

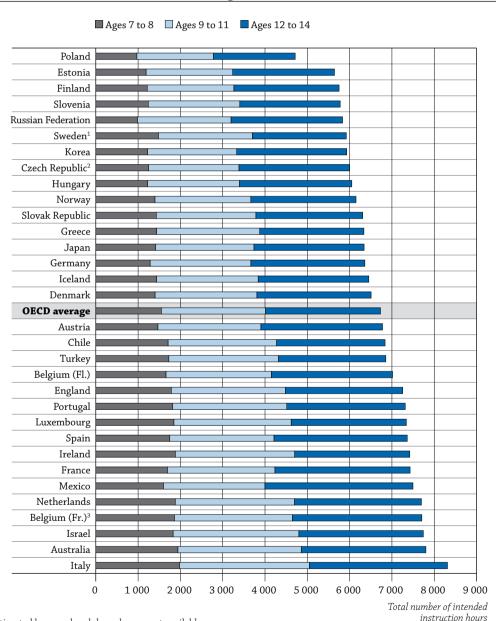
The Learning Environment AND ORGANISATION of Schools



HOW MUCH TIME DO STUDENTS SPEND IN THE CLASSROOM?

- Students in OECD countries are expected to receive an average of 6 732 hours of instruction between the ages of 7 and 14, and most of that intended instruction time is compulsory.
- On average across OECD countries, instruction in reading, writing and literature, mathematics and science represents 48% of the compulsory instruction time for 9-11 year-olds and 41% for 12-14 year-olds.

Chart D1.1. Total number of intended instruction hours in public institutions between the ages of 7 and 14 (2009)



- 1. Estimated because breakdown by age not available.
- 2. Minimum number of hours per year.
- 3. "Ages 12-14" covers ages 12-13 only.

Countries are ranked in ascending order of the total number of intended instruction hours.

Source: OECD. Table D1.1. See Annex 3 for notes (www.oecd.org/edu/eag2011).

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INDICATOR D1

Context

Instruction time in formal classroom settings accounts for a large portion of public investment in student learning and is a central component of effective schooling. The amount of instruction time and after-school lessons available to students is an important indication of students' opportunities to learn. Matching resources with students' needs and making optimal use of time are central to education policy. The main costs of education are the use and deployment of teachers, institutional maintenance and other educational resources. The length of time during which these resources are made available to students (as partly shown in this indicator) is thus an important factor in determining how funds for education are allocated (see Indicator B7).

Countries make various choices concerning the overall amount of time devoted to instruction and which subjects should be compulsory. These choices reflect national and/or regional priorities and preferences on what material students should be taught and at what age. Countries usually have statutory or regulatory requirements regarding hours of instruction. These are most often stipulated as the minimum number of hours of instruction a school must offer and are based on the notion that sufficient teaching time is required for good learning outcomes.

Other findings

- In OECD countries, compulsory instruction time for 7-8 year-old students averages 749 hours per year and intended instruction time averages 775 hours per year. Students aged 9 to 11 receive, on average, about 44 more hours of compulsory education per year than 7-8 year-olds, while students aged 12 to 14 receive about 80 more hours per year than 9-11 year-olds. Students aged 9 to 11 receive just over 46 more hours of intended instruction per year than 7-8 year-olds, and students aged 12 to 14 receive 86 more hours per year than 9-11 year-olds.
- For 9-11 year-olds, the proportion of the compulsory curriculum that is devoted to reading, writing and literature varies widely, from 11% in Indonesia to 30% or more in France, Mexico and the Netherlands.

INDICATOR D1

Analysis

Total intended instruction time

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 as per public regulations.

Between the ages of 7 and 8, students in OECD countries are expected to receive 1 550 hours of instruction, those between the ages of 9 and 11 are expected to receive 2 462 hours, and those between the ages of 12 and 14 are expected to receive 2 720 hours. Most of this instruction time is compulsory.

While the average instruction time for students in OECD countries between the ages of 7 and 14 is 6 732 hours, formal teaching-time requirements range from 4 715 hours in Poland to 8 316 hours in Italy. During these hours, schools are obliged to offer instruction in compulsory and non-compulsory subjects. The total intended instruction time for this age range is a good indicator of students' theoretical workload in school, but it cannot be interpreted as the actual amount of instruction time students receive during the years they spend in initial education.

Annual instruction time should be examined together with the length of compulsory education. In some countries with a heavier student workload, compulsory education covers fewer years and students drop out of the school system earlier; in other countries, a more even distribution of workload and study time over more years ultimately means 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 (see Indicator C1). Chart D1.1 shows the total amount of intended instruction time students should receive between the ages of 7 and 14. Intended instruction time does not capture the quality of learning opportunities provided or the level or quality of the human and material resources involved (see Indicator D2, which shows the number of teachers relative to the student population).

