institutions (2004)

Average number of hours per year of total compulsory and non-compulsory instruction time in the curriculum for 7 to 8, 9 to 11, 12 to 14 and 15-year-olds

						ours per y struction		Average number of hours per year of total compulsory and non-compulsory instruction time						
		Age range at which over 90% of the population are enrolled	Ages 7-8	Ages 9-11	Ages 12-14	Age 15 (typical programme)	Age 15 (minimum required programme)	Ages 7-8	Ages 9-11	Ages 12-14	Age 15 (typical programme)	Age 15 (minimum required programme)		
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)		
ries	Australia	5 - 16	981	982	966	964	949	981	982	1010	1 020	1 005		
OECD countries	Austria	5 - 16	709	788	938	1033	987	755	835	985	1 080	1 033		
D CC	Belgium (Fl.)	3 - 17	a	a	a	a	a	832	832	1 000	1 000	443		
OEC	Belgium (Fr.) <sup>1</sup>	3 - 17	840	840	960	1 020	m	840	840	1 020	1 020	m		
Ĭ	Czech Republic	5 - 17	658	770	897	965	394	658	770	897	965	394		
	Denmark	4 - 16	641	743	870	840	840	641	743	870	840	840		
	England	4 - 15	878	894	905	760	a	888	894	938	950	a		
	Finland	6 - 18	530	654	796	858	a	530	673	815	858	a		
	France	3 - 17	883	871	961	1 042	a	883	871	1 055	1 148	a		
	Germany	6 - 17	631	788	875	892	m	631	788	875	892	m		
	Greece	6 - 16	864	928	998	1 089	926	864	928	998	1 307	1 144		
	Hungary	4 - 16	555	624	740	763	763	611	718	950	1 106	1 106		
	Iceland	3 - 16	700	778	848	863	a	700	778	848	863	a		
	Ireland	5 - 16	941	941	848	802	713	941	941	907	891	891		
	Italy	3 - 15	941	990	963	908	a	990	990	963	908	a		
	Japan	4 - 17	712	776	871	m	a	712	776	871	m	a		
	Korea	6 - 17	612	703	867	1 020	a	612	703	867	1 020	a		
	Luxembourg	5 - 15	847	847	782	750	a	847	847	782	750	a		
	Mexico	6 - 12	800	800	1 167	1058	a	800	800	1167	1 124	a		
	Netherlands	5 - 16	940	1 000	1 067	m	a	940	1 000	1 067	m	a		
	New Zealand	4 - 15	a	a	a	a	a	985	985	962	950	950		
	Norway	6 - 17	599	713	827	855	a	599	713	827	855	a		
	Poland	6 - 17	564	658	786	827	a	677	752	852	884	a		
	Portugal	5 - 14	880	874	937	938	1 233	880	892	954	938	1 233		
	Scotland	4 - 15	a	a	a	a	a	a	a	a	a	a		
	Slovak Republic	6 - 17	m	m	m	m	m	m	m	m	m	m		
	Spain	3 - 16	792	792	956	978	978	792	792	956	978	978		
	Sweden	6 - 18	741	741	741	741	a	741	741	741	741	a		
	Switzerland	6 - 16	m	m	m	m	m	m	m	m	m	m		
	Turkey	8 - 13	720	720	791	959	a	864	864	887	959	a		
	United States	6 - 16	m	m	m	m	m	m	m	m	m	m		
		0 10												
	OECD average		758	808	894	910	865	785	831	928	962	911		
	EU19 average		769	819	890	894	854	786	834	928	959	896		
Partner country	Israel	5 - 17	666	749	971	919	a	944	990	971	919	a		

<sup>1.</sup> Ages 12-14 covers ages 12-13 only.

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

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

Table D1.2a.

