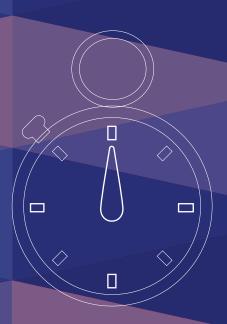


Recommended Annual Instruction Time in Full-time Compulsory Education

in Europe 2017/18

Eurydice – Facts and Figures



Education and Training



Recommended Annual

Instruction Time

in Full-time Compulsory Education

in Europe

2017/18

Eurydice – Facts and Figures



This document is published by the Education, Audiovisual and Culture Executive Agency (EACEA, Education and Youth Policy Analysis).

Please cite this publication as:

European Commission/EACEA/Eurydice, 2018. *Recommended Annual Instruction Time in Full-time Compulsory Education in Europe – 2017/18*. Eurydice – Facts and Figures. Luxembourg: Publications Office of the European Union.

ISBN 978-92-9492-777-4	ISSN 2443-5325	doi:10.2797/616811	EC-AK-18-001-EN-N
Text completed in May 2018.			
© Education, Audiovisual and	Culture Executive Age	ency, 2018.	

Reproduction is authorized provided the source is acknowledged.

Education, Audiovisual and Culture Executive Agency Education and Youth Policy Analysis
Avenue du Bourget 1 (J-70 – Unit A7)
BE-1049 Brussels
Tel. +32 2 299 50 58

Fax +32 2 292 19 71

E-mail: eacea-eurydice@ec.europa.eu Website: http://ec.europa.eu/eurydice

CONTENT

INTRODUCTION	4
PART I: COMPARATIVE ANALYSIS	7
Table of Figures	7
1. The minimum instruction time for compulsory education is related to the number of years concerned	8
2. Compulsory general secondary education tends to include more hours of instruction per year	10
3. In the past year, the minimum instruction time has remained unchanged in most European countries	12
4. In a few countries, schools have the flexibility to allocate the recommended time across subjects and/or grades	13
5. Reading, writing and literature takes up the largest share of the curriculum, especially in primary education	18
PIRLS data on grade 4 confirm the predominance of reading, writing and literature even when no minimum instruction time is specifically defined for this area	20
 Maths takes up the second largest share of the curriculum in primary education but its relative importance decreases in compulsory general secondary education 	23
 Natural sciences represent a small proportion of the curriculum in primary education but become more important at secondary level 	25
9. Social studies represent a small proportion of the curriculum, particularly at primary level	28
PART II: NATIONAL DIAGRAMS	32
Section 1. Reading guide to national data sheets and acronyms and abbreviations	32
Section 2. Instruction time by country	34
Section 3. Instruction time by subject	83
Section 4. Appendix	118
Section 5. Country-specific notes	122
GLOSSARY	145
Definition of instruction time	145
Definition of subject categories	145
Definition of curriculum categories	147
Country codes	148
Statistical codes	148
ACKNOWLEDGEMENTS	149

INTRODUCTION

The amount of instruction time available to students is an important factor in their learning process. Existing evidence suggests that the quality of instruction and the time available for learning can have a positive effect on student achievement and can compensate for weaknesses in other areas such as students' capabilities or willingness to learn (1). Research has also shown how the increase in the amount of instruction time allocated to a specific discipline can help to raise students' interest levels in that subject, and subsequently improve performance (2).

The correlation between instruction time and performance is not, however, unequivocal as other important elements must be factored into the equation; these include the quality of instruction and the time available for learning outside school. The positive relationship between increased instruction time and student achievement is, in effect, more apparent when the increase is accompanied by other support measures and directed at disadvantaged students, for instance, those who have a less favourable home learning environment.

Lavy (2010) examined the correlation between the PISA test scores of students from the same school in different subjects and the instruction time spent on those subjects. He found that the differences between subjects in student achievement were associated with differences in the available school instruction time for each subject, particularly with respect to pupils from families with low levels of education and the children of second-generation immigrants (3). Dobbie and Fryer (2013) observed that an index of five policies (increased instructional time, frequent teacher feedback, the use of data to guide instruction, 'high-dosage' tutoring and high expectations) could explain around 45 % of the variation in students' results and schools' effectiveness in charter schools in New York (4). Moreover, Battistin and Meroni (2016) analysed the impact of increasing instruction time in low achieving schools in Italy within the framework of the Quality and Merit Project, concluding that the intervention raised scores in mathematics for students from the least advantaged backgrounds. In contrast, targeting the best students with extra activities in language came at the cost of lowering their performance in mathematics (5). Aucejo and Romano (2016) observed that gains in maths and reading scores were more significant when intervening to reduce absenteeism (and, therefore, levelling the amount of learning time students received) than when increasing the number of instruction days in the school year (6).

This report concerns the recommended minimum instruction time in full-time compulsory general education (i.e. from the first year of primary education until the end of full-time compulsory education

⁽¹⁾ Gettinger, M, 1985. Time allocated and time spent relative to time needed for learning as determinants of achievement. Journal of Educational Psychology, 77, pp. 3-11. Carroll, J. B., 1989. The Carroll Model: A 25-years retrospective and prospective view. Educational Researcher, 18 (1), pp. 26-31. Kidron, Y., and Lindsay, J., 2014. The effects of increased learning time on student academic and non-academic outcomes: Findings from a meta-analytic review (REL 2014-015). Washing-ton, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Appalachia. https://ies.ed.gov/ncee/edlabs.

⁽²⁾ Traphagen, K., 2011. Strengthening science education: The power of more time to deepen inquiry and engagement. Washington, DC: National Center on Time and Learning. Blank, Rolf K., 2013. Science instructional time is declining in elementary schools: What are the implications for student achievement and closing the gap? Science Education, 97, pp. 830-847. Fitchett, P.G.; Heafner, T.L., Vanfossen, P., 2014. An analysis of time prioritization for social studies in elementary school classrooms. Journal of Curriculum & Instruction. 8 (2), pp. 7-35.

⁽³⁾ Lavy, V., 2010. Do differences in schools' instruction time explain international achievement gaps? Evidence from developed and developing countries. Working Paper 16227, National Bureau of Economic Research. http://www.nber.org/paper/w16227.

⁽⁴⁾ Dobbie, W. and Fryer R. G., 2013. Getting beneath the veil of effective schools: Evidence from New York City. *American Economic Journal*: Applied Economics 2013, 5(4), pp. 28-60.

⁽⁵⁾ Battistin, E. and Meroni, E. C., 2016. Should we increase instruction time in low achieving schools? Evidence from Southern Italy. *Economics of Education Review*, 55, pp. 39-56.

⁽⁶⁾ Aucejo, E. and Romano, T. F., 2016. Assessing the effect of school days and absences on test score performance. *Economics of Education Review*, 55, pp. 70-87.

for all students) in the school year 2017/18 in 43 European education systems (⁷). Data have been collected jointly by the Eurydice and the NESLI networks. Secondary education programmes with vocational profiles and programmes specifically designed for students with special needs are out of the scope of this study.

For the Netherlands, Austria and Liechtenstein, the information is broken down into the different pathways or programmes that start at lower secondary level in general education (⁸). In the French Community of Belgium, Bulgaria, Hungary, Italy, Romania and Turkey, data for upper secondary education (ISCED level 34) only refer to the general programme in which the largest proportion of students are enrolled.

This publication focuses on the recommended minimum instruction time for the compulsory curriculum specified in the regulations or policy documents of the education authorities, i.e., the minimum instruction time normally received by students. However, in certain countries, this minimum time may not apply to all schools or geographical areas. Furthermore, in some countries, schools may be required to make available additional instruction time, but students are free to decide whether or not to take advantage of it. This additional time is often offered in the form of programmes aimed at disadvantaged or low-achieving students. The non-compulsory curriculum is beyond the scope of the comparative analysis but further details can be found in the appendix and the country-specific notes of the countries concerned.

This report is organised as follows:

Part I consists of a comparative analysis on the recommended minimum annual instruction time and its distribution across the curriculum subjects, with a special focus on reading, writing and literature, mathematics, natural sciences and social studies. These areas have been selected in the context of the benchmark set by the Council of the European Union for reading, mathematics and science, which states that by 2020 the proportion of 15-year-olds with low achievement should be less than 15 % (⁹). Furthermore, the Council's recent recommendation on promoting common values, inclusive education, and the European dimension of teaching includes, as priorities, the promotion of citizenship education, democratic values, civic participation and an understanding of the origins and working of the European Union; these elements of the curriculum usually belong to the area of social studies (¹⁰).

The comparative analysis comprises nine sections:

- Section 1 shows how the minimum instruction time within compulsory education is related to the number of years concerned.
- Section 2 compares the recommended annual instruction time across countries by education level.
- Section 3 describes the main changes that have taken place over the last year.

(⁷) Although one or more grades of pre-primary education are compulsory in 12 European countries, this education level is beyond the scope of this data collection (see European Commission/EACEA/Eurydice, 2017. *Compulsory Education in Europe* – 2017/18. Eurydice – Facts and Figures. Luxembourg: Publications Office of the European Union).

⁽⁸⁾ In secondary education in the Netherlands, there are three different pathways, VWO, HAVO and VBMO. In Austria, the data for secondary education concerns the Neue Mittelschule (new secondary school, NMS) and Allgemeinbildende höhere Schule (academic secondary school, AHS). Also at secondary level, there are three pathways in Liechtenstein, Gymnasium, Oberschule and Realschule.

⁽⁹⁾ Council Conclusions of 12 May 2009 on a strategic framework for European cooperation in education and training ('ET 2020'). 2009/C 119/02: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2009:119:0002:0010:en:PDF

⁽¹⁰⁾ Council Recommendation on promoting common values, inclusive education, and the European dimension of teaching. Brussels, 17/01/2018. COM(2018) 23 final: https://ec.europa.eu/education/sites/education/files/recommendation-common-values-inclusive-education-european-dimension-of-teaching.pdf.

- Section 4 looks into the flexibility that local authorities and schools have in allocating the recommended instruction time across grades and/or subjects, or to choose the subjects that they offer.
- Section 5 examines the minimum instruction time for reading, writing and literature in primary and full-time compulsory general secondary education.
- Section 6 compares the official recommendations for reading, writing and literature in grade 4 with the instruction time reported by teachers in PIRLS 2016.
- Section 7 focuses on the minimum instruction time allocated to mathematics in primary and fulltime compulsory general secondary education.
- Section 8 looks into the minimum instruction time recommended for natural sciences in primary and full-time compulsory general secondary education.
- Section 9 examines the importance of social studies in the curriculum in terms of instruction time, and how it has evolved in recent years.

Part II is divided into five sections. Section 1 consists of a reading guide to the diagrams (national data sheets), including a list of the acronyms and abbreviations used. The diagrams are shown in Section 2 (Instruction time by country) and Section 3 (Instruction time by subject). Section 4 contains an appendix with the diagrams for some subject categories (i.e. languages 4 and 5) and for the non-compulsory curriculum. The country-specific notes are available in Section 5.

The definitions and the codes used can be found in the glossary at the end of the report.

PART I: COMPARATIVE ANALYSIS

Table of Figures

Figure 1:	Number of years of full-time compulsory education and total recommended instruction time for the compulsory curriculum, 2017/18	8
Figure 2:	Distribution of the education systems according to the total instruction time (hours) allocated at primary and lower secondary level, 2017/18	10
Figure 3:	Recommended minimum instruction time for the compulsory curriculum, in hours, per notional year and by ISCED level, 2017/18	11
Figure 4:	Changes in the recommended minimum instruction time for full-time compulsory general education between 2016/17 and 2017/18	13
Figure 5:	Time and subject flexibility, % of the total instruction time per ISCED level, 2017/18	15
Figure 6:	Percentage of the recommended minimum instruction time allocated to reading, writing and literature in primary and full-time compulsory general secondary education, 2017/18	19
Figure 7:	Distribution of students in grade 4 according to the number of instruction hours for reading, writing and literature reported by their teachers in PIRLS 2016, compared to the minimum recommended time in 2017/18 (hours per week)	22
Figure 8:	Percentage of the recommended minimum instruction time allocated to mathematics in primary and full-time compulsory general secondary education, 2017/18	24
Figure 9:	Percentage of the recommended minimum instruction time allocated to natural sciences in primary and full-time compulsory general secondary education, 2017/18	26
Figure 10:	Percentage of the recommended minimum instruction time specifically allocated to social studies in primary and full-time compulsory general secondary education, 2017/18	29
Figure 11:	Changes in the recommended minimum instruction time allocated to social studies in full-time compulsory general education between 2014/15 and 2017/18	31

1. The minimum instruction time for compulsory education is related to the number of years concerned

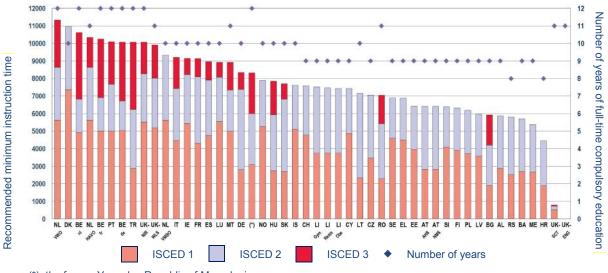
Full-time compulsory general education (as defined in this study) may last from 8 to 12 years depending on the country. In 20 education systems, it covers primary and general lower secondary education (i.e. ISCED levels 1 and 24). In the other 23, it also includes one or more grades of general upper secondary education or ISCED 34. The total instruction time recommended for the whole of full-time compulsory general education in each country is usually related to the number of grades involved: the more grades covered, the higher the number of hours.

The total number of recommended hours in full-time compulsory general education is below 7 600 in 23 education systems and, in almost all of these, it spans only eight or nine years. In Croatia and Serbia, it spans eight years. In 19 education systems, it spans nine years. Of these, the lowest number of recommended hours can be found in Bulgaria, Latvia, Albania, Bosnia and Herzegovina, and Montenegro. Lithuania and Romania also recommend fewer than 7 600 hours, although full-time compulsory general education spans 10 and 11 years respectively. In countries with a relatively low number of hours overall, the recommended annual instruction time tends to be lower for some or all grades of primary education (see Section 2).

In 11 education systems where full-time compulsory general education spans 10 years, between 7 616 and 9 340 hours of instruction time are recommended. Malta, with 11 years of compulsory education, and the former Yugoslav Republic of Macedonia, with 12 years, are also within this range. In this latter country, the average annual instruction time tends to be lower than in the other education systems both at primary and secondary level (see Section 2).

In the remaining education systems where full-time compulsory general education spans 11 or 12 years, between 9 918 and 11 340 hours of instruction time are the norm. Denmark is also within this range even though it has only 10 years of full-time compulsory general education. In this country, the average annual instruction time is higher than in most other education systems at both primary and secondary levels (see Section 2).

Figure 1: Number of years of full-time compulsory education and total recommended instruction time for the compulsory curriculum, 2017/18



(*): the former Yugoslav Republic of Macedonia *Source:* Eurydice.

Minimum instruction time in hours for the compulsory curriculum for each education level, 2017/18

	BE fr	BE de	BE nl	BG	CZ	DK	DE	EE	IE	EL	ES	FR	HR	IT	CY	LV
ISCED 1	5 012	5 040	4 931	1 907	3 469	7 360	2 804	3 964	5 460	4 514	4 750	4 320	1 890	4 455	4 872	3 589
ISCED 24	1 909	1 680	1 896	2 295	3 587	3 600	4 582	2 468	2 772	2 374	3 161	3 784	2 546	2 970	2 554	2 381
ISCED 34	3 341	3 360	3 793	1 728			962		924		1 054	1 036		1 782		
'	LT	LU	HU	MT		NL		AT	'	PL	PT	RO	SI	SK	FI	SE
ISCED 1	2 347	5 544	2 754	4 995		5 640		2 82	0	3 713	5 004	2 288	4 091	2 707	3 905	4 593
	•				HAVO	VMBO	VWO	AHS	NMS							
ISCED 24	4 810	2 535	3 186	2 357	3 000	3 700	3 000	3 600	3 600	2 482	2 675	3 138	2 298	4 117	2 423	2 297
ISCED 34		845	1 906	1 571	1 700		2 700				2 414	1 614		874		
	UK- ENG	UK- WLS	UK- NIR	UK- SCT	AL	ВА	СН	IS		LI		ME	RS	NO	(*)	TR
ISCED 1	*	5 168	5 510	532	2 874	2 700	4 773	5 100		3 740		2 682	2 511	5 272	3 096	2 880
'									Gym	Obs	Reals					
ISCED 24	*	2 850	2 765	190	2 993	3 008	2 807	2 516	3 795	3 686	3 740	2 698	3 314	2 622	2 904	3 360
ISCED 34	*	1 900	1 799	63											2 322	3 840

^{* =} No minimum instruction time defined

Source: Eurydice.

Country-specific notes (Figure 1)

Germany: The data represent the weighted average instruction time for the compulsory core curriculum subjects, calculated by the Secretariat of the Ministers of Education and Cultural Affairs of the *Länder* on the basis of the number of students enrolled in the different types of school (reference year 2016/17).

Spain: The data on intended instruction time are based on national and regional regulations on the curriculum and school calendars (reference year 2017/18). To calculate the weighted averages, statistics were used on the number of students per grade and Autonomous Community, as reported by the statistics office of the Ministry of Education, Culture and Sport (reference year 2015/16).

Austria: Data for grade 9 are not available although this grade is part of full-time compulsory general education.

Sweden: The minimum instruction time is centrally defined for the nine years of compulsory education as a whole. It has been artificially allocated to ISCED level 1 and 24 proportionally to the number of years in each education level (6 and 3 respectively). **United Kingdom (ENG)**: Since 2011, the Department of Education (DfE) has not provided guidance on the minimum weekly lesson time. However, the requirement remains for schools to allow sufficient instruction time to deliver a broad and balanced curriculum that includes all statutory requirements, including the number of days that schools must be open to teach students. **United Kingdom (SCT)**: The Scottish Curriculum for Excellence does not specify any instruction time for the curriculum areas

United Kingdom (SCT): The Scottish Curriculum for Excellence does not specify any instruction time for the curriculum areas that must be taught, except a minimum of 2 hours per week for physical education.

Switzerland: With the exception of a minimum number of lessons for physical education, there is no standard curriculum and no standard instruction time defined at national level. Curricula and intended instruction time are determined by the 26 Cantons. The figures represent weighted averages of the cantonal requirements for each grade and the total of instruction time as given by the cantonal timetables (*Stundentafeln/grilles horaires*).

The Former Yugoslav Republic of Macedonia: The length of compulsory education is not defined by the education authorities but all students must successfully complete secondary education. The general programme at ISCED level 34 (the Gymnasium) spans four years but the vocational programmes may cover fewer years.

The total instruction time in figure 1 for the United Kingdom (Scotland) is particularly low because, with the exception of a minimum of 2 hours per week for physical education, the Scottish Curriculum for Excellence does not specify any instruction time for the curriculum areas that must be taught. Similarly, there is no centrally defined minimum instruction time in the United Kingdom (England) (see Section 4).

Primary education usually covers more years and includes more instruction time than lower secondary education

Primary education tends to cover more years than lower secondary education and the total instruction time provided is consequently higher in many countries.

Primary education spans from four to seven years depending on the country, covering five or six years in two thirds of the education systems. In contrast, lower secondary education spans four years or less in all but three education systems.

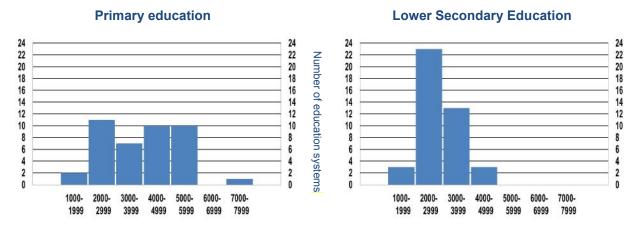
In line with this, primary education covers 4 000 hours or more in half of the education systems, while lower secondary education includes 4 000 hours or more only in three education systems. On

^{(*):} the former Yugoslav Republic of Macedonia

average, primary education covers at least 4 025 hours of instruction, and general lower secondary education 2 923.

As Figure 2 shows, differences across countries in the recommended instruction time per education level are larger in primary than in lower secondary education. Compulsory general lower secondary education covers between 2 000 and 4 000 hours of instruction in the great majority of education systems, with only five outside this range. At primary level, differences in the number of hours of instruction across education systems (and their dispersion in the graph) are more significant.

Figure 2: Distribution of the education systems according to the total instruction time (hours) allocated at primary and lower secondary level, 2017/18



2. Compulsory general secondary education tends to include more hours of instruction per year

Even though primary education usually includes more instruction time overall, the annual instruction time is often higher at secondary level. General lower secondary education tends to span a fewer number of grades, but these grades usually include more hours of instruction than at primary level. This is also the case at upper secondary level in countries where this level encompasses one or more grades of full-time compulsory general education. This suggests a tendency in education policy of increasing learning time according to students' age, with younger students spending less time in class. Indeed, the first grades of primary education often include fewer hours of instruction.

Figure 3 shows the minimum instruction time per notional year, which is calculated by dividing the total instruction time recommended for primary, lower secondary and upper secondary education respectively by the number of years covered by each education level.

In primary education, the average minimum instruction time per notional year is 727 hours – the lowest of the three education levels (¹¹). The annual instruction time ranges from below 500 hours in countries such as Bulgaria, Croatia and Romania, to more than 900 hours in Denmark, Ireland, Luxembourg and the Netherlands. In three quarters of the education systems, the recommended instruction time per notional year is less than 833 hours.

In general lower secondary education, the average minimum instruction time per notional year is 857, ranging from 637 hours in Croatia and 647 in Montenegro up to 1 000 hours or more in Denmark, Spain and the Netherlands. In more than half the countries, the recommended annual instruction time (per notional year) is more than 845 hours.

-

⁽¹¹⁾ The United Kingdom (England and Scotland) are not included in the calculations.

ISCED 1 ISCED 24 ISCED 34 Number of years (1) 1 2 3 4 5 6 7 8 9 10 11 12 13 (1) 0 1 2 3 4 5 6 7 8 9 10 11 12 13 1 2 3 4 5 6 7 8 9 10 11 12 13 BE fr BE fr 835 BE fr 955 BE de 840 BE de 2 840 BE de BE nl BE nl 948 BE nl 822 2 BG 477 BG 3 765 BG 694 CZ 897 CZ CZ DK DK 1 051 3 1 200 DK DE 701 DE 5 916 DE EE 661 3 823 EE IE 924 IE 6 910 3 IE FL 752 FI 3 791 FL ES 792 3 1 054 ES FR FR 864 4 946 FR HR 473 HR 637 HR IT IT 3 891 891 990 3 CY 812 CY 851 CY LV 598 LV 3 794 LV LT 587 LT 6 802 LT LU 3 845 LU LU 924 953 HU 689 HII 797 HU MT MT 3 786 MT 786 NL HAVO NL HAVO 3 1 000 NL 940 NL VMBO 925 NL VMBO NL VWO 3 1 000 NL VWO AT AHS 4 900 ΑT AT AT NMS 900 PL 619 PL 3 827 PL 834 PT 3 892 RO 458 RO RO 4 785 SI 682 SI 3 766 SI SK SK 5 823 677 SK FI 651 FI 3 808 FI SE 766 SE 3 766 SF UK-ENG 3 UK-WLS UK-WLS **UK-WLS** 861 3 950 UK-NIR 787 UK-NIR 3 922 **UK-NIR** UK-SCT 3 UK-SCT AL 575 AL 748 AL ВА 540 BA 752 BA 796 CH CH CH 3 936 IS 729 IS 4 726 IS 839 LI Gym 3 LI Gym LI 540 LI Obs 4 949 LIObs LI Reals 4 921 LI Reals ME 536 ME 935 753 874 NO NO 3 NO RS 628 RS 4 828 RS 619 674 (*) TR 720 TR TR 0 1 2 3 4 5 6 7 8 9 10 11 12 13 6 7 8 9 10 11 12 13 0 1 2 3 4 5 6 7 8 9 10 11 12 13 ISCED 1 ISCED 24 **ISCED 34**

Figure 3: Recommended minimum instruction time for the compulsory curriculum, in hours, per notional year and by ISCED level, 2017/18

Source: Eurydice.

* = No minimum instruction time defined

Explanatory note

The bar chart shows the recommended minimum instruction time (number of hours) per notional year. For each country, the minimum instruction time in hours for the compulsory curriculum for each ISCED level has been divided by its duration in years. The number of compulsory years per education level is shown before each bar for the three education levels.

(*): the former Yugoslav Republic of Macedonia

This figure only covers primary and full-time compulsory general secondary education. Grades at pre-primary level are excluded even if they are part of full-time compulsory education.

The column for ISCED 34 only captures information for the countries where full-time compulsory general education includes one or more grades of upper secondary education.

Country-specific notes (Figure 3)

Germany: The data represent the weighted average instruction time for the compulsory core curriculum subjects, calculated by the Secretariat of the Ministers of Education and Cultural Affairs of the *Länder* on the basis of the number of students enrolled in the different types of school (reference year 2016/17).

Spain: The data on intended instruction time are based on national and regional regulations on the curriculum and school calendars (reference year 2017/18). To calculate the weighted averages, statistics were used on the number of students per grade and Autonomous Community, as reported by the statistics office of the Ministry of Education, Culture and Sport (reference year 2015/16).

Austria: Data for grade 9 are not available although this grade is part of full-time compulsory general education.

Sweden: The minimum instruction time is centrally defined for the nine years of compulsory education. It has been artificially allocated to ISCED level 1 and 24 proportionally to the number of years in each education level (6 and 3 respectively).

United Kingdom (ENG): Since 2011, the Department for Education has not provided guidance on minimum weekly lesson time. However, the requirement remains for schools to allow sufficient instruction time to deliver a broad and balanced curriculum that includes all statutory requirements, including the number of days that schools must be open to teach students.

United Kingdom (SCT): The Scottish Curriculum for Excellence does not specify any instruction time for the curriculum areas that must be taught, except a minimum of 2 hours per week for physical education.

Switzerland: With the exception of a minimum number of lessons for physical education, there is no standard curriculum and no standard instruction time defined at national level. Curricula and intended instruction time are determined by the 26 Cantons. The figures represent weighted averages of the cantonal requirements for each grade and the total of instruction time as given by the cantonal timetables (*Stundentafeln/grilles horaires*).

In the great majority of the education systems, the minimum instruction time per notional year in lower secondary education is higher than in primary education. The difference is more than 200 hours in Bulgaria, the Czech Republic, Germany, Spain, Lithuania, Poland and Bosnia and Herzegovina; and more than 300 hours in Romania. Only in Luxembourg, Malta and the Netherlands (VMBO), is the recommended annual minimum instruction time slightly higher in primary education than in lower secondary education. In the German-speaking Community of Belgium, it is the same at both education levels; whereas in Sweden, the instruction time is prescribed for the whole of compulsory education (not per education level).

In 23 education systems, at least one grade of ISCED level 34 (which normally coincides with general upper secondary education) is compulsory. The average recommended instruction time per notional year at this education level is 855, ranging from 744 hours in the former Yugoslav Republic of Macedonia to more than 1 000 hours in Spain and France (¹²).

3. In the past year, the minimum instruction time has remained unchanged in most European countries

In 25 education systems, there were no changes in the minimum instruction time in 2017/18 compared with 2016/17 (see Figure 4).

The most significant changes in the minimum instruction time over the last year were observed in Lithuania and Montenegro. In Lithuania, 10 and 11 instruction days were added at primary and secondary level respectively, shortening the holiday period and increasing significantly the total instruction time. In Montenegro, the number of lessons per week was reduced significantly, and, therefore, the total instruction time decreased.

In a few other countries, small changes in the minimum instruction time were due to fluctuations in the number of instruction days, depending for instance on when the holidays fell throughout the year and the specific layout of the school year. This year, there was an extra day or more in the Flemish Community of Belgium, the Czech Republic, Ireland (secondary education), Cyprus and Malta. Therefore, the total instruction time increased in these countries. Conversely, there were fewer instruction days in the school year – and the instruction time slightly decreased – in Hungary, Romania and Liechtenstein.

In Greece, the length of the teaching periods at primary level was shortened and the total instruction time decreased at this education level despite having two more instruction days in the school year.

-

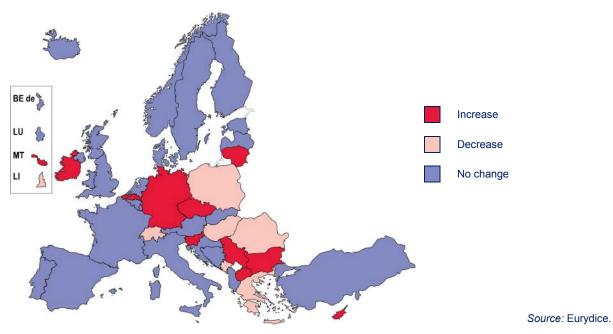
⁽¹²⁾ Austria and the United Kingdom (England and Scotland) are not included in the calculations.

The increase in the minimum instruction time at secondary level was due to the extra days and the introduction of the so-called thematic week (¹³).

In Poland, there was one less instruction day at primary level and one more at secondary level. The amount of instruction time also varied as the result of the new education reform that was implemented in grades 1, 4 and 7 in 2017/18.

Data for Germany and Switzerland consist of weighed averages, which tend to vary every year.

Figure 4: Changes in the recommended minimum instruction time for full-time compulsory general education between 2016/17 and 2017/18



Variation in the number of hours of instruction time between 2016/17 and 2017/18

	BE nl	BG	CZ	DE	IE	EL	CY	LT	HU	MT	PL	RO	SI	СН	(*)	LI	ME	RS
ISCED 1	62	19	35	-18	0	-36	112	139	-31	88	-94	-53	53	-121	48	-62	-261	54
ISCED 2	24	-765	37	38	17	15	0	386	-35	33	52	-48	0	-83	-24	-63	-422	41
ISCED 3	47	864	(-)	20	6	(-)	(-)	(-)	-21	22	(-)	-19	(-)	(-)	0	(-)	(-)	(-)

(*): the former Yugoslav Republic of Macedonia

Source: Eurydice.

Country-specific notes (14)

Germany: The data correspond to the weighted averages of the minimum instruction time defined by each of the *Länder*, which can vary from one year to another due to fluctuations in the student population.

Switzerland: The difference is due to the exclusion of five holidays (which were included in 2016/17) and the calculation of the weighted averages.

4. In a few countries, schools have the flexibility to allocate the recommended time across subjects and/or grades

In most countries, the official steering documents define how the recommended minimum instruction time should be allocated across grades and subjects. In some countries, however, there are fewer centrally defined requirements, and local authorities and schools enjoy greater flexibility to decide on the amount of instruction time to devote to the different compulsory subjects or even to choose which subjects to offer. This flexibility gives schools some scope to tailor education to the specific needs of

⁽¹³⁾ During this week, schools are expected to organise their own learning activities around a list of proposed themes.

⁽¹⁴⁾ In the United Kingdom (Northern Ireland), while there has been no change to the minimum instruction time in the current reference year, the value quoted differs from the previous year due to the correction of a mistake in the calculations.

their students. It may also reinforce the need for better coordination across grade levels and disciplines. This section examines the type and degree of flexibility that schools and local authorities are granted for allocating instruction time through grades (vertical flexibility) or across subjects (horizontal flexibility) and for teaching subjects of their own choice (subject flexibility).

Vertical flexibility occurs when central education authorities indicate the total number of hours for a specific subject to be taught across more than one grade, without specifying how these hours should be distributed. This is how all the minimum instruction time is defined in Estonia, Lithuania (primary education), the Netherlands, Finland, Sweden, Iceland and Norway (see Figure 5). In Lithuania, at secondary level, only one third of the curriculum is subject to vertical flexibility. Also in the Czech Republic, vertical flexibility applies to more than 80 % of the recommended instruction time.

Vertical flexibility operates differently in countries. In some cases, the total instruction time is indicated for a complete level of education, in others it applies to a group of grades within a level. In the Czech Republic, the Netherlands and Norway, the instruction time is indicated for the whole level of education. In Estonia and Iceland, at primary level, grades are split into two groups. In Lithuania, the minimum instruction time is given for each group of two grades at both primary and secondary level. In Finland, the combination of grades varies depending on the subject (i.e. groups comprise different number of grades depending on the subject). In Sweden, the minimum instruction time for compulsory subjects is set for the duration of compulsory education, without distinguishing between ISCED levels (¹⁵).

In Poland, the minimum instruction time in the new education system is given by grade (and no longer by groups of grades, as was the case in the past). In Ireland, education reform is gradually introducing vertical flexibility in lower secondary education, but this cannot be reflected in the data provided until the new system has been completely phased in.

There are differences in the way that vertical flexibility is applied in countries in terms of whether it is mandatory to teach one or more subjects in every grade of a group.

In the **Czech Republic** and **Estonia**, instruction in the compulsory subjects is generally provided in each grade of a group, except for some subjects (e.g. citizenship, ICT) where this this may not be possible (16).

In **Lithuania**, the education plans indicate the different options for schools to allocate the recommended weekly number of hours between the two grades in each group, including the option not to provide any instruction in one of the grades.

In the **Netherlands**, schools have the discretion to determine which subjects to teach in each grade.

In **Finland**, schools can start teaching any compulsory subject with vertical flexibility from grade 1, but they must introduce the first foreign language by grade 3 at the latest; the second foreign language by grade 6; social studies, by grade 4; and home economics, guidance and counselling (practical and vocational skills) by grade 7.

In **Sweden**, there is no regulation on whether the subject should be taught in every grade of compulsory education but, for almost all subjects, the curriculum defines the content that should be taught for grades 1-3, 4-6 and 7-9. Schools can still decide in which grade to start teaching a subject within each three-year cycle (¹⁷).

⁽¹⁵⁾ Additional information on the subjects affected by vertical flexibility in the different education systems can be found in Part II, National diagrams, Section 2. Some countries provide a more detailed description in Section 5: Country-specific notes.

^{(&}lt;sup>16</sup>) This is the case for subjects where only one or two lessons per week are prescribed for all the grades in a group. The subject is then usually taught in only one of the grades.

⁽¹⁷⁾ For home and consumer studies, the core content is defined for years 1-6 and 7-9; and for Modern languages, for years 4-9 (but schools can also choose to start from year 1).

ISCED 1 ISCED 24 ISCED 34 $0 \quad 10 \quad 20 \quad 30 \quad 40 \quad 50 \quad 60 \quad 70 \quad 80 \quad 90 \quad 100 \quad 0 \quad 10 \quad 20 \quad 30 \quad 40 \quad 50 \quad 60 \quad 70 \quad 80 \quad 90 \quad 100 \quad 0 \quad 10 \quad 20 \quad 30 \quad 40 \quad 50 \quad 60 \quad 70 \quad 80 \quad 90 \quad 100 \quad 1$ BEfr BE de 0 0 0 BE nl 0 BG CZ DK 0 DE EE ΙE 0 EL 0 ES FR HR 0 IT CY 0 LV LT 0 0 LU HU • MT 0 0 NL AT PL 0 · 0 PT RO 0 0 0 SI SK FI **UK-ENG UK-WLS** 0 UK-NIR 0 **UK-SCT** AL -CH IS 0 0 LI ME NO RS (*) • TR % 0 10 20 30 40 50 60 70 80 90 100 0 10 20 30 40 50 60 70 80 90 100 0 10 20 30 40 50 60 70 80 90 100 **ISCED 24 ISCED 1 ISCED 34** No horizontal No vertical Vertical Horizontal Subject Full 0 flexibility flexibility flexibility flexibility flexibility flexibility (*): the former Yugoslav Republic of Macedonia

Figure 5: Time and subject flexibility, % of the total instruction time per ISCED level, 2017/18

(*): the former Yugoslav Republic of Macedonia Source: Eurydice.

Explanatory note (Figure 5)

Vertical flexibility: Central education authorities indicate the total instruction time for a certain subject for several grades, for a whole level or for the whole period of full-time compulsory education. Schools/local authorities are then free to decide how much time to allocate to each grade.

Horizontal flexibility: Central education authorities indicate the total instruction time for a group of subjects within a specific grade. Schools/local authorities are then free to decide how much time to allocate to individual subjects (¹⁸).

Subject flexibility: Regional/local authorities or schools choose their own subjects (in some cases from a list defined by central education authorities) and allocate the time defined by the central authorities for this purpose (19).

Full flexibility: Central education authorities do not define the standard curriculum or the minimum instruction time. Regional authorities, local authorities or schools are free to decide how much time to allocate to individual subjects and grades.

Country-specific note

Poland: A new single structure (8-year primary school) is being phased in while a separate lower secondary school (3-year *gimnazjum*) is being phased out. Hence in the 2017/18 school year, the first year of reform, the two systems are operating in parallel. Grades 2, 3, 5, 6, 8 and 9, which operate under the 'old' system, are still affected by vertical flexibility, but his is not shown in the figure. In grades 1, 4 and 7 the reform has already been implemented and the numbers of compulsory hours are defined per grade and subject. Full implementation of the new structure and the new outline timetables will take place in 2019/20 and vertical flexibility will disappear.

Horizontal flexibility occurs when the central education authorities set a total number of teaching hours for a combination of compulsory subjects within the same grade. The local authorities or the schools themselves have then to decide how much time to allocate to each subject. In two education systems, there is full horizontal flexibility. In the United Kingdom (Wales), the Welsh Government recommends the minimum total instruction time for each grade but it is for schools to decide how much time to allocate to individual subjects. The Netherlands has full flexibility with respect to time allocation (horizontal and vertical). The minimum requirements for instruction time are set per education level, and schools have full flexibility in allocating it across subjects and grades.

Schools have horizontal flexibility in allocating a significant proportion of the centrally defined minimum instruction time across compulsory subjects in the French Community of Belgium (primary education), the German-speaking and Flemish Communities of Belgium, Italy (primary education) and the United Kingdom (Northern Ireland). In Denmark, there is only horizontal flexibility in grade 1, and in Poland, in grades 1-3. In Ireland, horizontal flexibility applies to many subjects in grade 10 (upper secondary education) (²⁰).

In a few other cases, there is some horizontal flexibility but this affects a small proportion of the curriculum. In Malta, in primary education, and in Portugal and Romania at both primary and secondary levels, in addition to the minimum instruction time established for each subject, schools have the flexibility to allocate a few additional hours across the compulsory subjects. In Finland, schools can distribute some additional centrally defined time between music, visual arts, crafts, physical education and home economics. In Ireland, in lower secondary education, schools have some additional instruction time to allocate between English, Irish and maths.

Schools can also be granted some flexibility to provide instruction time for subjects of their own choice or from a predefined list. In comparison with vertical and horizontal flexibility, **subject flexibility** usually applies to a smaller percentage (less than 23 %) of the total instruction time. It can be found in 16 education systems. Schools can use this additional flexible time defined by the education authorities to provide more instruction time for compulsory and elective subjects, to offer subjects of their own choice such as sports, foreign languages, religion and moral education, ICT and technologies, or to organise special weeks around a specific theme. The examples below show how subject flexibility is applied in different education systems.

