

# Education at a Glance 2023

## Country note

### Croatia

This country note provides an overview of the key characteristics of the education system in Croatia. It draws on data from *Education at a Glance 2023*. In line with the thematic focus of this year's *Education at a Glance*, it emphasises vocational education and training (VET), while also covering other parts of the education system. Data in this note are provided for the latest available year. Readers interested in the reference years for the data are referred to the corresponding tables in *Education at a Glance 2023*.

#### Highlights

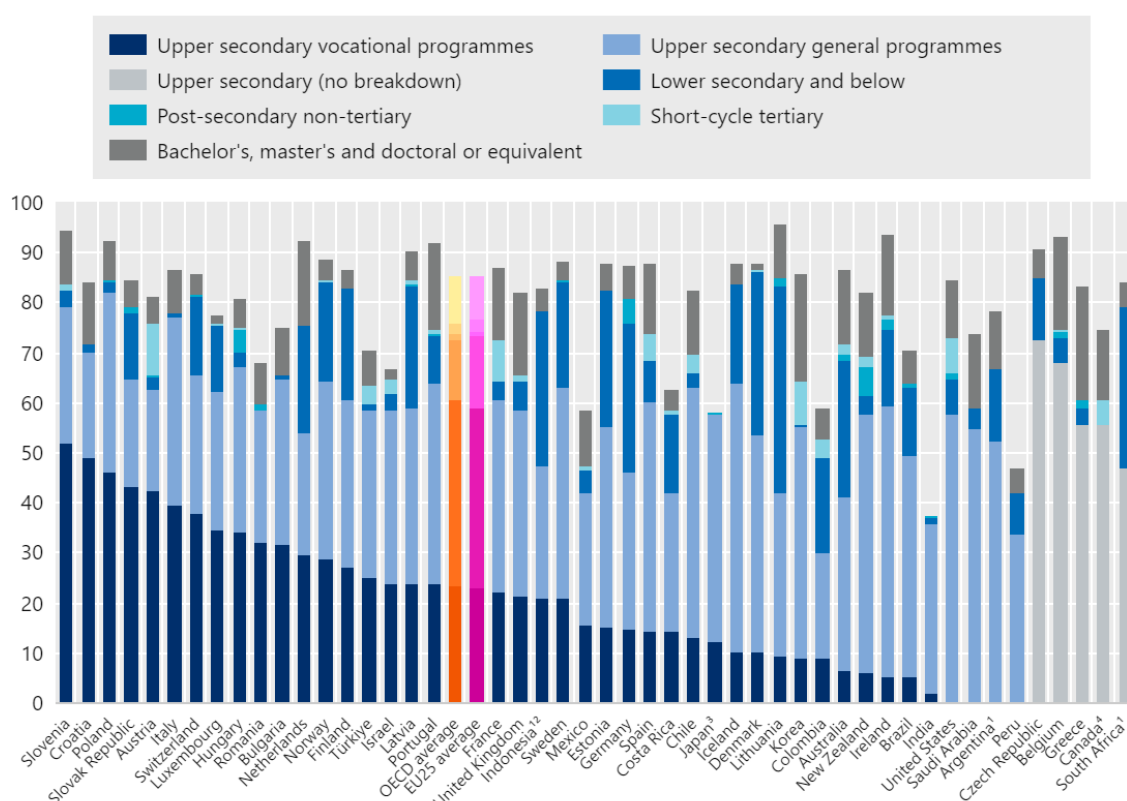
- In Croatia, 48% of 2-year-olds are enrolled in early childhood education (ECE), slightly above the OECD average of 41%. However, among 3-5 year-olds, the participation rate in ECE in Croatia is lower than the OECD average.
- In Croatia, the total number of compulsory instruction hours is 4 541 hours, distributed over eight grades. This number is much lower than the OECD average of 7 634 hours over nine grades.
- Vocational programmes are popular among upper secondary students in Croatia: 70% of 15-19 year-old upper secondary students are enrolled in a vocational programme. Across OECD countries the figure is lower, at 37%.
- Croatia spent 4.2% of its gross domestic product (GDP) on educational institutions (from primary to tertiary levels), below the OECD average of 5.1%. However, annual expenditure per full-time equivalent student as a fraction of annual per capita GDP (28%) is slightly higher than the OECD average (27%).
- Government is the main source of funding for primary to post-secondary non-tertiary education in Croatia, as in many OECD countries. In Croatia the central government is the source for 84% of expenditure on primary to post-secondary non-tertiary education. On average across OECD countries that share is less than half.
- Upper secondary education in Croatia has a lower student-teacher ratio than the OECD average. Upper secondary teaching staff are also relatively young compared to OECD countries. This is in particular the case for vocational programmes. There are 7 students in vocational upper secondary programmes per teaching staff member in Croatia, lower than in any OECD, partner and/or accession country. The share of teachers aged 50 or above in vocational upper secondary programmes is 35% in Croatia, below the OECD average of 43%.