In some countries, intended instruction time varies considerably among regions or types of schools. In many countries, local education authorities or schools determine the number and allocation of hours of instruction. Intended instruction time can also differ from the actual instruction time. Additional teaching time is often planned for enrichment or remedial courses (Box D1.1). However, time may be lost because of student absences or a lack of qualified substitutes to replace absent teachers.

Box D1.1. After-school lessons

Intended instruction time only captures the time spent by students in formal classroom settings. This is only a part of the total time students spend receiving instruction. Instruction also occurs outside the classroom and/or school. Secondary school students are often encouraged to take after-school classes in subjects already taught in school to help them improve their performance in key subjects. Students can take part in after-school lessons in the form of remedial "catch-up" classes or enrichment courses, with individual tutors or in group lessons provided by school teachers, or other independent courses. These lessons can be financed publically, or can be financed by students and their families.

Findings from the 2009 PISA survey suggest that the amount of time spent in these after-school lessons differs widely among countries. On average across OECD countries, a large proportion of students reported that they attend after-school lessons for up to four hours a week: in mathematics (26%), science (17%), language-of-instruction (reading, writing and literature) (16%), and other subjects (19%). Some students even spend more than four hours a week attending after-school lessons: in mathematics (7%), languageof-instruction (5%), science (5%) and other subjects (7%). In general, after-school lessons in mathematics are most common. In Estonia, Greece, Korea, the Russian Federation and Shanghai-China, more than 45% of students spend up to 4 hours a week in after-school lessons in mathematics; an additional 20% or more of students in Korea, Indonesia and Shanghai-China spend more than 4 hours a week. A similar pattern is observed for the other subjects (Table D1.3, available on line).

Compulsory instruction time

Total compulsory instruction time is the estimated number of hours during which students are taught both the compulsory core curriculum and flexible parts of the compulsory curriculum. In OECD countries, students between the ages of 7 and 14 receive an average of 6 497 hours of compulsory instruction.

Intended instruction time is fully compulsory for all age groups between 7 and 14 years in Australia, the Czech Republic, Denmark, England, Estonia, Germany, Greece, Iceland, Israel, Japan, Korea, Luxembourg, Mexico, the Netherlands, Norway, the Russian Federation, Slovenia, Spain and Sweden. Except for Australia, England, Israel, Luxembourg, Mexico, the Netherlands and Spain, the total length of intended instruction time in these countries is less than the OECD average. Intended instruction time is also fully compulsory at age 15 in these 19 countries, except in Israel, and except in Japan, for which data are missing. In France and Ireland, although total intended instruction time is fully compulsory for 7-8 year-olds and 9-11 year-olds, it is not compulsory for the older age groups. In Finland, total intended instruction time is only fully compulsory for 7-8 year-olds.

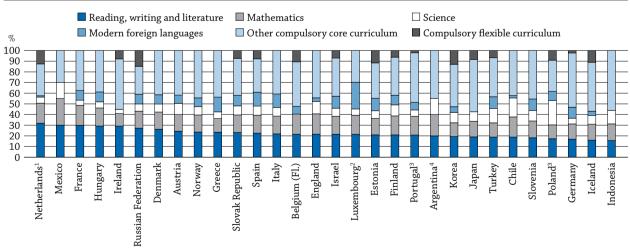
OECD countries report an average annual total compulsory instruction time in classroom settings of 749 hours for 7-8 year-olds, 793 hours for 9-11 year-olds and 873 hours for 12-14 year-olds. Most 15-year-olds are enrolled in programmes that provide an average of 902 hours of compulsory instruction (Table D1.1).

Instruction time in reading, writing and literature, mathematics and science

In OECD countries, 9-11 year-olds do not necessarily attend separate classes for each subject they study. Students at this age spend an average of 48% of the compulsory curriculum on three basic subjects: reading, writing and literature (23%), mathematics (16%) and science (9%). On average, an additional 9% of the compulsory curriculum is devoted to modern foreign languages and 8% to social studies. Together with the arts (11%) and physical education (9%), these seven study areas form the major part of the curriculum for this age group in all OECD and other G20 countries with available data. Ancient Greek and/or Latin, technology, religion, practical and vocational skills and other subjects make up the remainder (11%) of the compulsory core curriculum for 9-11 year-olds (Table D1.2a and Chart D1.2a).