⁽¹⁸⁾ Corresponds with the category 'compulsory subjects with flexible timetable', Part II, National diagrams.

⁽¹⁹⁾ Corresponds with the category 'compulsory flexible subjects chosen by the school', Part II, National diagrams.

⁽²⁰⁾ Additional information on the subjects affected by horizontal flexibility in the different education systems can be found in Part II, National diagrams, Section 2. A more detailed description is available in Section 5: Country-specific notes.

In the **French** and **Flemish Communities of Belgium**, secondary schools have some flexibility to decide which elective subjects to offer to students.

In the **Czech Republic**, schools can use flexible subject time to increase the instruction time for compulsory or elective subjects, to start teaching a foreign language in grades 1-2, to teach a second foreign language or swimming in primary education or to teach additional foreign languages.

In **Estonia**, schools usually use their flexible subject time to offer religion and moral education and information and communication technologies.

In **Ireland**, the phasing-in of the new specifications for the Junior cycle (lower secondary education) has meant increased flexibility for schools to design their own programmes of learning.

In **Greece**, flexible subject time is used to implement cross-thematic programmes (e.g. on environmental education, health education, culture and arts) at primary level. In lower secondary education, it refers to the thematic week.

In **Spain**, this flexible time is to be allocated by the Autonomous Communities on subjects of their choice (normally from a predefined list).

In Latvia, the education authorities recommend that schools devote this additional flexible subject time to sports.

In **Hungary**, schools can increase the time spent on compulsory subjects or offer other subjects of their choice. One lesson per week must be either Drama-dance or Homeland and peoples in grade 5, and either Drama-dance or Media in grade 9.

In **Poland**, schools can use this flexible subject time to teach subjects of their choice or to organise specific classes according to pupils' needs and interests (21).

In Portugal, this flexible subject time can be allocated to any of the compulsory or elective subjects.

In **Slovakia**, schools can increase the instruction time of the compulsory subjects or offer a second or third language, technology or other subjects.

In Finland, schools can offer any subject.

In **Albania**, the subjects chosen by schools can include environment education at primary level and foreign languages in secondary education.

In **Montenegro**, this time includes the two-week instruction time that schools devote to culture, technical activities, sports, outdoor education and school trips.

In Norway, primary schools can use flexible subject time to offer compulsory subjects of their own choice.

The highest degree of local decentralisation and school autonomy can be found in the United Kingdom (England and Scotland) and Switzerland. In the United Kingdom (England), the Department for Education has not established a minimum instruction time since 2011, but the requirement remains for schools to allow sufficient instruction time in each year to deliver the statutory curriculum areas. In the United Kingdom (Scotland), the *Curriculum for Excellence* does not establish any minimum instruction time overall for the curriculum or for any subject (with the exception of 'physical education') but it states that the Broad General Education Phase (grades 1-10) should include all of the experiences and outcomes across eight curriculum areas. In Switzerland, at national level, only education standards (basic competences) for core subjects are defined. There is no standard curriculum and no predefined instruction time (with the exception of a minimum number of hours for physical education) at national level. Within the framework of the education standards, at regional level, the Cantons are free to determine curricula (at the level of language-regions) and intended instruction time (at cantonal level).

⁽²¹⁾ Subject flexibility still applies in grades 2, 3, 6, 7, 8 and 9. It is being phased out alongside the gradual implementation of the new reform (see Country-specific note Figure 5).

5. Reading, writing and literature takes up the largest share of the curriculum, especially in primary education

This section examines the relative importance of reading, writing and literature (in the main language of instruction or language 1) (²²). The bar chart in Figure 6 shows the proportion of total instruction time allocated to this subject area in primary and full-time compulsory general secondary education. The number of hours by education level is indicated in the table below.

Reading, writing and literature is the subject area that generally accounts for the largest proportion of instruction time at all education levels, being especially dominant in primary education. At this level, the minimum instruction time recommended for this subject area covers an average 26 % of the curriculum, ranging from 15 % to 38 % depending on the country. In the German-speaking Community of Belgium (18 %), Ireland (20 %) and Malta (15 %), the percentages are relatively low compared with other countries, but the teaching of a second language also takes up a similar share of the curriculum at primary level — and it is significantly higher than in other countries. In all the other education systems, it covers 20 % or more of the curriculum at this education level. In France, Cyprus, Lithuania, Austria, Slovakia and Turkey, it accounts for 30 % or more.

In full-time compulsory general secondary education, reading, writing and literature covers an average of 15 % of the curriculum, similar to the weight of other core subject areas such as mathematics and natural sciences. Only in two countries (Greece and Italy) does it account for more than 20 % of the total instruction time for this education level.

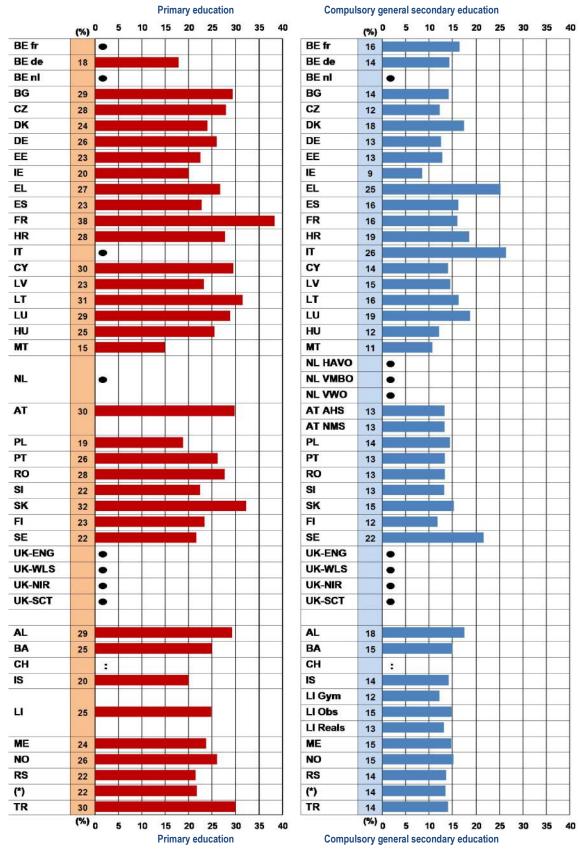
Reading, writing and literature is the subject area allocated the largest number of hours in nearly all countries at primary level. The average number of hours of instruction allocated to this subject area across the whole of primary education is 946 hours, ranging from 525 hours in Croatia to 1 656 in France (²³). In half of the education systems (where there is a minimum instruction time defined for this subject area), the recommended instruction time includes at least 883 hours. Countries where primary education spans fewer years tend to be among the countries with the lowest number of hours.

On average, 560 hours are allocated to reading, writing and literature for the whole of full-time compulsory general secondary education. This substantial difference is partly due to the fact that primary education usually spans more years. Nevertheless, generally, there is less emphasis on this subject area in the curriculum at secondary level.

^{(&}lt;sup>22</sup>) In this comparative analysis as in the rest of the document, 'reading, writing and literature' pertains to 'language 1', which is the language of instruction. Additional languages learnt by students are categorised as 'language 2', 'language 3', 'language 4' and 'language 5'. These usually refer to foreign languages but could also be official languages in some countries. In this text, 'other languages' refers to languages other than language 1.

⁽²³⁾ Only the education systems for which the minimum instruction time is centrally defined for this subject area have been taken into account in the calculations. Poland is not included given that the minimum instruction time for this subject is only defined for grades 4-6, whereas it is a compulsory subject with a flexible timetable in grades 1-3. At secondary level, only the *Realschule* has been taken into account for Liechtenstein.

Figure 6: Percentage of the recommended minimum instruction time allocated to reading, writing and literature in primary and full-time compulsory general secondary education, 2017/18



Compulsory subject area with time flexibility

(*): the former Yugoslav Republic of Macedonia *Source*: Eurydice.

Minimum instruction time in hours as defined centrally for reading, writing and literature, per education level, 2017/18

	BE fr	BE de	BE nl	BG	CZ	DK	DE	EE	IE	EL	ES	FR	HR	IT	CY	LV
Primary	•	900	•	560	970	1 530	728	893	1 092	1 204	1 084	1 656	525	•	1 438	835
Secondary	865	720	•	572	441	630	696	315	237	600	685	774	473	1 254	358	347
	LT	LU	HU	MT		NL		AT		PL	PT	RO	SI	SK	FI	SE
Primary	739	1 601	702	745		•		840)	389	1 310	635	919	874	912	993
Secondary	787	634	620	419	HAVO	VMBO	VWO	480 AHS	480 NMS	359	682	636	305	761	285	497
	UK- ENG	UK- WLS	UK- NIR	UK- SCT	AL	ВА	СН	(*)	IS		LI		ME	NO	RS	TR
Primary	•	•	•	•	840	675	:	672	1 020		928		638	1 372	540	864
Secondary	•	•	•	•	525	453	:	708	357	464 Gym	546 Obs	491 Reals	399	398	453	1 008

Source: Eurydice.

Explanatory note (Figure 6)

This figure only concerns general education. The percentage for each subject is obtained by dividing the total time allocated to this subject in primary and full-time compulsory general secondary education by the minimum total instruction time provided for the respective education level (and multiplying by 100).

Country-specific notes

Denmark: Grade 1 has been excluded since reading, writing and literature is a compulsory subject area with time flexibility in this grade.

Germany: The data represent the weighted average instruction time in compulsory core curriculum subjects, calculated by the Secretariat of the Ministers of Education and Cultural Affairs of the *Länder* on the basis of the number of students enrolled in the different types of school (reference year 2016/17).

Ireland: Schools in practice offer more instruction time on reading, writing and literature from the time that they have at their discretion to distribute across the compulsory subjects. At secondary level, data refer only to ISCED 2. In grade 10 (ISCED 34), English is a compulsory subject with time flexibility.

Spain: The data on intended instruction time are based on national and regional regulations on the curriculum and school calendars (reference year 2017/18). To calculate the weighted averages, statistics were used on the number of students per grade and Autonomous Community, as reported by the statistics office of the Ministry of Education, Culture and Sport (reference year 2015/16).

Austria: Data are not available for grade 9, but this grade is part of full-time compulsory general education.

Poland: In grades 1-3 of primary education, reading, writing and literature is a compulsory subject area with time flexibility, and the instruction time for these grades is therefore not included. The percentage shown in the figure only refers to grades 4-6.

Sweden: The recommended minimum instruction time is a total for the nine years of compulsory education. It has been artificially allocated to ISCED level 1 and 24 proportionally to the number of years at each education level (6 and 3 respectively).

6. PIRLS data on grade 4 confirm the predominance of reading, writing and literature even when no minimum instruction time is specifically defined for this area

In the international survey PIRLS 2016, teachers were asked about the instruction time devoted to reading, writing, speaking, literature and other language skills (in the language of instruction) in a typical week. In countries with vertical and horizontal flexibility, data from PIRLS can provide information on how schools use their autonomy to allocate the minimum instruction time for teaching this subject area. In the other countries, the instruction time reported by teachers can give an indication of how much actual instruction time students get compared to the minimum recommended. The data from the survey can also show the differences in instruction time within the same country. Comparison between both data sets must be interpreted with caution given the differences in the source, methodology and reference year (see explanatory note in Figure 7).

Figure 7 shows the minimum instruction time recommended for reading, writing and literature in grade 4 in 2017/18, and the distribution of the student population (percentiles 25, 50 and 75) according to the number of hours per week that their teachers reported spending on teaching this subject area in PIRLS 2016. Teachers from 25 of the 43 education systems covered by this report participated in this survey and answered the question on instruction time for reading, writing, speaking, literature and other language skills (in the language of instruction). For 11 of these, there is no

minimum instruction time defined for reading, writing and literature in the fourth grade (either because the minimum instruction time is defined for several compulsory subjects or for several grades).

According to reports from their teachers, 50 % of the students in grade 4 appear to receive eight hours or more per week in France, the Netherlands and Portugal, at least seven and a half hours in the French Community of Belgium and Hungary, and seven hours or more in Italy and the United Kingdom (England). In five of these education systems (the French Community of Belgium, France, Hungary, the Netherlands and Portugal), at least 25 % of the students are reported to receive nine hours or more.

Teachers usually reported (in PIRLS 2016) a higher amount of instruction time for reading, writing and literature in those education systems where the recommended minimum instruction time is higher (France, Austria and Portugal) and where schools have certain flexibility to allocate time across subjects (the French Community of Belgium, Italy, Hungary, the Netherlands and the United Kingdom (England)).

In the **French Community of Belgium** and **Italy**, the minimum instruction time is defined for a group of subjects in grade 4 (horizontal flexibility).

In **Portugal** and **Hungary**, in addition to the minimum instruction time centrally defined for reading, writing and literature, official recommendations also prescribe a number of hours for schools to distribute across the different compulsory subject areas.

In the Netherlands, there is vertical and horizontal flexibility.

In the United Kingdom (England), there is no minimum instruction time centrally defined.

In the other two education systems with horizontal flexibility (the Flemish Community of Belgium and the United Kingdom (Northern Ireland)), the percentile 50 is also high (close to six and seven hours per week respectively). All this confirms the importance that schools actually give to reading, writing and literature when they have some flexibility to allocate instruction time across subjects (in grade 4). The previous year's Eurydice report on instruction time showed that, in this grade, schools also tend to prioritise mathematics over other subjects such as natural sciences, in terms of instruction time (²⁴).

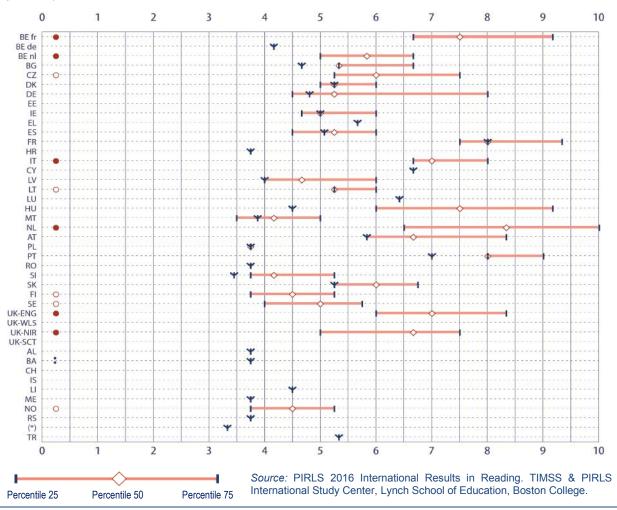
The education systems where students are reported to receive the least number of hours for reading, writing and literature in PIRLS 2016 are Malta, Poland, Slovenia, Finland and Serbia. Three quarters of the students are reported to receive 3.75 hours in Poland, less than five hours in Malta, and less than 5.25 hours in the other three countries.

The difference between the 25th and the 75th percentiles can be considered a proxy for the variations between students and schools in a certain country. As Figure 7 shows, this difference is more than two hours a week in the French Community of Belgium, the Czech Republic, Germany, Hungary, the Netherlands, Austria and the United Kingdom (England and Northern Ireland). Conversely, in Denmark, Lithuania and Portugal, the difference is one hour a week or less, and in Poland the 25th and the 75th percentiles are the same; which means that there are no significant differences in the instruction time received by students in these countries.

21

⁽²⁴⁾ European Commission/EACEA/Eurydice, 2017. Recommended Annual Instruction Time in Full-time Compulsory Education in Europe – 2016/17. Eurydice – Facts and Figures. Luxembourg: Publications Office of the European Union.

Figure 7: Distribution of students in grade 4 according to the number of instruction hours for reading, writing and literature reported by their teachers in PIRLS 2016, compared to the minimum recommended time in 2017/18 (hours per week)



- Horizontal flexible timetable
- O Vertical flexible timetable
- Y Recommended minimum instruction time

Source: Eurydice.

(*): the former Yugoslav Republic of Macedonia

Explanatory note

For each country, this figure shows:

- a) The minimum instruction time (in hours per week) recommended for reading, writing and literature in grade 4 in 2017/18 (in countries with no vertical or horizontal flexibility). Source: Eurydice.
- b) The distribution of the student population (percentiles 25, 50 and 75) according to the number of hours per week that their teachers reported teaching this subject in PIRLS 2016. If the 25th percentile is 5 hours, it means that 25 % of the students have a teacher that reported spending less than 5 hours per week on this subject. If the 75th percentile is 10 hours, then, it means that 25 % of the students have a teacher that reported spending 10 hours or more on this subject. By comparing p25 and p75, one can state that about 50 % of the students have between 5 hours and 10 hours a week. If the 50th percentile is 7, it means that 50 % receive less than 7 hours and 50 % 7 hours or more. Source: PIRLS 2016.

Comparison between both sets of data must be made with caution for several reasons. First, the recommended minimum instruction time (Eurydice) refers to public schools, while both public and private schools participate in PIRLS. Second, the PIRLS survey was conducted one year before. Third, in PIRLS, teachers are asked how much time (minutes) in a typical week they spend on the language of the test (language instruction) and/or activities with students.

Country-specific notes

Denmark: The recommended minimum instruction time refers to the fifth grade in this study, which is grade 4 in the Danish education system.

Poland: The official recommendation refers to 2017/18. In 2016/17, the minimum number of hours centrally defined for grades 4-6 altogether was 383.

7. Maths takes up the second largest share of the curriculum in primary education but its relative importance decreases in compulsory general secondary education

Mathematics represents the second largest share of instruction time in primary education. As with reading, writing and literature, its share in the curriculum also decreases at secondary level in favour of other subjects such as natural sciences or foreign languages.

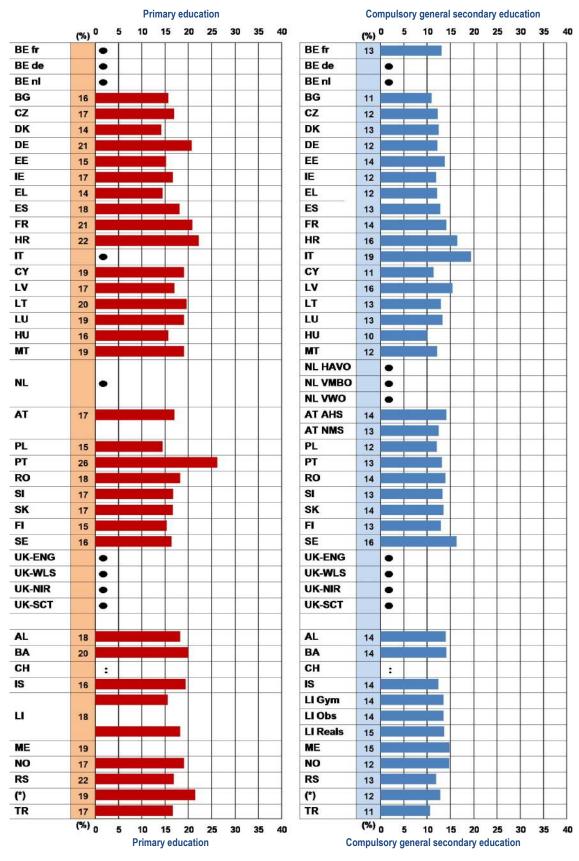
In primary education, around 18 % of the minimum instruction time is allocated on average to mathematics, varying from 14 % in Denmark and Greece to 26 % in Portugal. In three quarters of the education systems, it takes between 17 % and 19 % of the curriculum. The weight of mathematics in the curriculum of primary education is especially high in Germany, France, Croatia, Portugal and Serbia.

In full-time compulsory general secondary education, mathematics takes between 10 and 16 % of the total instruction time recommended for this education level in all countries. In Italy, it goes up to 19 % because, at lower secondary level, it includes the teaching of natural sciences. Mathematics is particularly important in the instruction time for compulsory general secondary education in Croatia, Latvia and Montenegro.

On average, nearly 670 hours are allocated to maths in primary education, 277 hours less than reading, writing and literature (²⁵). The number of hours ranges from 300 hours in Bulgaria to 1 310 in Portugal. In half of the education systems (where there is a minimum instruction time defined for this subject area), the recommended instruction time is at least 503 hours. At secondary level, 477 hours are allocated on average to this subject area, 83 hours less than reading, writing and literature.

⁽²⁵⁾ Only the education systems for which the minimum instruction time is centrally defined for this subject area have been taken into account in the calculations. Poland is not included since the instruction time for this subject is only set for grades 4-6. Mathematics is a compulsory subject with time flexibility in grades 1-3. At secondary level, only the *Realschule* has been taken into account for Liechtenstein.

Figure 8: Percentage of the recommended minimum instruction time allocated to mathematics in primary and full-time compulsory general secondary education, 2017/18



Compulsory subject area with time flexibility

(*): the former Yugoslav Republic of Macedonia *Source:* Eurydice.

Minimum instruction time in hours as defined centrally for maths, per education level, 2017/18

	BE fr	BE de	BE nl	BG	CZ	DK	DE	EE	IE	EL	ES	FR	HR	IT	CY	LV
Primary	•	•	•	300	588	900	579	604	911	652	858	900	420	•	928	609
Secondary	686	•	•	441	441	450	677	341	330	288	542	684	420	924	291	369
	LT	LU	HU	MT		NL		AT		PL	PT	RO	SI	SK	FI	SE
Primary	460	1 056	432	952		•		480		299	1 310	418	683	451	599	750
Secondary	624	451	512	476	HAVO	VMBO	VWO	510 AHS	450 NMS	299	353	663	306	677	314	375
	UK- ENG	UK- WLS	UK- NIR	UK- SCT	AL	ВА	СН	IS		LI		ME	NO	RS	(*)	TR
Primary	•	•	•	•	525	540	:	793		683		510	888	540	600	480
Secondary	•	•	•	•	420	426	:	340	340 Gym	519 Obs	546 Reals	399	313	426	651	768

(*): the former Yugoslav Republic of Macedonia

Source: Eurydice.

Explanatory note (Figure 8)

This figure only concerns general education. The percentage for each subject is obtained by dividing the total time allocated to this subject in primary and full-time compulsory general secondary education by the minimum total instruction time provided for the respective education level (and multiplying by 100).

Country-specific notes

Denmark: Grade 1 has been excluded since maths is a compulsory subject area with time flexibility in this grade.

Germany: The data represent the weighted average instruction time in compulsory core curriculum subjects, calculated by the Secretariat of the Ministers of Education and Cultural Affairs of the *Länder* on the basis of the number of students enrolled in the different types of school (reference year 2016/17).

Ireland: At secondary level, data refer only to ISCED 2. In grade 10 (ISCED 34), mathematics is a compulsory subject with time flexibility.

Spain: The data on intended instruction time are based on national and regional regulations on the curriculum and school calendars (reference year 2017/18). To calculate the weighted averages, statistics were used on the number of students per grade and Autonomous Community, as reported by the statistics office of the Ministry of Education, Culture and Sport (reference year 2015/16).

Italy: Instruction time for maths includes the teaching of natural sciences in grades 6-8 (lower secondary education).

Austria: Data are not available for grade 9, but this grade is part of full-time compulsory general education.

Poland: In grades 1-3 of primary education, maths is a compulsory subject area with time flexibility, and the instruction time for these grades is therefore not included. The percentage shown in the figure only refers to grades 4-6.

Portugal: Data refer to lower secondary education. In grades 10-12, mathematics is a compulsory option that students may choose.

Sweden: The recommended minimum instruction time is a total for the nine years of compulsory education. It has been artificially allocated to ISCED level 1 and 24 proportionally to the number of years at each education level (6 and 3 respectively).

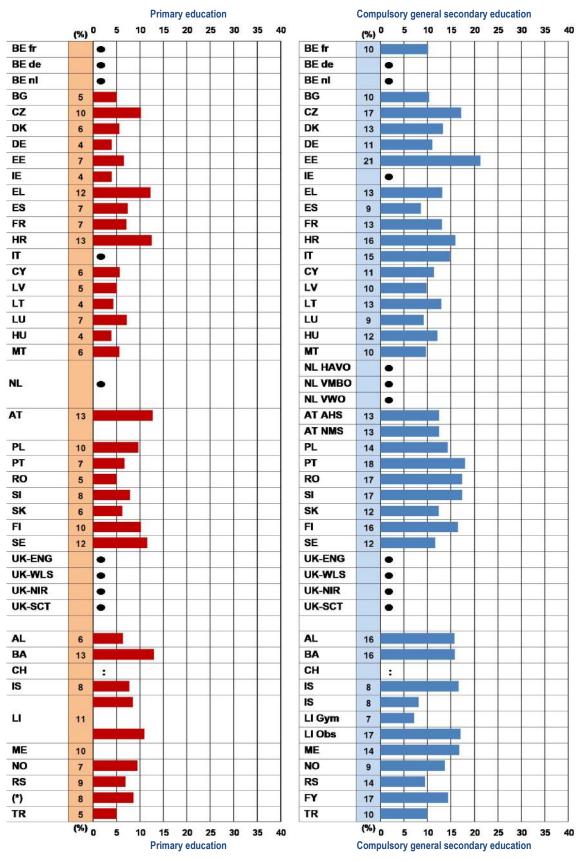
8. Natural sciences represent a small proportion of the curriculum in primary education but become more important at secondary level

Natural sciences include subjects such as science, physics, chemistry, biology, environmental sciences and ecology.

In contrast to the areas of reading, writing and literature and mathematics, the teaching of natural sciences becomes more important in compulsory general secondary education. On average, less than 8 % of the minimum instruction time provided for primary education is allocated to this subject area, while the percentage goes up to 13 % at secondary level (the same as mathematics).

In more than half of the education systems, natural sciences represent 7 % or less of the curriculum in primary education. In contrast, natural sciences take up 12 % of the primary curriculum in Greece. In other countries where the percentage is also high (the Czech Republic, Croatia, Austria, Sweden, Bosnia and Herzegovina, Liechtenstein and Montenegro), this area includes the instruction time for other subjects such as social studies and technology.

Figure 9: Percentage of the recommended minimum instruction time allocated to natural sciences in primary and full-time compulsory general secondary education, 2017/18



Compulsory subject area with time flexibility

(*): the former Yugoslav Republic of Macedonia *Source*: Eurydice.

Minimum instruction time in hours as defined centrally for natural sciences, per education level, 2017/18

	BE fr	BE de	BE nl	BG	CZ	DK	DE	EE	IE	EL	ES	FR	HR	IT	CY	LV
Primary	•	•	•	53	353	360	111	263	218	552	350	306	236	•	278	181
Secondary	537	•	•	417	617	480	612	525	•	312	363	630	407	264	291	235
	LT	LU	HU	MT		NL		AT		PL	PT	RO	SI	SK	FI	SE
Primary	102	396	108	283		•		360)	198	338	114	323	169	399	533
Secondary	624	310	620	382	HAVO	VMBO	VWO	450 AHS	450 NMS	355	482	829	401	620	399	267
	UK- ENG	UK- WLS	UK- NIR	UK- SCT	AL	ВА	СН	IS		LI		ME	NO	RS	(*)	TR
Primary	•	•	•	•	184	351	:	431		410		255	366	216	240	144
Secondary	•	•	•	•	473	477	:	204	273 Gym	628 Obs	628 Reals	371	249	477	870	720

(*): the former Yugoslav Republic of Macedonia

Source: Eurydice.

Explanatory note (Figure 9)

This figure only concerns general education. The percentage for each subject is obtained by dividing the total time allocated to this subject in primary and full-time compulsory general secondary education by the minimum total instruction time provided for the respective education level (and multiplying by 100).

Country-specific notes

Bulgaria: Instruction time for grades 1-2 is included in social studies. These two grades have been excluded from the calculations.

Denmark: Grade 1 has been excluded since natural sciences is a compulsory subject area with time flexibility in this grade.

Germany: The data represent the weighted average instruction time in compulsory core curriculum subjects, calculated by the Secretariat of the Ministers of Education and Cultural Affairs of the *Länder* on the basis of the number of students enrolled in the different types of school (reference year 2016/17).

Ireland: At secondary level, the instruction time for natural sciences is captured in the 'compulsory options chosen by the students'.

Spain: The data on intended instruction time are based on national and regional regulations on the curriculum and school calendars (reference year 2017/18). To calculate the weighted averages, statistics were used on the number of students per grade and Autonomous Community, as reported by the statistics office of the Ministry of Education, Culture and Sport (reference year 2015/16).

Italy: Data in this figure only refer to ISCED level 3.

Austria: Data are not available for grade 9, but this grade is part of full-time compulsory general education.

Poland: In grades 1-3 of primary education, natural sciences is a compulsory subject area with time flexibility, and the instruction time for these grades is therefore not included. The percentage shown in the figure only refers to grades 4-6.

Portugal: Data refer to lower secondary education. In grades 10-12, mathematics is a compulsory option that students may choose.

Sweden: The recommended minimum instruction time is a total for the nine years of compulsory education. It has been artificially allocated to ISCED level 1 and 24 proportionally to the number of years at each education level (6 and 3 respectively). In reality, the number of hours devoted to natural sciences in primary education is much lower.

The minimum instruction time recommended for natural sciences includes the teaching of social studies in eight countries: the Czech Republic (grades 1-5), France (grades 1-3), Croatia (grades 1-4), Austria (grades 1-4), Bosnia and Herzegovina (grades 1-4), Liechtenstein (in primary education and in secondary education in *Oberschule* and *Realschule*), Montenegro (grades 1-3) and Serbia (grades 1-4).

In nine education systems, it includes the teaching of technology: the German-speaking Community of Belgium (grades 1-8), the Flemish Community of Belgium (grades 1-6), Ireland (grades 1-6), France (grades 1-6), Cyprus (grades 1-4), Malta (grades 1-6), Austria (grades 1-4), Sweden (grades 1-9) and Montenegro (grades 1-4).

In compulsory general secondary education, the share of natural sciences in the curriculum increases considerably, representing 8 % or more of the curriculum in all countries. In more than half of the education systems, it accounts for 13 % or more. At this education level, the importance of natural sciences is particularly high in the Czech Republic, Portugal, Romania, Slovenia, the former Yugoslav Republic of Macedonia, and especially in Estonia, where the percentage goes up to 21 %.

On average, 288 hours are provided for natural sciences for the duration of primary education, which is not even one third of the average time spent on reading, writing and literature, and less than a half of the average for mathematics. However, at secondary level, the number of hours allocated to this subject category is similar to that of mathematics, and only slightly lower than for reading, writing and literature.

9. Social studies represent a small proportion of the curriculum, particularly at primary level

Social studies include subjects such as history, geography, community studies, social and political instruction, philosophy, and civics education. Citizenship education is generally included in this subject area either as a separate subject or integrated into one or more of the other subjects (²⁶).

In three quarters of the education systems, the minimum instruction time specifically recommended for the social studies area only accounts for 5 % or less of the curriculum at primary level. It is indeed rather unusual that education authorities define a minimum instruction time for social studies as a separate subject from the first grade of primary education. The teaching of this subject area (or elements of it) normally starts at a later stage and is often integrated into other subjects.

In five countries, the minimum instruction time is defined for a group of grades (Estonia, Lithuania, Sweden, Iceland and Norway) and the teaching of this subject may start in the first grade or later.

In 10 education systems, a minimum instruction time is specifically recommended for this subject area only from grade 3 (Greece and Slovakia), grade 4 (Denmark, France, Poland, Romania, Finland and Montenegro) or grade 5 (Luxembourg and Bosnia and Herzegovina) of primary education. In some cases, elements of social studies are integrated into other subject areas in earlier grades (in natural sciences in France, Bosnia and Herzegovina and Montenegro; and, in religion, ethics and moral education, in Luxembourg). In Poland, social studies is a compulsory subject with time flexibility from the first to the third grade of primary education.

In five countries (the Czech Republic, Croatia, Austria, Liechtenstein and Serbia), elements of social studies are integrated into natural sciences throughout primary education (²⁷).

In seven education systems (the three communities of Belgium, Italy, the Netherlands and the United Kingdom (Wales and Northern Ireland)), steering documents define a total minimum instruction time for a number of compulsory subjects, including social studies; how this time is allocated between subjects is left to the school's discretion.

In Hungary, there is no recommended minimum instruction time for social studies at primary level.

In Cyprus, Sweden, Iceland and Turkey, social studies appear to have greater weight in the primary curriculum compared with other countries.

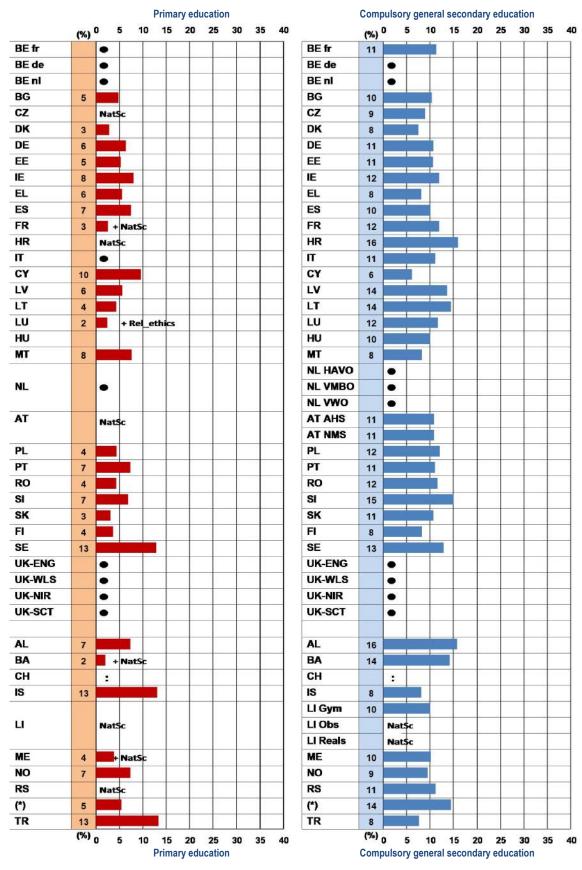
The importance of social studies increases at secondary level, but the time allocated to this subject area is still lower than that devoted to languages, mathematics or natural sciences. In more than half of the education systems with a defined minimum instruction time for social studies, it takes up between 8 % and 11 % of the total instruction time for compulsory general secondary education. In Cyprus, it only represents 6 %. Croatia, Slovenia and Albania are the countries where social studies are given more importance in terms of instruction time at this education level.

On average, 396 hours are provided for social studies for the duration of compulsory general secondary education; 250 for primary education.

(27) Social studies may also be taught together with natural sciences in countries reporting specific time for social studies (e.g. Lithuania).

⁽²⁶⁾ European Commission/EACEA/Eurydice, 2017. Citizenship Education at School in Europe – 2017. Eurydice Report. Luxembourg: Publications Office of the European Union.

Figure 10: Percentage of the recommended minimum instruction time specifically allocated to social studies in primary and full-time compulsory general secondary education, 2017/18



Compulsory subject area with time flexibility

(*): the former Yugoslav Republic of Macedonia *Source:* Eurydice.

Minimum instruction time in hours as defined centrally for social studies, per education level, 2017/18

	BE fr	BE de	BE nl	BG	CZ	DK	DE	EE	IE	EL	ES	FR	HR	IT	CY	LV
Primary	•	•	•	91	NatSc	210	179	210	437	251	353	108 + NatSc	NatSc	•	464	203
Secondary	597	•	•	417	323	270	594	263	331	192	428	576	407	198	157	325
	LT	LU	HU	MT		NL		AT		PL	PT	RO	SI	SK	FI	SE
Primary	102	132 + Rel ethics		379		•		NatSc		92	367	100	282	85	143	590
Secondary	697	394	512	324	HAVO	VMBO	VWO	390 AHS	390 NMS	299	562	551	345	536	200	295
	UK- ENG	UK- WLS	UK- NIR	UK- SCT	AL	ВА	СН	IS		LI		ME	NO	RS	(*)	TR
Primary	•	•	•	•	210	54 + NatSc	:	669		NatSc		102 + NatSc	385	NatSc	168	384
Secondary	•	•	•	•	473	426	:	204	382 Gym	NatSc Obs	NatSc Reals	276	249	372	756	552

(*): the former Yugoslav Republic of Macedonia

Source: Eurydice.

Explanatory note (Figure 10)

This figure only concerns general education. The percentage for each subject is obtained by dividing the total time allocated to this subject in primary and full-time compulsory general secondary education by the minimum total instruction time provided for the respective education level (and multiplying by 100).

In some countries, the minimum instruction time for the education level covers all grades but only a few define a specific instruction time for social studies.

Country-specific notes

Bulgaria: Instruction time for grades 1-2 is included natural sciences.

Czech Republic, Croatia and Serbia: In primary education, social studies are integrated into natural sciences.

Denmark: At primary level, the minimum instruction time for social studies refers to grades 4-7. There is no instruction time defined for this subject area in grades 1-3.

Germany: The data represent the weighted average instruction time in compulsory core curriculum subjects, calculated by the Secretariat of the Ministers of Education and Cultural Affairs of the *Länder* on the basis of the number of students enrolled in the different types of school (reference year 2016/17).

Ireland: At secondary level, data refer only to ISCED 2. In grade 10 (ISCED 34) social studies is an optional subject.

Spain: The data on intended instruction time are based on national and regional regulations on the curriculum and school calendars (reference year 2017/18). To calculate the weighted averages, statistics were used on the number of students per grade and Autonomous Community, as reported by the statistics office of the Ministry of Education, Culture and Sport (reference year 2015/16).

France: At primary level, the minimum instruction time for social studies refers to grades 4-5. In grades 1-3, social studies are integrated into natural sciences.

Italy. Data in this figure only refer to ISCED level 3. In grades 6-8, the instruction time for social studies is included in reading, writing and literature.

Luxembourg: At primary level, the minimum instruction time for social studies refers to grades 5-6. In grades 1-4, social studies are integrated into religion, ethics and moral education.

Austria: In primary education, social studies are integrated into natural sciences. Data are not available for grade 9, but this grade is part of full-time compulsory general education.

Poland: In grades 1-3 of primary education, social studies is a compulsory subject area with time flexibility, and the instruction time for these grades is therefore not included. The percentage shown in the figure only refers to grades 4-6.

Portugal: In grade 12, social studies is an optional subject.

Romania: At primary level, the minimum instruction time for social studies refers to grades 4-5. There is no instruction time defined for this subject area in grades 1-3.

Finland: At primary level, the minimum instruction time for social studies refers to grades 4-6. There is no instruction time defined for this subject area in grades 1-3.

Sweden: The recommended minimum instruction time is a total for the nine years of compulsory education. It has been artificially allocated to ISCED level 1 and 24 proportionally to the number of years at each education level (6 and 3 respectively). In reality, the number of hours devoted to natural sciences in primary education is much lower.

Bosnia and Herzegovina: At primary level, the minimum instruction time for social studies refers to grade 5. In grades 1-4, social studies are integrated into natural sciences.