## Access to education, participation and progress

- Participation in high-quality early childhood education (ECE) has a positive effect on children's well-being, learning and development in the first years of their lives. In Croatia, 48% of 2-year-olds are enrolled in ECE, slightly higher than the OECD average of 41%. The participation rate in Croatia increases to 66% among 3-year-olds, 71% among 4-year-olds and 75% among 5-year-olds. However, these shares are below the OECD average for the same age groups: 73% among 3-year-olds, 88% among 4-year-olds and 84% among 5-year-olds.
- Compulsory education in Croatia starts between the ages of 5 and 6 and continues until the ages between 15 and 16. Students who complete general upper secondary education typically graduate between the ages of 18 and 19. The age range for completing vocational programmes is wider, as students typically graduate from vocational upper secondary education between the ages of 15 and 19. This is similar to most OECD countries, where graduates from vocational upper secondary programmes have a wider age range, reflecting the greater diversity of the design of vocational programmes, and preceding pathways, than in the case of general education.
- The large majority of 15-19 year-olds across the OECD are enrolled in education. In Croatia, 21% of this age group are enrolled in general upper secondary education and 49% in vocational upper secondary education. A further 1% are enrolled in lower secondary programmes and 12% in tertiary programmes. This compares to an OECD average of 37% enrolled in general upper secondary programmes, 23% in vocational upper secondary programmes, 12% in lower secondary programmes and 12% in tertiary programmes (Figure 1). In other words, 70% of 15-19 year-old upper secondary students are enrolled in a vocational programme in Croatia compared to the OECD average of 37%.
- Tertiary education plays an essential role in developing advanced skills among young people, as well as adults. In Croatia, science, technology, engineering and mathematics (STEM) is the most prevalent broad field among tertiary new entrants to tertiary education. In 2021, 31% of new entrants enrolled in STEM, above the OECD average of 27%. As for many countries, business, administration and law is also prevalent in Croatia, accounting for 22% of new entrants to tertiary education, compared to an OECD average of 24%.
- In the context of rapidly changing labour market needs, adults need to adapt, re-skill and upskill. Lifelong learning, including non-formal education and training, is therefore crucial. In Croatia, the share of adults (aged 26-64) who participated in non-formal job-related education over a four-week reference period is 1% among those with vocational upper secondary attainment, 4% among those with general upper secondary attainment and 6% among those with tertiary attainment. These figures are lower than the average of OECD and accession countries with available data for the same categories (7%, 8% and 14%, respectively).

Figure 1. Enrolment rates of 15-19 year-olds, by level of education (2021)

In per cent



1. Year of reference differs from 2021: 2020 for Argentina and South Africa; 2018 for Indonesia.

2. Excludes students enrolled at tertiary levels.

3. Breakdown by age not available after 15 years old.

4. Excludes post-secondary non-tertiary education.

Countries are ranked in descending order of the share of students enrolled in upper secondary vocational education.