Chart D1.2a. Instruction time per subject as a percentage of total compulsory instruction time for 9-11 year-olds (2009)

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



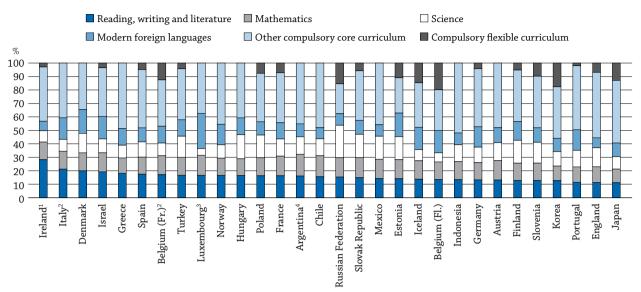
- 1. Includes 11-year-olds only.
- 2. German as a language of instruction is included in "Reading, writing and literature" in addition to the mother tongue Luxemburgish.
- 3. Includes 10-11 year-olds only.
- 4. Year of reference 2008.

Countries are ranked in descending order of the proportion of intended instruction hours devoted to reading, writing and literature.

Source: OECD. Argentina, Indonesia: UNESCO Institute for Statistics (World Education Indicators Programme). Table D1.2a. See Annex 3 for notes (www.oecd.org/edu/eag2011).

Chart D1.2b. Instruction time per subject as a percentage of total compulsory instruction time for 12-14 year-olds (2009)

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



- 1. For 13-14 year-olds, "Arts" is included in "Non-compulsory curriculum".
- 2. Includes 12-13 year-olds only.
- 3. German as a language of instruction is included in "Reading, writing and literature" in addition to the mother tongue Luxemburgish.
- 4. Year of reference 2008.

Countries are ranked in descending order of the proportion of intended instruction hours devoted to reading, writing and literature.

Source: OECD. Argentina, Indonesia: UNESCO Institute for Statistics (World Education Indicators Programme). Table D1.2b. See Annex 3 for notes (www.oecd.org/edu/eag2011).

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On average, the largest portion of the curriculum for 9-11 year-olds is devoted to reading and writing, but the differences among countries are greater than in other subjects. For example, in Indonesia, reading and writing accounts for 11% of compulsory instruction time while in France, Mexico and the Netherlands, it accounts for 30% or more of compulsory instruction time. There are also sizeable variations between countries in the time spent learning modern foreign languages. In Argentina, Chile, England, Japan, Mexico and the Netherlands, instruction in modern foreign languages accounts for 3% or less of instruction time; in Estonia, Germany, Greece, Israel, Italy, the Slovak Republic, Slovenia, Spain and Turkey it accounts for 10% or more of instruction time; and in Luxembourg, instruction in modern foreign languages accounts for 25% of total instruction time.

In OECD countries, an average of 41% of the compulsory curriculum for 12-14 year-olds is devoted to three subjects: reading, writing and literature (16%), mathematics (13%) and science (12%). Compared with the younger age group, a relatively larger part of the curriculum for this age group is devoted to modern foreign languages (13%) and social studies (12%), and somewhat less time is devoted to the arts (8%) and physical education (8%). Together, these seven study areas form the major part of the compulsory curriculum for lower secondary students in all OECD and partner countries. Ancient Greek and/or Latin, technology, religion, practical and vocational skills and other make up the remainder (12%) of the compulsory core curriculum for 12-14 year-olds (Table D1.2b and Chart D1.2b).

The allocation of time for the different subjects within the compulsory curriculum for 12-14 year-olds varies less among countries than it does for 9-11 year-olds. Again, one of the greatest variations is in the time spent teaching reading and writing, which ranges from 11% of compulsory instruction time in England, Japan and Portugal to 28% in Ireland, where reading and writing includes work in both English and Irish.

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There is also substantial variation in the proportion of compulsory instruction time devoted to particular subjects for 9-11 year-olds compared to 12-14 year-olds. On average among OECD countries, the older age group spends about one-third less time studying reading, writing and literature than the younger age group. Conversely, time spent on science, social studies, modern foreign languages, technology and practical and vocational skills increases with students' age. These differences are larger in some countries than in others. For example, the percentage of compulsory instruction time devoted to reading, writing and literature for 12-14 year-olds is around one-half of that for 9-11 year-olds in England and Mexico. Yet in Ireland and Italy, the difference is less than 5%. Indonesia is the only country where the proportion of compulsory instruction time devoted to reading, writing and literature is higher for 12-14 year-olds than for 9-11 year-olds. Clearly, countries place different emphases both on subjects and on when they should be taught to students.