Liechtenstein: In primary education and in Oberschule and Realschule, social studies are integrated into natural sciences.

Montenegro: At primary level, the minimum instruction time for social studies refers to grades 4-5. In grades 1-3, social studies are integrated into natural sciences.

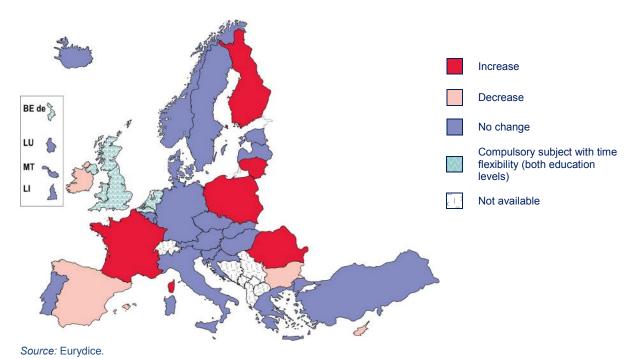
No significant changes have taken place since 2014/15

Over the last four years, there have been no significant changes in the minimum instruction time allocated to social studies in the majority of the education systems (see Figure 11).

As from 2016/17, the recommended minimum instruction time allocated to this subject category increased in Finland in grades 4-6 and in France in grades 4-5. In Poland, the new reform which began to be implemented in 2017/18 increased the hours of instruction for history. Also in Romania, the framework plan for lower secondary education (grades 6-9), which began to be implemented in 2017/18 in grade 6, envisaged an increase in the number of hours allocated to social studies (²⁸). In Lithuania, the minimum recommended for this subject area has also been increased at both education levels.

In Spain, new legislation approved in 2013 which has since been gradually implemented, has reduced the instruction time centrally allocated to social studies and increased the time that the Autonomous Communities can distribute across subjects. In Ireland, recent reforms also diminished the minimum recommended for social studies and increased the instruction time that schools can allocate themselves. In Bulgaria and Cyprus, the time recommended for social studies has also decreased in recent years.

Figure 11: Changes in the recommended minimum instruction time allocated to social studies in full-time compulsory general education between 2014/15 and 2017/18



Explanatory note

This figure shows the changes in the minimum instruction time recommended for social studies between 2014/15 and 2017/18 (²⁹).

Methodological changes and those due to variations in the number of the instruction days in the school year are not shown.

⁽²⁸⁾ Grades 6-9 in this data collection correspond to grades 5-8 in the Romanian education system.

⁽²⁹⁾ European Commission/EACEA/Eurydice, 2015. Recommended Annual Instruction Time in Full-time Compulsory Education in Europe – 2014/15. Eurydice – Facts and Figures. Luxembourg: Publications Office of the European Union.

Section 1. Reading guide to national data sheets and acronyms and abbreviations

National data sheets present data on recommended minimum instruction time in two ways: by countries (Section 2) and by curriculum categories (Section 3). With Section 2, the reader is able to compare annual instruction time in hours of 60 minutes between curriculum categories in each country and for each grade. Section 3 allows a comparison between all countries for each curriculum category and for each grade.

Grades are shown on the vertical axis of each diagram. Those in **red** are part of full-time compulsory general education. The horizontal axis indicates the number of hours (in hours, i.e. 60 minutes) per year devoted to curriculum subjects or curriculum categories.

The diagrams also show specific features of instruction time allocation:

- Responsible education authorities do not specify instruction time for each subject, but only
 indicate instruction time schools have to provide for a group of subjects or for the whole
 curriculum. Hence, schools have the autonomy to decide how to allocate instruction time between
 curriculum subjects. This 'horizontal' flexibility enjoyed by schools is indicated by a black bullet.
- Responsible education authorities specify instruction time for curriculum subjects for several
 grades together, one education level or the whole of full time compulsory education. Schools are
 thus free to decide how to allocate instruction time across the grades. This 'vertical' flexibility given
 to schools is represented by a vertical black bar.
- One single value for instruction time is provided for two curriculum subjects together. This is the case when two subjects (social studies and natural sciences for example) are integrated into one single subject in the national curriculum. It might also be the case that one particular subject, ICT for example, is taught when teaching another subject, natural sciences for instance. The value for instruction time for these two subjects is allocated to the subject area for which the biggest value is expected, and a reference to this subject (following an arrow symbol) is made in the other subject concerned.

For three countries, instruction time is provided for different education programmes.

- The Netherlands: a) primary school + Voorbereidend Wetenschappelijk Onderwijs; b) primary school + Hoger Algemeen Voortgezet Onderwijs; c) Primary school + Voorbereidend Middelbaar Beroepsonderwijs.
- Austria: a) Volkschule (primary school grades 1-4) + Allgemeinbildende h\u00f6here Schule (AHS; academic secondary school science branch: Realgymnasium grades 5-8); b) Volkschule (primary school grades 1-4) + Neue Mittelschule (new secondary school grades 5-8).
- **Liechtenstein**: a) primary school + *Gymnasium*; b) primary school + *Realschule*; c) primary school + *Oberschule*.

Acronyms, abbreviations and symbols

The following table contains all the **acronyms and abbreviations** used in the National Data Sheets.

Codes	Subjects	Abbr
RWL	Reading, Writing and Literature (L1)	vwo
Math	Mathematics	HAV
NatSc	Natural Sciences	VMB
SocSt	Social Studies	
Lg (+ number)	Languages (L 2-5)	Volks +AHS
PhysEd_H	Physical Education and Health	
ArtsEd	Arts Education	+ NM
Rel_ethics	Religion/ethics/moral education	
ICT	Information and Communication Technologies (ICT)	
Tech	Technology	
P_Vs	Practical and Vocational skills	
Others	Other subjects	
TMinCCurr	Total Minimum Compulsory Curriculum	
COcbS	Compulsory Options chosen by the Students	
CFScbSch	Compulsory Flexible Subject chosen by the Schools	
CSwFT	Compulsory Subjects with Flexible Timetable	

Volkschule	Voorbereidend Wetenschappelijk Onderwijs Hoger Algemeen Voortgezet Onderwjis
VMBO	doger Algemeen Voortgezet Onderwjis
Volkschule V + AHS + (6 b) Volkschule V + NMS + +	
+AHS + (a b b Volkschule + NMS + +	/oorbereidend Middelbaar Beroepsonderwijs
+ NMS +	Volkschule (primary school – grades 1-4) • Allgemeinbildende höhere Schule academic secondary school – science branch: Realgymnasium – grades 5-8)
S	/olkschule (primary school – grades 1-4) Neue Mittelschule (new secondary school – grades 5-8)

Section 2. Instruction time by country

Belgium – French Community	35	Poland	60
Belgium – German-speaking Community	36	Portugal	61
Belgium – Flemish Community	37	Romania	62
Bulgaria	38	Slovenia	63
Czech Republic	39	Slovakia	64
Denmark	40	Finland	65
Germany	41	Sweden	66
Estonia	42	United Kingdom – England	67
Ireland	43	United Kingdom – Wales	68
Greece	44	United Kingdom – Northern Ireland	69
Spain	45	United Kingdom – Scotland	70
France	46	Albania	71
Croatia	47	Bosnia and Herzegovina	72
Italy	48	Switzerland	73
Cyprus	49	Iceland	74
Latvia	50	Liechtenstein - Primary and Gymnasium	75
Lithuania	51	Liechtenstein - Primary and Oberschule	76
Luxembourg	52	Liechtenstein – Primary and Realschule	77
Hungary	53	Montenegro	78
Malta	54	Norway	79
Netherlands – Primary and HAVO	55	Serbia	80
Netherlands – Primary and VMBO	56	The former Yugoslav Republic of Macedonia	81
Netherlands – Primary and VWO	57	Turkey	82
Austria - Volksschule and AHS (Realgymnasium)	58		
Austria - Volksschule and Neue Mittelschule	59		

For specific national information, see Part II, Section 5: Country-specific notes.

Full-time compulsory general education (FTCG):

Primary level Secondary level n Grades in FTCG

Horizontal axis: Number of hours per school year

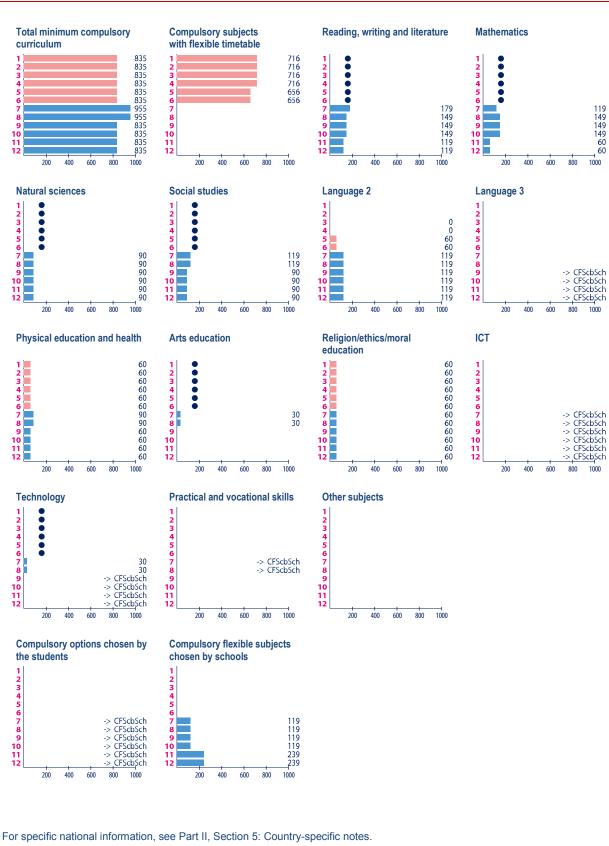
Vertical axis: Grades

Flexible time

-> category Instruction time included in another category (see Reading guide)

X Number of hours distributed between various school years

BELGIUM - FRENCH COMMUNITY



Full-time compulsory general education (FTCG):

Primary level

Secondary level

n Grades in FTCG

Horizontal axis:

Number of hours per school year

Vertical axis: Grades

Flexible time

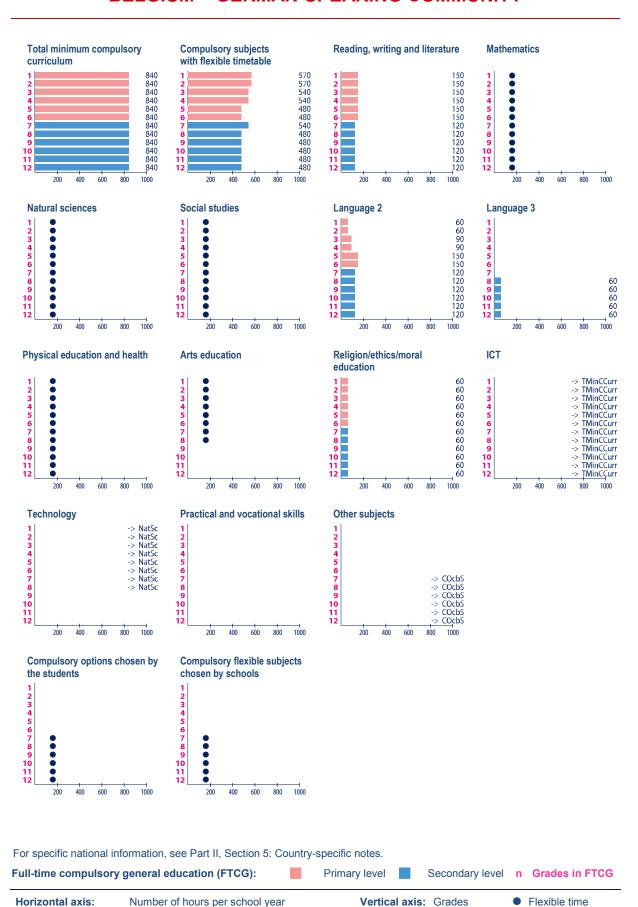
-> category

Instruction time included in another category (see Reading guide)

X Number of hours distributed between various school years

Source: Eurydice.

BELGIUM – GERMAN-SPEAKING COMMUNITY

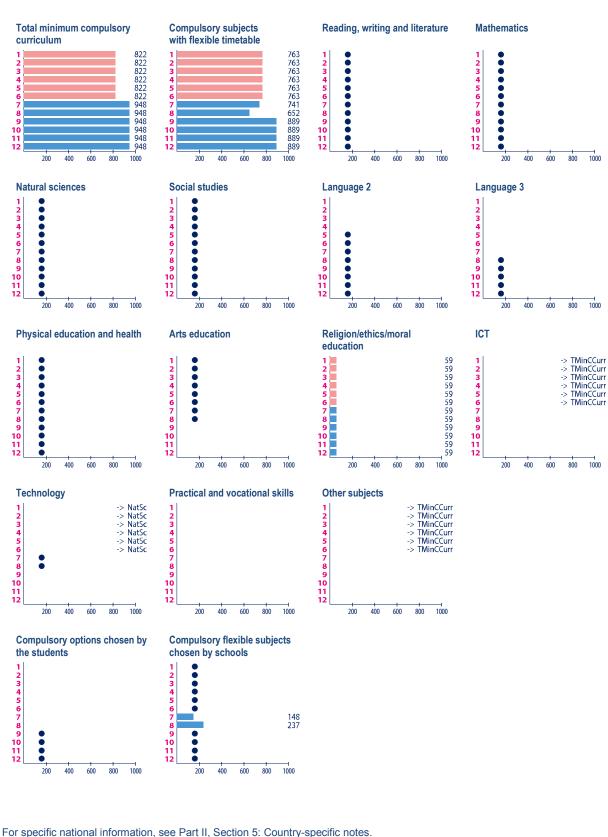


Instruction time included in another category (see Reading guide)

-> category

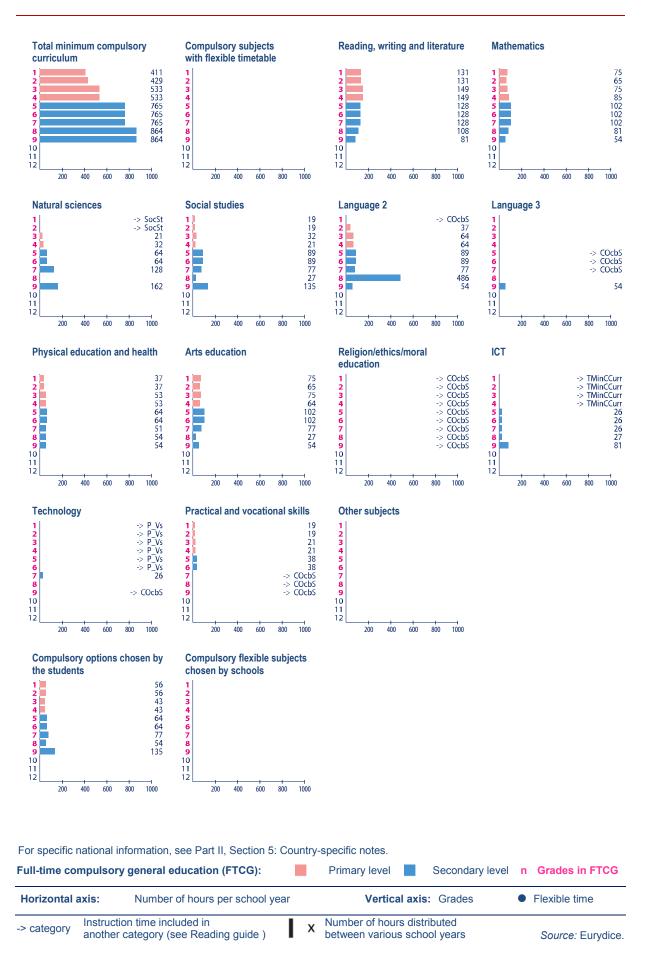
X Number of hours distributed between various school years

BELGIUM - FLEMISH COMMUNITY

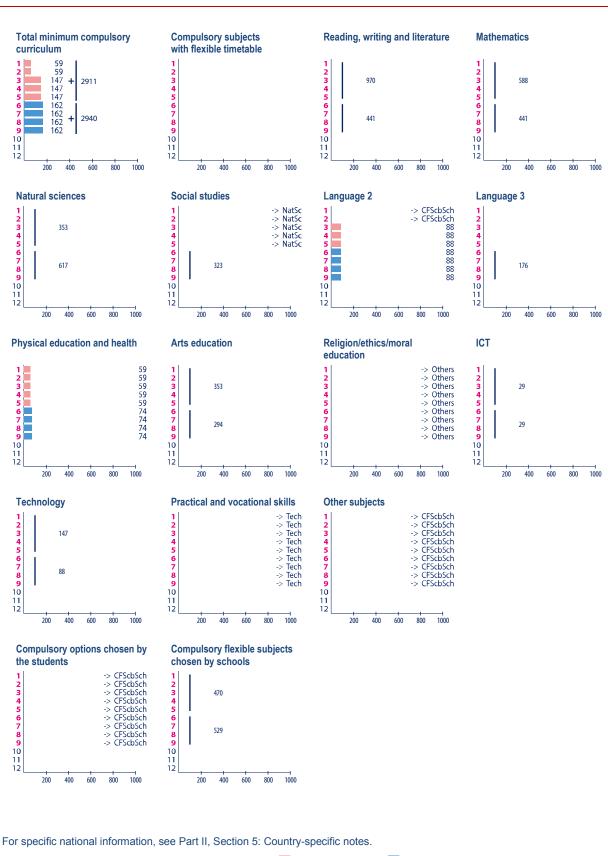


Full-time compulsory general education (FTCG): Primary level Secondary level **Grades in FTCG** Number of hours per school year Flexible time **Horizontal axis:** Vertical axis: Grades Instruction time included in Number of hours distributed -> category between various school years another category (see Reading guide) Source: Eurydice.

BULGARIA



CZECH REPUBLIC



Full-time compulsory general education (FTCG): Primary level Secondary level **Grades in FTCG** Number of hours per school year Flexible time **Horizontal axis:** Vertical axis: Grades Instruction time included in Number of hours distributed

-> category another category (see Reading guide) between various school years

Source: Eurydice.

DENMARK



Vertical axis: Grades

Number of hours distributed

between various school years

Flexible time

Source: Eurydice.

Number of hours per school year

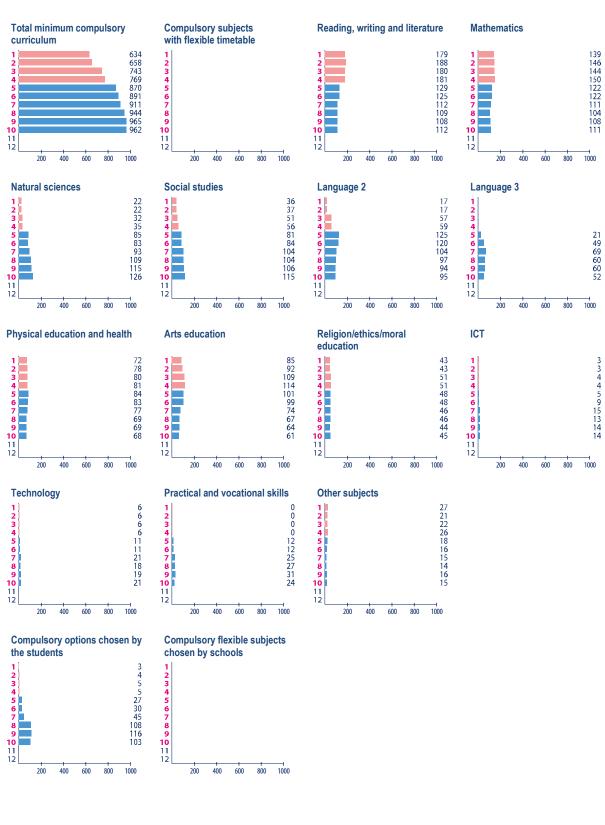
Instruction time included in

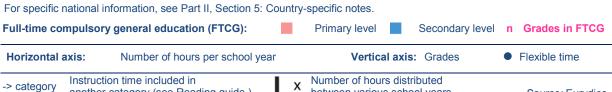
another category (see Reading guide)

Horizontal axis:

-> category

GERMANY



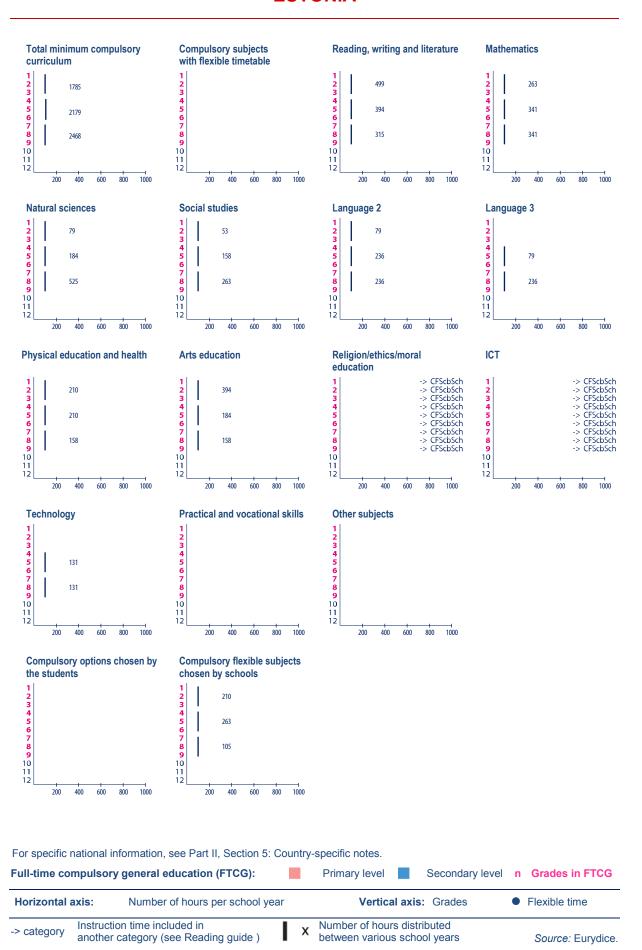


another category (see Reading guide)

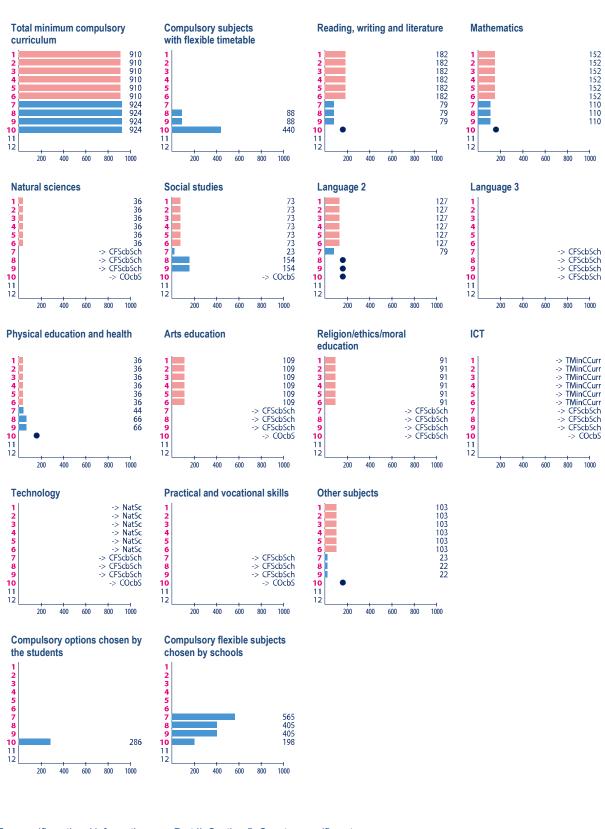
between various school years

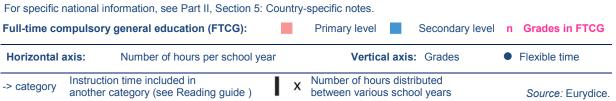
Source: Eurydice.

ESTONIA

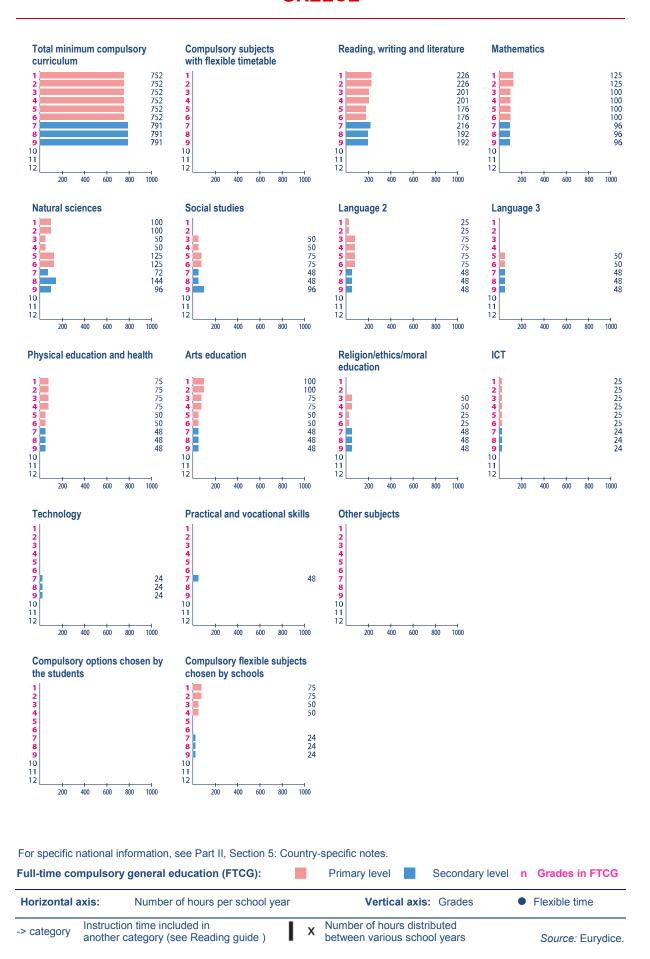


IRELAND



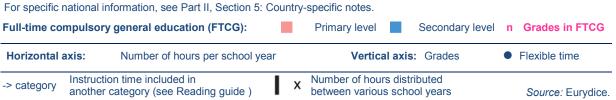


GREECE



SPAIN

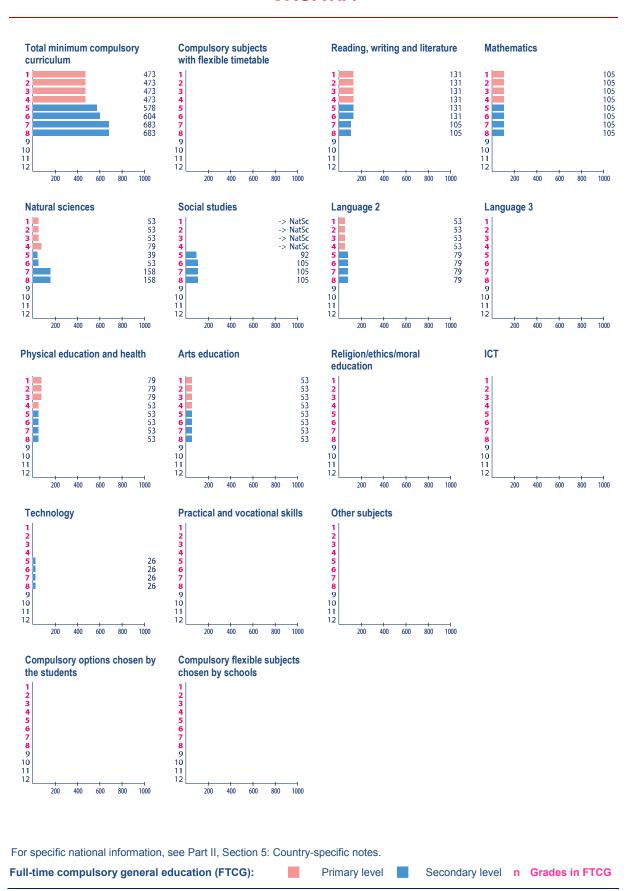




FRANCE



CROATIA



another category (see Reading guide)

Instruction time included in

Number of hours per school year

Horizontal axis:

-> category

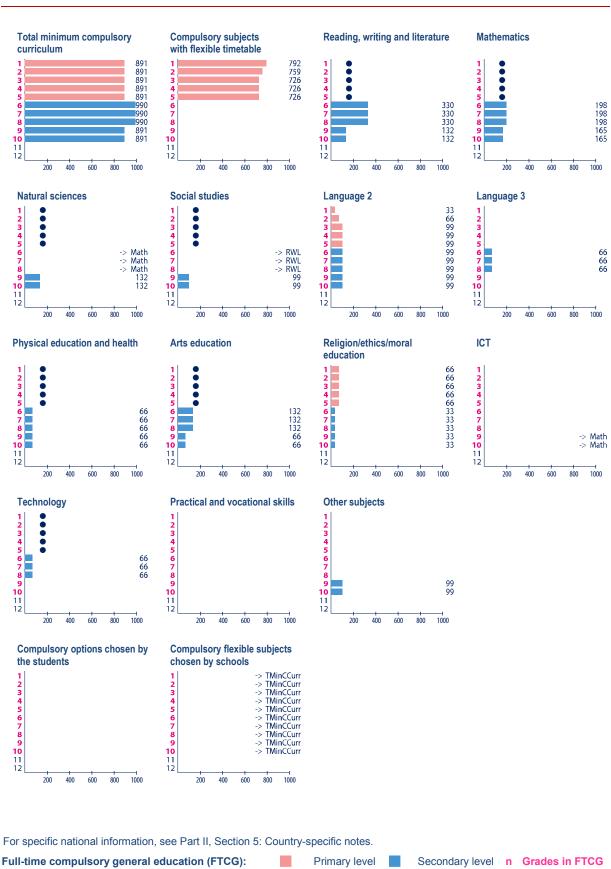
X Number of hours distributed between various school years

Vertical axis: Grades

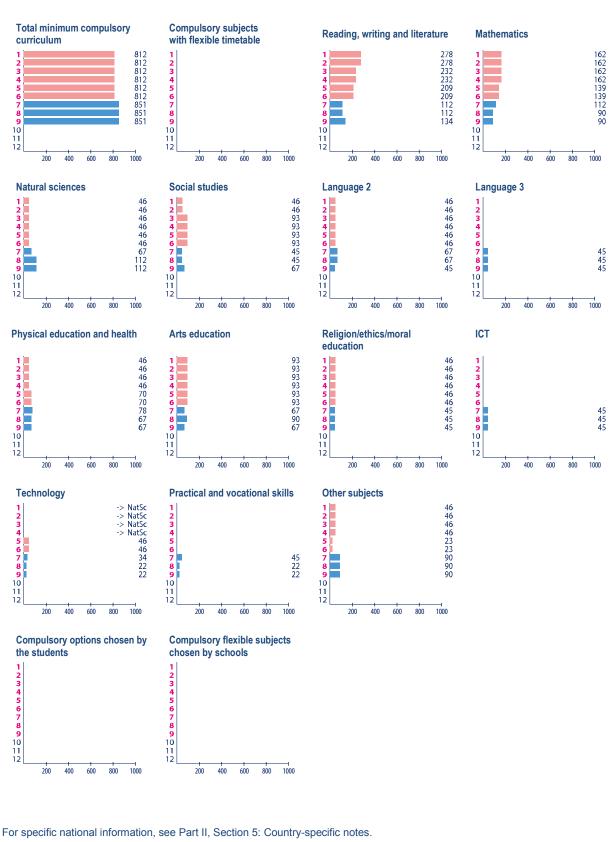
Source: Eurydice.

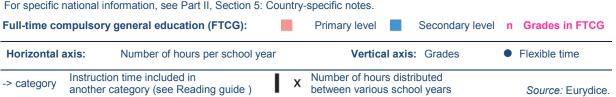
Flexible time

ITALY

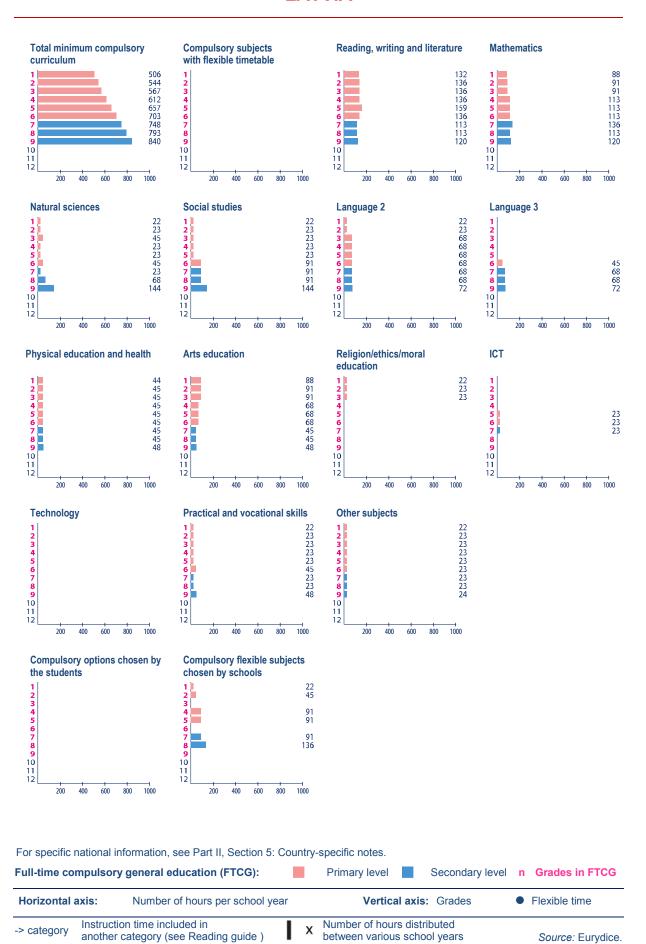


CYPRUS

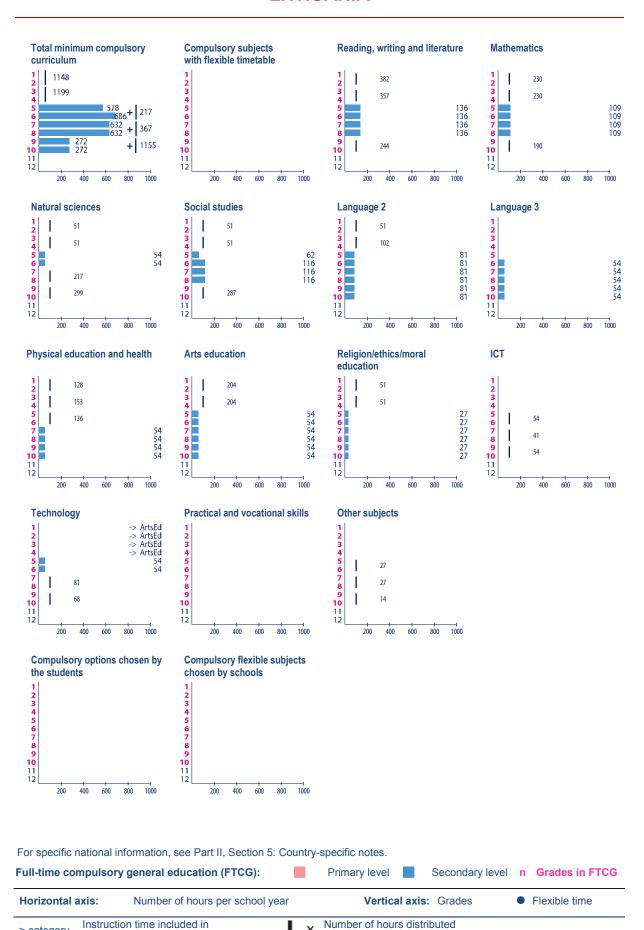




LATVIA



LITHUANIA



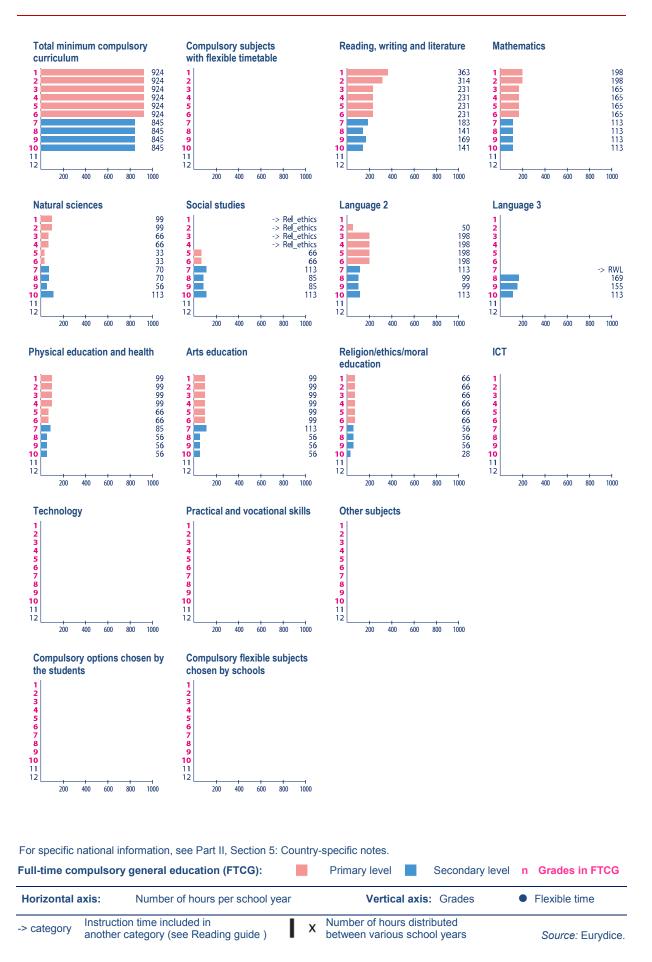
between various school years

Source: Eurydice.

-> category

another category (see Reading guide)

LUXEMBOURG



HUNGARY



Number of hours distributed

between various school years

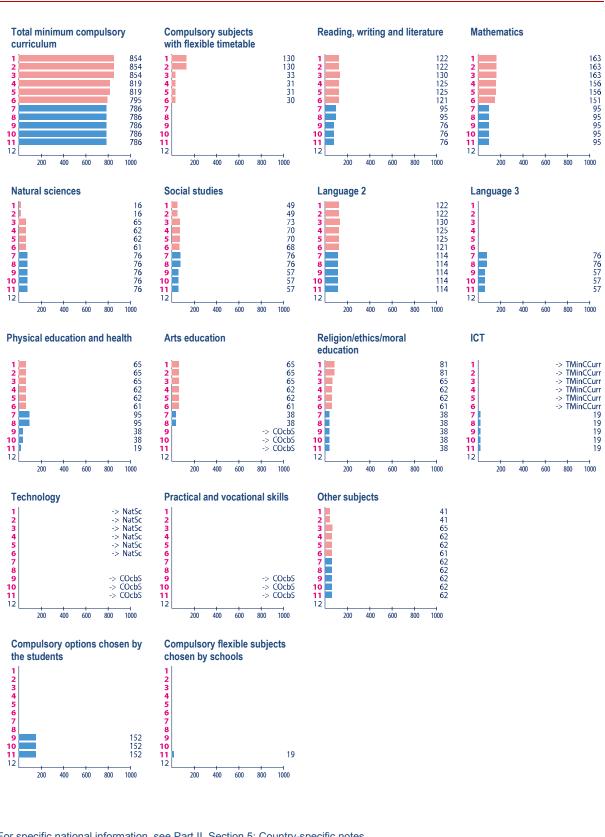
Source: Eurydice.