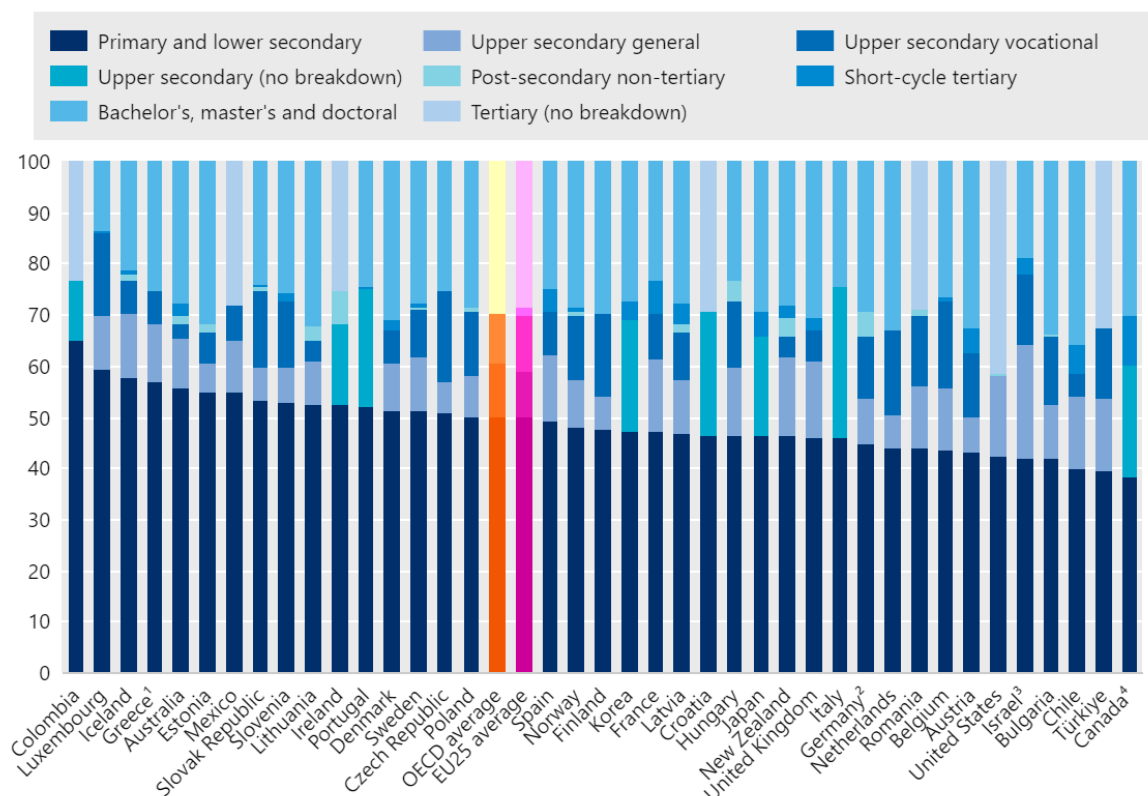
Source: OECD/UIS/Eurostat (2023), Table B1.2. For more information see [Source](#) section and [Education at a Glance 2023 Sources, Methodologies and Technical Notes](#) (OECD, 2023<sup>[1]</sup>).

## Financial resources invested in education

- All OECD, partner and/or accession countries devote a substantial share of their domestic output to education. In 2020, OECD countries spent on average 5.1% of their gross domestic product (GDP) on primary to tertiary educational institutions. In Croatia, the corresponding share was 4.2% of GDP, of which 47% was dedicated to primary and lower secondary education combined, 24% to upper secondary education and 29% to tertiary education (Figure 2).
- Funding for education is strongly influenced by countries' income levels: countries with higher GDP per capita tend to spend more per student, in absolute terms, than those with lower GDP per capita. Across all levels from primary to tertiary education, Croatia spends USD 8 150 annually per full-time equivalent student (adjusted for purchasing power), compared to the OECD average of USD 12 647. However, when compared to GDP per capita funding is close to the OECD average: expenditure per student is equivalent to 28% of GDP per capita in Croatia, slightly above the OECD average of 27%.

Figure 2. Total expenditure on primary to tertiary educational institutions, by level of education (2020)

In per cent



1. Year of reference differs from 2020. Refer to the source table for more details.

2. Upper secondary vocational programmes include lower secondary vocational programmes.

3. Upper secondary programmes include lower secondary programmes.

4. Primary education includes pre-primary programmes.

Countries are ranked in descending order of total expenditure on primary and lower secondary institutions.