Instruction time per subject as a percentage of total compulsory instruction time for 9-to-11-year-olds (2004)

Percentage of intended instruction time devoted to various subject areas within the total compulsory curriculum

					Con	pulse	ory co	ore cu	ırricu	ılum						
		Reading, writing and literature	Mathematics	Science		Modern foreign languages		Arts	Physical education	Religion	Practical and vocational skills	Other	TOTAL compulsory core curriculum	Compulsory flexible curriculum	TOTAL compulsory curriculum	Non- compulsory curriculum
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
trie	Australia <sup>1</sup>	13	9	2	3	1	2	4	5	1	n	1	42	58	100	n
onno	Austria	24	16	10	3	8	n	18	10	8	x(12)	3	100	x(12)	100	m
OECD countries	Belgium (Fl.) <sup>1</sup>	a	a	a	a	a	a	a	a	a 7	a	a	19	a 81	a 100	a
OE	Belgium (Fr.) <sup>1</sup>	a	a 10	а 9	a	5	a	a	7		a	n				n
	Czech Republic <sup>2</sup> Denmark	24 26	19 16	8	11 4	13	n	14 22	8	n 4	n	n 3	97 100	3	100 100	n
	England	27	22	10	8	n	n 9	8	7	5	n n	5	100	n n	100	n n
	Finland	23	16	11	2	9	n	14	9	6	n	n	90	10	100	3
	France	30	19	5	10	9	3	9	14	n	n	n	100	n	100	n
	Germany	21	18	7	5	9	1	15	11	7	n	3	97	3	100	n
	Greece	29	14	11	11	10	n	8	7	7	n	2	100	n	100	n
	Hungary	28	16	6	7	9	n	15	11	n	4	4	100	n	100	15
	Iceland	16	15	8	8	4	6	12	9	3	5	3	89	11	100	n
	Ireland	29	12	4	8	x(13)	n	12	4	10	n	14	92	8	100	n
	Italy <sup>3</sup>	a	a	a	a	a	a	a	a	a	a	a	a	a	100	n
	Japan	19	15	9	9	n	n	10	9	n	n	21	91	9	100	m
	Korea	19	13	10	10	5	2	13	10	n	2	3	87	13	100	n
	Luxembourg <sup>4</sup>	25	18	6	2	21	n	11	10	7	n	n	100	n	100	n
	Mexico	30	25	15	20	n	n	5	5	n	n	n	100	n	100	n
	Netherlands <sup>5</sup>	30	19	x(4)	15	2	2	10	7	4	n	12	100	n	100	n
	New Zealand	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a
	Norway	23	15	7	8	6	n	16	7	9	n	9	100	n	100	n
	Poland <sup>6</sup>	21	16	12	5	11	5	5	12	8	n	4	100	n	100	20
	Portugal <sup>6</sup>	15	12	9	6	11	12	6	9	n	n	17	97	3	100	3
	Scotland	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a
	Slovak Republic	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Spain	22	17	9	9	13	n	11	11	x(13)	n	n	91	9	100	n
	Sweden	22	14	12	13	12	x(3)	7	8	x(4)	7	n	94	6	100	n
	Switzerland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Turkey	19	13	10	10	9	n	7	7	7	9	1	91	9	100	20
	<b>United States</b>	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	OECD average <sup>1</sup>	24	16	9	8	8	2	11	9	4	1	5	96	4	100	3
	EU19 average	25	16	9	7	9	2	12	9	4	1	4	97	3	100	3
s	Chile <sup>6</sup>	13	13	10	10	5	5	8	5	5	a	2	79	21	100	m
countries	Israel	11	19	7	11		x(13)	n	7	7	n	n	74	26	100	32
100	Russian Federation <sup>6</sup>	26	16	6	10	10	6	6	6	n	n	n	87	13	100	m
								L								

1. Australia, Belgium (Fr.) and Belgium(Fl.) are not included in the averages.

2. For 9-to-10-year-olds, social studies is included in science.

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

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

 $<sup>3. \</sup> For \ 9- \ and \ 10- \ year-olds \ the \ curriculum \ is \ largely \ flexible, for \ 11- \ year-olds \ it \ is \ about \ the \ same \ as \ for \ 12 \ and \ 13- \ year-olds$ 

<sup>4.</sup> German as a language of instruction is included in "Reading, writing and literature" in addition to the mother tongue Luxemburgish.

<sup>5.</sup> Includes 9- and 11-year-olds only.

<sup>6.</sup> Includes 10-to-11-year-olds only.

Table D1.2b.