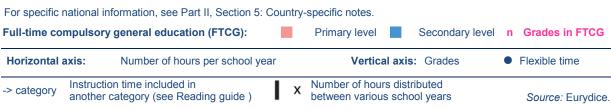
Instruction time included in

another category (see Reading guide)

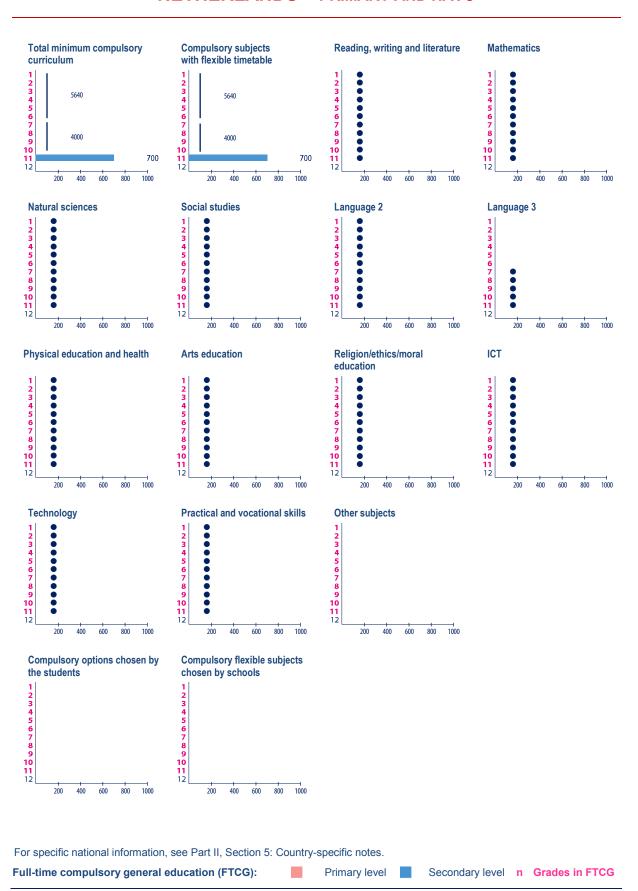
-> category

MALTA





NETHERLANDS - PRIMARY AND HAVO



-> category Instruction time included in another category (see Reading guide)

Number of hours per school year

Horizontal axis:

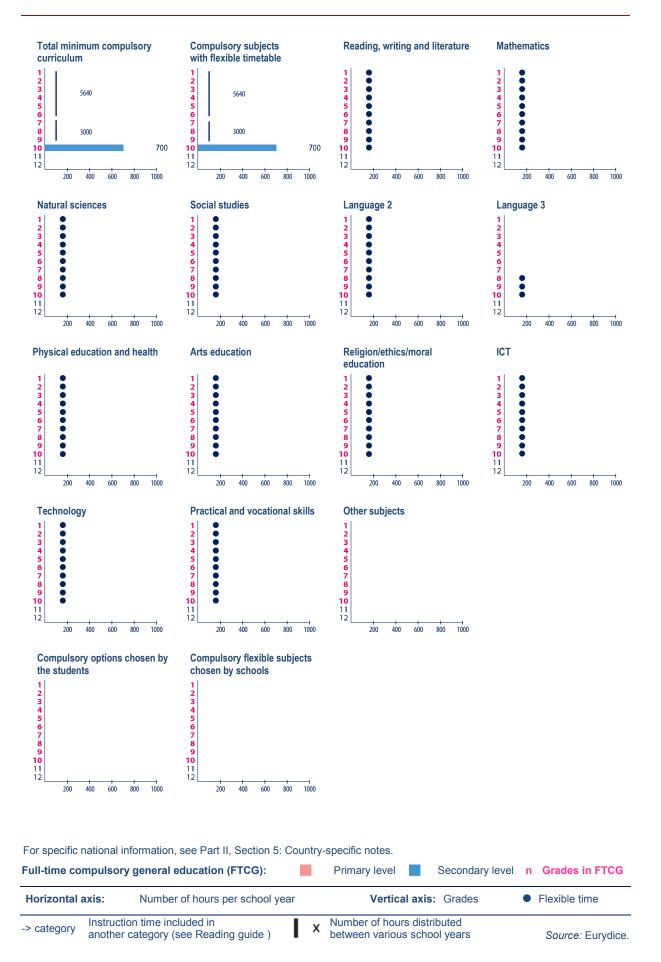
X Number of hours distributed between various school years

Vertical axis: Grades

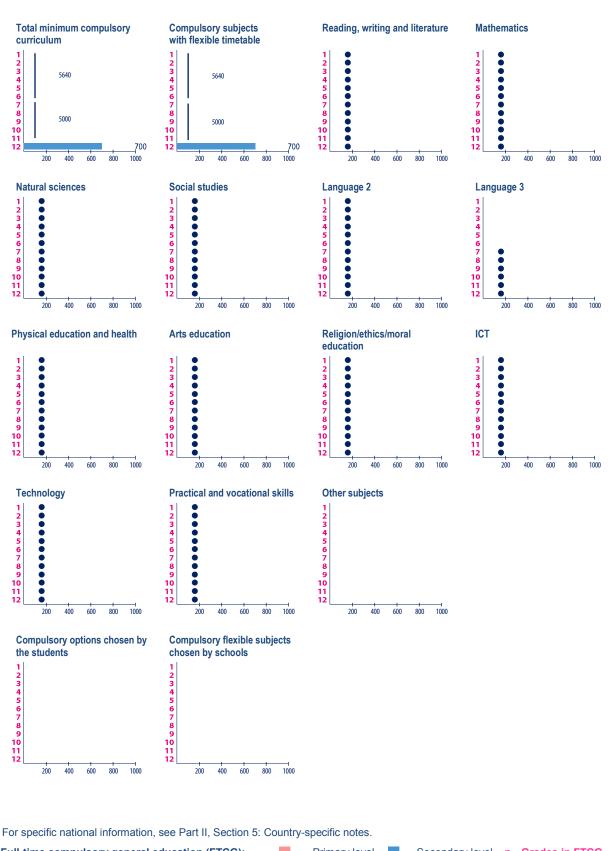
Source: Eurydice.

Flexible time

NETHERLANDS - PRIMARY AND VMBO



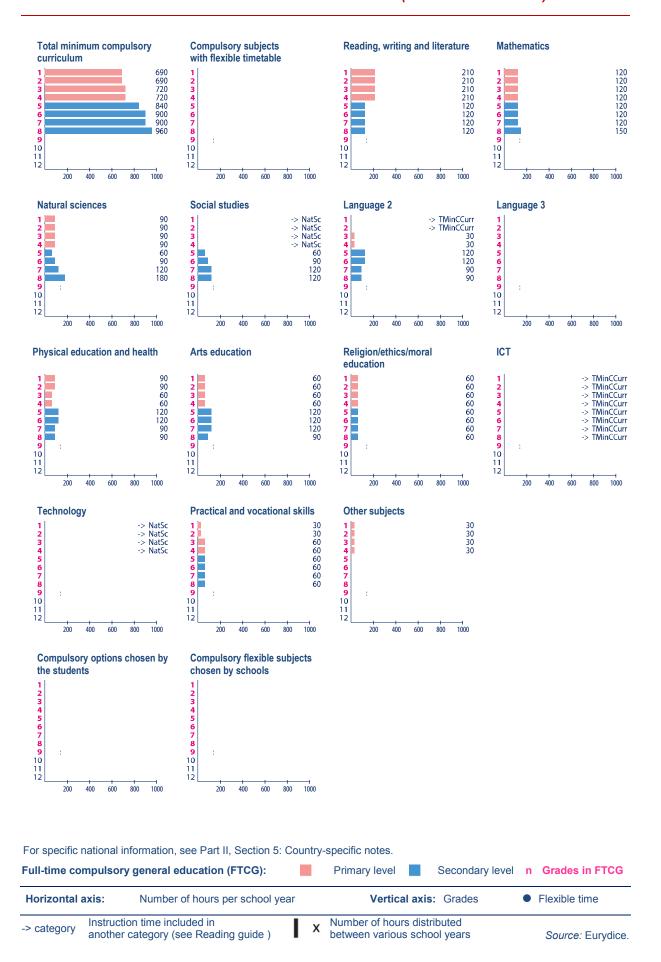
NETHERLANDS - PRIMARY AND VWO



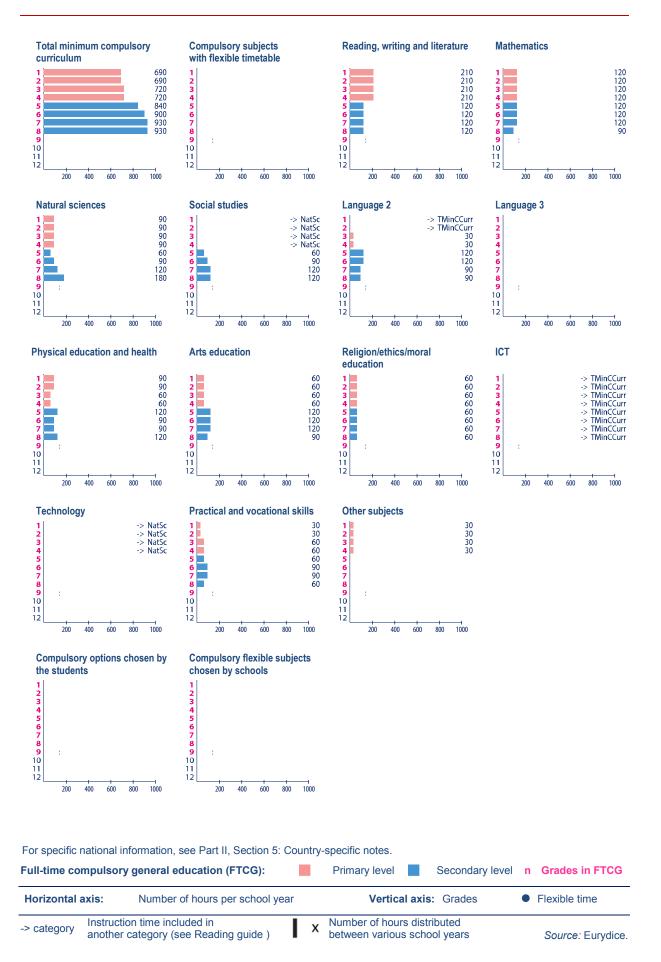
Full-time compulsory general education (FTCG): Primary level Secondary level **Grades in FTCG Horizontal axis:** Number of hours per school year Vertical axis: Grades Flexible time Instruction time included in Number of hours distributed

-> category another category (see Reading guide)

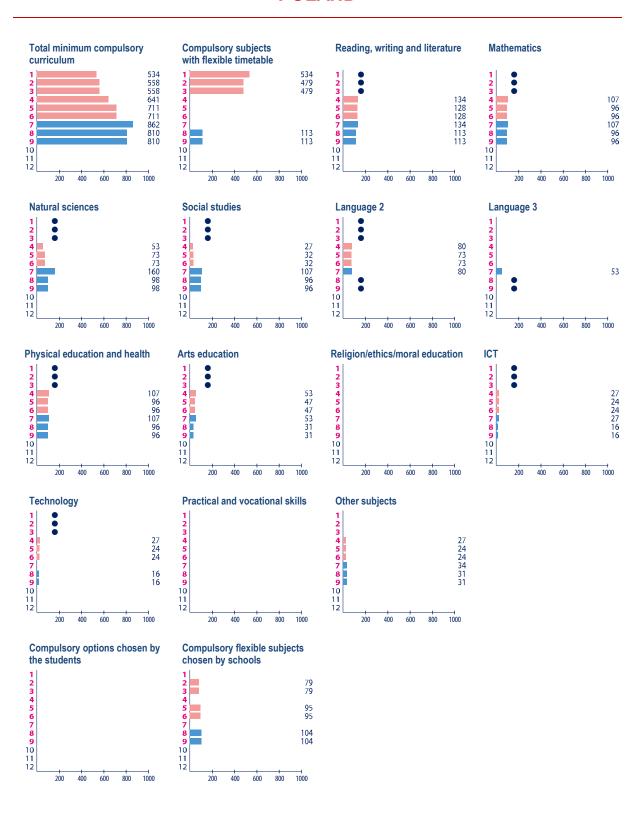
AUSTRIA - VOLKSSCHULE AND AHS (REALGYMNASIUM)



AUSTRIA - VOLKSSCHULE AND NEUE MITTELSCHULE



POLAND



For specific national information, see Part II, Section 5: Country-specific notes.

Full-time compulsory general education (FTCG):

Primary level

Secondary level

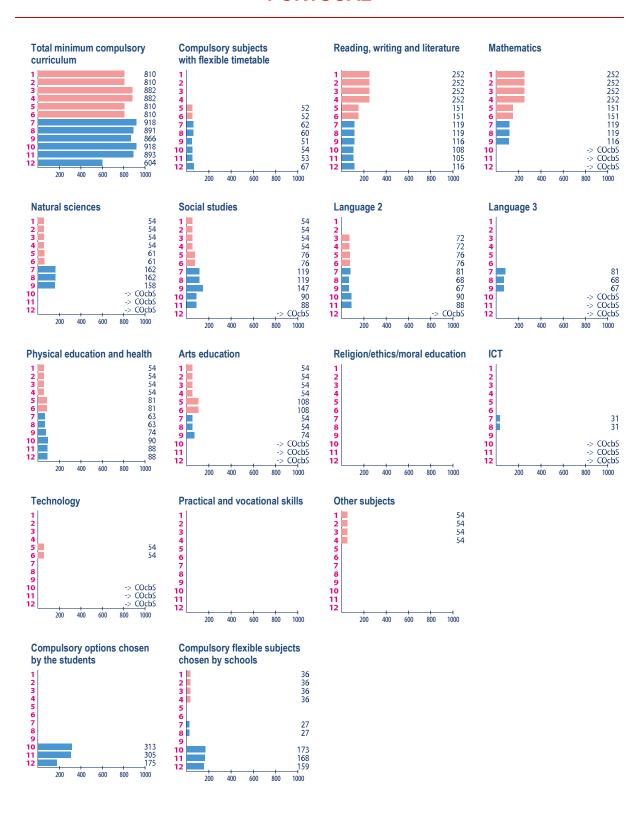
Grades in FTCG

Horizontal axis: Number of hours per school year Vertical axis: Grades ● Flexible time

-> category Instruction time included in another category (see Reading guide)

X Number of hours distributed between various school years

PORTUGAL



For specific national information, see Part II, Section 5: Country-specific notes.

Full-time compulsory general education (FTCG):

Primary level Secondary level n Grades in FTCG

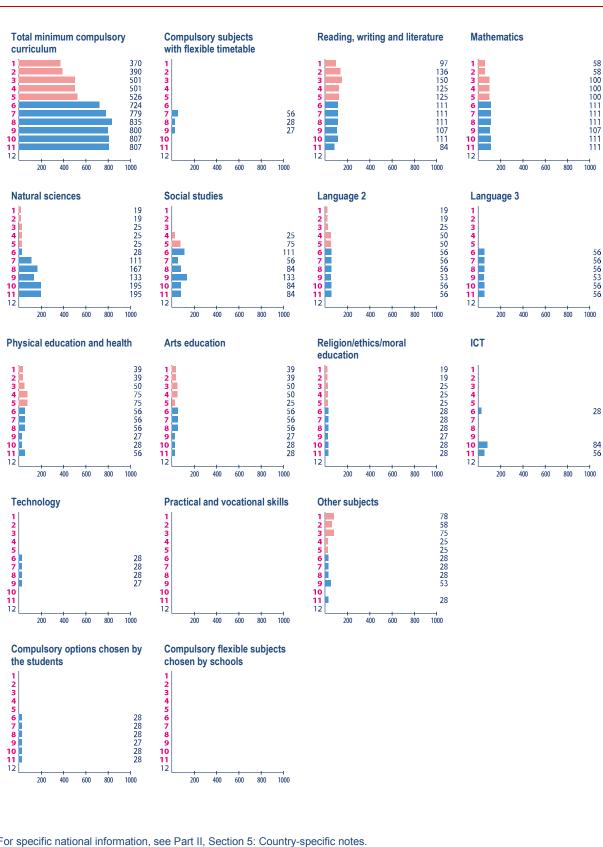
Horizontal axis: Number of hours per school year Vertical axis: Grades Flexible time

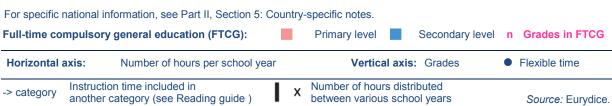
-> category Instruction time included in another category (see Reading guide)

X Number of hours distributed between various school years

Source: Eurydice.

ROMANIA

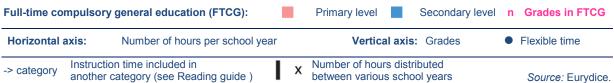




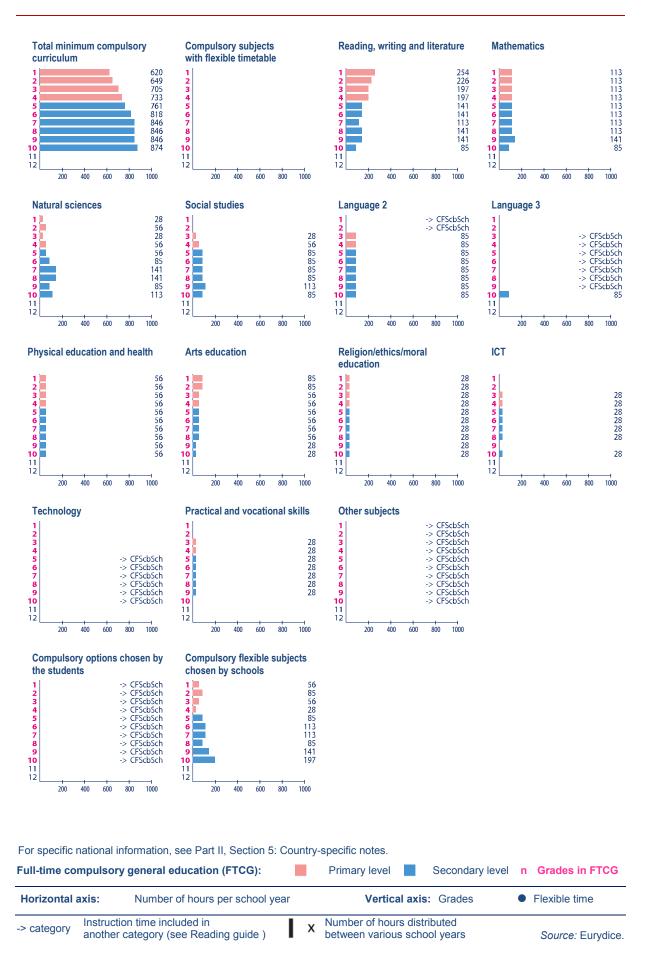
SLOVENIA



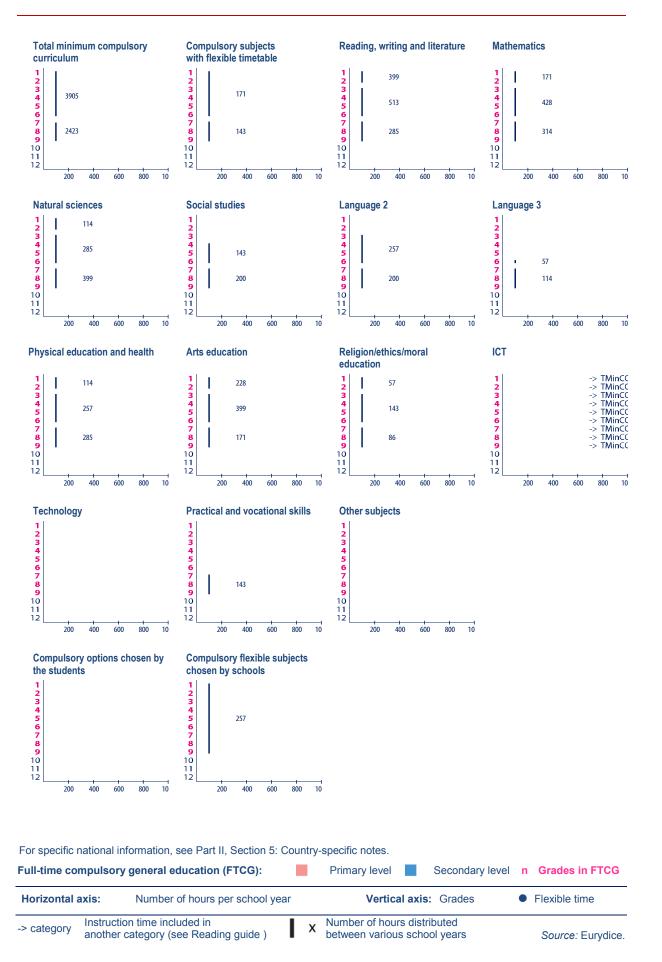




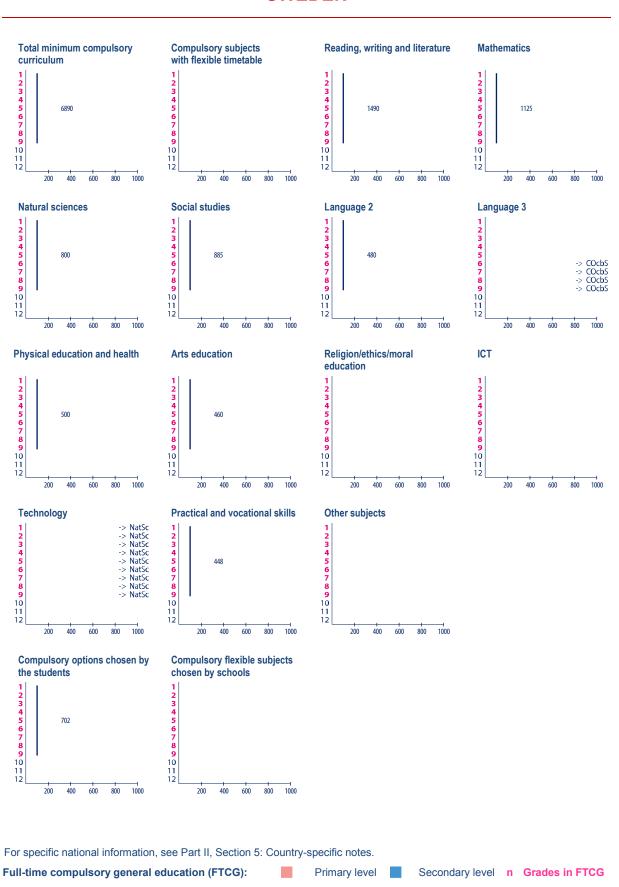
SLOVAKIA



FINLAND



SWEDEN



66

Vertical axis: Grades

Number of hours distributed

between various school years

Flexible time

Source: Eurydice.

Number of hours per school year

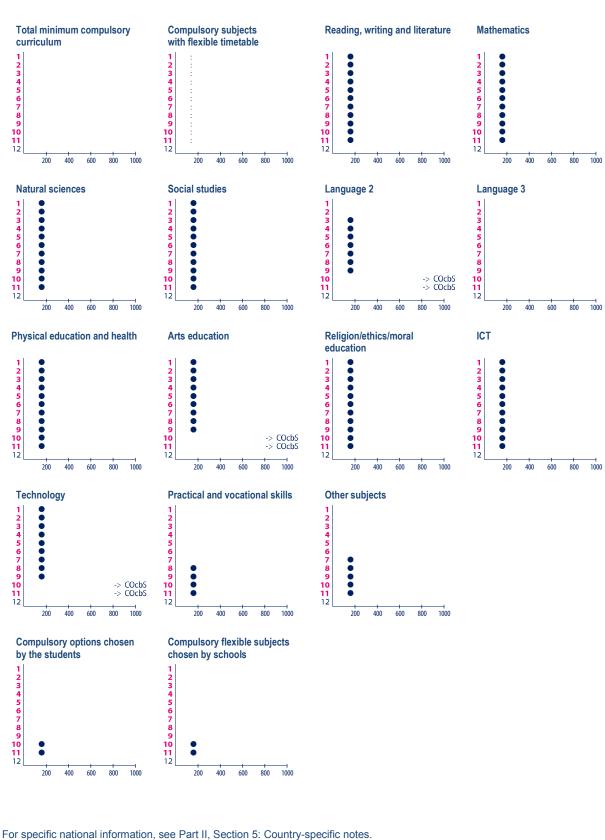
Instruction time included in

another category (see Reading guide)

Horizontal axis:

-> category

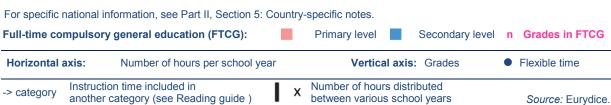
UNITED KINGDOM - ENGLAND



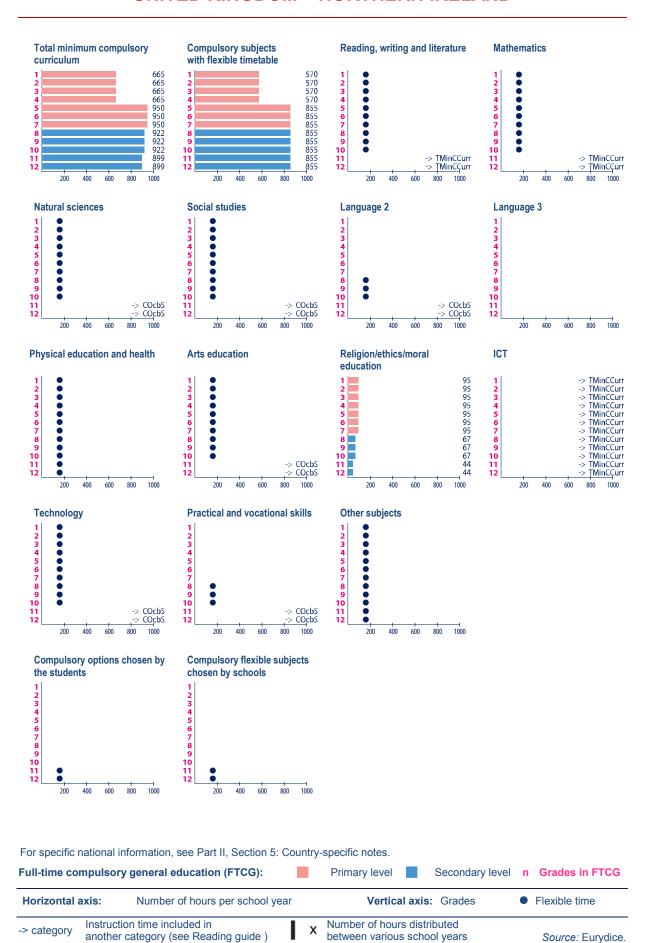
Full-time compulsory general education (FTCG): Primary level Secondary level **Grades in FTCG Horizontal axis:** Number of hours per school year Vertical axis: Grades Flexible time Instruction time included in Number of hours distributed -> category between various school years another category (see Reading guide) Source: Eurydice.

UNITED KINGDOM - WALES

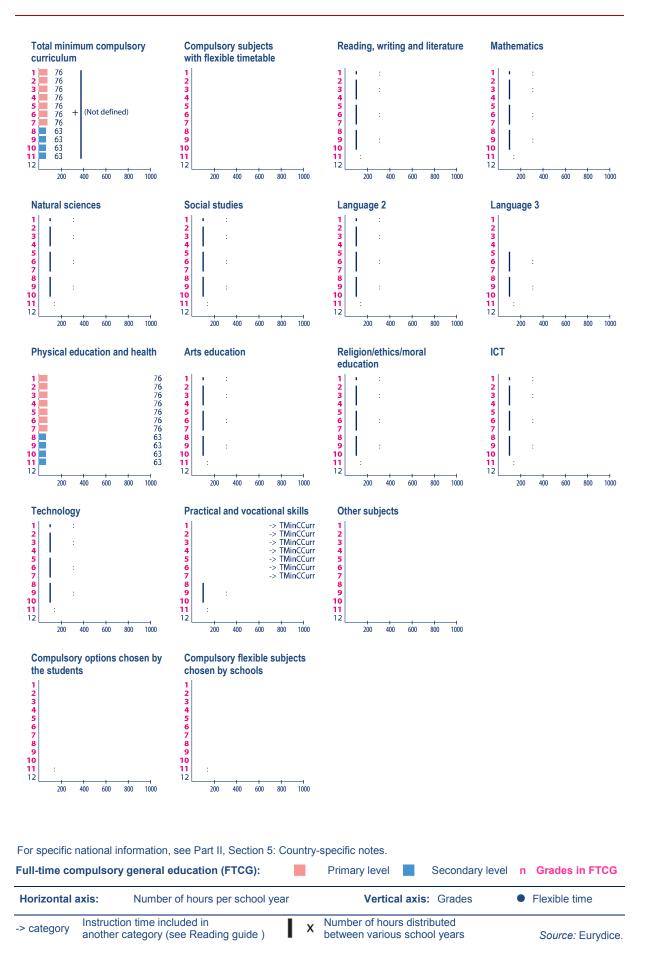




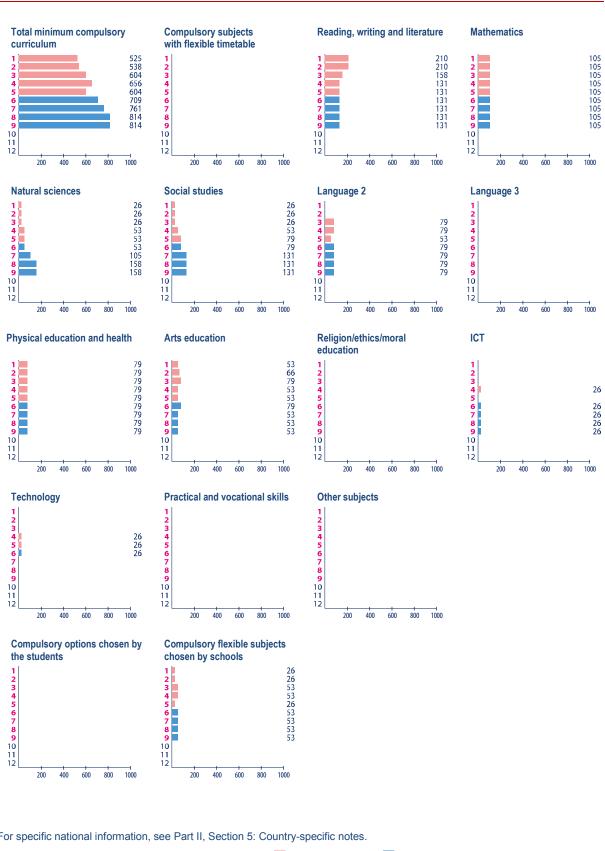
UNITED KINGDOM - NORTHERN IRELAND

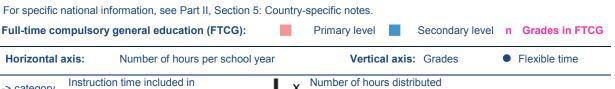


UNITED KINGDOM - SCOTLAND



ALBANIA



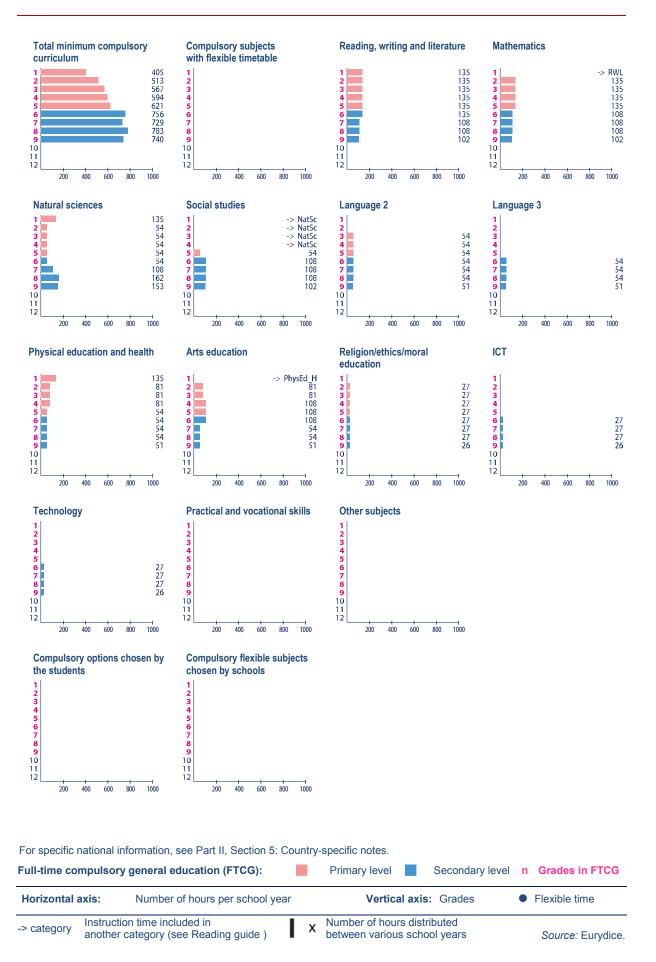


-> category another category (see Reading guide)

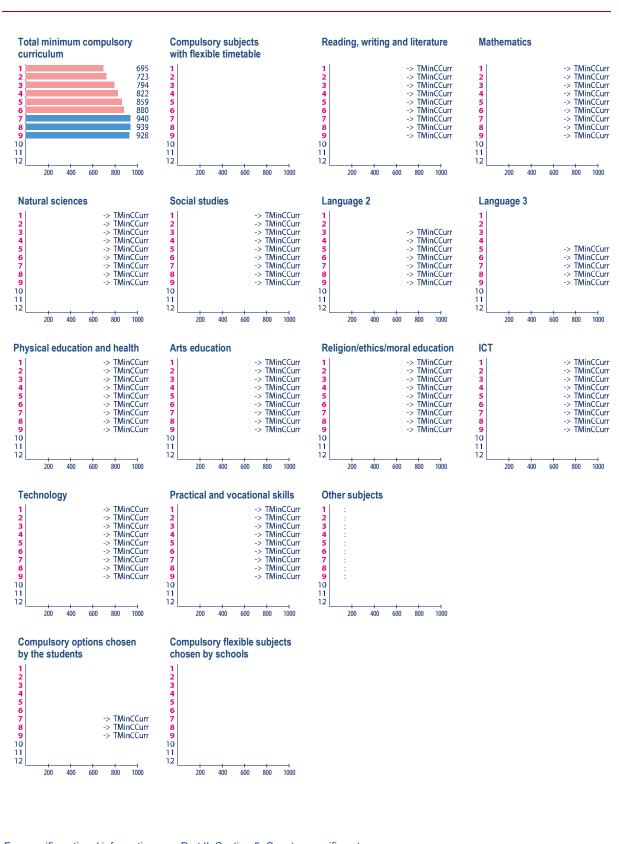
between various school years

Source: Eurydice.

BOSNIA AND HERZEGOVINA



SWITZERLAND



For specific national information, see Part II, Section 5: Country-specific notes.

Full-time compulsory general education (FTCG):

Primary level Secondary level n Grades in FTCG

Horizontal axis: Number of hours per school year

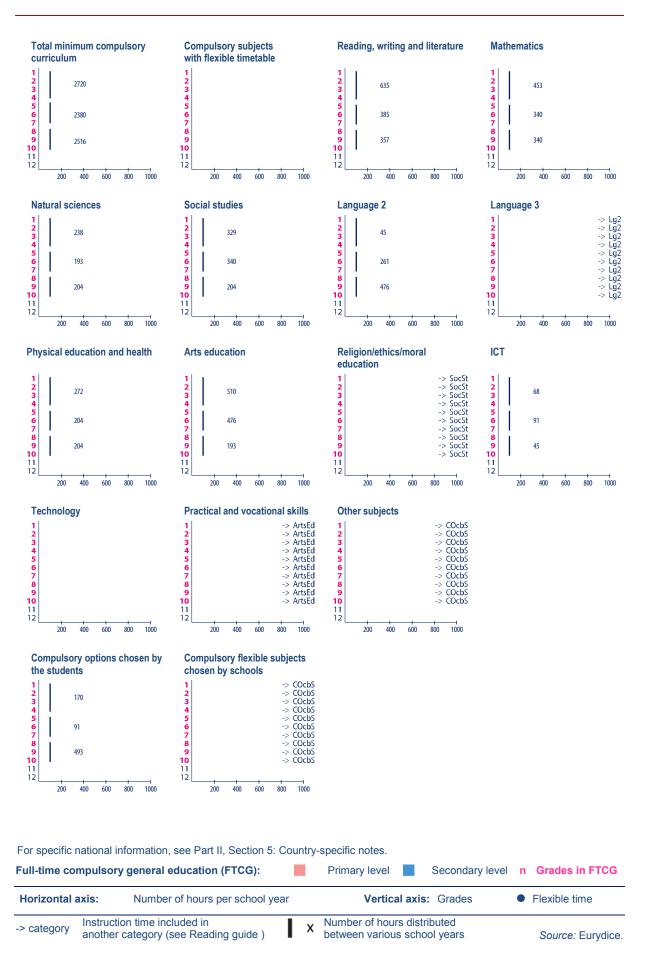
Vertical axis: Grades Flexible time

-> category Instruction time included in another category (see Reading guide)

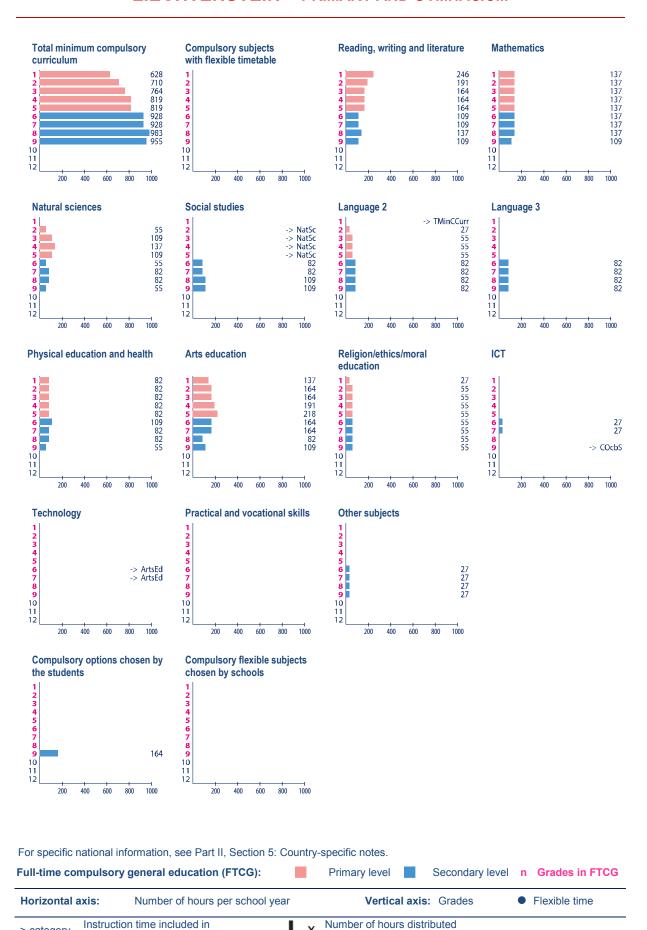
X Number of hours distributed between various school years

Source: Eurydice.