Source: OECD/UIS/Eurostat (2023), Table C2.1. For more information see [Source section](#) and [Education at a Glance 2023 Sources, Methodologies and Technical Notes](#) (OECD, 2023<sup>[1]</sup>).

- In the context of the COVID-19 pandemic, between 2019 and 2020, expenditure on primary to tertiary educational institutions per full-time equivalent student (including expenditure on research and development) grew by 0.4% on average across the OECD. In Croatia, it increased by 0.6%. This increase in Croatia is the result of a 0.8% rise in total expenditure on educational institutions and a 0.1% rise in the total number of full-time equivalent students. In addition, provisional data show that expenditure per student increased by 3.5% in Croatia between 2020 and 2021: this is the result of a 5.3% rise in total expenditure on educational institutions and a 1.7% rise in the number of full-time equivalent students.
- Government sources dominate funding below tertiary education in all OECD countries, while the private sector contributes 9% of the total expenditure on educational institutions on average. In Croatia private funding accounted for 5% of expenditure at primary, secondary and post-secondary non-tertiary levels.
- On average across OECD countries, more than half of government expenditure on primary to post-secondary non-tertiary education comes from subnational governments. However, this is not the

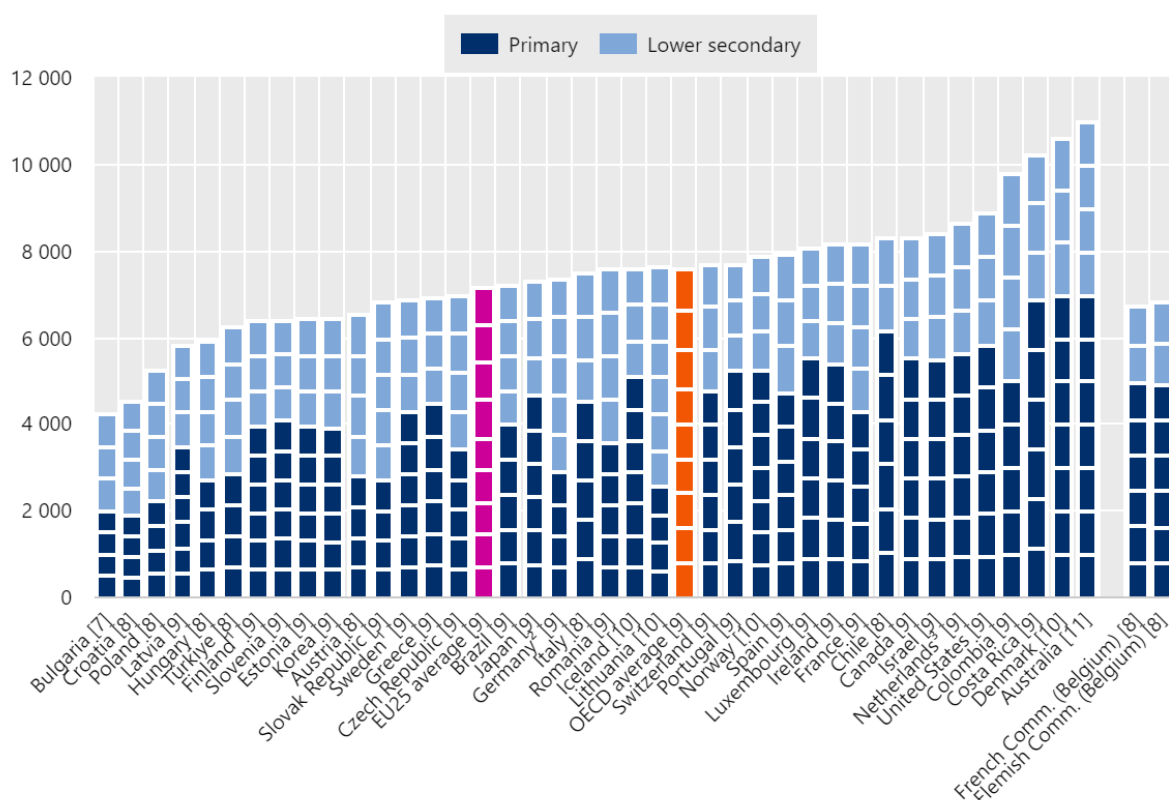
case in Croatia, where 84% of the funding comes from central government, after accounting for transfers between government levels and 16% from regional levels.