Instruction time per subject as a percentage of total compulsory instruction time for 12-to-14-year-olds (2004) Percentage of intended instruction time devoted to various subject areas within the total compulsory curriculum

					Con	pulse	ory co									
		Reading, writing and literature	(E) Mathematics	Science	(F) Social studies	Modern foreign languages	© Technology	3 Arts	Physical education	© Religion	Practical and vocational skills	Other	TOTAL compulsory core curriculum	Compulsory flexible curriculum (13)	TOTAL compulsory curriculum (14)	Non- compulsory curriculum (15)
s.	Australia	11	11	8	8	5	7	7	8	1	n	3	67	33	100	5
ntri	Austria	13	15	13	12	11	n	16	10	7	2	n	100	x(12)	100	m
OECD countries	Belgium (Fl.)	a	a	a	a	a	a	a	a	a	a	a	a	a a	a	a
G	Belgium (Fr.) <sup>1</sup>	16	13	9	13	13	3	3	9	6	n	3	88	13	100	6
Ō	Czech Republic	12	13	20	16	10	3	8	7	n	n	n	88	12	100	n
	Denmark	21	14	17	7	18	n	9	7	3	n	3	100	n	100	n
	England	13	13	13	13	9	12	9	8	5	n	3	100	n	100	4
	Finland	13	12	13	5	14	n	9	7	4	4	n	80	20	100	2
	France	17	15	12	13	12	6	7	11	n	n	n	93	7	100	10
	Germany	14	14	10	12	16	3	10	9	5	2	2	97	3	100	n
	Greece	12	11	10	10	15	5	6	8	6	1	16	100	n	100	n
	Hungary	15	11	17	11	11	3	10	8	n	4	9	100	n	100	28
	Iceland	14	14	8	6	17	4	7	8	2	4	3	85	15	100	n
	Ireland <sup>2</sup>	28	13	8	17	7	x(15)	4	5	9	x(15)	5	97	3	100	7
	Italy <sup>1</sup>	22	10	10	15	10	10	13	7	3	n	n	100	n	100	n
	Japan	11	10	9	9	10	3	7	9	n	n	18	87	13	100	m
	Korea	13	11	11	10	10	4	8	8	n	4	5	82	18	100	n
	Luxembourg <sup>3</sup>	22	15	5	10	20	n	10	8	6	n	5	100	n	100	n
	Mexico	14	14	17	26	9	n	6	6	n	9	n	100	n	100	n
	Netherlands	10	10	8	11	14	5	7	9	n	3	n	78	22	100	n
	New Zealand	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a
	Norway	16	13	9	11	10	n	8	10	7	n	16	100	n	100	n
	Poland	18	14	16	9	10	5	4	11	7	n	6	100	n	100	8
	Portugal	12	12	11	16	13	4	7	9	n	n	11	94	6	100	2
	Scotland	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a
	Slovak Republic	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Spain	16	11	11	10	10	8	11	7	x(13)	x(13)	3	87	13	100	n
	Sweden Switzerland	22	14	12	13	12	x(3)	7	8	x(4)	7	n	94	6	100	n
		m 15	m 14	m 16	m 10	m 15	m	m 4	m 6	m 5	m 4	m 3	m 91	m 9	m 100	m 12
	Turkey United States	m m					n						m		100 m	
			m	m	m	m	m	m	m	m	m	m		m		m
	OECD average	16	13	12	12	12	3	8	8	3	2	5	92	8	100	4
	EU19 average	16	13	12	12	13	4	8	8	4	1	4	94	6	100	4
ries	Chile <sup>1</sup>	13	13	11	11	8	5	11	5	5	a	5	87	13	100	m
countries	Israel	11	13	16	21	18	x(3)	4	5	13	n	n	100	n	100	m
٠.	Russian Federation	14	14	26	9	9	3	3	6	n	n	n	83	17	100	m

<sup>1.</sup> Includes 12-to-13-year-olds only.

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

<sup>2.</sup> For 13-to-14-year-olds, arts is included in non-compulsory curriculum.

<sup>3.</sup> German as a language of instruction is included in "Reading, writing and literature" in addition to the mother tongue Luxemburgish. Source: OECD. See Annex 3 for notes (www.oecd.org/edu/eag2006).

# References

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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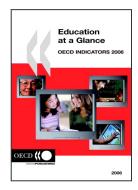
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