Among OECD countries, the non-compulsory part of the curriculum accounts for an average of 4% of the total intended instruction time for 9-11 year-olds and 5% of the total intended instruction time for 12-14 year-olds. Nevertheless, a considerable amount of additional non-compulsory instruction time is sometimes provided. For 9-11 year-olds, all intended instruction time is compulsory in most countries, but additional non-compulsory time accounts for as much as 27% of total instruction time in Chile, 20% in Hungary and Turkey, 12% in Italy and 11% in Belgium (French Community). For 12-14 year-olds, non-compulsory instruction time is a feature in Argentina, Austria, Belgium (French Community), Chile, Finland, France, Hungary, Indonesia, Ireland, Italy, Poland, Portugal, the Slovak Republic and Turkey, ranging from 3% in Portugal and the Slovak Republic to 32% in Hungary (Tables D1.2a and D1.2b).

On average among OECD countries, the flexible part of the curriculum accounts for some 4% of compulsory instruction time for 9-11 year-olds and 6% for 12-14 year-olds. Within the compulsory part of the curriculum, students have varying degrees of freedom to choose the subjects they want to study. The Czech Republic allows complete flexibility (100%) in the compulsory curriculum for 9-14 year-olds. They are followed by Australia, which allows 59% flexibility in the compulsory curriculum for 9-11 year-olds and 42% for 12-14 year-olds. Belgium, Estonia, Iceland, Japan, Korea, the Russian Federation and Slovenia allow 10% or more flexibility in the compulsory curriculum for 12-14 year-olds (Tables D1.2a and D1.2b).

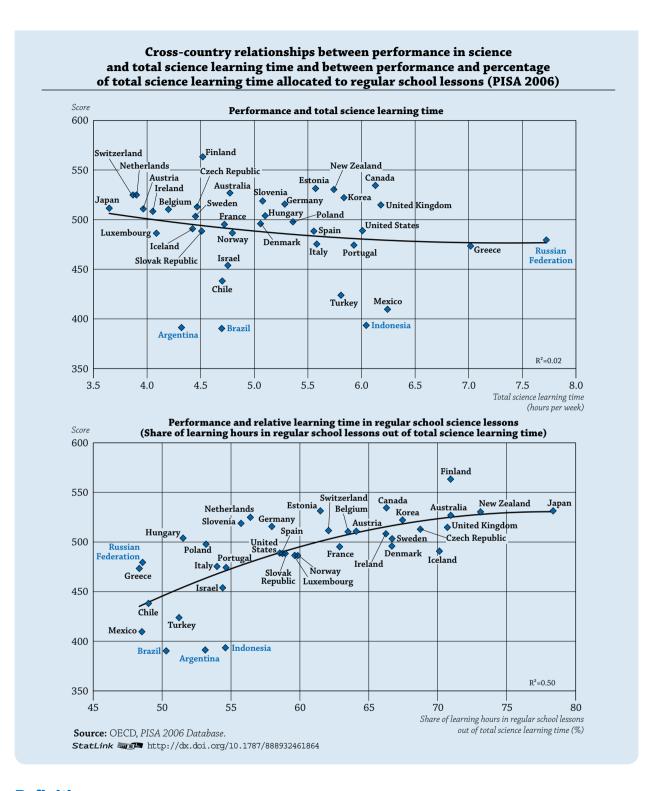
Box D1.2. Does investing in after-school classes pay off?

Students in countries that perform well in PISA spend less time, on average, in after-school lessons and individual study, and more time in regular school lessons, than students in countries that are poor performers in PISA.

According to findings based on PISA 2006 results, learning time spent in after-school lessons and individual study is negatively related to performance. Of course, this might be because students who attend after-school classes do so for remedial purposes, rather than to enhance their school studies. Still, across countries, findings show that students tend to perform better if a high percentage of their total learning time - which includes regular school lessons, after-school lessons and individual study - is spent during normal school hours in a classroom. For example, in the high-performing countries of Australia, Finland, Japan and New Zealand, over 70% of learning in science happens during regular school science lessons. Yet time spent learning does not fully explain why students in these countries are among the best performers. In fact, in all of these countries except New Zealand, 15-year-olds spend fewer hours learning science compared to the OECD average. The same pattern is observed for mathematics and language-ofinstruction learning time.

Source: OECD (2011b).





Definitions

The **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, since the data sources (policy documents) do not allow for more precise measurement.

Instruction time for 7-15 year-olds refers to the formal number of 60-minute hours per school year organised by the school for class instruction in the reference school year 2008-09. For countries with no formal policy

on instruction time, the number of hours is 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.

Instruction time for the least demanding programmes refers to programmes for students who are least likely to continue studying beyond the mandatory school age or beyond lower secondary education. Such programmes may or may not exist, depending on a country's 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 subjects. Often, such choices have to be made early in the student's school career if programmes are long and differ substantially.