## Teachers, the learning environment and the organisation of schools

- The total compulsory instruction time throughout primary and lower secondary education varies widely across countries (Figure 3). Across the OECD, over the course of primary and lower secondary education, compulsory instruction time totals an average of 7 634 hours, distributed over nine grades. In Croatia, the total number of compulsory instruction hours is lower, at 4 541 hours, over eight grades.

Figure 3. Compulsory instruction time in general education (2023)

In hours, in primary and lower secondary education, in public institutions



Note: Instruction hours for each grade refer to average hours per grade for the level of education. Numbers in square brackets refer to the total number of years for primary and lower secondary education.

1. Estimated number of hours by level of education based on the average number of hours per year, as for some subjects, the allocation of instruction time across multiple levels is flexible.

2. Year of reference 2022.

3. The number of grades in lower secondary education is three or four, depending on the track. The fourth year of pre-vocational secondary education was excluded from the calculation.

Countries and other participants are ranked in ascending order of the total number of compulsory instruction hours.

Source: OECD (2023), Table D1.1. For more information see Source section and [Education at a Glance 2023 Sources, Methodologies and Technical Notes](#) (OECD, 2023<sub>[11]</sub>).

- On average across OECD countries, 25% of the compulsory instruction time in primary education is devoted to reading, writing and literature and 16% to mathematics. In Croatia, 28% of time is devoted to reading, writing and literature and 22% to mathematics at primary level. In lower secondary education, on average across OECD countries 15% of compulsory instruction time is devoted to reading, writing and literature and 13% to mathematics. In Croatia, 18% of time is devoted to reading, writing and literature and 16% to mathematics.
- Teachers' salaries are an important determinant of the attractiveness of the teaching profession. They also represent the single largest expenditure category in formal education. In most OECD countries, the salaries of teachers in public educational institutions increase with the level of education they teach, as well as with experience. On average, annual statutory salaries for upper secondary teachers in general programmes with the most prevalent qualification and 15 years of experience are USD 53 456 across the OECD. In Croatia, the corresponding salary adjusted for purchasing power is USD 32 108.
- On average across OECD countries, there are 14 students for every teaching staff member in general upper secondary programmes. This number in Croatia is lower than the OECD average, with 10 students per teaching staff member. There are even fewer students in vocational upper secondary programmes per teaching staff member in Croatia, with 7 students per teaching staff member. This is lower than in any other OECD, partner and/or accession country.
- The average age of teachers varies across OECD countries, with a difference between vocational and general programmes in some countries. An ageing teacher workforce is a challenge in some countries. In Croatia, 30% of teachers in general upper secondary programmes are aged 50 or above, compared to an OECD average of 39%. Teachers in vocational programmes are older than their general programme peers their peers in general education, with 35% aged 50 or above, compared to an OECD average of 43%.
- Across OECD countries, national/central assessments (standardised tests with no consequence on students' progression through school or certification) are more common at primary and lower secondary levels than at upper secondary level. Most OECD countries conduct national/central examinations (standardised tests with formal consequence) in the final years of upper secondary education. These national/central assessments and examinations take place at different grades and can have different periodicities, their contents may vary over years and/or across students and are not necessarily compulsory for students. In Croatia, there is one national/central assessment at primary level, and one at lower secondary level. At upper secondary level, there is one national/central examination that each student may be expected to take.

## References

- OECD (2023), *Education at a Glance 2023 Sources, Methodologies and Technical Notes*, OECD Publishing, Paris, <https://doi.org/10.1787/d7f76adc-en>. [1]
- OECD (2023), Education at a Glance Database, <https://stats.oecd.org/>. [2]
- OECD (2023), *Education at a Glance 2023: OECD Indicators*, OECD Publishing, Paris, <https://doi.org/10.1787/e13bef63-en>. [3]

## More information

**For more information on *Education at a Glance 2023* and to access the full set of indicators, see:** <https://doi.org/10.1787/e13bef63-en>.