ICELAND



LIECHTENSTEIN - PRIMARY AND GYMNASIUM



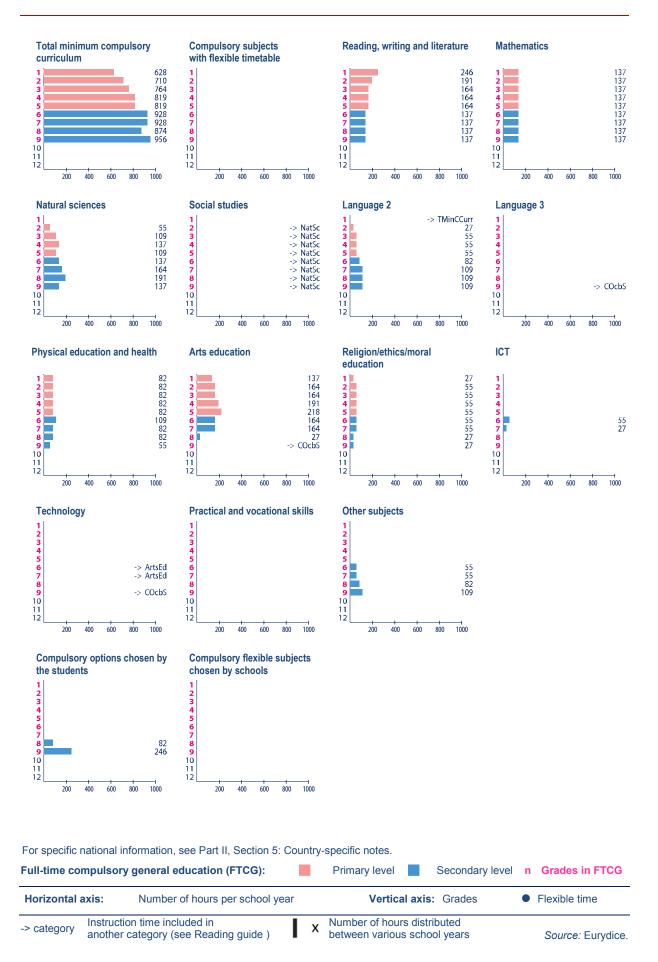
between various school years

Source: Eurydice.

-> category

another category (see Reading guide)

LIECHTENSTEIN - PRIMARY AND OBERSCHULE

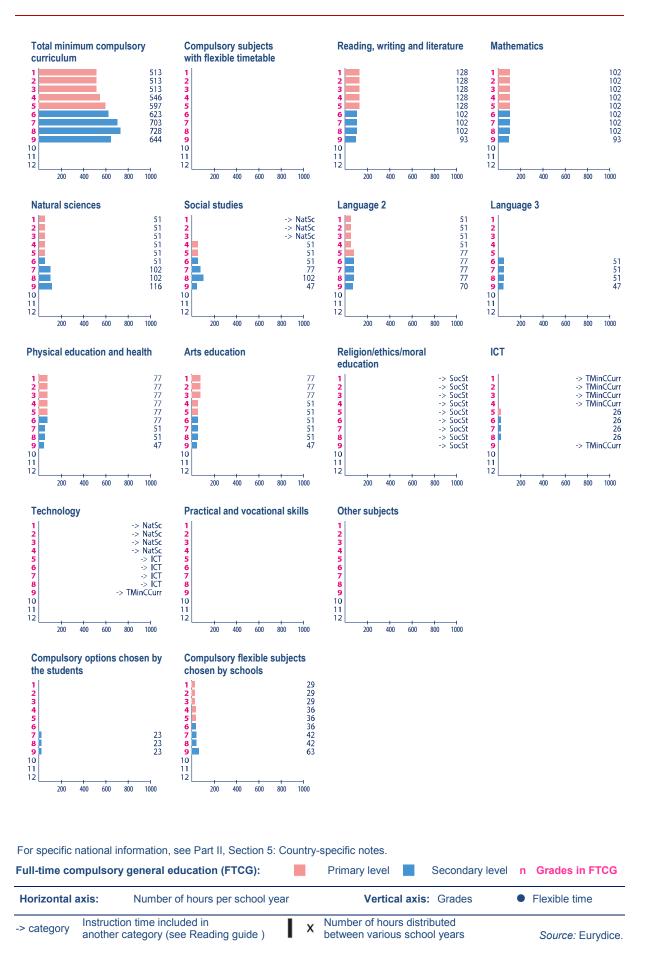


LIECHTENSTEIN - PRIMARY AND REALSCHULE

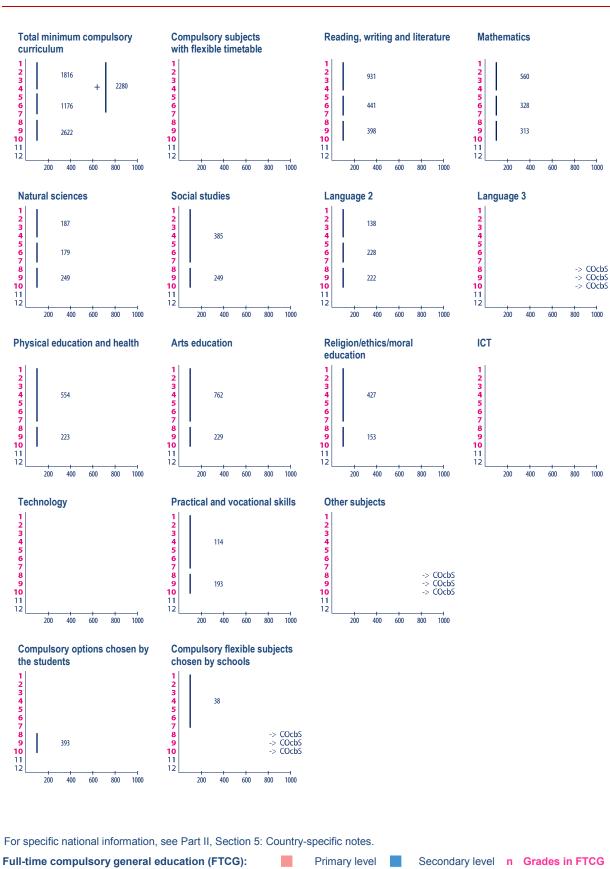


Full-time compulsory general education (FTCG): Primary level Secondary level **Grades in FTCG Horizontal axis:** Number of hours per school year Vertical axis: Grades Flexible time Instruction time included in Number of hours distributed -> category between various school years another category (see Reading guide) Source: Eurydice.

MONTENEGRO



NORWAY

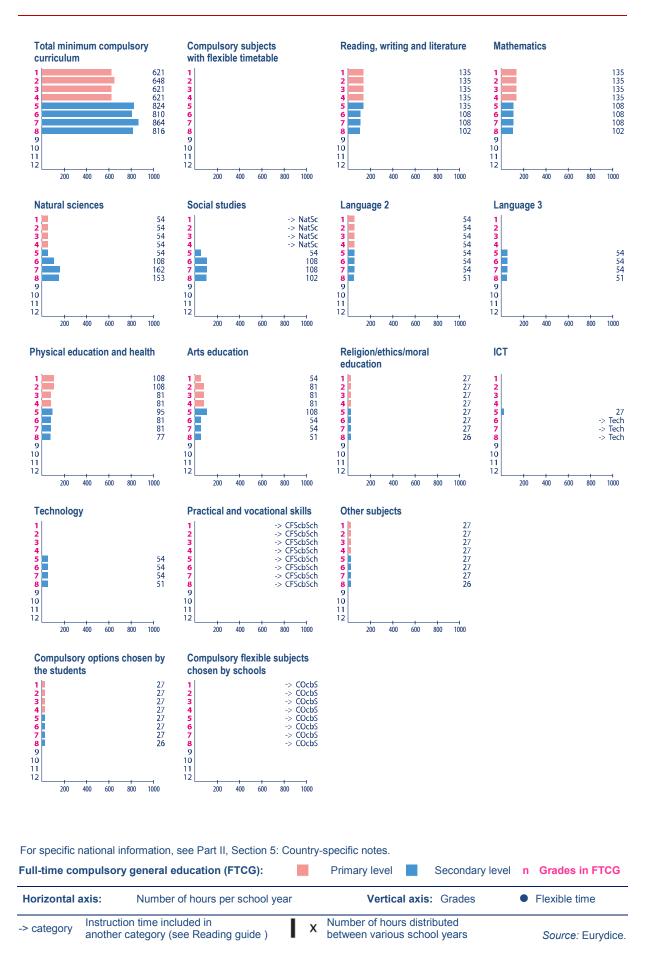


Horizontal axis: Number of hours per school year Vertical axis: Grades Flexible time Instruction time included in Number of hours distributed

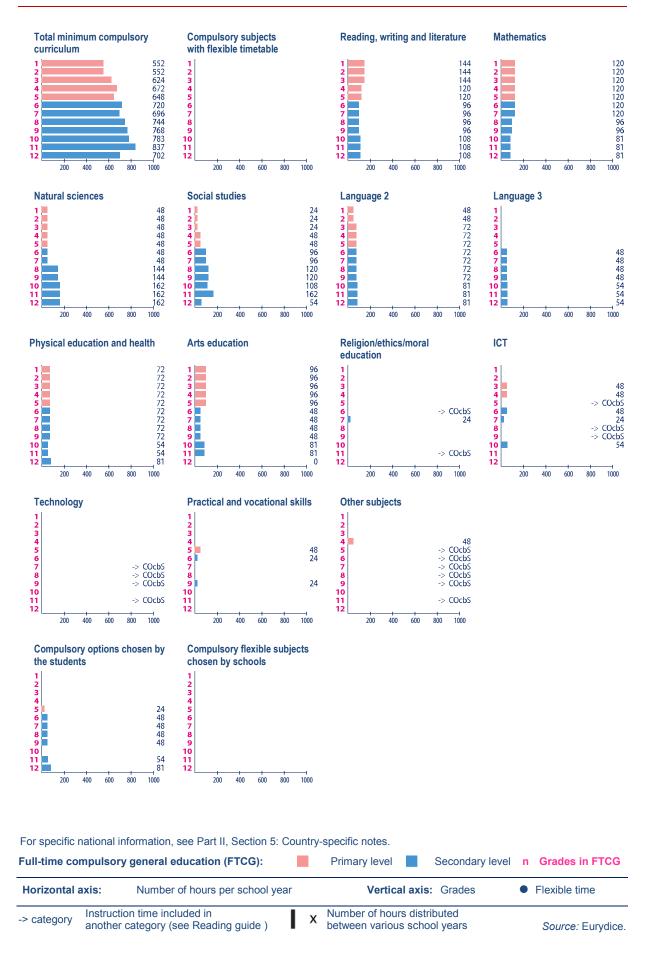
-> category another category (see Reading guide) between various school years

Source: Eurydice.

SERBIA

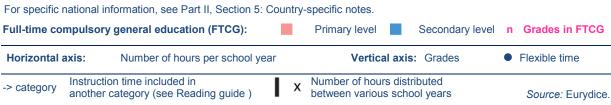


THE FORMER YUGOSLAV REPUBLIC OF MACEDONIA



TURKEY





Section 3. Instruction time by subject

Total minimum compulsory curriculum	84
Compulsory subjects with flexible timetable	86
Reading, writing and literature	88
Mathematics	90
Social studies	94
Language 2	96
Language 3	98
Physical education and health	100
Arts education	102
Religion/ethics/moral education	104
ICT	106
Technology108	
Practical and vocational skills	110
Other subjects	112
Compulsory options chosen by the students	114
Compulsory flexible subjects chosen by schools	116
Language 4 (compulsory curriculum)	118
Language 5 (compulsory curriculum)	119
Non-compulsory curriculum	119

For specific national information, see Part II, Section 5: Country-specific notes.

Full-time compulsory general education (FTCG):

Primary level

Secondary level

n Grades in FTCG

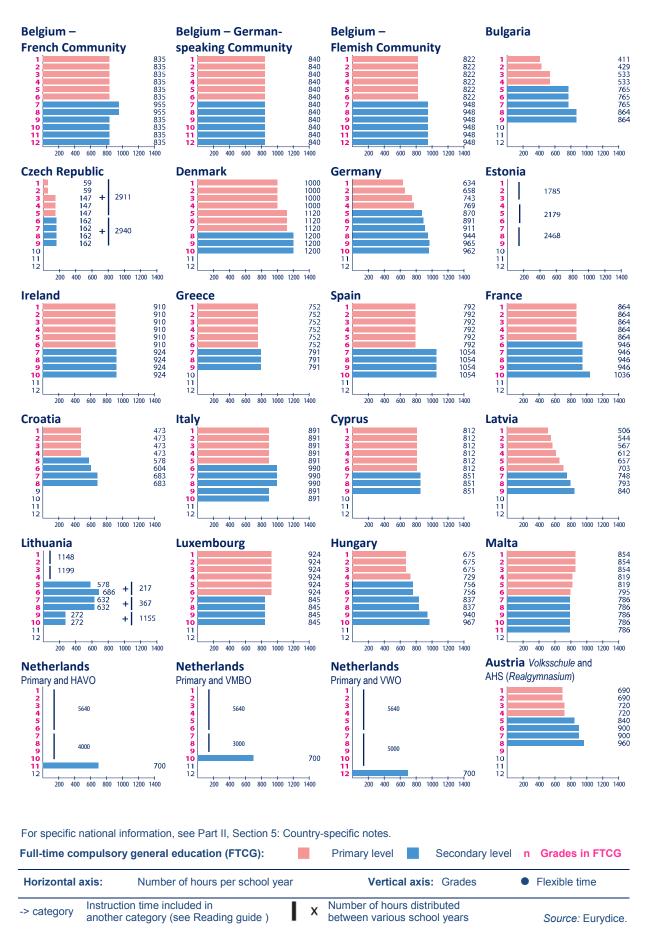
Horizontal axis: Number of hours per school year

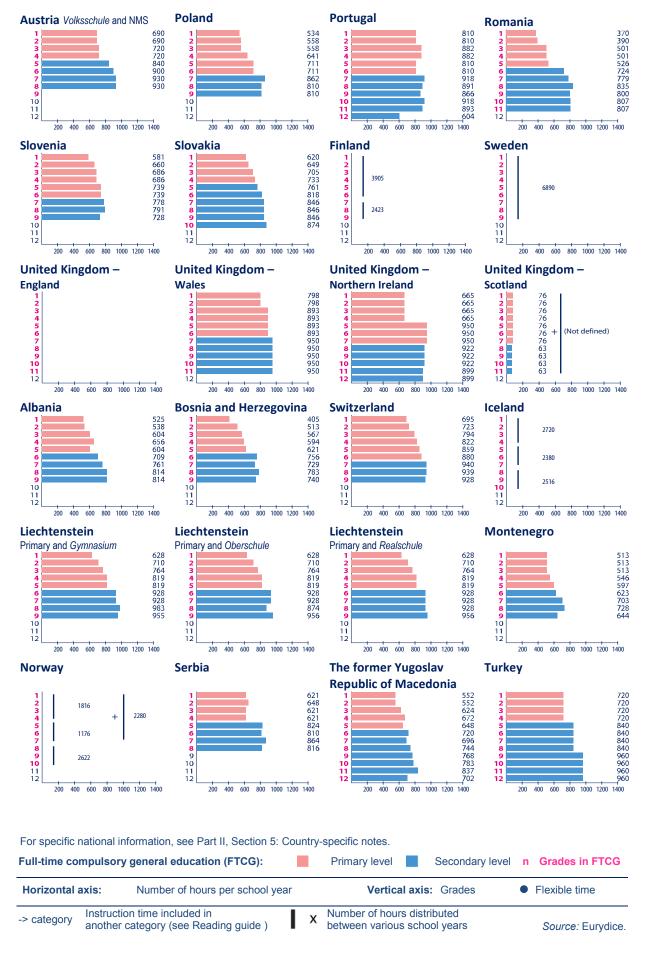
Vertical axis: Grades

• Flexible time

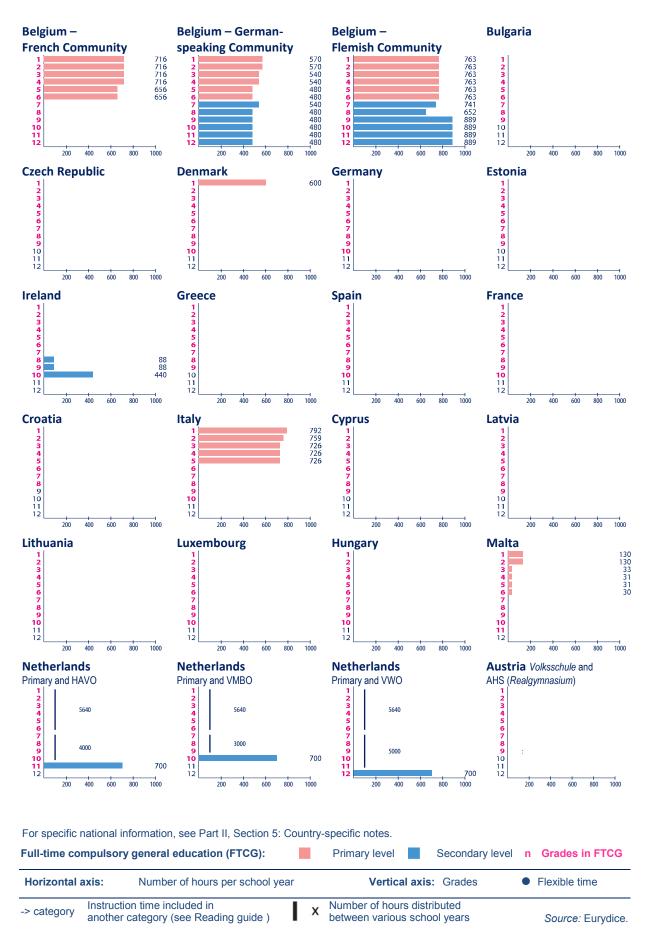
-> category Instruction time included in another category (see Reading guide)

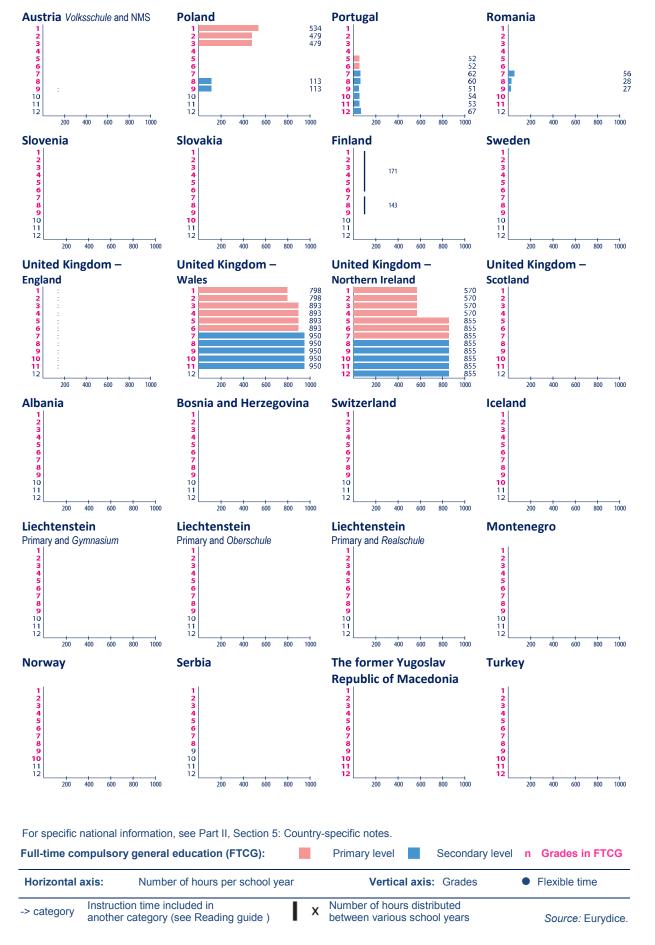
TOTAL MINIMUM COMPULSORY CURRICULUM





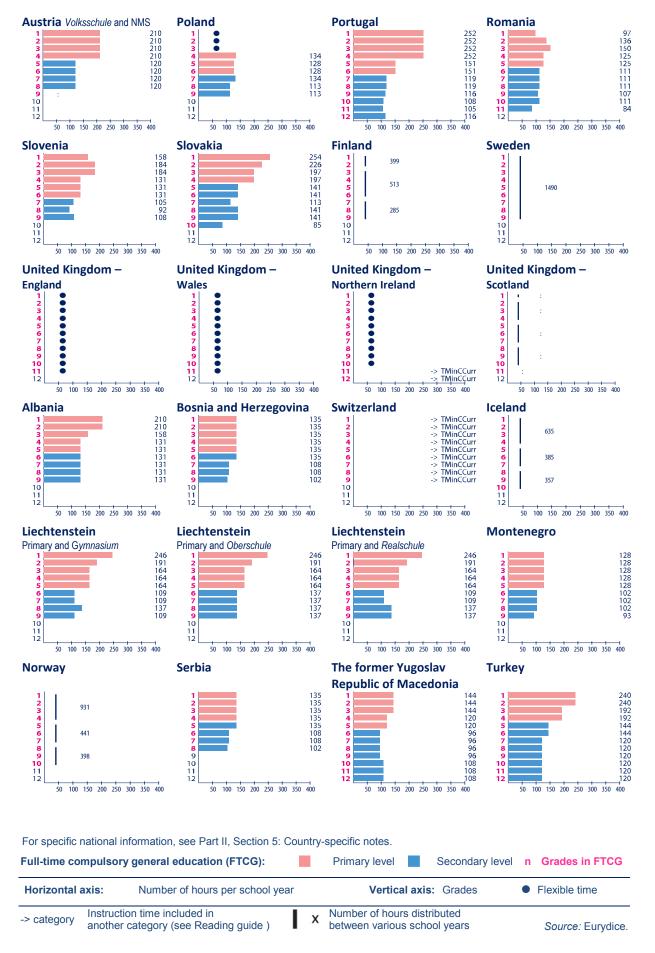
COMPULSORY SUBJECTS WITH FLEXIBLE TIMETABLE



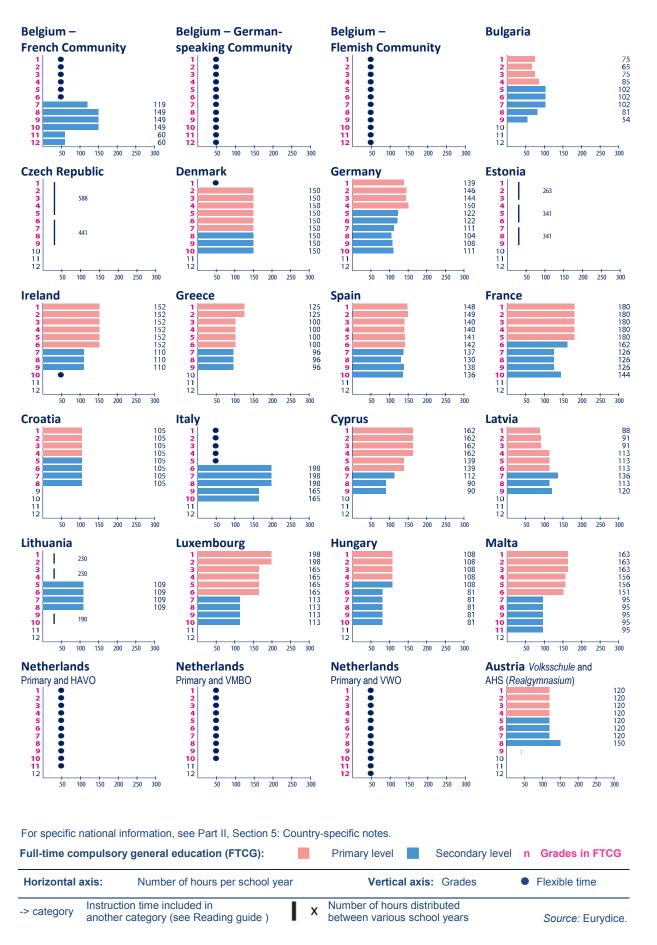


READING, WRITING AND LITERATURE





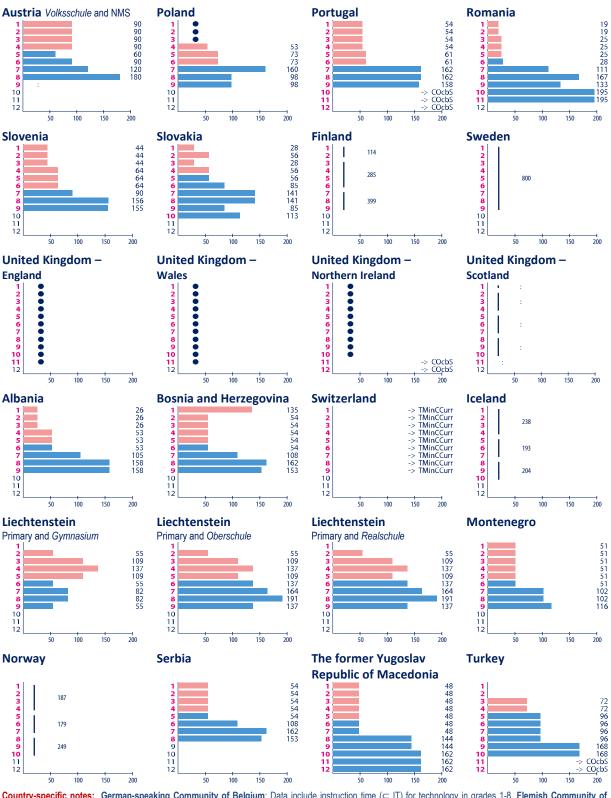
MATHEMATICS



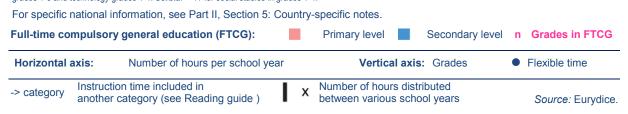


NATURAL SCIENCES



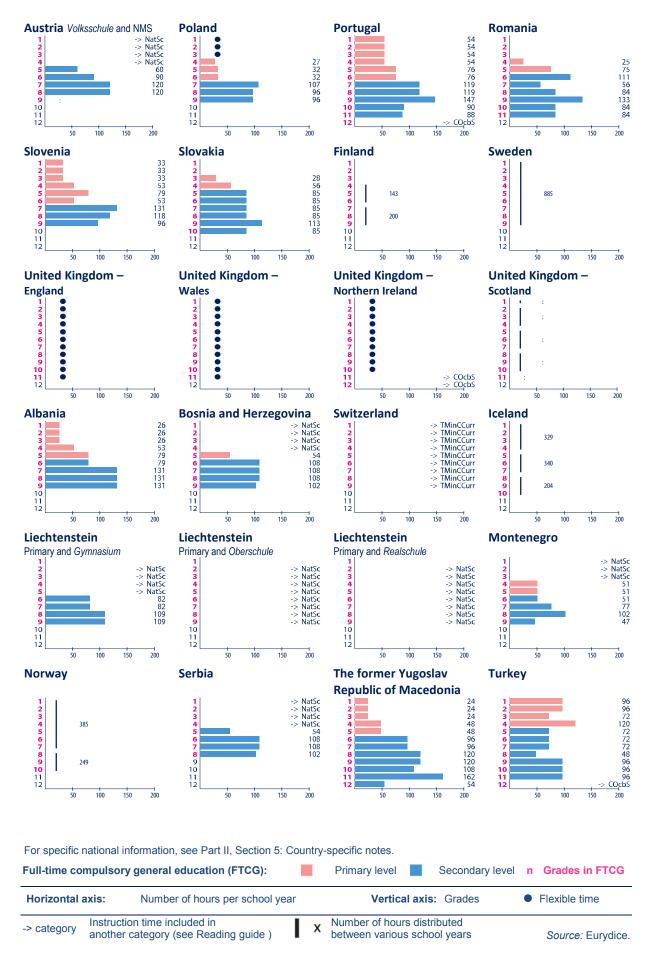


Country-specific notes: German-speaking Community of Belgium: Data include instruction time (⊂ IT) for technology in grades 1-8. Flemish Community of Belgium: □ IT for technology in grades 1-6. Czech Republic: □ IT for social studies in grades 1-5. Ireland: □ IT for technology in grades 1-6. France: □ IT for social studies and ICT in grades 1-3 and for technology in grades 1-6. Croatia: □ IT for social studies in grades 1-4. Cyprus: □ IT for technology in grades 1-4. Malta: □ IT for technology in grades 1-6. Austria: □ IT for social studies and technology in grades 1-4. Sweden: □ IT for technology in grades 1-9. Bosnia and Herzegovina: □ IT for social studies in grades 1-4. Liechtenstein: □ IT for social studies (primary education Oberschule and Realschule). Montenegro: □ IT for social studies in grades 1-3 and technology grades 1-4. Serbia: □ IT for social studies in grades 1-4.