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.

Language of instruction is the term the OECD's Programme for International Student Assessment (PISA) uses to denote classes in reading, writing and literature in the language in which students are taught.

The non-compulsory part of the curriculum refers to the average time of instruction to which students are entitled beyond 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.

The total compulsory curriculum comprises the compulsory core curriculum as well as the compulsory flexible curriculum.

In Table D1.1, typical instruction time for 15-year-olds refers to the programme in which most students at this age are enrolled. The programme may take place in lower or upper secondary education and, in most countries, consists of a general programme. If the system channels students into different programme types at this age, the average instruction time may have been estimated for the most important mainstream programmes and weighted by the proportion of students in the grade in which most 15-year-olds are enrolled. When vocational programmes are also taken into account in typical instruction time, only the school-based part of the programme is included in the calculations.

Methodology

This indicator captures intended instruction time, as established in public regulations, as a measure of exposure to learning in formal classroom settings. It does not show the actual number of hours of instruction received by students and does not cover learning outside of the formal classroom setting. Differences may exist across countries between the regulatory minimum hours of instruction and the actual hours of instruction received by students. A study conducted by Regioplan Beleidsonderzoek in the Netherlands showed that, owing to factors such as school timetable decisions, lesson cancellations and teacher absenteeism, schools may not consistently reach the regulatory minimum instruction time (see Box D1.1 in OECD, 2007d).

The indicator also illustrates how minimum instruction times are allocated across different curricular areas. It shows the intended net hours of instruction for those grades in which the majority of students are between 7 and 15 years old. Although the data are difficult to compare among countries because of different curricular policies, they nevertheless provide an indication of how much formal instruction time is considered necessary for students to achieve the desired educational goals.

This indicator also captures the percentage of 15-year-old students who attend after-school lessons in the form of enrichment or remedial courses and the amount of time spent on them.

Data on instruction time are from the 2010 OECD-INES Survey on Teachers and the Curriculum and refer to the school year 2008-09.

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The achievement scores are based on assessments administered as part of the Programme for International Student Assessment (PISA) undertaken by the Organisation for Economic Co-operation and Development (OECD). Data on after-school classes were collected during the 2006 and 2009 school year.

The target population studied for the analysis of after-school classes was 15-year-old students. Operationally, this referred to students aged between 15 years and 3 (completed) months and 16 years and 2 (completed) months at the beginning of the testing period and who were enrolled in an educational institution at the secondary level, irrespective of the grade levels or type of institutions in which they were enrolled, and of whether they participated in school full-time or part-time.

Notes on definitions and methodologies for each country are provided in Annex 3, available at www.oecd.org/ edu/eag2011.

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

References

For further information about PISA 2006 and PISA 2009, see: OECD (2011b), Quality Time for Students: Learning In and Out of School, OECD, Paris. Visit www.pisa.oecd.org

The following additional material relevant to this indicator is available on line:

• Table D1.3. Percentage of 15-year-old students attending after-school lessons, by hours per week (PISA 2009) StatLink http://dx.doi.org/10.1787/888932465151

Table D1.1. Compulsory and intended instruction time in public institutions (2009)

