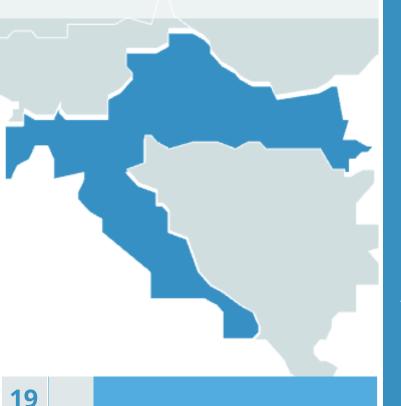
# Croatia



Upper secondary school

17

16

15

14

13

12

11

10

9

8

5

Compulsory schooling

General (31 %) Vocational (69 %)

Primary & lower secondary school
(Common track)

**Pre-school** 

**36.6%** Population aged 25-34 with a tertiary degree <sup>a</sup>

**13.6%** Percentage of immigrant stock (% population) <sup>b</sup>

**18.5%** Population below the poverty line <sup>c</sup>

12.7% Youth not in employment, education or training (NEET)

**Average TIMSS/PIRLS scores (4th grade)** <sup>e</sup> *Center point: 500* 

NA 509 524

Reading Math Science

Average PISA scores (10th grade)

OECD average

**479 464 472**487 489 489 **Reading Math Science** 

public spending in education as a % of GDP<sup>g</sup>

6.4 billions allocated in NPRR h

Sources: a, b, c, d, g: World Bank Indicators ; e: TIMSS 2019 report, PIRLS 2016 report; f: F

## **General features**

### Educational system

In Croatia, primary school starts at 7 and it is compulsory until the age of 15. The last year of preprimary school is compulsory as well. Students stay in the same school for primary and lower secondary level, as in some other eastern countries. They follow a core curriculum that is focused on equipping students with the necessary knowledge to access further schooling. Upper secondary school has a variable duration, from 3 to 5 years. Available tracks are (i) general education (4-years) (ii) 4- or 5-year vocational programs (iii) 3-years vocational programs. General education ends with a national state exam that gives access to higher education. The official language of instruction is Croatian, but there is a minority of schools dedicated to ethnic minorities that offer teaching in Serbian, Italian, Czech and Hungarian. 49 Public education is free and accessible to everyone. The majority of the school system is public with a small percentage of students (2%) enrolled in private institutions<sup>50</sup>. The country is mostly inhabited by natives, with some ethnic minorities primarily from neighbouring countries such as Serbs (4.4%) Bosnians (0.5%), Italians (0.45%), Hungarians (0.37%), Albanians (0.34%) and Slovenes.<sup>51</sup> The percentage of early school leavers among people aged 18-24 is extremely low (2.2% compared to the EU average of 9.9% in 2021), while tertiary educational attainment is slightly lower when compared to EU average (36.6% versus 40.5%). However, according to a pilot survey conducted by the European Commission<sup>52</sup>, Croatia has quite high levels of youth unemployment rate (23.8%). The percentage of youths aged 15-29 neither in employment nor in education or training (NEET) is in line with the EU average (12.7 % versus roughly 13%).

#### Governance and funding

The Ministry of Science, Education and Sports is the national entity responsible for the educational system. Other national public bodies involved in the regulation, development and quality control are the Education and Teacher Training Agency, the Agency for Vocational Education and Training, the Agency for Science and Higher Education, the Agency for Mobility and the EU Programmes and National Center for External Evaluation of Education. Compulsory education is financed through public funds while private expenditure is concen-

trated in pre-primary and tertiary education. Annual expenditure in education is lower than the EU average  $^{53}$ .

# **Performance**

According to the last PISA assessment (2018), students in Croatia scored lower than the OECD average in all the subjects of the assessment (reading, maths and science). However, the percentage of pupils who reached basic skills in reading and science is similar to the OECD average (78% and 75% of students attained at least Level 2 proficiency in reading and science respectively compared to the OECD average of 77% and 78%) but lower in maths (69 % versus 76 %). The mean performance throughout the years remained stable, but in science it started to decline, especially among the lowest-achieving students.

While performance in reading and mathematics remained stable throughout PISA editions, performance in science is steadily declining since 2012.

The gender gap in reading is in favor of girls (33 percentage point), similar to the OECD average (30). However in maths the gap is reversed, with boys outperforming girls by 9 points (compared to 5 points average in OECD countries). In science, the gap between boys and girls is not statistically different.

Socio-economically advantaged students outperformed disadvantaged ones by 63 score points, which is smaller than the OECD average of 89, and 15% of students, a higher number than the OECD average (11%), was able to score in the top quartile for reading. Socio-economic status explained a lower part of the variation in performance when compared to the OECD average: 10% of the variation in performance in mathematics and 8% in science (OECD average: 14% for maths and 13% for science).

In the PISA sample of 2018, there are 9% of students with an immigrant background in Croatia. Roughly 40% of them comes from a socioeconomically disadvantaged background. Native students scored similarly to immigrants, even taking into account students' and schools' socioeconomic background. Moreover, 21% of immigrant students scored in the top quarter of reading, compared to the OECD average of 17%.