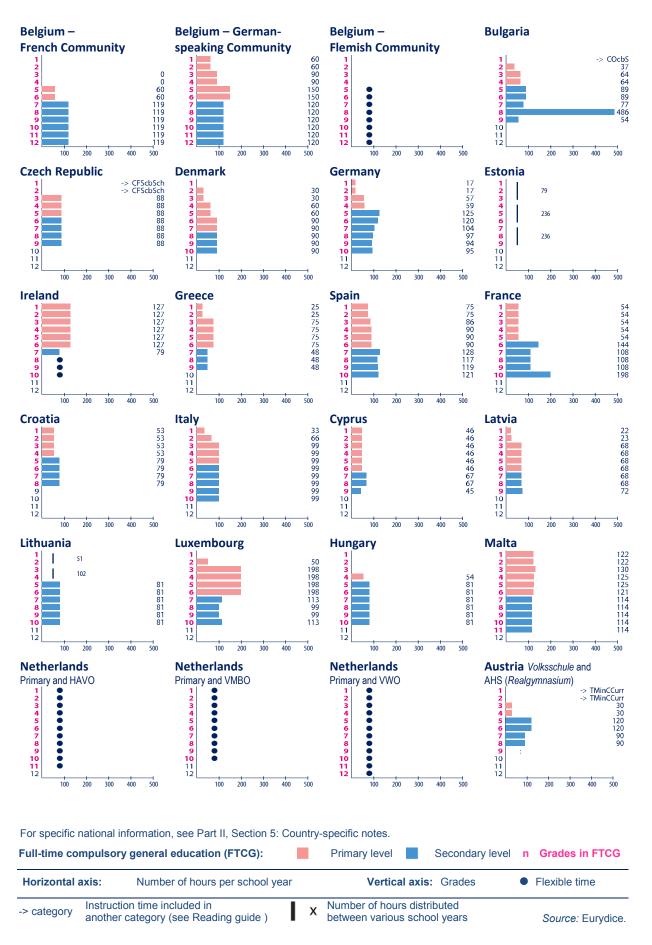


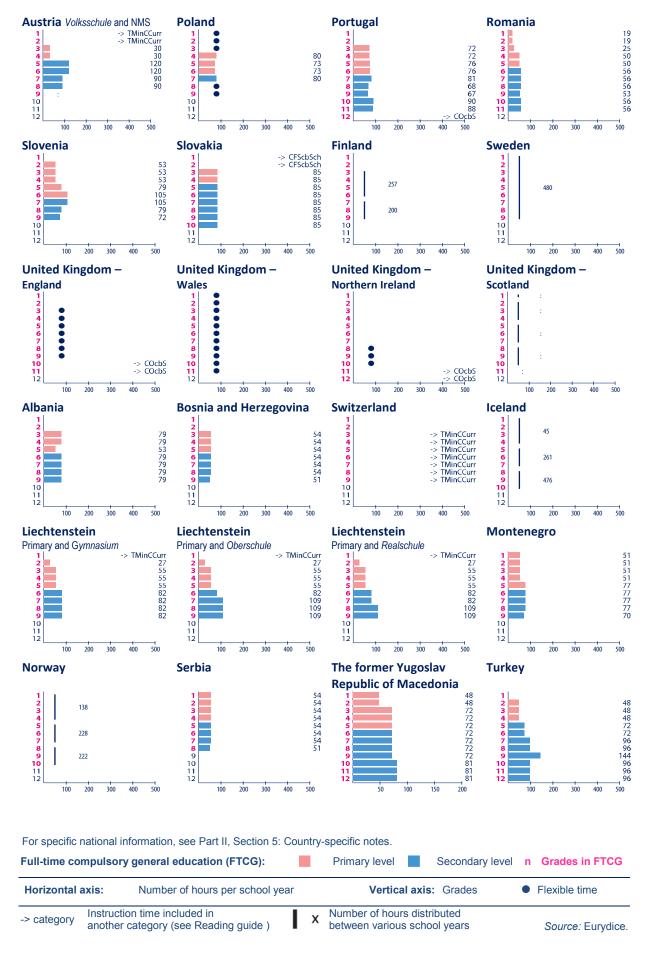
SOCIAL STUDIES



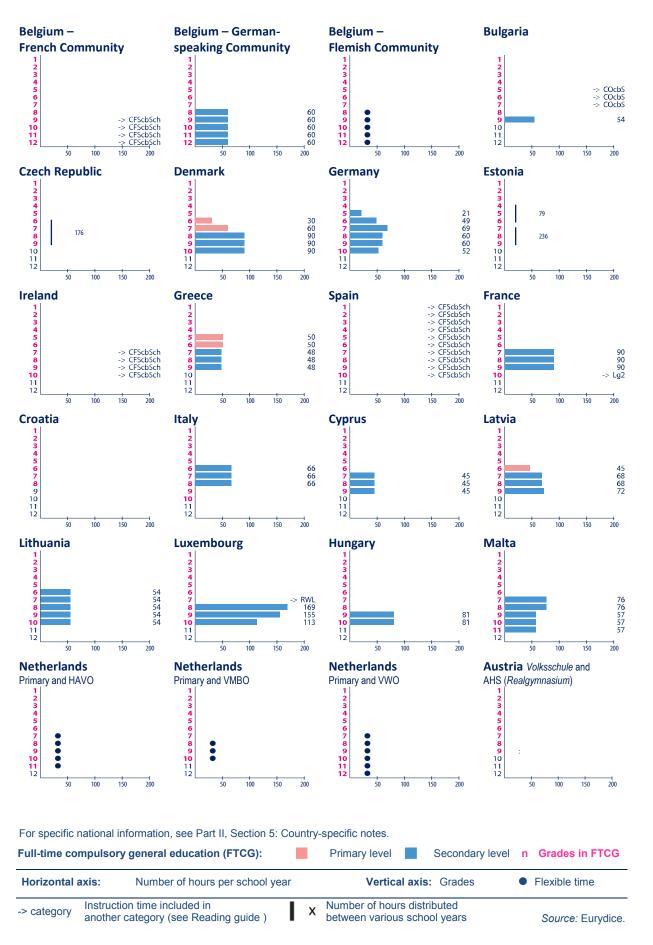


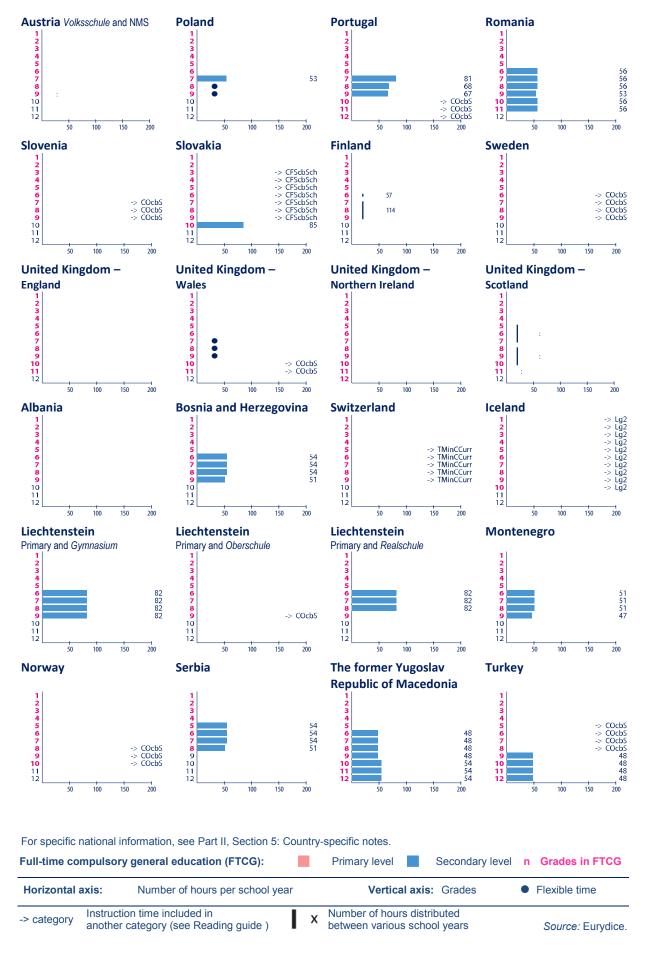
LANGUAGE 2



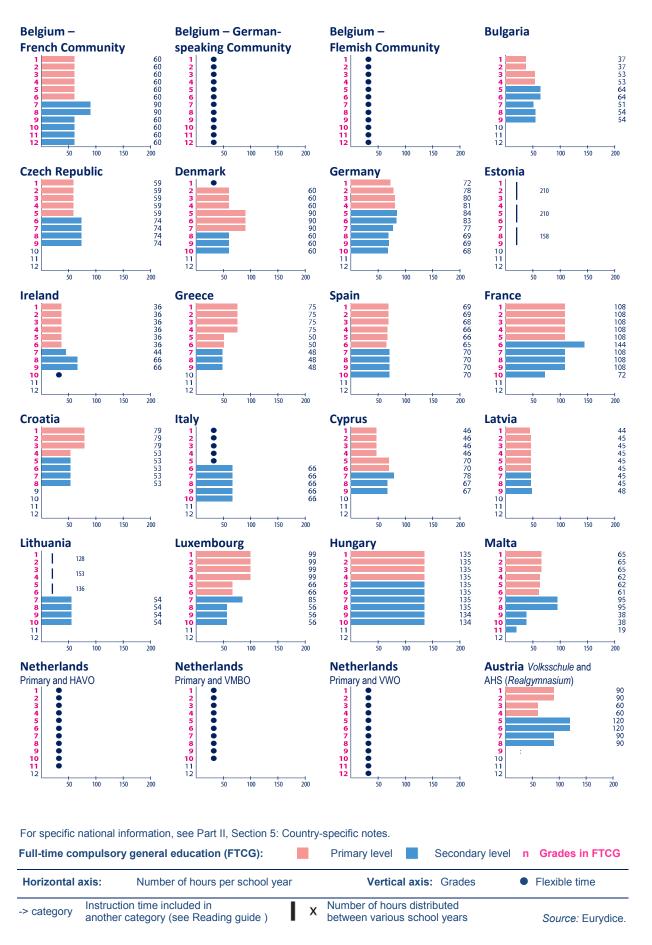


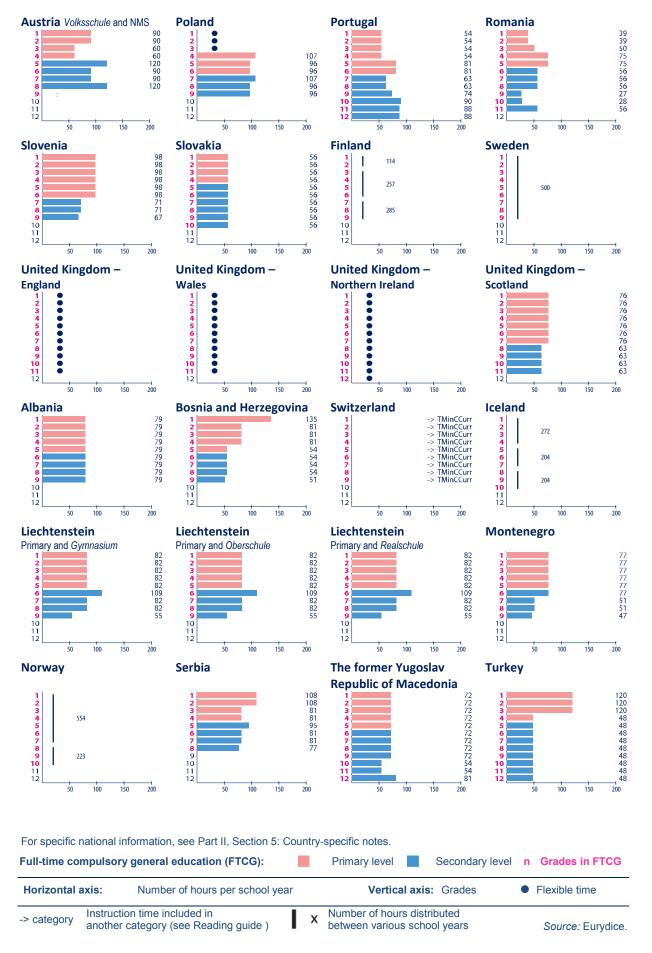
LANGUAGE 3



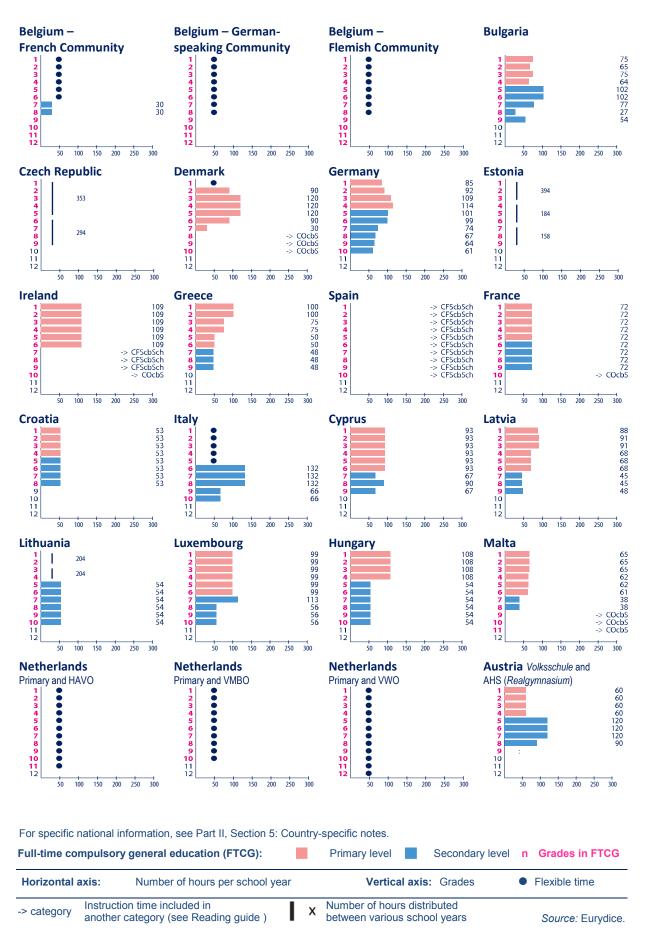


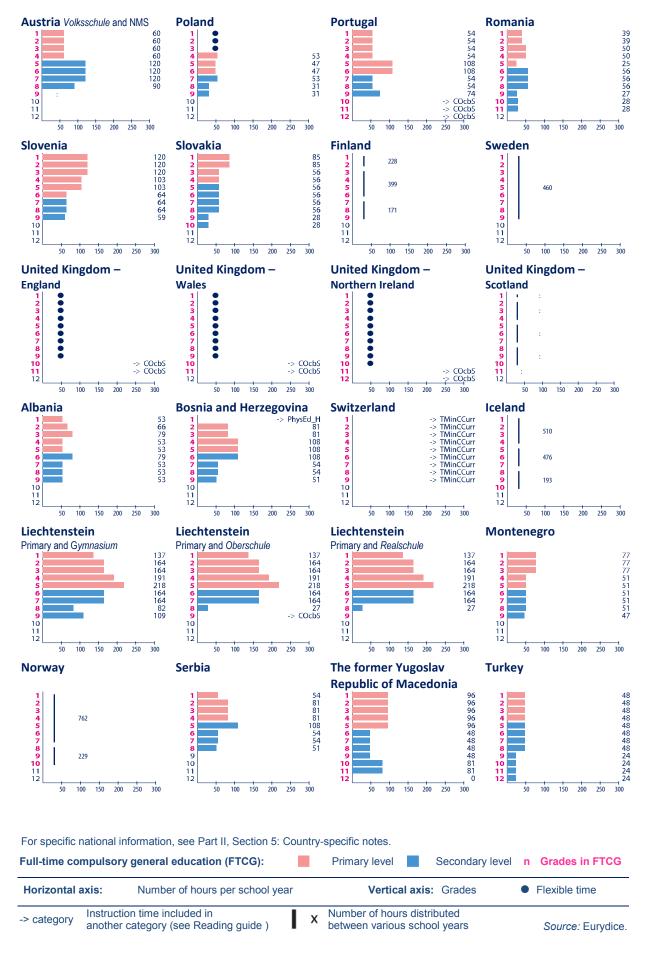
PHYSICAL EDUCATION AND HEALTH



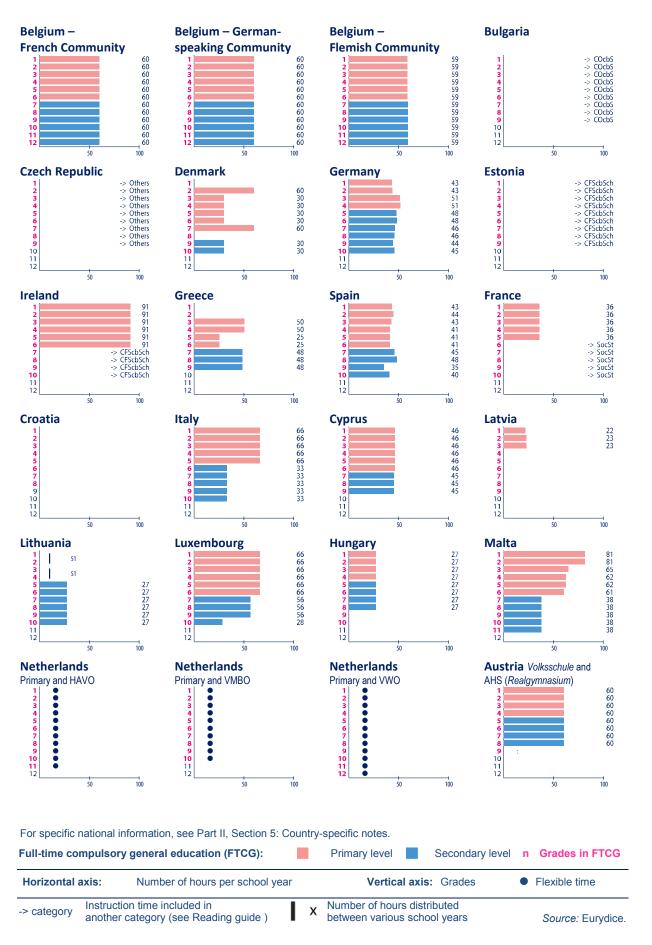


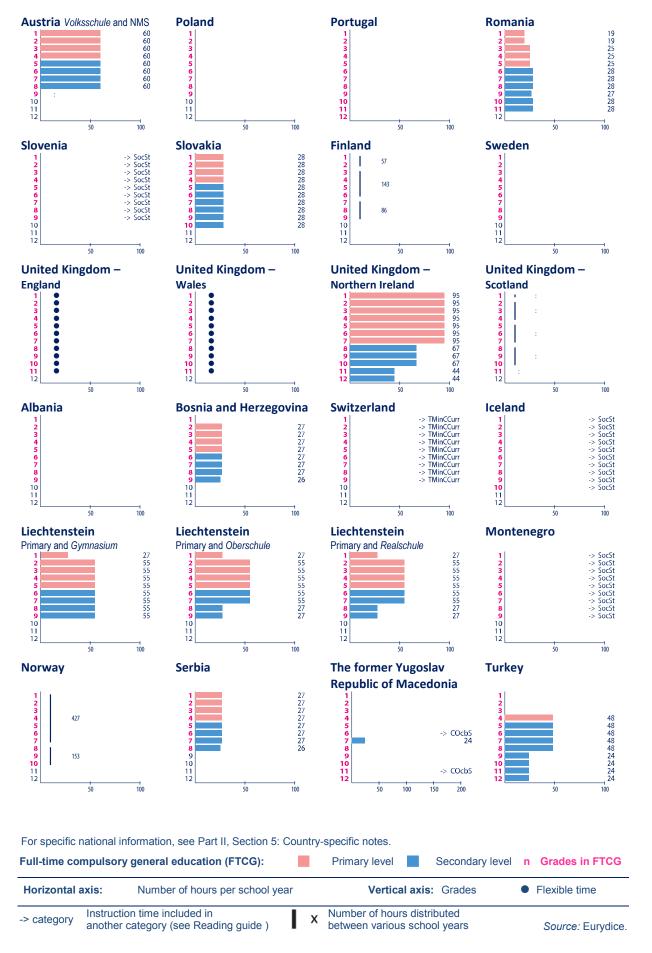
ARTS EDUCATION



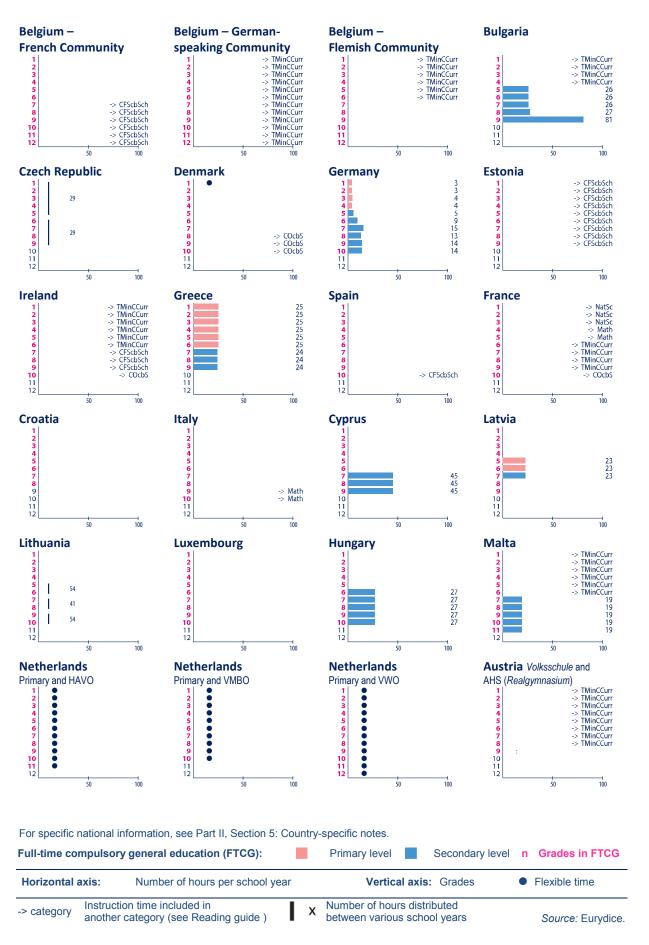


RELIGION/ETHICS/MORAL EDUCATION



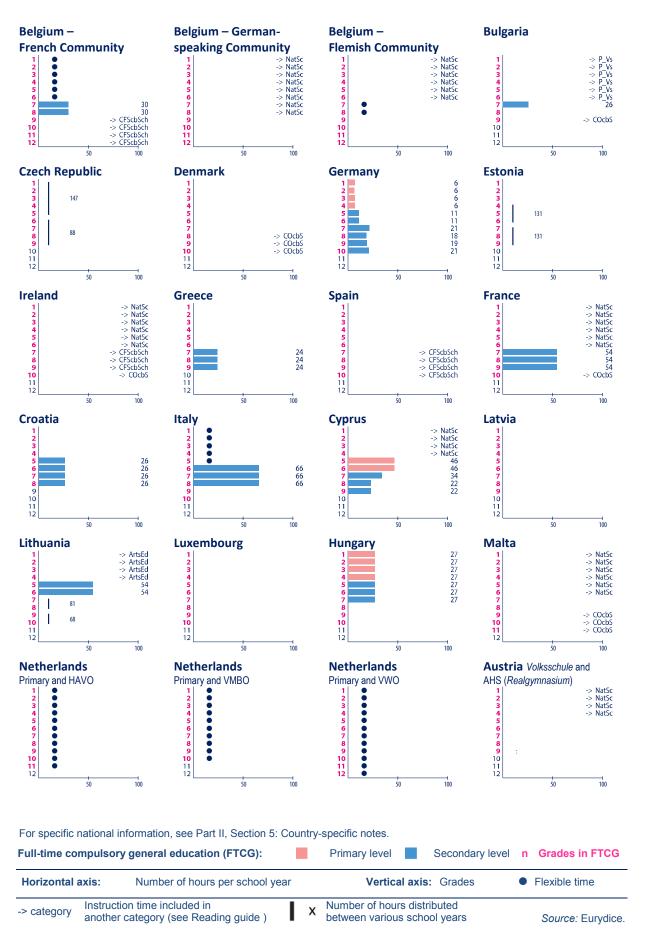


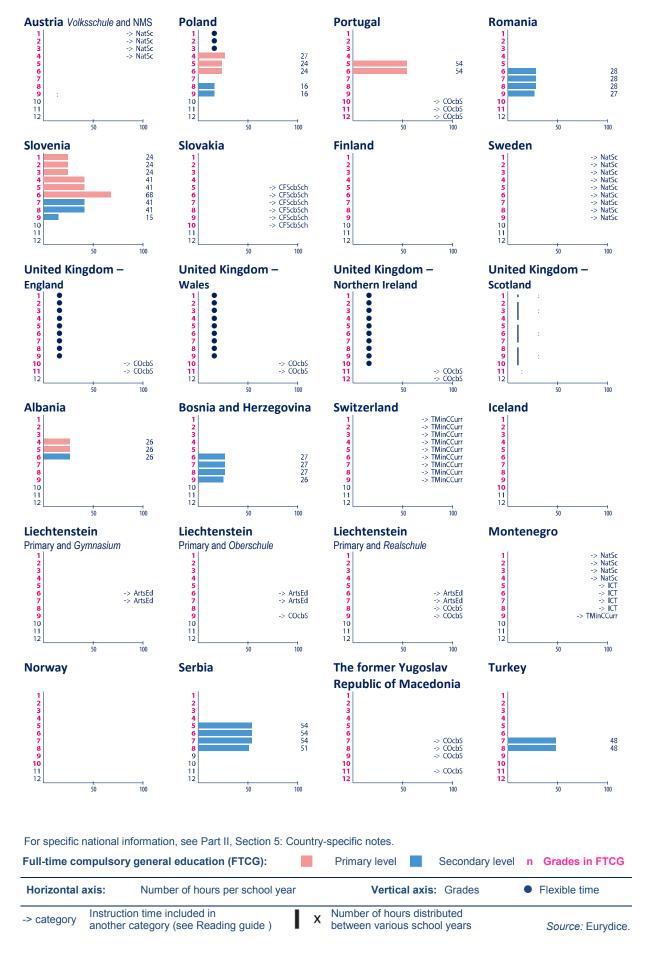
ICT



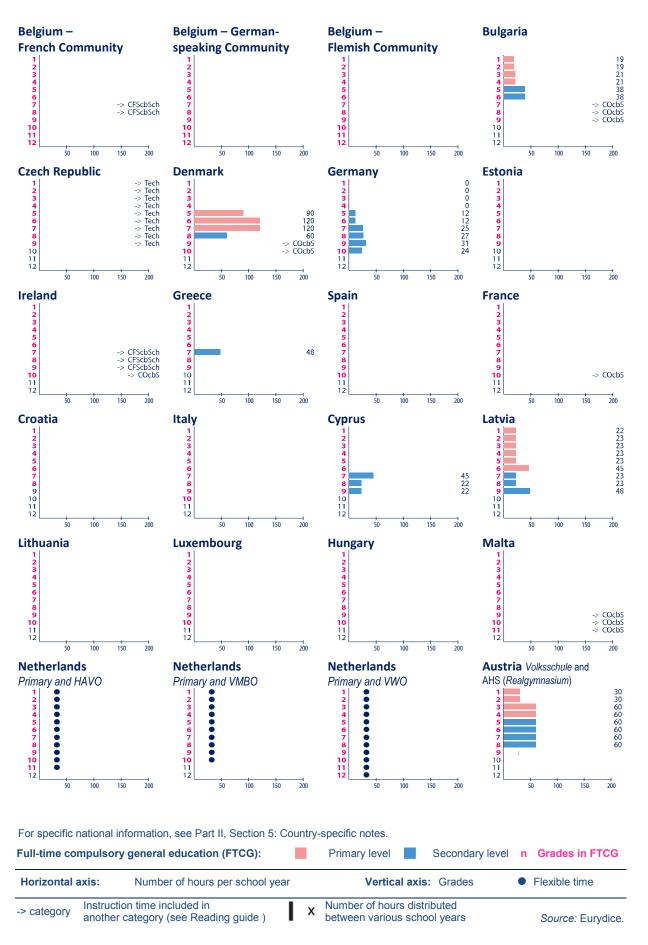


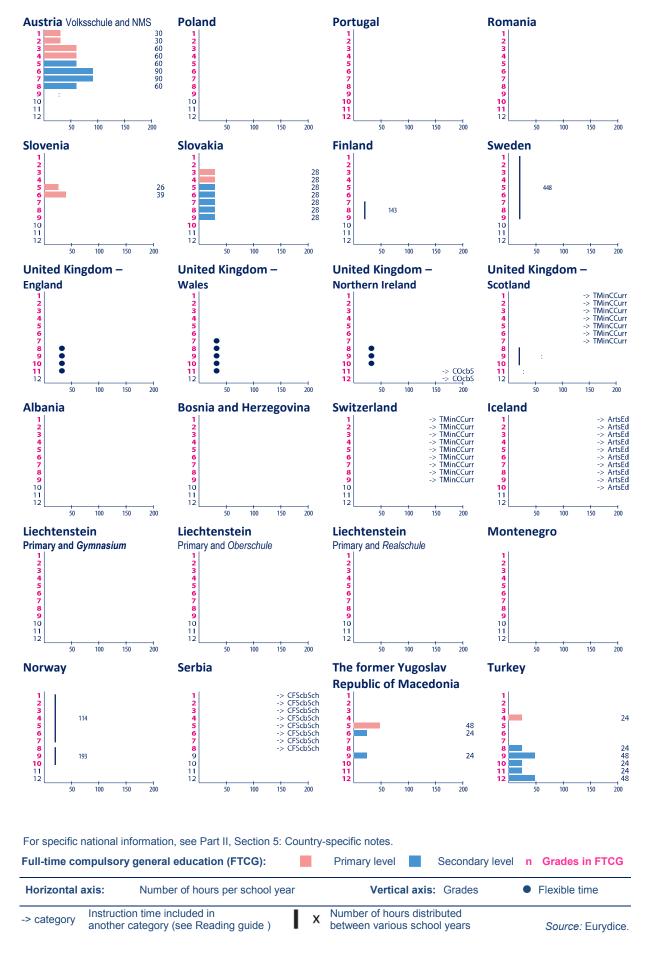
TECHNOLOGY



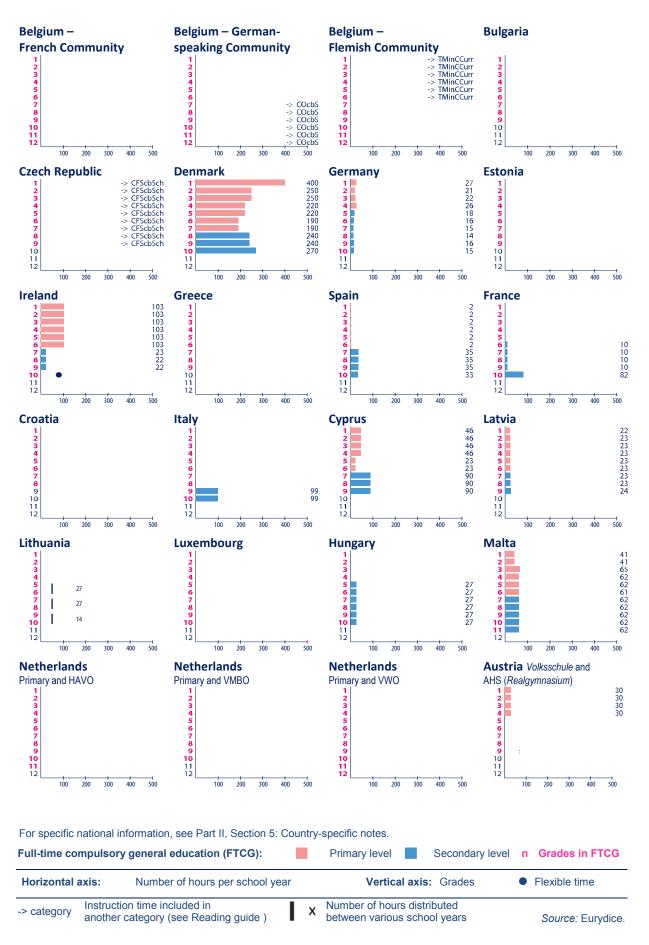


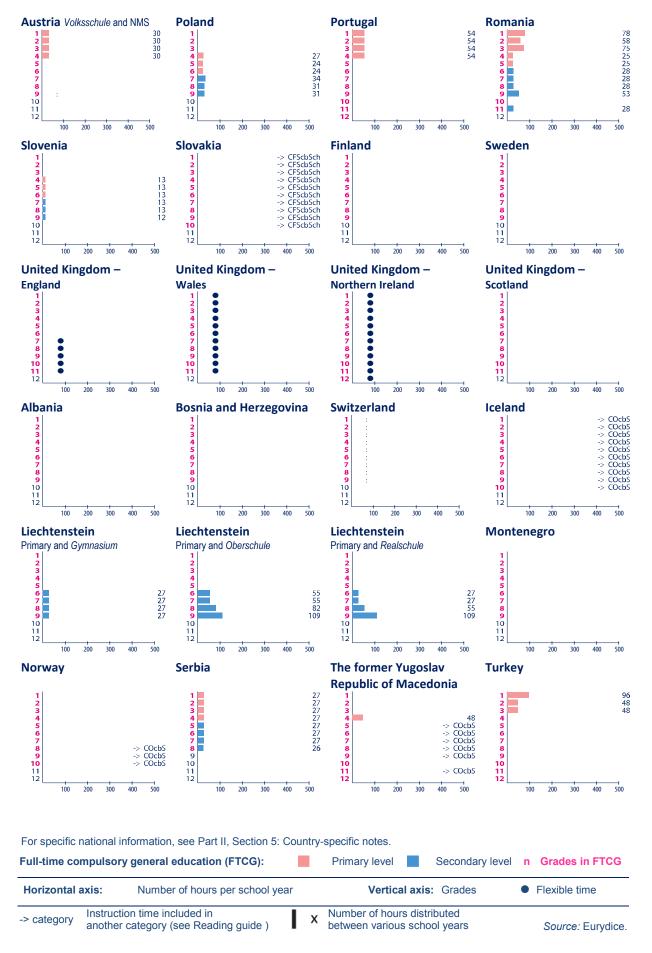
PRACTICAL AND VOCATIONAL SKILLS



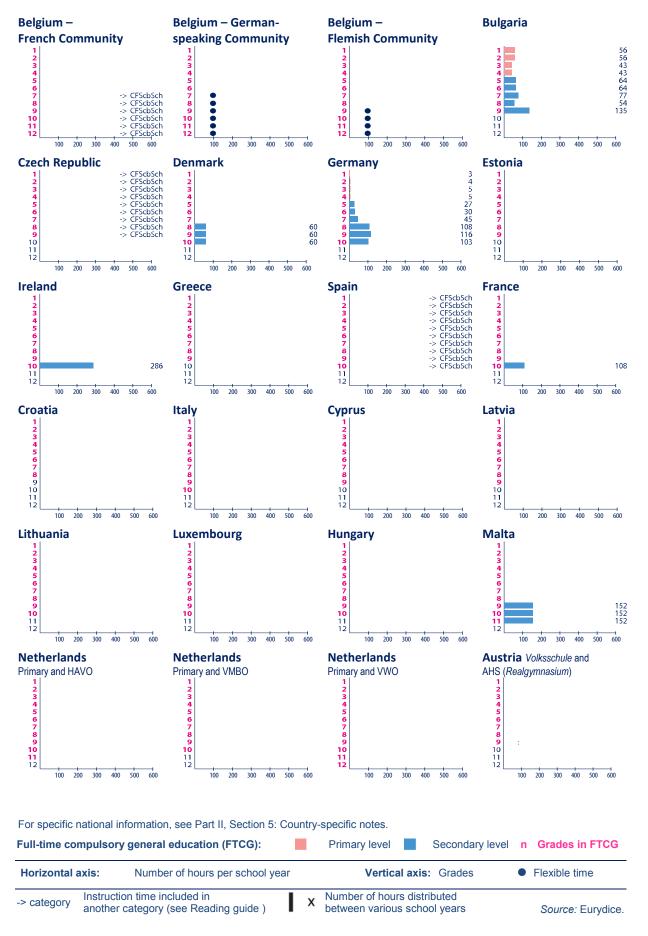


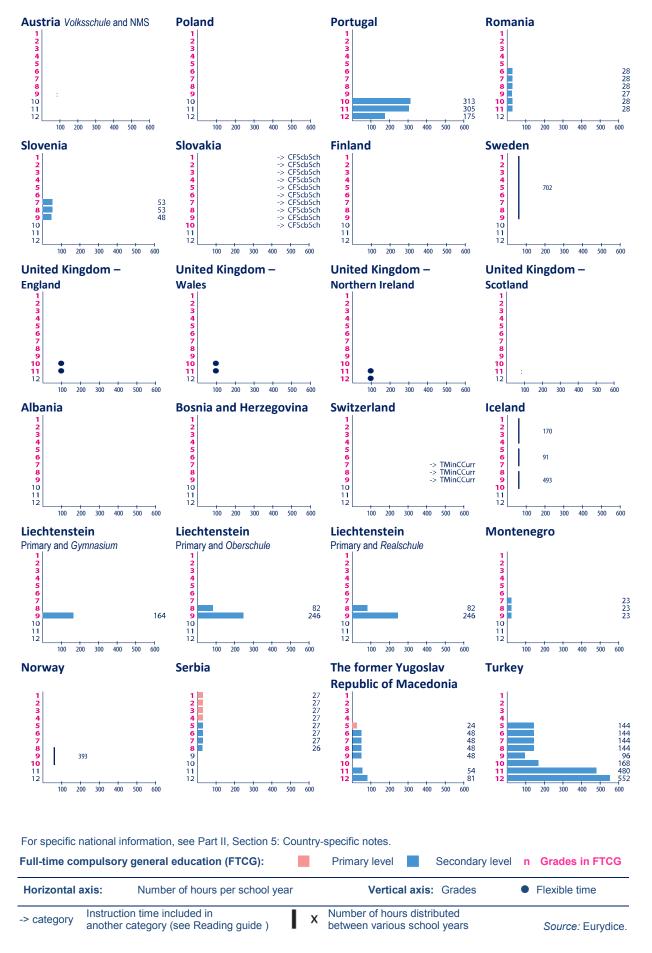
OTHER SUBJECTS



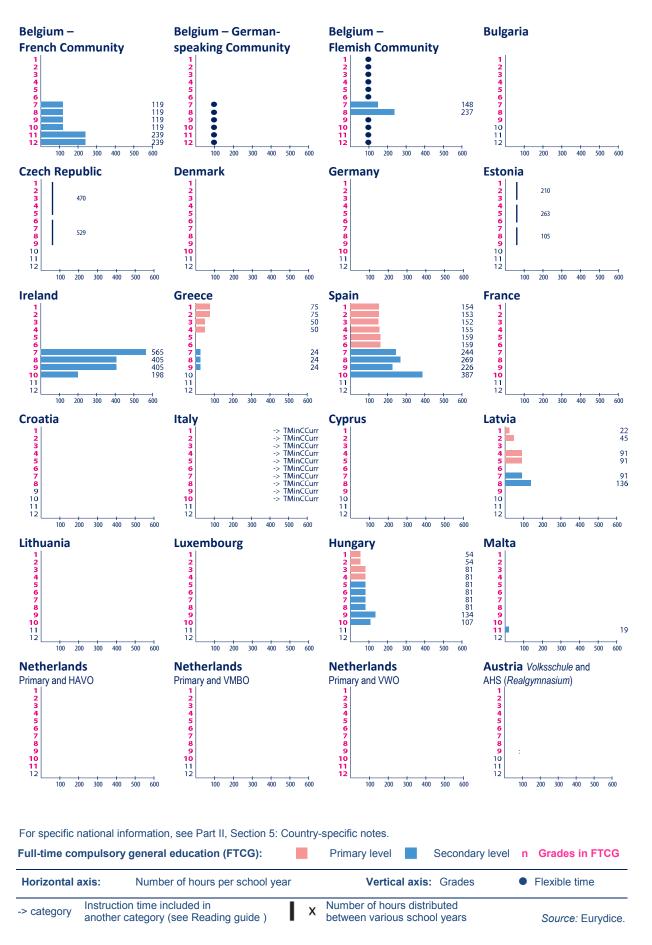


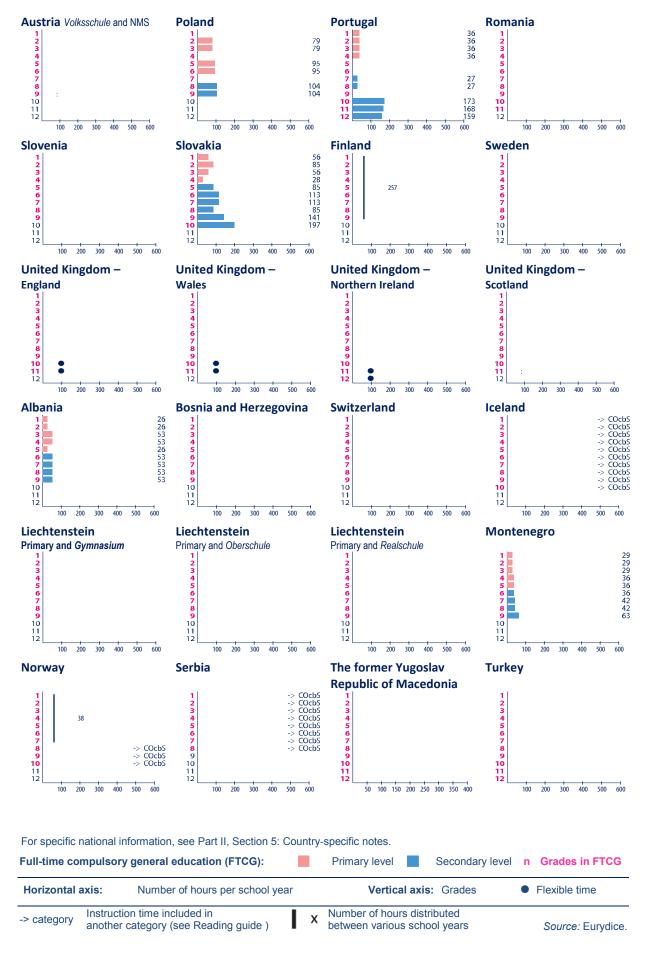
COMPULSORY OPTIONS CHOSEN BY THE STUDENTS





COMPULSORY FLEXIBLE SUBJECTS CHOSEN BY SCHOOLS

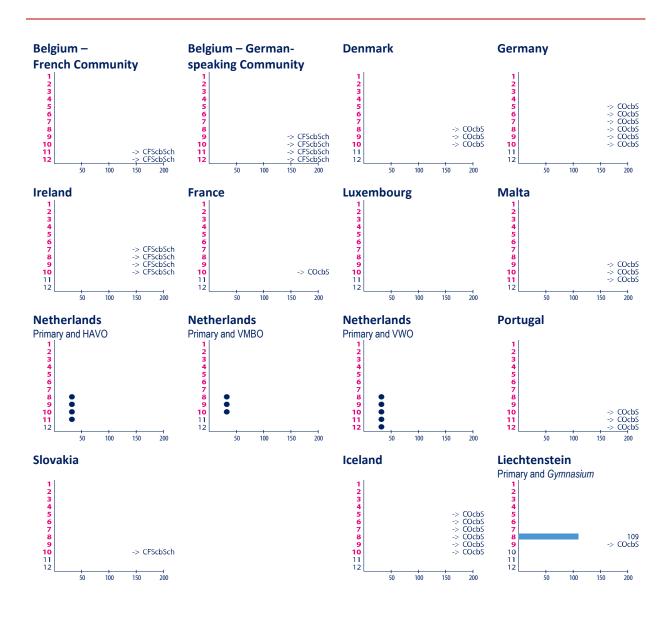


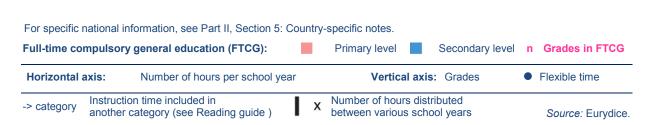


Section 4. Appendix

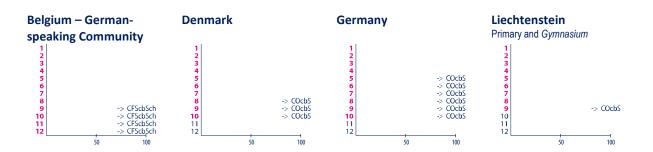
Language 4 (compulsory curriculum)	118
Language 5 (compulsory curriculum)	119
Non-compulsory curriculum	119

LANGUAGE 4 (COMPULSORY CURRICULUM)





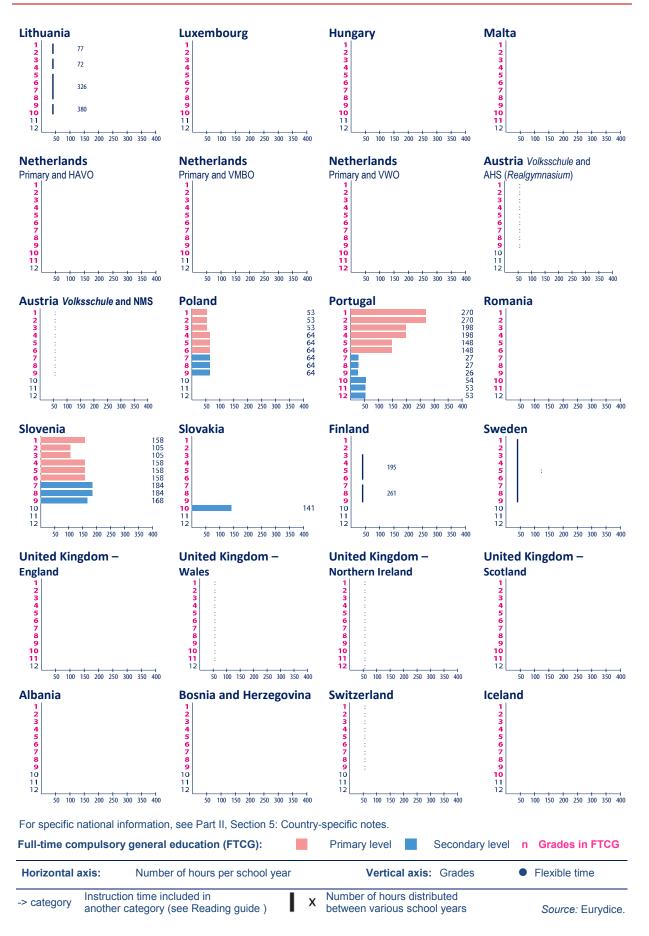
LANGUAGE 5 (COMPULSORY CURRICULUM)



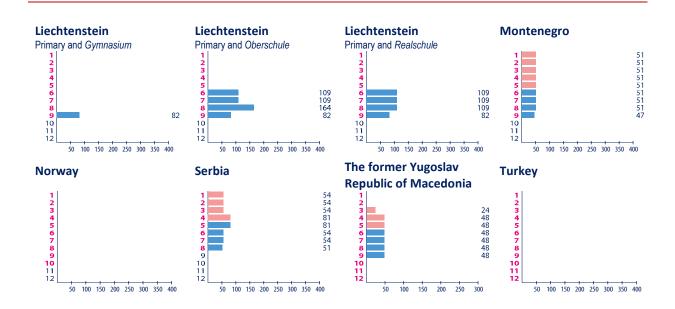
NON-COMPULSORY CURRICULUM



NON-COMPULSORY CURRICULUM



NON-COMPULSORY CURRICULUM



For specific national information, see Part II, Section 5: Country-specific notes.