For more information on the methodology used during the data collection for each indicator, the references to the sources and the specific notes for each country, see *Education at a Glance 2023 Sources, Methodologies and Technical Notes* (<https://doi.org/10.1787/d7f76adc-en>).

For general information on the methodology, please refer to the *OECD Handbook for Internationally Comparative Education Statistics 2018* (<https://doi.org/10.1787/9789264304444-en>).

Updated data can be found on line at <http://dx.doi.org/10.1787/eag-data-en> and by following the *StatLinks 2* under the tables and charts in the publication.

Explore, compare and visualise more data and analysis using the Education GPS:

<https://gpseducation.oecd.org/>.

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Key facts for Croatia in *Education at a Glance 2023*

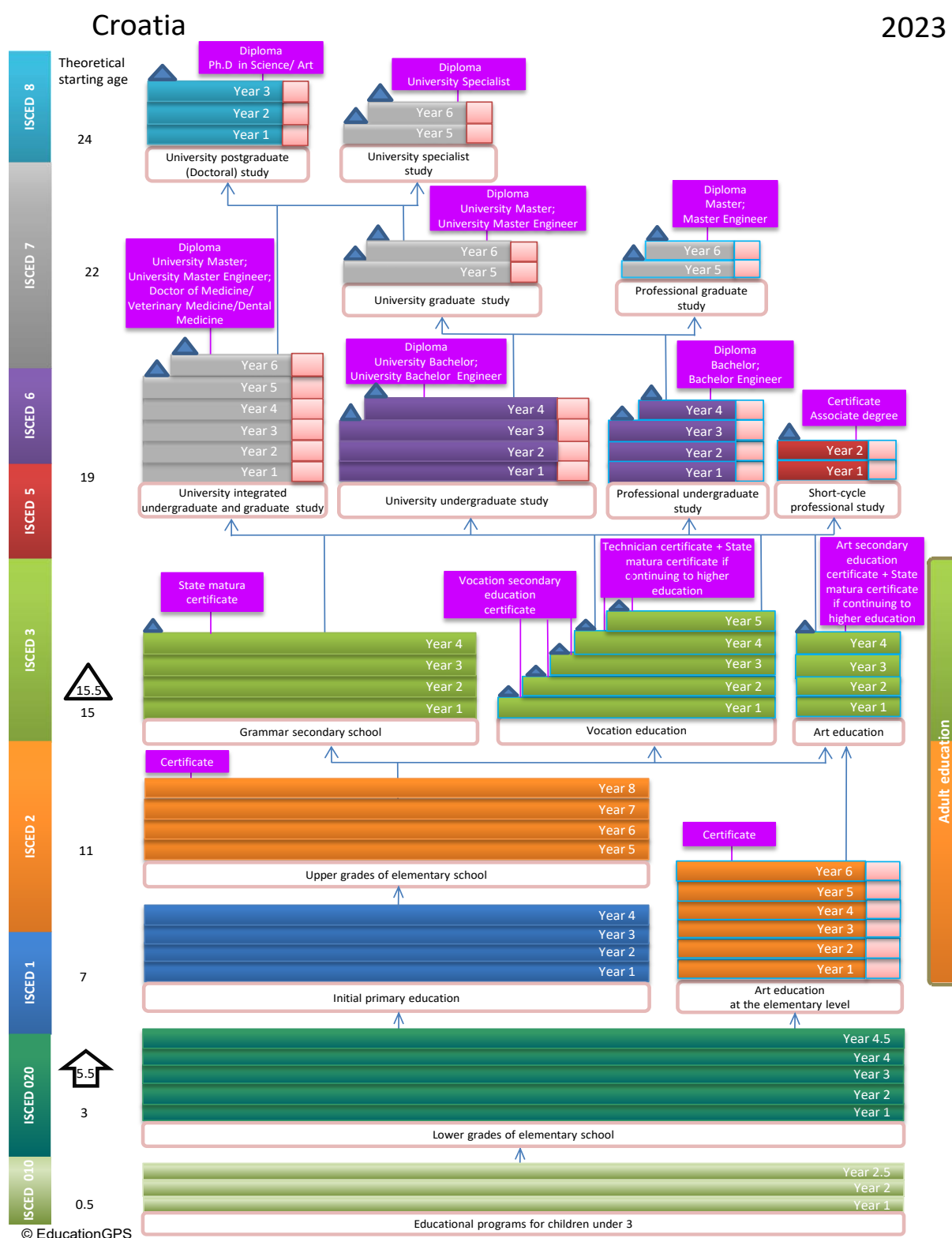
Indicator	Country		OECD average		Source
Educational attainment of 25-34 year-olds by gender	2022		2022		Table A1.2
	% Men	% Women	% Men	% Women	
	m	m	16%	12%	
	m	m	44%	35%	
Below upper secondary	m	m	41%	54%	
Upper secondary or post-secondary non-tertiary					
Tertiary					
NEET rates of 18-24 year-olds by gender	2022		2022		OECD (2023 <sup>[2]</sup> )
	% Men	% Women	% Men	% Women	
	m	m	14%	15.5%	
Employment rates of 25-64 year-olds by educational attainment and gender	2022		2022		OECD (2023 <sup>[2]</sup> )
	% Men	% Women	% Men	% Women	
	m	m	70%	48%	
Below upper secondary	m	m	84%	69%	
Upper secondary or post-secondary non-tertiary	m	m	90%	83%	
Tertiary					
Enrolment rate of children aged 3 in ECEC	2021		2021		Table B2.1
	66%		73%		
Enrolment rate of 15-19 year-olds	2021		2021		Table B1.1
	84%		84%		
Share of upper secondary students enrolled in VET programmes	2021		2021		Table B1.3
	70%		44%		
Upper secondary completion rates by programme orientation	2021		2021		Table B3.1
	General	Vocational	General	Vocational	