On average, self-reported absenteeism is slightly lower than the OECD average (16% versus

<sup>49</sup> https://gem-report-2020.unesco.org/wp-content/uploads/2021/02/Croatia.pdf

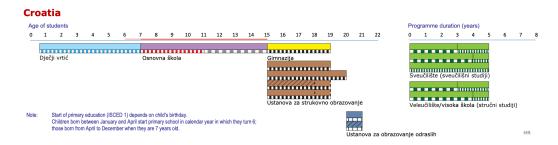
<sup>&</sup>lt;sup>50</sup>Secondary school enrolment. UNESCO, 2020

<sup>&</sup>lt;sup>51</sup>Migrants and Refugees Country Profile: Croatia

<sup>&</sup>lt;sup>52</sup>European Commission, 2020

<sup>&</sup>lt;sup>53</sup>Key Features of the Educational System

Figure 1.4: Educational system in Bosnia and Herzegovina



21% of students reported to have missed a class in the preceding two weeks of the PISA test) and the percentage of late entries to school is similar to the OECD average (49% versus 48%).

Careers tend to somewhat reflect gender stereotypes, with girls shying away from the ICT sector. Within high-performing students in maths and science, the difference in the share of boys and girls who wanted to work in engineering and science was small and not statistically significant (20% for boys versus 15% for girls). About 33% of high-performing girls expected to work in a health-related profession, while only 12% of high-performing boys expected so. Finally, only 1% of high-performing girls expect to work in ICT, versus 11% of boys.

Among high-achieving students, a high percentage of disadvantaged students (33%) expected not to complete tertiary education, compared to roughly 13% of the advantaged students.

# Key policy challenges

Despite the lowest percentage of early school leavers in the EU, average students' basic skills are low. According to PISA 2018 assessment, the share of low-achieving students is higher than the EU average, especially in maths and science.<sup>54</sup>

The percentage of students enrolled in general upper secondary school is low and highly heterogeneous between regions. Only 31% of pupils are enrolled (EU average: 51%) and within VET programs, a high percentage (roughtly 66%) chooses to enrol in the 4-year programs, another way to access university, especially popular among males and low-achieving students.<sup>55</sup>

Educational attainment rate in tertiary education is still low, with important heterogeneities

in terms of gender and place of residence (urban versus rural areas). Both students in general and vocational schools would be interested in starting university<sup>56</sup>, but despite this interest, a lot of study places still remain vacant.

The percentage of students that graduate from a tertiary education is lower than the EU average (36.6% versus 40.5%), with important gaps in terms of gender (18.2 percentage points of difference) and place of residence (rural versus urban area) (26 percentage points of difference)<sup>57</sup>.

Youth employment rate and first salary after graduation are lower than the EU average, and among the lowest in EU: in 2020, 77.2% of recent graduates were employed (compared to the EU average of 83.7%) a percentage that decreased by 1.9 percentage points in the last year.<sup>58</sup> According to the Croatian Employment Service, graduates in STEM are more needed.

# Recently enacted policies and investments

In recent years, Croatia put in place several projects to ameliorate digitalization and accumulation of digital skills. Their implementation was a success, considering that now it is the only EU country where all 16-19 year-olds have at least basic digital skills. <sup>59</sup> In particular, the project eschool and the curricular reform focused on distributing digital equipment to schools and extending the usage of ICT to teaching practices. Moreover, from 2019/2020 the government introduced ICT as a compulsory subject from sixth to seventh grade. At the time COVID-19 pandemic hit, these processes were still in progress and only a fraction of schools was equipped with the necessary digital devices (and teachers with the necessary

<sup>&</sup>lt;sup>54</sup>Education and Training Monitor, 2021

<sup>&</sup>lt;sup>55</sup>idem

 $<sup>^{56}\</sup>mbox{What after middle school?}$  Desires, plan and attitudes of Croatian high-school students

<sup>&</sup>lt;sup>57</sup>Education and Training Monitor, 2021

<sup>&</sup>lt;sup>58</sup>https://op.europa.eu/webpub/eac/education-and-training-monitor-2021/en/croatia.html

<sup>&</sup>lt;sup>59</sup>Education and Training Monitor, 2021

sary skills) to set up and switch to online learning. However, thanks to this modernization Croatian schools were able to effectively provide classes online.

In order to increase equity of the educational system, Croatia started implementing a Roma curriculum from 2020/2021, to preserve Roma language and culture, where Roma pupils can attend from 2 to 5 hours of extra classes in their mother language.<sup>60</sup>

The National Development Strategy (NDS)<sup>61</sup> and the National Recovery and Resilience Plan

(NRRP) focus on strengthening both primary and higher education, and improving teacher quality. Specifically, the NDS plans on increasing instruction time and introducing whole-day schooling in primary school. Then, it aims at retaining good quality teachers and supporting them in the implementation of new curricula, developed following EU technical assistance. <sup>62</sup>. In the NPRR, Croatia is investing 84 million of euros in digitalizing the higher education system, investing in e-learning and digital teaching tools. <sup>63</sup>

<sup>60</sup> https://narodne-novine.nn.hr/clanci/sluzbeni/2020\_04\_52\_1046.html

<sup>&</sup>lt;sup>61</sup>Croatia - National Development Strategy 2030

<sup>&</sup>lt;sup>62</sup>Education and Training Monitor, 2021

<sup>&</sup>lt;sup>63</sup>national Recovery and Resilience Plan, Croatia