Full-time compulsory general education (FTCG):

Primary level

Secondary level

n Grades in FTCG

Horizontal axis:

Number of hours per school year

Vertical axis: Grades

Flexible time

-> category

Instruction time included in another category (see Reading guide)

X Number of hours distributed between various school years

Source: Eurydice.

Section 5. Country-specific notes

Belgium (French Community)

The scope includes both public and government-dependent private institutions, whose programmes only slightly differ. Therefore, data only show the minimum number of hours in public institutions. Compulsory education lasts until the age of 18 for every student. However, in vocational education, from age 15, school-based learning is compulsory only part time. Students may opt for a structured learning path which combines part-time vocational education at school with part-time training in the workplace.

Education authorities prescribe three days for the professional development of teachers, which have been deducted from the number of instruction days in the school year, but the recommended minimum instruction time has not varied compared with previous years. Legislation provides a maximum number of examination days, but not a compulsory number of examination days. These days have therefore not been deducted.

In primary education, the legislation stipulates a combined total instruction time for 'reading, writing and literature', 'mathematics', 'natural sciences', 'social studies', arts education and technology. It is left to the school's discretion as to how this time is allocated between the different subjects. In grades 5-6, in the Walloon Region, schools have to offer at least two periods (1 period = 50 minutes) per week of the second language, which can be Dutch, English or German. However, in the 19 municipalities of Brussels and the Walloon communes with special linguistic status, the first foreign language (language 2) must be taught for at least three periods per week in grades 3-4, and five periods per week in grades 5-6. In the Region Brussels-Capital, the first foreign language (language 2) must be Dutch.

In lower secondary education, grades 7-8, the compulsory options from which students can choose include: French (Latin, drama, introduction to the ancient world, etc.); a foreign language (conversation, culture, etc.); sciences and mathematics (informatics, sciences, mathematics, logic, etc.); social studies (economic matters, civic life, etc.); artistic activities (music, arts, etc.); and sport activities.

General education (enseignement de transition) has two pathways: enseignement général (de transition) and enseignement technique et artistique (de transition). The vast majority of students 85.20 % at ISCED 34 are on the enseignement général pathway. Only this track is reported in this publication.

In grades 9-12, students must choose at least one foreign language with four periods a week.

Since 1 September 2016 for primary schools, and 1 September 2017 for those secondary schools offering a choice between religion and moral studies, at least one of the two lessons per week allocated to these subjects should be devoted to 'philosophy and citizenship'. Instruction on this subject is part of the compulsory curriculum. In the other schools, the content and objectives of philosophy and citizenship must be acquired through all subjects.

Belgium (German-speaking Community)

The scope includes both public and government-dependent private institutions. Compulsory education lasts until the age of 18 for every student. However, in vocational education, from age 15, school-based learning is compulsory only part time. Students may opt for a structured learning path that combines part-time vocational education at school with part-time training at a workplace.

Education authorities have prescribed three days for the professional development of teachers in this school year. These have been deducted from the number of instruction days, but the recommended minimum instruction time has not varied compared with previous years. For many subject areas, the legislation only stipulates the total instruction time ('compulsory subjects with flexible timetable'). It is left to the school's discretion as to how this time is allocated between the different subjects.

From grade 1 to 8, 'technology' is integrated within 'natural sciences'. ICT is integrated into all other subjects in all grades.

In secondary education, schools must offer between 28 and 36 hours a week. The minimum, i.e. 28 hours a week, has been reported in the compulsory curriculum, although most schools offer more instruction time. Schools can offer different programmes with different instruction times for the different subjects. The total number of hours varies across programmes. Students can decide which programme to follow. Schools can also offer 'other subjects' such as Latin and economics. The non-compulsory curriculum reflects the difference between the minimum and maximum instruction time that students can receive depending on the options that they choose.

Belgium (Flemish Community)

The scope includes both public and government-dependent private institutions. Compulsory education lasts until the age of 18 for every student. However, in vocational education, from age 15, school-based learning is compulsory only part time. Students may opt for a structured learning path that combines part-time vocational education at school with part-time training at a workplace.

For many subject areas, the legislation only stipulates the total instruction time ('compulsory subjects with flexible timetable'). It is left to the school's discretion as to how this time is allocated between the different subjects.

From grade 1 to 6, 'technology' is integrated into 'natural sciences'. The 'other subjects' refer to learning to learn and social skills. These subjects and ICT are integrated into the rest of the subjects. Examination days aren't excluded because there are no national or other official regulated examination days in Flanders.

Bulgaria

In grades 1-2, 'natural sciences' and 'social studies' are taught as an integrated subject. In grades 1-4, ICT is integrated into all subjects. In grades 1-6, technology is integrated into 'practical and vocational skills'.

The compulsory options that students can choose are: in grade 1, a foreign language; in grades 1-9, religion; in grades 5-8, a second foreign language (language 3); in grades 7-9, practical and vocational skills; and in grade 9, technology. Subjects in the non-compulsory curriculum are usually the same as in the compulsory curriculum, but can also be others such as folk dance, robotics, etc.

The Pre-school and School Education Act is being implemented in grade 8 in 2017/18. In 2018/19, it will be implemented in grades 3 and 9.

Primary education covers grades 1-7; it is divided into two stages:

- 1. Elementary: grades 1-4 (ISCED 1).
- 2. Pre-gymnasium: grades 5 -7 (ISCED 2)

The secondary education covers grades 8-12, divided in two stages:

- 1. Lower gymnasium: grades 8-10 (ISCED 3)
- 2. Higher gymnasium: grades 11-12 (ISCED 3).

Czech Republic

Grades 1-5: Time for 'social studies' is integrated into 'natural sciences'. Instruction time is set for the curriculum area 'people and the world'. In grades 6-9, geography is integrated into natural studies (reported in the category 'natural sciences').

In grades 1-2, the first foreign language (language 2) is a 'compulsory flexible option chosen by the school'. As from grade 3, it is a compulsory subject for all students. The minimum instruction time for the second foreign language (language 3) is given for grades 6-9. It is taught from grade 8 at the latest, but it can be taught also in lower grades.

In grades 6-9, health education can either be provided as a subject in its own right or integrated into other subjects such as 'natural sciences' or physical education. For this data collection, instruction time dedicated to health education and physical education has been combined. Schools are free to allocate this time as they wish between the grades. For this data collection, this time has been distributed equally between the four grades. However, two periods must be dedicated to physical education in every grade, as a minimum.

'Practical and vocational skills' are integrated into technology (grades 1-9).

The 'other subjects' include the cross-curricular subjects: Personal and social education; education for democratic citizenship; education towards thinking in the European and global context; multicultural education; environmental education; and media studies. Religion/ethics/moral education has also been included here, although it is not part of the compulsory curriculum defined at national level. Schools can decide to offer ethics as a compulsory, optional or non-compulsory subject. Religion is taught as a non-compulsory subject at schools established by a municipality or a union of municipalities, if at least seven pupils of the school request it.

The 'compulsory flexible subjects chosen by schools' include the flexible periods established by the Framework Educational Programme (FEP), which must be provided by all schools to increase the time allocated to any subject. They can be used to teach the first foreign language (language 2) in grades 1-2, swimming within physical education at ISCED level 1, elective subjects and subjects belonging to the 'other subjects' category. Schools can also offer a second foreign language (language 3) at ISCED level 1 and a third and a fourth foreign language at ISCED levels 1 and 2, although the FEP does not state this.

There are two types of vertical flexibility. Some subjects must be taught in all the related grades ('reading, writing and literature', 'mathematics', 'natural sciences', 'social studies' and arts education), whereas for the other subjects (namely, ICT and technology) this obligation does not exist.

Denmark

Grades 1-10: The 'other subjects' include 'exercise and physical activity', 'assisted learning activities' and 'free class'. Forty-five minutes of exercise and physical activity must be organised every day as part of the other compulsory subjects or of the assisted learning activities. Assisted learning activities and the free class aim to develop pupils' receptiveness to teaching by working with them on their social competences, individual development, motivation and well-being, and by helping them develop a better approach to work in the future.

Grades 8-10: The 'compulsory options chosen by pupils' include the third and fourth foreign language (German, French, Spanish and immigrant languages for pupils with appropriate prior knowledge of the language), arts education (fine art, media, movies knowledge, drama, music) and practical and vocational skills (crafts and design, working knowledge and *Madkundskab* – food knowledge).

Germany

The data represent the weighted average instruction time for the compulsory core curriculum subjects, calculated by the Secretariat of the Ministers of Education and Cultural Affairs of the *Länder* on the basis of the number of students enrolled in the different types of school.

The category 'other subjects' includes instruction time devoted to teaching skills and competences that are important for living and working in society, such as social skills. In some *Länder*, the category may also include instruction time in integrated subjects (combination of two or three subjects).

The second foreign language (language 3) is only compulsory for education courses leading to the *Allgemeine Hochschulreife* (general higher education entrance qualification). For some *Länder*, data on the instruction time in compulsory 'foreign' (or modern) languages may also include instruction time in Latin and ancient Greek.

Estonia

The first foreign language must be taught from grade 3 at the latest but schools may start in grades 1 and 2. The second foreign language must be taught from grade 6 at the latest but schools may start in grades 4 and 5.

In schools where the language of instruction is other than Estonian, the second foreign language (language 3) is not a compulsory subject; instead, students have to study Estonian as a second language.

Reading, writing, literature: Estonian or Russian language and literature (as language of instruction); Literature begins in grades 4-6.

Religion/ethics/moral education and ICT are often compulsory flexible subjects chosen by schools.

Ireland

At ISCED 1, the tables refer to the six years of compulsory education. There are also two years of primary education for 4- and 5-year-olds which are not compulsory and are not included in the 2017/18 survey return.

At ISCED 1, technology (designing and making) is integrated into natural sciences and visual art education. At this level, the category 'other subjects' includes social, personal and health education (SPHE) and the legacy time allocated for school assembly and roll call.

At ISCED 1, 24 and 34, both English and Irish as national languages are taught to all students although some students with special educational needs and students living abroad up to the age of 11 may receive an exemption from studying Irish. English is regarded as the first language (L1) and Irish as the second language (L2) in English-medium schools whilst in Irish-medium schools, the L1 is Irish and the L2 is English. The category 'reading, writing and literature' includes time for either English or Irish depending on which is the first language of the school; the instruction time for the other is included in L2.

Curriculum reform at ISCED 24 commenced in 2014 and is being implemented on a phased basis up to 2021. The phased implementation includes the introduction of new specifications (syllabuses) for the different subjects offered at this level. Phase 1 saw a new specification for English introduced to first year students at ISCED 24 in 2014. Phase 2 saw new specifications for science and business studies introduced to first year students at ISCED 24 in 2016. Phase 3 saw new specifications for Irish, modern languages and art, craft & design introduced to first year students at ISCED 24 in 2017. In addition, a compulsory area called 'wellbeing' was introduced in 2017. Physical education, civic,

social and political education (CPSE) and social personal and health education (SPHE) are required components of this area.

The curriculum reform gives schools considerable flexibility to design their learning programmes at ISCED 24 in accordance with 24 Statements of Learning, and taking account of the school's circumstances and the students' learning needs and interests. At ISCED 24, Year 1 and Year 2, a greater proportion of time is now reported under 'compulsory flexible subjects chosen by schools.' For example, science which was previously included under 'compulsory options chosen by the students' (21) is now under 'compulsory flexible subjects chosen by schools' (22). History and geography are included for ISCED 24 Year 1 in 'compulsory flexible subjects chosen by schools' (22) rather than in 'social studies' (8) as in previous returns. Other subjects now included for ISCED 24 under 'compulsory flexible subjects chosen by the school' include the second foreign language (French, German, Italian, Spanish), arts education (music, art-craft-design), religious education, technology, practical and vocational skills (home economics, materials technology (wood), metalwork, technical graphics, business studies) and subjects such as Latin, ancient Greek, classical studies, Jewish studies and environmental studies.

The curriculum reform at ISCED 24 provides for vertical flexibility within individual subjects across the three years of this level. However, it is not possible to reflect this in the current survey as the introduction of new subject specifications that accommodate this vertical flexibility is happening on a phased basis for individual subjects and as students enter Year 1 of ISCED 24. It is only when the curriculum reform at ISCED 24 is fully implemented in 2021 that it will be possible to accurately represent the vertical flexibility envisaged in the curriculum reform.

At ISCED 24, a new Junior Cycle specification has been introduced for English and is now implemented for each of the three years of ISCED 24. As outlined in the 2016/17 return, the new specification provides for an intended minimum of 240 hours instruction time (equivalent to 2.4 hours per week) over the course of the three years of the junior cycle.

At ISCED 24, new specifications (syllabuses) have been introduced for science and business studies for each of the first two years of ISCED 24. These two specifications provide for an intended minimum of 200 hours of instruction time (equivalent to two hours per week) over the course of the three years of ISCED 24. Both science and business studies are now included as 'compulsory flexible subjects chosen by the schools'.

New specifications for Irish (L2) and for modern languages (L3 and L4) and art, craft & design have been introduced for ISCED 24 Year 1 students. The new specification for Irish (L2) provides for a minimum of 240 hours instruction time, equivalent to 2.4 hours per week, over the three years of ISCED 24. Irish is now included under L2 rather than 'compulsory subjects with flexible timetable'. The new specifications for modern languages and art, craft & design now provide for a minimum of 200 hours of instruction time, that is two hours per week over the course of three years of ISCED 24.

While the curriculum reform at ISCED level 24 gives schools considerable flexibility in the design of their programmes, English (L1 in the majority of schools), Irish (L2 in the majority of schools), mathematics and now also wellbeing are compulsory in all schools. As part of the new compulsory subject 'wellbeing' with its minimum provision of 300 hours over the three years of ISCED 24, schools are required to include provision for physical education (135 hours minimum over the course of three years), CSPE (70 hours minimum) and SPHE (70 hours minimum). The required minimum instruction time for PE is now reduced to 1.35 hours per week for ISCED 24 Year 1 compared with the 2 hours per week that was reported previously for this grade level and continues to be in place during the 2017/18 school year for students in ISCED 24 Year 2 and Year 3. Physical education continues to be

reported under 'physical education'. Instruction time for CSPE continues to be included in 'social studies'. SPHE continues to be included in 'other subjects'.

The first year of ISCED 34 is also the last year of compulsory education for most students. Many students take a transition year at this point, with less emphasis on academic subjects and more time given to practical and self-directed learning. Every school is free to develop its own transition year programme and decide on subjects. Hence, the data provided for the transition year is indicative only.

In Ireland, schools at ISCED 1 are typically required to be open to pupils to receive instruction for a minimum of 183 days. During 2017/18, individual schools were permitted to close for one day to facilitate whole teaching staff engagement in continuing professional development in support of the introduction of a new language curriculum.

At ISCED 24 and 34, schools are typically required to be open to pupils to receive instruction for a minimum of 167 days. During 2017/18, individual schools are permitted to close for two days to facilitate whole school planning and continuing professional development for teachers in support of the introduction of new curriculum and assessment arrangements at ISCED 24.

Greece

The 'Unified All-day Primary School' has been established since the 2016/17school year. Thus, the data provided pertains to the majority of primary schools, i.e. primary schools functioning with at least four teachers.

In grades 5-6, geography is included in natural sciences. Social studies refer to history, and civic and social studies.

English is taught in all grades (1-9) of compulsory education as from 2017/18. Students can choose between French and German as a second foreign language in grades 5-9. In grades 7-9, Italian is also a choice in few schools.

In grade 7, practical and vocational skills refer to home economics.

In primary education, the 'compulsory flexible subjects chosen by the schools' refer to the cross-thematic teacher initiated programmes, which can include activities relating to environmental education, health education, culture and arts, etc. In lower secondary education, it includes the thematic week, for which schools are expected to organise their own learning activities around a list of proposed themes.

All-day primary schools can include an all-day school programme (a morning session from 7 am to 8 am and an afternoon session from 13.20 to 16.00) while the daily compulsory timetable is from 8.10 to 13.15. Parents have to apply to enrol their children in the all-day programme at the beginning of the school year (Ministerial Circular 71858/Δ1/3-5-2017). This instruction time is captured in the non-compulsory curriculum category and may cover subjects as ICT, English, physical education, art, music, drama and cultural activity clubs at primary level. In lower secondary school, non-compulsory curriculum includes remedial instruction in mathematics, modern and ancient Greek, physics, chemistry, and English, as well as project-based activities on culture, ecology, health issues, career options and entrepreneurship.

Spain

Data on intended instruction time are based on national and regional regulations on the curriculum and school calendars (reference year 2017/18). To calculate the weighted averages, statistics were used on the number of students per grade and Autonomous Community, as reported by the statistics office of the Ministry of Education, Culture and Sport (reference year 2015/16).

The General Act on the Improvement of the Quality of Education (LOMCE, 2013) introduced changes affecting instruction time, including a higher degree of autonomy at regional level in the allocation of time to different subjects. In 2014/15, they were introduced in grades 1, 3 and 5 (primary education), in 2015/16 they were introduced in grades 2, 4 and 6 (primary education) and in grades 7 and 9 (secondary education) and in 2016/17 they were introduced in grades 8 and 10 (secondary education).

Reading, writing and literature: this category includes the instruction time for the co-official language in the Autonomous Communities, where applicable.

Religion/ethics/moral education: in primary education (grades 1-6) students must choose between 'religion' or 'social and civic values'. In secondary education (grades 7-10), students must choose between 'religion' and 'ethical values'.

Other subjects: in grades 7-10, this category includes a weekly group tutorial session, which is compulsory for all students. Tutoring is also included in grades 1-6 when it is specifically mentioned in regional regulations.

Compulsory options chosen by students: in primary education (grades 1-6), students must choose one of the 'specific subjects' proposed by the education authorities in order to comply with the established total instruction time. In secondary education (grades 7-9), students must choose a number of 'specific subjects' and 'subjects proposed by the Autonomous Communities'. In grade 10, students must choose a number of 'core subjects', 'specific subjects' and 'subjects proposed by the Autonomous Communities'.

Compulsory flexible subjects chosen by schools: reported data reflect the number of hours that Autonomous Communities have allocated to the subject or subjects of their choice in order to comply with the established total instruction time. According to the LOMCE, in primary education (grades 1 to 6), arts education and a second foreign language are optional subjects. For grades 7-9 of secondary education, the central education authorities have defined the following as optional subjects from which regional authorities or schools can choose: classical culture, arts, visual and audio-visual education, music, introduction to entrepreneurial and business activity and technology.

In grade 10, some academic core subjects (biology and geology, economics, physics and chemistry, and Latin) and applied core subjects (science applied to professional activity, introduction to entrepreneurship and business activity and technology) are designated by the central education authorities as the 'optional subjects' from which regional authorities or schools can choose.

Performing arts and dance, scientific culture, classical culture, plastic, visual and audio-visual education, philosophy, music, second foreign language, information and communication technologies, religion or ethical values are designated by the central education authorities as 'specific and optional subjects' from which regional authorities or schools can choose.

All these subjects are included in the category 'compulsory flexible subjects chosen by schools'.

France

In grades 1-3, the category 'natural sciences' refers to 'questioning the world' which covers notions of science, history/geography, technology and ICT. This subject also includes 'civic and moral education', although this time has been captured in the category 'religion, ethics and moral education'. In grades 4-6, 'natural sciences' includes technology.

In grades 4-10, 'social studies' cover history/geography and civic and moral education (although in grades 4 and 5 this time is captured in the category 'religion, ethics and moral education'). In grade 10, it also includes legal and social studies.

In grades 1-3, 'ICT' is integrated into 'natural sciences', and, in grades 4-5, in mathematics (including notions of computer science (programming)). In grades 6-9, 'ICT' is mainly integrated into 'technology' and 'mathematics', but it can be taught as part of any compulsory subject.

In grades 6-9, the category 'other subjects' includes form time, and, in grade 10, form time and the *accompagnement personnalisé* (i.e. tailored teaching including individual support, methodological aid, knowledge enhancement and careers guidance).

In grades 6-9, the accompagnement personnalisé and the interdisciplinary projects (enseignements pratiques interdisciplinaires) are included in compulsory instruction time and integrated into all subjects. In grade 9, the total compulsory curriculum also includes a week for the close observation of the work environment.

In grade 10, 'language 3' i.e. the second foreign language and 'language 2' are reported together.

In grade 10, students have to take two options (*enseignements d'exploration*) from a list, including economics, a third foreign language (language 4), arts education, ICT, technology, and practical and vocational skills. This time is captured in the category 'compulsory options chosen by the students'. Depending on the options chosen, the instruction time can increase by up to 162 hours/year.

The 'non-compulsory curriculum' includes:

- In grade 6, a second foreign language or a regional language (regional languages and cultures) that cannot exceed 6 hours per week when combined with the first foreign language. Each school is free to choose the distribution of the six hours according to their needs.
- In grade 7, one hour a week of languages and cultures from antiquity (Latin and ancient Greek), two hours a week of a regional language (regional languages and cultures) and two hours a week of a European languages and culture course based on one of the two foreign languages studied.
- In grades 8-9, three hours a week of languages and cultures from antiquity (Latin and ancient Greek), two hours a week of a regional language (regional languages and cultures) and two hours a week of a 'European languages and cultures' course based on one of the two foreign languages studied. In grade 9, it also includes 'discovery of the world of work'.
- In grade 10, a third foreign language (language 4; up to 108 hours per year) or arts activities (up to 72 hours) can be chosen if not yet taken as compulsory options.

In grades 6-9, the non-compulsory curriculum also includes the 'homework done' programme, which allows willing students to do their homework under supervision.

Croatia

The instruction time on religion, ethics and moral education is included in the 'non-compulsory curriculum' (grades 1-8). This category also includes the instruction time on a second foreign language (grades 3-8) and ICT (grades 5-8).

In 2014/15, the compulsory cross-curricular topic of citizenship education was introduced into the school curriculum. However, it is not taught as a separate subject but rather its content is integrated into the curriculum of 'other subjects'.

Italy

In grades 1-5 (ISCED 1), the reported instruction time corresponds to a weekly timetable of 27 hours over 33 weeks (891 hours), and applies to 36.23 % of students. The other possible weekly timetables are 24 hours (0.57 % students), 28-30 hours (27.48 %) and 40 hours (35.72 %).

In grades 6-8 (ISCED 24), the reported instruction time corresponds to a timetable of 30 hours weekly, which covers almost 88.2 % of the students at this ISCED level. 'Social studies' are integrated into 'reading, writing and literature', and 'natural sciences' are integrated into 'mathematics'. Instruction time for the second foreign language (language 3) can be used for teaching the first foreign language. The music branch is taken by 5.2 % of students; an extra hour per week is allocated for each musical instrument (up to a maximum of three instruments). Therefore, the weekly timetable in this branch can rise from 31 to 33 hours per week.

In grades 9-10 (ISCED 34), there are six types of *licei* devoted to arts subjects, classical studies, scientific studies, foreign languages, music and dance, and human sciences. The information reported for grades 9 and 10 is for the *liceo scientifico* (which has the highest percentage of students enrolled in all *licei*, i.e. 28.1 %). In these grades, ICT is integrated into 'mathematics' (but it is taught as an independent subject in the applied sciences option of the *liceo scientifico*). The 'other subjects' include Latin language and literature.

At all ISCED levels, schools have the autonomy to modify up to 20 % of the annual timetable by changing the allocation of instruction time across subjects, or by introducing new subjects.

Cyprus

Geography is included in 'social studies' in grades 1-6, and in 'natural sciences' in grades 7-9.

In grades 1-4, design/technology is included in 'natural sciences'. In grades 5-6, design and technology includes life education.

First aid is included in physical education.

The 'other subjects' include: in grades 1-4, life education; in grades 5-6, environmental education – education for sustainable development; in grades 1-6, instruction time dedicated to consolidating skills in and knowledge of curriculum subjects; in grades 7-9, classical studies and ancient Greek.

Latvia

The reported curriculum refers to the basic education programme, which affects 71 % of students in public schools. The other 29 % of students follow the basic education programme for ethnic minorities, which includes the teaching of the ethnic minority language in grades 1-9. The following subjects are also taught in the minority language: literature (grades 4-9), 'mathematics' (grades 1-4) and ethics/introduction to Christianity (grades 1-3). The rest of the subjects are taught in Latvian. (Data reference year 2016/17.)

The category 'other subjects' includes form time, which is devoted to discussing values, communication culture, civic education, road safety, healthy lifestyle, personal development, leadership, critical thinking, creative thinking, financial literacy, entrepreneurship skills and career guidance.

Schools must provide the additional instruction time indicated in the category 'compulsory flexible subjects chosen by the school'. The standard model recommends that this time is devoted to physical education (sports).

Additionally, schools must offer optional lessons for groups of pupils on a voluntary basis (e.g. choir, dance, drama, sports, or a foreign language), lessons for individual work with students and prolonged-day groups. This is shown in the category 'non-compulsory curriculum'.

Lithuania

The reported curriculum refers to schools where the medium of instruction is Lithuanian, which enrol over 90 % of all students. The remaining students attend schools where instruction is provided in the language of one of the national minorities.

In grades 1-4, 'natural sciences' and 'social studies' are taught as an integrated subject. To calculate the hours of 'natural sciences' and 'social studies', the total instruction time of the general subject was divided by two. Technology and art education are taught as an integrated subject.

In grades 7-8 'natural sciences' include biology, chemistry and physics. Schools have to allocate 162.9 hours between physics and biology. In grade 8, 54.3 hours should be devoted to teaching chemistry.

In grades 9-10 social studies include history, citizenship, geography, economics and business. History must be taught for a minimum of 54.3 hours at each grade, 108.6 in total. Schools have the autonomy to decide how to distribute 162.9 hours among the other social studies subjects.

In grades 5-10, 7.5 hours per year are devoted to civic education. This instruction time is included in the total number of hours for social studies.

The 'other subjects' refer to human safety.

Students have the option to choose additional lessons from the non-compulsory curriculum, which varies across schools. These lessons might be used for teaching support for low achievers and for personalised teaching and learning for talented students. Schools often use these lessons for extra literacy and mathematics lessons.

Luxembourg

In grades 1-6, German and Luxembourgish are both languages of instruction and both are included in 'reading, writing and literature'. French is considered to be 'language 2'.

In grades 7-10, French is the medium of instruction, German is 'language 2', and English 'language 3'.

Hungary

According to the Act on Public Education, students who started grade 9 in 2011/12 or earlier had to terminate their compulsory education at the end of the school year in which they would turn 18. Since this provision is no longer applicable, compulsory education ends at 16, and grades 11 and 12 are excluded from the report.

The 'other subjects' include the form time.

Schools can devote the instruction time included in the 'compulsory flexible subjects chosen by schools' to increasing the time allocated to the prescribed subjects or to new subjects of their own choice. In addition, they have to choose one of the two following subjects: drama-dance or 'homeland and peoples' in grade 5; and drama-dance or media in grade 9. The Ministerial Decree No 14/2017 (VI. 14.) (EMMI rendelet) stipulates the number of school days. For ISCED level 34, the data on this report refer to gimnázium. Annex 14 to the ministerial decree No 51/2012 (EMMI rendelet) stipulates the compulsory number of days to be taught in grades 9 and 10 in szakgimnázium. As regards szakgimnázium, the total number of classes per grade is the same for each vocational pathway but the distribution between subjects may vary.

Malta

The scope includes both public and government-dependent private institutions. These country-specific notes apply to state schools in Malta which cater for 60 % of the student population but might not reflect the situation in government-dependent church schools which cater for around 29 % of the student population. In state schools, the five-year secondary cycle is made up of two distinct phases: during the first two years students attend middle schools while during the last three years students attend secondary schools. The secondary cycle of government-dependent church schools is made up of one single five-year phase.

During the month of June, schools are on half days and the total instruction time for each grade in compulsory education amounts to 17.5 hours per week.

In years 1-2, the four hours per week that schools have to devote to handwriting, storytelling, reading sessions, 'talk about sessions' and 'choosing time' have been included in the category 'compulsory flexible subjects chosen by schools'. In grades 3-6, this category includes one hour per week that teachers have for consolidating learning. This time is usually used for literacy, mathematics and language 2.

In years 1-6, science and technology are integrated into one subject with the emphasis being on science.

In years 1-6, the 'other subjects' category includes the daily 15-minute morning assembly, and in grades 3-6 the subject personal social and career development. In years 7-11, the 'other subjects' category includes the subject personal, social and career development as well as a daily 10-minute morning assembly/form period.

In grade 11, the 'compulsory flexible subjects chosen by schools' refer to additional time which is allocated to the various subjects at the discretion of the school head due to the last stage of the phasing-in of the 40-lesson weekly timetable.

In grades 9-11, students have to choose two of the following subjects (depending on teacher availability at the school they are attending): Arabic, French, German, Italian, Russian, Spanish; biology, chemistry, geography; art, music; European studies, history, social studies; business studies, accounting, computer studies; engineering, health and care, hospitality, information technology; agribusiness, design and technology, graphical communication, home economics and textile studies and physical education. These options are included in the category 'compulsory options chosen by students'.

Netherlands

The total compulsory instruction time for pre-primary and primary education (8 years) is 7 520 hours. It is left to the school's discretion as to how these hours are distributed between the grades. For this report, the instruction time for grades 1-6 has been calculated as follows: 7 520/8*6 = 5 640.

After grade 10 of VMBO and grade 11 of HAVO, students normally continue their education in vocational schools or universities of applied sciences. As vocational education is out of scope of this data collection, data for these grades have not been provided. As it was not possible to show vertical flexibility for grades 10-12, instruction time for this cycle has been artificially divided into three.

In grade 7 (VMBO), a second foreign language (language 3) is compulsory for students following three of the four programmes (1. Middle-management vocational programme; 2. Combined programme and 3. Theoretical programme). A second foreign language (language 3) is not compulsory in the basic vocational programme. This means that in the Netherlands, 80 % of the students (VMBO) do have a second foreign language (language 3) as a compulsory subject.

Austria

Compulsory schooling starts for all children on 1st September, following the child's sixth birthday and comprises nine years. Students can chose from different programmes of study for year 9. As these programmes could not all be presented, no data for that particular year were included.

In primary school (*Volksschule*), grades 1-4: 'social studies' and technology are part of an integrated subject called *Sachunterricht*, which covers initial natural sciences.

In grades 1-2, modern foreign language teaching (32 periods of 50 minutes) is integrated into other subjects and has been reported in the 'total minimum compulsory curriculum'. ICT is taught as an integrated subject in all four grades. Compulsory instruction time for remedial education has been included in the category 'other subjects'.

For secondary education, the data refers to the curricula for *Neue Mittelschule* (new secondary school, NMS) and *Allgemeinbildende höhere Schule* (academic secondary school, AHS). In the AHS, grades 5 and 6 are common, whereas in grades 7 and 8 there are three branches: the scientific branch (*Realgymnasium*), the grammar school (*Gymnasium*) and the economics branch (*Wirtschaftskundliches Realgymnasium*). This report shows the data corresponding to the scientific branch (*Realgymnasium*). NMS and AHS schools can opt to follow a discretionary school timetable with more autonomy to decide on the subjects that they offer. The subjects *Technisches und Textiles Werken* are included in practical and vocational skills although certain aspects of these subjects refer to arts education. ICT is integrated into all subjects at all grades in all pathways.

Poland

In 2017/18, a new system is being phased in. In the old system, general compulsory education comprised six years of primary education, three years of lower secondary education and three (to four) years of upper secondary education. Instruction time was defined in cycles of three years (i.e. there was vertical flexibility). In the new system, general compulsory education includes eight years of primary school (which covers both ISCED 1 and 2) and four more years of secondary school (ISCED 3). In the new system, instruction time is defined by grade; there is no longer vertical flexibility. The new system has been implemented in grades 1, 4 and 7 in 2017/18. Data reported for these grades correspond to the new system. For the other grades, data correspond to the old system although it was not possible to reflect the vertical flexibility. Grade 1 of the former Gymnasium no longer exists. Grade 7 (ISCED 24) is taught now in primary schools. The school managing body can decide to provide up to three additional hours per week of instruction.

Under the new system currently being phased in, there is no such subject as 'natural sciences' (*Przyroda*) in grades 5-8. *Przyroda* is only taught in grade 4. Instead, biology and geography have been introduced in grades 5-6, and chemistry and physics in grade 7 (and 8). In 2017/18, *Przyroda* is taught in grades 4-6 due to the coexistence of both (old and new) systems. Instruction time for geography is included in 'social studies', although, in Poland, this subject is considered to belong to 'natural sciences'.

In grade 7, languages 2 and 3 are no longer compulsory subjects with flexible timetable, that is, specific instruction time is now defined for these subjects.

The 'other subjects' include form time in grades 4-9, 'education for safety' in grades 8-9 and vocational guidance in grade 7. The compulsory flexible subjects chosen by schools may include any subject from the compulsory curriculum.

The non-compulsory curriculum includes in grade 4-9 the subject 'education for family life' and in all grades religion and/or ethics.

Portugal

In primary education, the figures show the minimum instruction time. In grades 1, 2 and 4, the weekly instruction time may vary between 22.5 hours (minimum) and 25 hours (maximum), and in grade 3, between 24.5 hours (minimum) and 27 hours (maximum). If a school decides to offer the maximum instruction time, then the non-compulsory curriculum decreases to 5 hours a week. In grades 10-12, the minimum instruction time varies according to the different education pathways. The figure shows the lowest of all the minima. In some pathways, the minimum instruction time is higher.

The instruction time for each subject has also a maximum and a minimum predefined time. Each school chooses the time to allocate to each subject within the established limits: minimum per subject and total per year (or cycle for some subjects). The difference between the minimum instruction time established for each subject (or group of subjects) and the total minimum instruction time per year is indicated in the category 'compulsory subjects with flexible timetable'. This time is be allocated to the compulsory subjects at the discretion of schools.

Public schools with an autonomy agreement may manage 25 % of the curriculum in a flexible way, provided they comply with the syllabi, the curriculum learning outcomes and the curriculum guidelines, in each grade and for each subject.

Public and private schools taking part in the Project for Autonomy and Curriculum Flexibility (pilot project 2017/18) may manage up to 25 % of the curriculum in a flexible way, as long as they comply with what is set out in Legislative order no. 5908/2017.

The category 'other subjects' (grades 1-4) includes the compulsory time for supervised study.

The 'compulsory options' that students can choose in upper secondary education vary according to education pathway. In grades 10-12, they can include: 'mathematics', 'natural sciences', foreign languages (languages 3 and 4), arts education, 'reading, writing and literature', 'social studies', technology and ICT. In grades 10-11, language 2 is also a compulsory option.

Within the schools taking part in the Project for Autonomy and Curriculum Flexibility, in compliance with Legislative order no. 5908/2017, upper secondary education students are guaranteed the opportunity of creating their own personal pathway by being able to choose options from different school pathways.

The 'non-compulsory curriculum' includes religion and moral education, as well as curriculum enrichment activities such as English or other foreign languages, sports, arts education, sciences, information and communications technology and education for citizenship.

Romania

In Romania, general compulsory education has 11 grades. It includes primary education (the preparatory grade and grades 1-4), *gimnaziu* education (grades 5-8) and the first two years of upper secondary education (grades 9-10). Grade 1 on the diagrams corresponds to the preparatory grade in the Romanian education system, grade 2 to grade 1, etc. At ISCED 34 level, the instruction time and the subjects vary across the different pathways. Data in this report concerns the scientific track.

The Framework Plan approved in 2013 has been progressively implemented since then. In this school year, all grades in primary education are based on the Framework Plan approved in 2013. Schools can decide to provide one additional period per week.

The Framework Plan for lower secondary education (grades 6-9), approved in 2016 started to be implemented in 2017-2018 in grade 6. The new Framework Plan will be progressively implemented in the next three school years (2018/19 grade 7, 2019/20 grade 8, and 2020/21 grade 9).

The new Framework Plan for the Gymnasium brings the following novelties for the 6th grade (the 5th grade in the Romanian educational system): reducing the number of hours per week of the Romanian language from five to four; introducing the compulsory subject 'informatics and ICT' (one hour a week); increasing the number of hours allocated to social studies by two hours per week and introducing a compulsory elective subject for the students.

The 'other subjects' category includes: in grades 1-5 (preparatory and grades 1-4 in the Romanian system), 'music and movement'; in grades 1-3 (preparatory and grades 1-2 in the Romanian system), personal development; in grades 6-9 (5-8 in the Romanian system), counselling and guidance; in grade 9 (8 in the Romanian system), Latin language; and in grade 11 (10 in the Romanian system), entrepreneurship education.

Slovenia

Compulsory education is provided in a single structure, which comprises 9 years. The reported curriculum is followed by 95.3 % of pupils. In areas where Italian and Hungarian ethnic minorities live, schools implement adapted curricula, which include two more lessons per week and a slightly different allocation of the instruction time between subjects, given that students have to learn two languages – Slovenian, and Italian or the Hungarian language. The adapted curriculum is followed by 3.8 % of pupils.

In the 2017/18 school year, the first foreign language (language 2) is compulsory for all students in grade 3.

In grades 1-3, the subject area environmental education (3 lessons a week) encompasses different subjects: 'natural sciences' (1.25 lessons a week), 'social studies' (1.25 lessons a week) and technology (0.5 lessons a week). In grades 4-5, the subject natural sciences and technics (3 lessons a week) includes the subjects 'natural sciences' (2 lessons a week) and technology (1 lesson a week). In grades 7-8, the subject 'patriotic and citizenship culture and ethics' (1 lesson per week) is reported in the category 'social studies'. The annual compulsory additional 15 days of activities in arts, sciences, physical education and technology have been included in the respective categories.

In grades 1-9, religion/ethics/moral education is integrated into 'social studies'. In grades 7-9, it can also be a compulsory option. ICT is integrated into all the subjects in grades 1-9. In grades 6-8, it is integrated into technology and, in grades 7-9, it can also be a compulsory option.

The category 'other subjects' includes the form time.

The 'compulsory options' in grades 7-9 include subjects in the fields of social sciences and humanities, and natural sciences and technology such as ICT, technology, 'language 3', 'language 4', religion/ethics/moral education, 'social studies', physical education, practical skills, arts education and 'natural sciences'. Schools have to offer at least three subjects from each field, including a mandatory foreign language, rhetoric, and religions and ethics in the field of social sciences and humanities. Students may be exempted from attending 'compulsory options' for attending music school with an accredited programme.

Schools must provide the following non-compulsory subjects: in grade 1, first foreign language (attended by 92 % of students); in grades 4-6: second foreign language, arts, ICT, sports and techniques (attended by 87 % of students); in grades 7-9, a foreign language (attended by 8 % of students); in grades 7-9, an additional lesson of compulsory options. The 'non-compulsory curriculum' (grades 1-9) also includes student interest activities, supplementary lessons and remedial education. In grade 1, 72 % of students also attend 'morning care', and, in grades 1-5, 84 % of the students are

enrolled in the after-school activities, which follow official guidelines for their implementation and are taught by qualified teachers.