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

			hich	Aver		r of hours ory instruc	per year of tion time	Average number of hours per year of total intended instruction time						
		Ending age of compulsory education	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 (least demanding programme)	Ages 7-8	Ages 9-11	Ages 12-14	Age 15 (typical programme)	Age 15 (least demanding programme)	
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
OECD	Australia	15	5 - 16	972	971	983	964	932	972	971	983	964	932	
0	Austria	15 18	5 - 16 3 - 17	690	766	913	1 005	960	735 831	811 831	958 955	1 050 955	1 005 448	
	Belgium (Fl.) Belgium (Fr.) ¹	18	3-17	a 840	840	960	a	a m	930	930	1 020			
	Canada	16 - 18	6-17				m					m	m	
	Chile	18	6-17	m 675	m 675	m 709	m 743	m 743	m 855	m 855	855	945	m 945	
	Czech Republic ²	15	5 - 17	624	713	871	950	683	624	713	871	950	683	
	Denmark	16	3 - 16	701	803	900	930	900	701	803	900	930	900	
	England	16	4 - 16	893	899	925	950	a	893	899	925	950	a	
	Estonia	15	4-17	595	683	802	840	m	595	683	802	840	m	
	Finland	16	6 - 18	608	640	777	856	a	608	683	829	913	a	
	France	16	3 - 17	847	847	971	1 042	a	847	847	1 065	1 147	a	
	Germany	18	4 - 17	643	794	898	912	m	643	794	898	912	m	
	Greece	14 - 15	5 - 17	720	812	821	798	a	720	812	821	798	a	
	Hungary	18	4 - 17	555	601	671	763	763	614	724	885	1 106	1 106	
	Iceland	16	3 - 16	720	800	872	888	a	720	800	872	888	a	
	Ireland	16	5 - 18	941	941	848	802	713	941	941	907	891	891	
	Israel	17	4 - 16	914	991	981	964	m	914	991	981	1 101	m	
	Italy	16	3 - 16	891	913	1 001	1 089	m	990	1 023	1 089	1 089	m	
	Japan	15	4 - 17	709	774	868	m	a	709	774	868	m	a	
	Korea	14	7 - 17	612	703	867	1 020	a	612	703	867	1 020	a	
	Luxembourg	15	4 - 15	924	924	908	900	900	924	924	908	900	900	
	Mexico	15	4 - 14	800	800	1 167	1 058	a	800	800	1 167	1 058	a	
	Netherlands	18	4 - 17	940	940	1 000	1 000	a	940	940	1 000	1 000	a	
	New Zealand	16	4 - 16	m	m	m	m	m	m	m	m	m	m	
	Norway	16	3 - 17	700	756	829	859	a	700	756	829	859	a	
	Poland	16	6 - 18	446	563	604	595	a	486	603	644	635	a	
	Portugal	14	5 - 16	875	869	908	893	m	910	898	934	945	m	
	Scotland	16	4 - 16	a	a	a	a	a	a	a	a	a	a	
	Slovak Republic	16	6 - 17	687	767	813	926	926	715	785	842	926	926	
	Slovenia	14	6 - 17	621	721	791	908	888	621	721	791	908	888	
	Spain	16	3 - 16	875	821	1 050	1 050	1 050	875	821	1 050	1 050	1 050	
	Sweden ³	16	4 - 18	741	741	741	741	a	741	741	741	741	a	
	Switzerland	15	5 - 16	m	m	m	m	m	m	m	m	m	m	
	Turkey	14	7 - 13	720	720	750	810	a	864	864	846	810	a	
	United States	17	6 - 16	m	m	m	m	m	m	m	m	m	m	
	OECD average	16	5 - 16	749	793	873	902	860	775	821	907	941	889	
	EU21 average	16	4 - 17	746	790	865	897	865	767	815	902	935	880	
-	Argentina ⁴	17	5 - 15	m	720	744	m	m	m	m	m	m	m	
r G20	Brazil	17	7 - 15	m	m m	m	m	m	m	m	m	m	m	
Other	China	m	m	531	613	793	748	m	m	m	m	m	m	
	India	m	m	m	m	m	m	m	m	m	m	m	m	
	Indonesia	15	6 - 14	m	551	654	m	m	m	m	m	m	m	
	Russian Federation	17	7 - 14	493	737	879	912	m	493	737	879	912	m	
	Saudi Arabia	m	m	m	m	m	m	m	m	m	m	m	m	
	South Africa	m	m	m	m	m	m	m	m	m	m	m	m	

^{1. &}quot;Ages 12-14" covers ages 12-13 only.

Source: OECD. Argentina, Indonesia: UNESCO Institute for Statistics (World Education Indicators Programme). China: The Ministry of Education, Notes on the Experimental Curriculum of Compulsory Education, 19 November 2001. See Annex 3 for notes (www.oecd.org/edu/eag2011). Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

^{2.} Minimum number of hours per year.

^{3.} Estimated minimum numbers of hours per year because breakdown by age not available.

^{4.} Year of reference 2008.

Table D1.2a. Instruction time per subject as a percentage of total compulsory instruction time for 9-11 year-olds (2009)