By the end of the programme duration	m	m	77%	62%	
Two years after the end of the programme duration	m	m	87%	73%	
Expenditure on educational institutions per full-time equivalent student by level of education (in USD PPP)	2020		2020		Table C1.1
Primary	USD 7 317		USD 10 658		
Lower secondary	m		USD 11 941		
Upper secondary	USD 8 230		USD 12 312		
Tertiary	USD 9 865		USD 18 105		
Total expenditure on primary to tertiary educational institutions as % of GDP	2020		2020		Table C2.1
	4.2%		5.1%		
Share of total education expenditure on upper secondary educational institutions by programme orientation	2020		2020		Figure C2.2
	General	Vocational	General	Vocational	
	m	m	11%	10%	
Total compulsory instruction time in primary and lower secondary education	2023		2023		Table D1.1
	4 541 hours		7 634 hours		
Statutory salaries of upper secondary teachers in general programmes with the most prevalent qualifications after 15 years of experience (in USD PPP)	2022		2022		Table D3.1.
	USD 32 108		USD 53 456		
Change in statutory salaries of upper secondary teachers in general programmes with the most prevalent qualifications after 15 years of experience (in real terms)	2015-2022		2015-2022		Table D3.7
	m		4%		
Share of teachers in general upper secondary programmes aged 50 or older	2021		2021		Table D7.2.
	30%		39%		

Note: The OECD average for completion rates reflects a different country coverage (see Indicator B3).

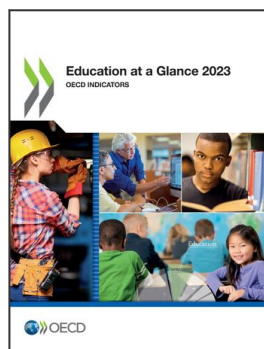
Source: OECD (2023<sup>[2]</sup>)



## Croatia's education system



Source: OECD (2023), "Croatia: Diagram of education system", OECD Education GPS, [http://gpseducation.oecd.org/Content/MapOfEducationSystem/HRV/HRV\\_2011\\_EN.pdf](http://gpseducation.oecd.org/Content/MapOfEducationSystem/HRV/HRV_2011_EN.pdf)  
 Please refer to "Croatia: Diagram of education system" for information on the keys.



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