Slovakia

The State Education Programmes in force since 2015/16 set the minimum instruction time for primary and lower secondary education per grade, not for a group of grades (vertical flexibility) as in previous years. Still, instruction time for ISCED 34 is prescribed for the four years of upper secondary education. Given that only the first year (grade 10) is compulsory, a quarter of this time has been included in each subject category.

The 'compulsory flexible subjects' that schools can offer are, at the same time, compulsory options for students, and include a second and third language, technology, and 'other subjects' such as transport education, sex education and minority languages. Schools can also decide to offer additional lessons for some compulsory subjects.

Finland

Schools and education providers can start teaching any compulsory subject with vertical flexibility from grade 1. They are obliged to introduce the following subjects by the grades specified at the latest: the first foreign language, by grade 3; the second foreign language, by grade 6; social studies, by grade 4; and home economics, guidance and counselling (practical and vocational skills), by grade 7.

The compulsory subjects with flexible timetable include music, visual arts, crafts, physical education and home economics.

The compulsory subjects chosen by schools can be any subject.

The non-compulsory curriculum refers to an optional foreign language.

Sweden

The scope includes both public and grant-aided independent schools (Sw. fristående skola).

The minimum instruction time is recommended for the nine years of compulsory education and schools decide how to distribute it between the grades. For comparability purposes, the total instruction time has been divided between ISCED levels 1 and 24 proportionally to the number of years in each education level (6 and 3 respectively) but it does not correspond to reality. The number of hours for a subject or group of subjects may be reduced by at most 20 % to accommodate school options, except for English, mathematics, Swedish and Swedish as a second language.

The 'compulsory options' that students have to choose from include: deepening or broadening pupils' knowledge of one or more subjects, Swedish, Swedish as a second language (provided that pupils have already received education in this subject), English and sign language. The total number of instruction hours for the second foreign language as a compulsory option is 320, but the steering documents do not lay down the starting grade. It is common practice for schools to start teaching the second foreign language in grade 6.

In grades 1-9, technology is a separate subject, as are the natural science subjects biology, physics, and chemistry. The total number of hours allocated to these four subjects is 800, but the number of hours for each subject is not specified in the regulations.

The 'non-compulsory curriculum' includes mother tongue tuition for children with a mother tongue other than Swedish. Municipalities can decide how to organise this tuition and its duration. The regular practice is one hour per week.

United Kingdom – England

The data in the figures applies to pupils in public schools (maintained schools) only. The information in these notes also applies to pupils in government-dependent private institutions (academies, including free schools).

There is no prescribed minimum time for individual subjects or in total. However, all schools must provide sufficient lesson time to deliver a broad and balanced curriculum that includes all statutory requirements.

For pupils in maintained schools (public schools), legislation sets requirements for the subjects to be taught:

- Language 2 refers to any modern or ancient foreign language in grades 3-6 and any modern foreign language in grades 7-9.
- Religion: Schools are required to provide for the teaching of religious education and for a daily act of collective worship. Parents have the right to withdraw their child from religious education and from collective worship.
- Practical and vocational skills: schools are required to secure access to independent and impartial careers advice and guidance for pupils in grades 8-11.
- Other subjects: schools are required to provide for the teaching of sex and relationships education to all pupils in grades 7-11. Parents have the right to withdraw their child from this teaching.
- Compulsory options chosen by students: pupils in grades 10 and 11 must be offered options in foreign languages, arts, technologies and social sciences.

Schools may also require pupils to study subjects that are not part of the compulsory curriculum, for example foreign languages, arts, technologies or social sciences in grades 10 and 11.

For academies (government-dependent private institutions), subject requirements are not set by legislation but by an individual funding agreement with the Secretary of State. All funding agreements set a requirement for a broad and balanced curriculum that includes English, mathematics, science and religious education.

After the end of grade 11, there is an additional legal requirement to engage in full- or part-time education or training from age 16 to 18.

United Kingdom – Wales

The information in the figures applies to public schools (maintained schools).

Minimum weekly lesson times are suggested in Welsh Office Management of the School Day Circular 43/90. There is a further requirement on schools to allow sufficient instruction time to deliver a broad and balanced curriculum that includes all statutory requirements. Schools may provide more than the minimum time if they wish.

Legislation sets requirements for the subjects to be taught, but does not specify teaching time for these subjects:

- Language 2 refers to Welsh and language 3 to modern foreign languages (a European or world language).

- Religion: Schools are required to provide for the teaching of religious education and for a daily act of collective worship. Parents have the right to withdraw their child from religious education and from collective worship.
- Practical and vocational skills: An introduction to careers and the world of work is compulsory for grades 7-11.
- Other subjects: Personal and social education (PSE) forms part of the basic curriculum for all grades. Sex education: schools are required to provide for the teaching of sex education to all pupils at grades 7-11. Parents have the right to withdraw their child from this teaching.

Schools may also require students to study subjects that are not part of the compulsory curriculum, for example foreign languages, arts education or technology in grades 10 and 11.

United Kingdom – Northern Ireland

Schools must provide sufficient lesson time to deliver a broad and balanced curriculum that includes all statutory requirements. Schools may provide more than the minimum if they wish.

- In grades 1-4, pupils are required to be under instruction for a minimum of 3 hours per day, excluding religious education, for which an additional 2.5 hours per week is allocated.
- In grades 5-7, pupils are required to be under instruction for 4.5 hours a day, excluding religious education for which an additional 2.5 hours per week is allocated.
- In grades 8-12, pupils are required to be under instruction for 4.5 hours a day, excluding religious instruction. Time allocated for religious instruction is expressed in periods: three periods a week in grades 8-10 and two periods a week in grades 11-12. The length of a period varies across schools but for the purpose of this report is estimated as 35 minutes.

Legislation sets requirements for the subjects to be taught, but does not specify teaching time for these subjects, other than for religious education:

- Language 2 refers to any official language of the European Union other than English and, in Irish-speaking schools, other than Irish.
- Religion: Schools are required to provide for the teaching of religious education and for a daily act of collective worship. Parents have the right to withdraw their child from religious education and from collective worship.
- Practical and vocational skills: Learning for life and work is compulsory in grades 8-12. This includes employability, local and global citizenship and personal development (including relationship and sexuality education, RSE). For grades 8-10, it also includes home economics.
- Other subjects: Personal development and mutual understanding (PDMU) is compulsory in grades 1-7. This includes personal understanding and health (incorporating emotional development, learning to learn, health, relationships and sexuality education); and mutual understanding in the local and global community.

The compulsory curriculum for grades 1-12 also includes cross-curricular skills (communication, using mathematics and using ICT). In grades 1-10, the 'other skills' (thinking, problem solving and decision-making, self-management, working with others, managing information, and being creative) and in grades 11-12 the 'other skills' (problem solving, self-management, and working with others) are also developed.

In grades 11-12, the Entitlement Framework provides greater flexibility for pupils to choose from the wider range of general and applied subjects that schools have to provide access to.

Schools may also require pupils to study subjects that are not part of the compulsory curriculum.

United Kingdom – Scotland

The Scottish Curriculum for Excellence does not prescribe any minimum instruction time with the exception of 2 hours per week for physical education, but it states the 'experiences and outcomes' that the five levels of the Broad General Education Phase – which span several grades each – must include across eight curriculum areas. Local authorities and schools are responsible for agreeing to the specific subjects and the time allocated to them in each grade. National curriculum guidance produced by Education Scotland sets out that all children and young people within the Broad General Education phase have an entitlement to learning within each of the eight curriculum areas.

Although there is no intended instruction time, the Education (Scotland) Act 1980, which reflects previous legislation dating back to 1972, imposes a statutory duty on local authorities to provide religious education in Scottish schools. In the case of religious education in Roman Catholic Schools – all Catholic schools are expected by the Bishops' Conference of Scotland to follow guidelines established by the Catholic Education Commission on the provision of adequate time for religious education within the school curriculum.

With regard to languages: The Scottish curriculum has eight eight curriculum areas – one of which is languages. National curriculum guidance produced by Education Scotland sets out that all children and young people within the Broad General Education (ages 3-16) have an entitlement to learning within each of the eight curriculum areas. The languages curriculum area includes literacy and English, literacy and Gàidhlig, modern languages, Gaelic (learners), classical languages and Scots. These span different subject categories in this study. While learning in these areas is not 'compulsory' in the strict sense of being set out in legislation, there is an expectation that this will be delivered by local authorities and state schools. The Scottish Government currently has a policy – the 1+2 Languages policy – which requires that every child and young person is entitled to a second language (L2) from P1 to S3, and then an experience of one or more third language(s) (L3) at the latest from P5 until S3. This entitlement will be fully implemented by 2021.

Albania

The compulsory subjects chosen by schools include: modules in environment or different activities in elementary level/grades 1-5; grades 6-9, mostly second foreign language, e.g. German, French, Italian, etc.

Bosnia and Herzegovina

There are three official languages in B&H and classes are held in one of those languages.

In grade 1, 'mathematics' is integrated into 'reading, writing and literature' (and 'creation' in B&H), and arts education is integrated into physical education and sports.

In grades 1-4, 'social studies' are integrated into 'natural sciences'.

Switzerland

With the exception of a minimum number of lessons for physical education, there is no standard curriculum and no standard instruction time defined at national level. Curricula and the intended instruction time are determined by the 26 Cantons at the regional level. The delimitation and the number of both compulsory and non-compulsory subjects, as well as the total instruction time and its

distribution between subjects, vary considerably across Cantons. Therefore, only the data for the total of instruction time per grade and ISCED level can be presented. The total of compulsory instruction time for six years on primary level varies between a minimum of 4 560 and a maximum of 5 450 hours between Cantons. The total compulsory instruction time for the three years at lower secondary level varies between a minimum of 2 400 and a maximum of 3 220 hours.

The scope includes only public institutions. The figures represent weighted averages of the cantonal requirements for each grade and the total instruction time as given by the cantonal timetables (*Stundentafeln/grilles horaires*). The averages are weighted by the number of students per Canton in primary education (six years) and lower secondary education (three years) in 2015/16. For the Canton Ticino with five years of primary education and four years of lower secondary education in 2017/18, calculations are based on six years of primary and three years of lower secondary education for reasons of comparability. The instruction time indicated in lower secondary education is the mean of the different pathways (basic and advanced requirements; without baccalaureate schools in grade 9).

Compulsory education includes 2 years of pre-primary education (ISCED 02) and lasts 11 years in total.

The length of holiday periods and the number of public holidays also vary between cantons. The number of instruction days per school year is presented as an average of the number of school weeks per year (varying between 36.5 and 40 weeks) minus an estimated average of five public holidays. Teacher development days are at the discretion of the school and therefore cannot be excluded. The length of a period varies between 45 (in the majority of the Cantons) and 50 minutes.

Iceland

In grades 1-10, the subject 'practical and vocational skills' is integrated into arts education, and religion/ethics/moral education in 'social studies'.

According to the National Curriculum for Compulsory Schools, English is defined as the first foreign language (language 2) and Danish (in some cases Norwegian or Swedish) as the second foreign language (language 3). For the age group in question (grades 1-4), the Curriculum defines the specific minimum instruction time for foreign languages which schools must fulfil, but are free to allocate the total instruction time between languages and to determine when instruction commences. Schools are, however, obliged to ensure that students fulfil the specific time-requirements set for each grade level.

The 'compulsory options chosen by students' can include extra teaching time for compulsory subjects and 'school electives'. In grades 5-10, students can also choose to follow a third foreign language (in addition to Danish and English).

Liechtenstein

In grade 1, English is taught as an integrated subject (CLIL). It is up to teachers to decide how this is done. It is reported as one lesson integrated into the total instruction time.

'Social studies' is integrated into 'natural sciences' in grades 2-5. In *Realschule* and *Oberschule*, 'social studies' is also integrated into 'natural sciences' in grades 6-9. In grades 6-7, technology is integrated into arts education in all pathways.

The category 'other subjects' includes (in the three pathways) life science and 'class hour' (which addresses topics such as personal development, sex education, career guidance and form time). In *Oberschule* and *Realschule*, the 'other subjects' also includes home economics.

In grade 9, the compulsory options for students in the *Gymnasium* depend on the track they choose, which can be: Latin; Spanish; Italian and Latin; art, music and pedagogy; economics and law; maths

and natural sciences. In *Realschule* and *Oberschule*, the compulsory options include: technical drawing, crafts and design, arts, music, physical education, second foreign language (language 3) (French), other subjects/life sciences/school projects (in *Realschule*) and vocational education (in *Oberschule*).

In *Oberschule* and *Realschule* (grades 6-9), schools offer additional non-compulsory lessons for remedial teaching (including additional lessons in German for migrants) and specific support lessons for high achievers in order to move to another type of school. In grade 9, they are used particularly to prepare students (individually) for their further general or vocational education career. In the *Gymnasium*, the non-compulsory subjects aim to promote topics across different subjects (interdisciplinary) and students' individual interests.

Montenegro

'Social studies' are integrated into 'natural sciences' in grades 1-3.

Religion/ethics/moral education is integrated into 'social studies' throughout compulsory education.

Technology is integrated into 'natural sciences' in grades 1-4, and into ICT in grades 5-8. In grade 9, both technology and ICT are integrated into the compulsory subjects. Besides being studied as a separate subject, 'ICT' is integrated into all other subjects.

In schools where the Montenegrin language is taught as a non-mother tongue language, the number of lessons has been increased by two.

One period per week (of the recommended instruction time per year) must be devoted to form time.

In grades 7-9, students have to choose one compulsory subject (one lesson per week). Schools are obliged to offer a minimum of five subjects from a list of 20 approved by the national council for education.

The compulsory flexible subjects chosen by schools cover two weeks of instruction time that schools devote to culture, technical activities, sports, outdoor education and school trips.

The 'non-compulsory curriculum' includes student interest activities and extra time for compulsory subjects and options.

Norway

Instruction time per subject for the 10-year compulsory education programme is mainly established for primary schooling (ISCED 1) as a whole (grades 1-7), and for lower secondary schooling (ISCED 24) as a whole (grades 8-10).

In primary education, instruction time for the core subjects 'reading, writing and literature', 'mathematics', 'natural sciences' and the first foreign language (language 2) is prescribed for grades 1-4, and for grades 4 to 7. Schools can decide how to distribute this time between the relevant grades. Schools must provide 38 additional hours per year in compulsory subjects of their own choice, based on what is most advisable according to local needs.

The number of hours allocated to natural sciences for grades 1 to 7 has recently been increased to 366, which represents an increase of 38 hours – also in the total instruction time.

On compulsory options chosen by the students:

In grades 8 to 10, lower secondary education (ISCED 24), students can choose between 14 subjects (as part of a pilot a 15th subject in computing has been added) as compulsory options for a total number of 171 hours. Every school must offer at least two different subjects as compulsory options. In

addition, a student can choose between a second foreign language (language 3) and in-depth studies or work-related training for a total number of 222 hours. The in-depth studies give students the opportunity to develop their competences in English, reading writing and literature, Sami, mathematics or work-related training instead of starting a new foreign language subject. Schools can decide which subjects to offer as in-depth studies and how to organise them, but they must offer at least one in addition to language 3. In 2016/17, 74 % of the students had language 3 while only 17 % chose in depth-studies in other languages and 10 % in-depth studies in mathematics or work-related training.

Serbia

The municipalities with an official minority language can organise classes in this language. Schools where the Serbian is the language of instruction may include a minority language as an option (36 lessons a year).

In grades 1-4, 'social studies' is integrated into 'natural sciences'. In grades 6-8, ICT is integrated into technology.

In grade 1, students have to choose between religion and civic education, and they can follow the same subject during years 2-8 or switch in grade 5.

The 'other subjects' include form time (classroom meeting).

In grades 1-8, students have to choose one of the 'compulsory flexible subjects' offered by schools. In grades 1-4, schools have to offer at least three of the following 'compulsory flexible subjects': national tradition, hands in dough/discovering the world, nature keeper, creative writing, from toys to computers, native language/language with national culture elements and chess. In grades 5-8, schools have to offer at least three of the following 'compulsory flexible subjects': nature keepers, everyday life in the past, drawing, painting and sculpting, choir and orchestra, ICT, native language/language with national culture elements, chess and crafts.

The non-compulsory curriculum consists of supplementary classes, additional classes and different kinds of extra-curricular activities (volunteering, humanitarian activities, cultural activities, sports, etc.).

The former Yugoslav Republic of Macedonia

Primary education is implemented by municipal and state primary schools. State schools are established by the government for students with special educational needs. There are also international public schools implementing the curricula in English, French, and German.

In grades 4-5, the subject crafts is included in the category 'other subjects'. The subject innovations in grade 9, which was introduced as the result of the adoption and implementation of the Strategy for Entrepreneurship Education, has been included in the category 'practical and vocational skills'.

In grade 6, students have to choose one of the following compulsory options: ethics of religions, introduction to religions and classical culture of the European civilization. In grades 7-9, students have to choose one of the following compulsory options: homeland culture, environmental education, local studies, folk dance, projects in musical art, projects in painting art, technical education, projects in informatics, sport, health, skills for living and computer programming (only in grades 8-9). In grades 3-9, students can decide to follow (with the consent of their parents) one of the following non-compulsory subjects: Aromanian language and culture, Roma language and culture, or Bosnian language and culture.

Although there is no maximum age set by the Government for compulsory education, ISCED 3 is mandatory for all citizens. The general programme at this ISCED level 34 is called the Gymnasium and consists of four compulsory years. Nevertheless, data in this report only shows the three first

years (grades 10-12), given that compulsory education for students following the vocational programmes might end at an earlier age. For the fourth year of the Gymnasium, the minimum instruction time for the total compulsory curriculum is 540 hours a year (108 for 'reading, writing and literature'; 81 for 'mathematics', 'social studies', the first foreign language and physical education and health; and 54 for the second foreign language and for the subject business and entrepreneurship.

In the Gymnasium, students have to choose one of the following options: in grade 11, classical languages (Latin, ancient Greek), information technology, basic algebra and geometry, ethics, pronunciation and writing; in grade 12, linear algebra and analytical geometry, algebra; in grade 13, programming languages, mathematical analysis, physics.

Turkey

Instruction time for ISCED 34 in this report only relates to the Anatolian high schools. There are four general education programmes at ISCED level 3 in Turkey: Anatolian high school (80 % of students), high school (11 %), science high school (5 %) and Anatolian teacher training high school (4 %). High schools and Anatolian teacher training high schools are gradually been transformed into Anatolian high schools. High schools still enrol approximately 40 % of students in grade 12. Nevertheless, the curricula of high schools and Anatolian high schools in this grade are very similar, with the main exception being the instruction time for foreign languages, which is lower in high schools.

In grades 1-3, the 'other subjects' category includes free activities.

In grades 5-8, students have to choose three subjects per grade. Compulsory options include subjects pertaining to religion/ethics/moral education, 'reading, writing and literature', 'mathematics', 'natural sciences', 'social studies', arts education, sports and foreign languages. ICT is a compulsory option in grades 7-12. In grades 9-12, schools can offer as compulsory options: language, Turkish literature, mathematics, geometry, physics, chemistry, biology, history, geography, psychology, sociology and a foreign language.

Definition of instruction time

The intended instruction time includes the time a public school is expected to provide instruction to students on all the subjects integrated in the compulsory and non-compulsory curriculum in the school premises or in out-of school activities which are formal parts of the compulsory programmes. The instruction time excludes:

- Breaks between classes or other types of interruptions.
- Non-compulsory time outside the school day.
- Time dedicated to homework activities.
- Individual tutoring or private study.
- Days when schools are closed for festivities, such as national holidays, and days when students
 are not expected to be at school because of teacher development days or examination periods.

National data sheets (Part II, Sections 2 and 3) present data as **annual instruction time in hours of 60 minutes per grade**, taking into account the number of instruction days per week and per year and the number and length of periods (³⁰). When the data collected from the national policy document is provided in periods (usually between 35 and 50 minutes), per week or per year, calculations are done in order to obtain standard annual data in hours.

Definition of subject categories

The subjects taught during full-time compulsory education in Europe vary across countries. In order to be able to compare the information, it is necessary to group them according to more general subject categories. Most subject categories cover several subjects (e.g. natural sciences: physics, chemistry or biology).

The category 'reading, writing and literature' is associated to 'language 1'. Additional languages learnt by students — usually but not necessarily foreign languages, are referred to as 'language 2', 'language 3', 'language 4' and 'language 5'.

The following table defines the subject categories which are included in the national data sheets.

Subject categories	Definitions			
Reading, writing and literature (L1)	Covers skills such as spelling, reading, and writing in the language of instruction and includes subjects such as grammar, language of instruction and literature. It can be considered as the first language taught to students. If there are two languages of instruction in almost every public school, then hours allocated to reading, writing and literature in both languages of instruction should be reported.			
Mathematics	Covers all numeracy skills and subjects such as arithmetic, algebra, geometry, statistics, etc.			
Natural sciences	Includes subjects such as science, physics, chemistry, biology, environmental sciences and ecology.			
Social studies	Includes subjects such as history, geography and all related studies. May also include community			

⁽³⁰⁾ All figures are rounded up to the next complete number and for this reason some non correspondence between individual subjects and total annual figures might exist. For more information on ISCED classifications, see: http://www.uis.unesco.org/Education/Documents/isced-2011-en.pdf

Subject categories	Definitions		
	studies, social and political instruction, philosophy or civics education.		
Languages (L 2-5)	Includes subjects that develop students' knowledge of a language viewed in the curriculum as 'foreign' (or modern) languages, other national languages and/or regional and minority languages. This definition of languages in the curriculum is educationally based and unrelated to the political status of languages.		
Physical education and health	Includes subjects such as education in sports and health enhancing physical activities, as well as time devoted to instruction in competitive and traditional games, gymnastics, swimming, athletics, dance or other activities that develop pupils' physical and social competences (including knowledge, skills, psychomotor coordination, cooperation and leadership) and an active healthy lifestyle.		
Arts education	Includes subjects such as arts, history of arts, music, visual arts, drama, music and dance performance, photography, and creative handicraft.		
Religion/ethics/ moral education	Includes subjects whose aim is to teach the principles and history of one or more religions, and subjects such as ethics whose aim is to determine how to live and behave in accordance with human and social principles.		
Information and communication technologies (ICT)	Includes subjects such as informatics, information and communication technologies or computer science. These subjects include a wide range of topics concerned with the new technologies used for the processing and transmission of digital information, including computers, computerised networks (including the Internet), microelectronics, multimedia, software and programming, etc.		
Technology	Includes subjects that provide knowledge on the practical use of scientific or technological discoveries that use specific instruments and processes. For example, construction, electricity, electronics, graphics and design, etc.		
Practical and vocational skills	Includes vocational skills (preparation for a specific occupation), accountancy, business studies, career education, clothing and textiles, driving and road security, home economics, nursing, secretarial studies, tourism and hospitality, woodwork, metalwork and sewing.		
Other subjects	This category includes different subjects that cannot be classified within the other groups or which specifically reflect national concerns. In this category, the following types of subjects may be included: classical languages and minority languages which the curriculum does not consider to be other languages, personal development/well-being.		

Definition of curriculum categories

The intended instruction time might be composed of a compulsory curriculum and a non-compulsory curriculum. The compulsory curriculum refers to the amount and allocation of instruction time that has to be provided in almost every public school and must be attended by almost all public sector students.

The compulsory curriculum contains compulsory subjects defined as such by central education authorities and taught to all pupils. It may also be flexible in various ways as local authorities, schools, teachers and/or students may have varying degrees of freedom to choose the subjects and/or the allocation of compulsory instruction time.

The following table defines the curriculum categories which are included in the information presented in the national data sheets.

Curriculum categories	Definitions		
Compulsory subject	Subject that must be studied by all students.		
Compulsory options chosen by the students	Includes the total amount of instruction time for subjects that are chosen by students, where there is a list of subjects that school must offer and each student must choose one or more from the list.		
Compulsory flexible subjects chosen by schools	Includes the total amount of compulsory instruction time indicated by the central authorities, which regional authorities, local authorities, schools or teachers allocate to subjects of their choice (or subjects they chose from a list defined by central education authorities). For example, schools may be able to choose between offering religious education or more science, or art, etc., but to offer one of these subjects is compulsory for the school and students must study it.		
Compulsory subjects with flexible timetable (total time devoted to)	Includes the total amount of instruction time indicated by the central authorities for a given group of subjects, which regional authorities, local authorities, schools or teachers allocate to individual subjects. There is flexibility in the time spent on a subject, but not in the subjects to be taught. For example, central authorities may define the total number of hours that students should be studying reading, writing and literature, mathematics, science and modern foreign languages per year and schools may choose how to distribute this time between these individual subjects.		
Non-compulsory curriculum	Includes the total amount of instruction time to which students are entitled beyond the compulsory hours of instruction and that almost every public school is expected to provide. Subjects can vary from school to school or from region to region and take the form of elective subjects. For example, students may have the possibility to take a mathematics enrichment course or to study an additional language, above the compulsory hours of instruction. Students are not required to choose one of these elective subjects, but all public schools are expected to offer this possibility.		

Country codes

EU/EU-28	European Union	AT	Austria	
BE	Belgium	PL	Poland	
BE fr	Belgium – French Community	PT	Portugal	
BE de	Belgium – German-speaking Community	RO	Romania	
BE nl	Belgium – Flemish Community	SI	Slovenia	
BG	Bulgaria	SK Slovakia		
CZ	Czech Republic	FI	Finland	
DK	Denmark	SE Sweden		
DE	Germany	UK	United Kingdom	
EE	Estonia	UK-ENG	England	
IE	Ireland	UK-WLS	Wales	
EL	Greece	UK-NIR	NIR Northern Ireland	
ES	Spain	UK-SCT	CT Scotland	
FR	France	EEA and Candidate countries		
HR	Croatia	ВА	Bosnia and Herzegovina	
IT	Italy	СН	Switzerland	
CY	Cyprus	IS	Iceland	
LV	Latvia	LI	Liechtenstein	
LT	Lithuania	ME	Montenegro	
LU	Luxembourg	(*)	The former Yugoslav Republic of Macedonia (Provisional code)	
HU	Hungary	NO	Norway	
МТ	Malta	RS	Serbia	
NL	Netherlands	TR	Turkey	

Statistical codes

: Data not available (–) Not applicable

EDUCATION, AUDIOVISUAL AND CULTURE EXECUTIVE AGENCY

EDUCATION AND YOUTH POLICY ANALYSIS

Avenue du Bourget 1 (J-70 – Unit A7)
B-1049 Brussels
(http://ec.europa.eu/eurydice)

Managing editor

Arlette Delhaxhe

Author

Sonia Piedrafita

Layout and graphics

Patrice Brel

Cover

Virginia Giovannelli

Production coordinator

Gisèle De Lel

Data in this publication come from the Eurydice/OECD joint data collection on instruction time.

EURYDICE NATIONAL UNITS

ALBANIA

Eurydice Unit

European Integration and Projects Department Ministry of Education and Sport Rruga e Durrësit, Nr. 23

1001 Tiranë

AUSTRIA

Eurydice-Informationsstelle

Bundesministerium für Bildung, Wissenschaft und Forschung

Abt. Bildungsentwicklung und -monitoring

Minoritenplatz 5

1010 Wien

Contribution of the Unit: Joint responsibility

BELGIUM

Unité Eurydice de la Communauté française Ministère de la Fédération Wallonie-Bruxelles Direction des relations internationales Boulevard Léopold II, 44 – Bureau 6A/008 1080 Bruxelles

Contribution of the Unit: Joint responsibility

Eurydice Vlaanderen

Departement Onderwijs en Vorming/

Afdeling Strategische Beleidsondersteuning

Hendrik Consciencegebouw 7C10

Koning Albert II-laan 15

1210 Brussel

Contribution of the Unit: Eline De Ridder (coordination); expert: Raymond Van De Sijpe

Eurydice-Informationsstelle der Deutschsprachigen Gemeinschaft

Ministerium der Deutschsprachigen Gemeinschaft

Fachbereich Ausbildung und Unterrichtsorganisation Gospertstraße 1

4700 Eupen

Contribution of the Unit: Clara Jacquemart and Catherine Reinertz

BOSNIA AND HERZEGOVINA

Ministry of Civil Affairs Education Sector Trg BiH 3 71000 Sarajevo

Contribution of the Unit: Joint responsibility

BULGARIA

Eurydice Unit

Human Resource Development Centre Education Research and Planning Unit 15, Graf Ignatiev Str.

1000 Sofia

Contribution of the Unit: Silvia Kantcheva

CROATIA

Ministarstvo znanosti i obrazovanja Donje Svetice 38 10000 Zagreb Contribution of the Unit: Duje Bonacci and Ana Tecilazić Goršić

CYPRUS

Eurydice Unit

Ministry of Education and Culture

Kimonos and Thoukydidou

1434 Nicosia

Contribution of the Unit: Christiana Haperi;

experts: Ioannis Ioannou (Department of secondary general education), Panayiotis Kyrou (Department of primary education)

CZECH REPUBLIC

Eurydice Unit

Centre for International Cooperation in Education

Dům zahraniční spolupráce

Na Poříčí 1035/4

110 00 Praha 1

Contribution of the Unit: Marcela Máchová;

expert: Michaela Maršíková (Ministry of Education, Youth and Sports)

DENMARK

Eurydice Unit

Ministry of Higher Education and Science

Danish Agency for Higher Education

Bredgade 43

1260 København K

Contribution of the Unit: The Ministry of Higher Education

and Science and the Ministry of Education

ESTONIA

Eurydice Unit

Analysis Department

Ministry of Education and Research

Munga 18

50088 Tartu

Contribution of the Unit: Kersti Kaldma (coordination); expert: Kristel Vaher (analyst, Ministry of Education and

Research)

FINLAND

Eurydice Unit

Finnish National Agency for Education

P.O. Box 380

00531 Helsinki

Contribution of the Unit: Hanna Laakso

FORMER YUGOSLAV REPUBLIC OF MACEDONIA

National Agency for European Educational Programmes and Mobility

Porta Bunjakovec 2A-1

1000 Skopje

Contribution of the Unit: Dejan Zlatkovski; Darko Dimitrov

FRANCE

Unité française d'Eurydice

Ministère de l'Éducation nationale, de l'Enseignement supérieur et de la Recherche

Direction de l'évaluation, de la prospective et de la performance

Mission aux relations européennes et internationales 61-65, rue Dutot

75732 Paris Cedex 15

Contribution of the Unit: Anne Gaudry-Lachet

GERMANY

Eurydice-Informationsstelle des Bundes Deutsches Zentrum für Luft- und Raumfahrt e. V. (DLR) Heinrich-Konen Str. 1 53227 Bonn

Eurydice-Informationsstelle der Länder im Sekretariat der Kultusministerkonferenz

Taubenstraße 10 10117 Berlin

Contribution of the Unit: Thomas Eckhardt

GREECE

Eurydice Unit

Directorate of European and International Affairs Ministry of Education, Research and Religious Affairs 37 Andrea Papandreou Str. (Office 2172) 15180 Maroussi (Attiki)

Contribution of the Unit: Magda Trantallidi, Maria Spanou and Dimitra Farmakiotou

HUNGARY

Hungarian Eurydice Unit Educational Authority 10-14 Szalay utca 1055 Budapest

Contribution of the Unit: Hungarian Eurydice Unit and Anna Imre (expert)

ICELAND

Eurydice Unit The Directorate of Education Víkurhvarfi 3 203 Kópavogur

Contribution of the Unit: Joint responsibility

IRELAND

Eurydice Unit
Department of Education and Skills
International Section
Marlborough Street
Dublin 1 – DO1 RC96
Contribution of the Unit: Inspectorate Department of
Education and Skills, led by Pádraig Mac Fhlannchadha

ITALY

Unità italiana di Eurydice Istituto Nazionale di Documentazione, Innovazione e Ricerca Educativa (INDIRE) Agenzia Erasmus+ Via C. Lombroso 6/15 50134 Firenze Contribution of the Unit: Erika Bartolini; expert: Lucia De Fabrizio (Ufficio 'Statistica e Studi', Ministero dell'istruzione, dell'università e della ricerca)

LATVIA

Eurydice Unit State Education Development Agency Valnu street 1 (5th floor) 1050 Riga Contribution of the Unit: Joint responsibility

LIECHTENSTEIN

Informationsstelle Eurydice Schulamt des Fürstentums Liechtenstein Austrasse 79 Postfach 684 9490 Vaduz

Contribution of the Unit: National Eurydice Information

LITHUANIA

Eurydice Unit National Agency for School Evaluation of the Republic of Lithuania Geležinio Vilko Street 12

Gelezinio viiko Si

03163 Vilnius

Contribution of the Unit: Lithuanian NU; external experts: Daiva Jakavonytė-Staškuvienė and Linas Jašinauskas

LUXEMBOURG

Unité nationale d'Eurydice
ANEFORE ASBL
eduPôle Walferdange
Bâtiment 03 - étage 01
Route de Diekirch
7220 Walferdange
Contribution of the Unit: Gilles Hirt (expert – Ministère de l'Éducation nationale, de l'Enfance et de la Jeunesse)

MALTA

Eurydice National Unit
Directorate for Research, Lifelong Learning and
Employability
Ministry for Education and Employment
Great Siege Road
Floriana VLT 2000
Contribution of the Unit: Joanne Bugeja and Peter Vassallo

MONTENEGRO

Eurydice Unit Vaka Djurovica bb 81000 Podgorica Contribution of the Unit: Nevena Čabrilo (Bureau for Education Services)

NETHERLANDS

Eurydice Nederland Ministerie van Onderwijs, Cultuur en Wetenschap Directie Internationaal Beleid Rijnstraat 50 2500 BJ Den Haag Contribution of the Unit: Joint responsibility and a special thanks to Hans Ruesink (the expert)

NORWAY

Eurydice Unit
Ministry of Education and Research
AIK-avd., Kunnskapsdepartementet
Kirkegata 18
P.O. Box 8119 Dep.
0032 Oslo
Contribution of the Unit: Joint responsibility

POLAND

Polish Eurydice Unit

Foundation for the Development of the Education System Aleje Jerozolimskie 142A

02-305 Warszawa

Contribution of the Unit: Magdalena Górowska-Fells and Michał Chojnacki; expert: Anna Nowożyńska (Ministry of National Education)

PORTUGAL

Unidade Portuguesa da Rede Eurydice (UPRE) Ministério da Educação e Ciência Direção-Geral de Estatísticas da Educação Av. 24 de Julho, 134

1399-054 Lisboa

Contribution of the Unit: Isabel Almeida; outside the Unit: Joint responsibility (General Directorate for Education)

ROMANIA

Eurydice Unit

National Agency for Community Programmes in the Field of Education and Vocational Training

Universitatea Politehnică București

Biblioteca Centrală

Splaiul Independenței, nr. 313

Sector 6

060042 București

Contribution of the Unit: Veronica – Gabriela Chirea, in cooperation with experts Laura Căpiță and

Angela Teşileanu (Institute of Science Education)

SERBIA

Eurydice Unit Serbia Foundation Tempus Ruze Jovanovic 27a 11000 Belgrade Contribution of the Unit: Joint responsibility

SLOVAKIA

Eurydice Unit

Slovak Academic Association for International Cooperation Krížkova 9

811 04 Bratislava

Contribution of the Unit: Joint responsibility

SLOVENIA

Eurydice Unit Ministry of Education, Science and Sport Education Development Office Masarykova 16 1000 Ljubljana Contribution of the Unit: Joint responsibility

SPAIN

Eurydice España-REDIE

Centro Nacional de Innovación e Investigación Educativa (CNIIE)

Ministerio de Educación, Cultura y Deporte

c/ Torrelaguna, 58

28027 Madrid

Contribution of the Unit: Fátima Rodríguez Gómez, Joaquín Martín Muñoz, Jaime Vaquero Jimenez and Joaquín María Vera Moros

SWEDEN

Eurydice Unit

Universitets- och högskolerådet/

The Swedish Council for Higher Education

Box 450 93 104 30 Stockholm

Contribution of the Unit: Joint responsibility

SWITZERLAND

Eurydice Unit

Swiss Conference of Cantonal Ministers of Education (EDK)

Speichergasse 6

3001 Bern

Contribution of the Unit: Alexander Gerlings

TURKEY

Eurydice Unit

MEB, Strateji Geliştirme Başkanlığı (SGB)

Eurydice Türkiye Birimi, Merkez Bina 4. Kat

B-Blok Bakanlıklar

06648 Ankara

Contribution of the Unit: Osman Yıldırım Uğur;

expert: Prof. Dr. Paşa Tevfik Cephe

UNITED KINGDOM

Eurydice Unit for England, Wales and Northern Ireland Centre for Research Planning and Knowledge Management National Foundation for Educational Research (NFER)

The Mere, Upton Park

Slough, Berkshire, SL1 2DQ

Contribution of the Unit: Joint responsibility

Eurydice Unit Scotland Learning Directorate Scottish Government

2-C North

Victoria Quay

Edinburgh EH6 6QQ

Contribution of the Unit: Gary Walsh

Recommended Annual Instruction Time in Full-time Compulsory Education in Europe - 2017/18

The Council of the European Union has set the goal of reducing low achievement in reading, mathematics and science among 15-year-olds to less than 15 % by 2020. How are European countries going to achieve this? One of the key elements in the learning process is the instruction time available to students.

In fact, not only the quality of instruction but also the time available for learning can have a positive effect on students' learning process, in particular, in the case of disadvantaged students.

This Instruction Time report analyses the recommended minimum instruction time in full-time compulsory general education in 43 European education systems for the year 2017-2018.

Special attention is paid to subjects, with a special focus on reading, writing and literature, mathematics, natural sciences and social studies.

The report outlines how reading, writing and literature are the subject area that takes up the largest share of instruction time, especially in primary education. Mathematics represents the second largest share of instruction time. Its share decreases at secondary level in favour of other subjects such as foreign languages.

In addition to the comparative analysis, the report includes national diagrams that illustrate data by country and subject, which have been collected jointly by the Eurydice and the NESLI networks. Eurydice has been collecting data on instruction time for more than two decades and updates annually these findings, available on the Eurydice website since 2010.

The Eurydice network's task is to understand and explain how Europe's different education systems are organised and how they work. The network provides descriptions of national education systems, comparative studies devoted to specific topics, indicators and statistics. All Eurydice publications are available free of charge on the Eurydice website or in print upon request. Through its work, Eurydice aims to promote understanding, cooperation, trust and mobility at European and international levels. The network consists of national units located in European countries and is co-ordinated by the EU Education, Audiovisual and Culture Executive Agency. For more information about Eurydice, see http://ec.europa.eu/eurydice.