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

		Compulsory core curriculum															
		Reading, writing and literature	Mathematics	Science	Social studies	Modern foreign languages	Ancient Greek and/ or Latin	Technology	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)	(16)
OECD	Australia ¹	m	m	m	m	m	m	m	m	m	m	m	m	41	59	100	n
ō	Austria	24	16	10	3	8	n	n	18	10	8	x(12)	3	100	x(12)	100	6
	Belgium (Fl.) ¹	22	19	x(12)	x(12)	7	n	n	10	7	7	n	18	89	11	100	n
	Belgium (Fr.) ¹	x(12)	x(12)	x(12)	x(12)	5	n	x(12)	x(12)	7	7	n	81	100	n	100	11
	Canada	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Chile	19	19	18	4	2	n	9	12	9	7	n	1	100	n	100	27
	Czech Republic¹	x(14)	x(14)	x(14)	x(14)	x(14)	n	x(14)	x(14)	x(14)	n	n	n	x(14)	100	100	n
	Denmark	26	16	7	5	9	n	n	20	10	4	n	3	100	n	100	n
	England	22	19	12	9	3	n	11	9	7	4	1	3	100	n	100	n
	Estonia	21	15	7	6	12	n	4	9	10	n	n	4	88	12	100	n
	Finland	21	18	10	2	9	n	n	19 9	9	5	n	n	94	6	100	7
	France	30	19	5 5	11	9	n	3		14	n	n	n 10	100	n	100	n
	Germany	17	14		6	10	n	3	14	10	6	1	10	98	2	100	n
	Greece	23	13	6	16	14	n	n	7	6	6	n	7	100	n	100	n
	Hungary Iceland	29	17	6 8	7 8	9	n	n 6	14	12 9	n 3	5 5	2 3	100	n	100	20
		16	15		8	4	n		12	4	10			89	11	100	n
	Ireland	29	12 17	4 8		x(14)	n 	n	12	6		n	14 3	92	8 7	100 100	n
	Israel Italy ²	21 22	17	8	11	11 13	n	1 2	5 14	7	11	n		93 100		100	n 12
	•	19	15	9	11 9	n	n	n	10	9	n	n n	n 21	92	n 8	100	m
	Japan Korea	19	13	10	10	5	n n	2	13	10	n	2	3	87	13	100	n
	Luxembourg ³	21	18	6	2	25	n	n	11	10	7	n	n	100	n	100	n
	Mexico	30	25	15	20	n	n	n	5	5	n	n	n	100	n	100	n
	Netherlands ⁴	32	19	6	6	1	n	n	9	7	5	3	n	88	13	100	n
	New Zealand	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Norway	24	16	8	9	8	n	n	15	9	8	n	3	100	n	100	n
	Poland ⁵	17	13	23	8	9	n	4	4	13	n	n	n	91	9	100	7
	Portugal ^{5, 6}	21	17	6	11	7	n	x(8)	12	6	n	n	18	98	2	100	3
	Scotland	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a
	Slovak Republic	23	16	9	12	10	n	1	9	7	4	2	n	93	7	100	2
	Slovenia	18	16	10	8	11	n	2	11	11	n	3	10	100	n	100	n
	Spain	23	17	9	9	13	n	n	10	10	x(14)	n	3	92	8	100	n
	Sweden	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Switzerland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Turkey	19	13	13	10	11	n	2	7	6	7	n	6	93	7	100	20
	United States	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
		23	16	9	8	9		2	11	9	4	1	4	96	4	100	4
	OECD average ¹						n										
	EU21 average ¹	23	16	8	8	9	n	2	12	9	4	1	4	96	4	100	3
120	Argentina ⁷	20	20	15	15	n	n	n	10	10	n	n	10	100	x(13)	100	n
Other G20	Brazil	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Ţ.	China	20-23	13-16	7-10	3-5	6-9	m	m	9-12	10-12	m	16-21	7-10	m	m	m	m
٠	India	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Indonesia	11	11	9	7	a	n	a	9	9	7	4	4	100	x(13)	100	4
	Russian Federation	27	16	7	6	9	n	7	7	7	n	n	n	85	15	100	n
	Saudi Arabia	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	South Africa	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m

 $^{1. \} Australia, \ Belgium \ (Fl.), \ Belgium \ (Fr.) \ and \ the \ Czech \ Republic \ are \ not \ included \ in \ the \ averages.$

Source: OECD. Argentina, Indonesia: UNESCO Institute for Statistics (World Education Indicators Programme). China: The Ministry of Education, Notes on the Experimental Curriculum of Compulsory Education, 19 November 2001. See Annex 3 for notes (www.oecd.org/edu/eag2011). Please refer to the Reader's Guide for information concerning the symbols replacing missing data.

^{2.} 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.

^{3.} German as a language of instruction is included in "Reading, writing and literature" in addition to the mother tongue Luxemburgish.

^{4.} Includes 11-year-olds only.

^{5.} Includes 10-11 year-olds only.

 $^{6.\} For\ 9-year-olds, "Technology", "Arts"\ and "Practical\ and\ vocational\ skills"\ are\ included\ in\ "Other".$

^{7.} Year of reference 2008.

Table D1.2b. Instruction time per subject as a percentage of total compulsory instruction time for 12-14 year-olds (2009)

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

		Compulsory core curriculum															
		Reading, writing and literature	Mathematics	Science	Social studies	Modern foreign languages	Ancient Greek and/or Latin	Technology	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)	(16)
OECD	Australia ¹	m	m	m	m	m	m	m	m	m	m	m	m	58	42	100	n
0	Austria	13	14	13	12 9	11	1	n	16	10	7	2	n	100	x(12)	100	5
	Belgium (Fl.) Belgium (Fr.) ²	14 17	13 14	7 9	13	17 13	n x(14)	4	4 3	6 9	6	1	n	80 88	20 13	100 100	n 6
	Canada	m	14 m	m	m	m	x(14) m	m	m	m	m	n m	n m	m	m	m	m
	Chile	16	16	13	13	8	n	6	11	6	6	n	5	100	n	100	19
	Czech Republic ¹	x(14)	x(14)	x(14)	x(14)	x(14)	n	x(14)	x(14)	x(14)	n	n	n	x(14)	100	100	n
	Denmark	20	13	14	9	18	n	n	11	8	3	n	3	100	n	100	n
	England	11	12	14	12	7	n	12	9	7	4	3	2	93	7	100	n
	Estonia	14	14	17	7	17	n	5	7	7	n	n	n	89	11	100	n
	Finland	13	13	17	7	14	n	n	15	7	5	4	n	95	5	100	7
	France	16	15	13	13	12	n	6	7	11	n	n	n	93	7	100	10
	Germany	13	13	11	11	15	2	4	9	9	5	2	1	96	4	100	n
	Greece	18	11	10	12	12	9	5	6	8	6	3	1	100	n	100	n
	Hungary	17	12	18	12	12	n	3	10	9	n	3	3	100	n	100	32
	Iceland	14	14	8	6	17	n	4	7	8	2	4	3	85	15	100	n
	Ireland ³	28	13	8	17	7	n	x(16)	4	5	9	x(16)	5	97	3	100	7
	Israel	19	14	10	16	17 16	n	4	n 12	6 6	9	n	1	97	3	100	n 14
	Italy ²	21 11	13 10	9	11 9	10	n	7 3	13 7	9		n	n 18	100 87	n 13	100 100	14
	Japan Korea	13	11	11	10	10	n n	4	8	8	n n	n 4	5	82	18	100	m n
	Luxembourg ⁴	17	15	5	10	26	n	n	10	8	6	n	3	100	n	100	n
	Mexico	14	14	17	23	9	n	n	6	6	n	9	3	100	n	100	n
	Netherlands	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	New Zealand	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Norway	17	13	10	10	15	n	n	11	9	7	3	5	100	n	100	n
	Poland	16	13	17	15	10	n	4	4	13	n	n	n	92	8	100	7
	Portugal ⁵	11	11	12	13	15	n	4	7	9	n	n	15	98	2	100	3
	Scotland	a	a	a	a	a	a	a	a	a	a	a	a	а	a	а	a
	Slovak Republic	15	15	17	16	10	n	n	7	7	3	3	n	94	6	100	3
	Slovenia	13	13	15	15	11	n	2	6	6	n	n	9	90	10	100	n
	Spain	17	13	11	10	10	n	5	10	7	x(14)	n	11	95	5	100	n
	Sweden Switzenland	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Switzerland Turkey	m 17	m 13	m 16	m 11	m 12	m n	m 4	m 4	m 5	m 5	m n	m 8	96	m 4	m 100	m 13
	United States	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
														1			
	OECD average ¹ EU21 average ¹	16 16	13 13	12 12	12 12	13 13	n 1	3	8 8	8 8	3	2 1	3	94 95	6 5	100 100	5 5
Other G20	Argentina ⁶ Brazil	16 m	16 m	13 m	19 m	10 m	n m	6 m	10 m	10 m	n m	n m	n m	100 m	x(13) m	100 m	20 m
the	China	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
0	India	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Indonesia	13	13	13	12	9	n	4	8	8	7	6	6	100	x(13)	100	6
	Russian Federation	15	14	24	9	9	n	3	4	6	n	1	n	85	15	100	n
	Saudi Arabia	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	South Africa	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m

^{1.} Australia and the Czech Republic are not included in the averages.

Source: OECD. Argentina, Indonesia: UNESCO Institute for Statistics (World Education Indicators Programme). See Annex 3 for notes (www.oecd.org/edu/eag2011). ${\it Please \ refer to \ the \ Reader's \ Guide \ for \ information \ concerning \ the \ symbols \ replacing \ missing \ data}.$

^{2.} Includes 12-13 year-olds only.

^{3.} For 13-14 year-olds, "Arts" is included in "Non-compulsory curriculum".

^{4.} German as a language of instruction is included in "Reading, writing and literature" in addition to the mother tongue Luxemburgish.

^{5. &}quot;Technology" is included in "Arts" for 14-year-olds.

^{6.} Year of reference 2008.