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Education and Training Monitor 2022

Accompanying the document

**Communication from the Commission to the European Parliament, the Council, the
European Economic and Social Committee and the Committee of the Regions**

on progress towards the achievement of the European Education Area

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Education and Training Monitor 2022

BULGARIA



The Education and Training Monitor's country reports present and assess the main recent and ongoing policy development at all education levels in EU Member States. They provide the reader with more in-depth insight of the performance of countries with regard to the EU level targets agreed within the EEA. They are based on the most up-to-date quantitative and qualitative evidence available.

Section 1 presents a statistical overview of the main education and training indicators. Section 2 focuses on how the Member State has addressed or is addressing one of its education challenges. Section 3 covers early childhood education and care. Section 4 deals with school education policies. Section 5 covers vocational education and training and adult learning. Finally, Section 6 discusses measures in higher education.

The Education and Training Monitor's country reports were prepared by the European Commission's Directorate-General for Education, Youth, Sport and Culture (DG EAC), with contributions from the Directorate-General for Employment, Social Affairs and Inclusion (DG EMPL).

The document was completed on 30 September 2022
More background data at:
<https://op.europa.eu/webpub/eac/education-and-training-monitor-2022/en/>



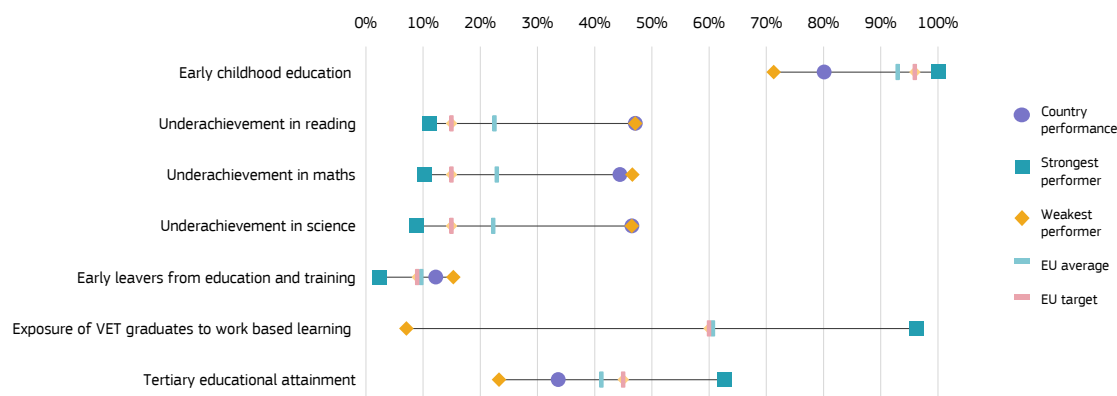
1. Key indicators

Figure 1: Key indicators overview

		Bulgaria		EU	
		2011	2021	2011	2021
EU-level targets		2030 target			
Participation in early childhood education (from age 3 to starting age of compulsory primary education)	≥ 96 %	83.8% ¹³	80.1% ²⁰	91.8% ¹³	93.0% ²⁰
Low achieving eighth-graders in digital skills	< 15%	:	:	:	:
Low achieving 15-year-olds in:	Reading	41.0% ⁰⁹	47.1% ¹⁸	19.7% ⁰⁹	22.5% ¹⁸
	Maths	47.1% ⁰⁹	44.4% ¹⁸	22.7% ⁰⁹	22.9% ¹⁸
	Science	38.8% ⁰⁹	46.5% ¹⁸	18.2% ⁰⁹	22.3% ¹⁸
Early leavers from education and training (age 18-24)	< 9 %	11.8% ^b	12.2% ^b	13.2%	9.7% ^b
Exposure of VET graduates to work-based learning	≥ 60 % (2025)	:	: ^u	:	60.7%
Tertiary educational attainment (age 25-34)	≥ 45 %	27.2% ^b	33.6% ^b	33.0%	41.2% ^b
Participation of adults in learning (age 25-64)	≥ 47 % (2025)	:	:	:	:
Other contextual indicators					
Equity indicator (percentage points)		:	38.3 ¹⁸	:	19.30 ¹⁸
Early leavers from education and training (age 18-24)	Native	11.9% ^b	12.2% ^b	11.9%	8.5% ^b
	EU-born	:	: ^{bu}	25.3%	21.4% ^b
	Non EU-born	: ^b	: ^{bu}	31.4%	21.6% ^b
Upper secondary level attainment (age 20-24, ISCED 3-8)		86.7% ^b	86.3% ^b	79.6%	84.6% ^b
Tertiary educational attainment (age 25-34)	Native	27.2%	33.5% ^b	34.3%	42.1% ^b
	EU-born	: ^u	: ^{bu}	28.8%	40.7% ^b
	Non EU-born	: ^u	: ^{bu}	23.4%	34.7% ^b
Education investment	Public expenditure on education as a percentage of GDP	3.4%	4.0% ²⁰	4.9%	5.0% ²⁰
	Public expenditure on education as a share of the total general government expenditure	10.0%	9.5% ²⁰	10.0%	9.4% ²⁰

Sources: Eurostat (UOE, LFS, COFOG); OECD (PISA). Further information can be found in Annex I and at *Monitor Toolbox*. Notes: The 2018 EU average on PISA reading performance does not include ES; the indicator used (ECE) refers to early-childhood education and care programmes which are considered by the International Standard Classification of Education (ISCED) to be 'educational' and therefore constitute the first level of education and training systems – ISCED level 0; the equity indicator shows the gap in the share of underachievement in reading, mathematics and science (combined) among 15-year-olds between the lowest and highest quarters of socio-economic status; b = break in time series, u = low reliability, : = not available, 09 = 2009, 13 = 2013, 18 = 2018, 20 = 2020.

Figure 2: Position in relation to strongest and weakest performers



Source: DG Education, Youth, Sport and Culture, based on data from Eurostat (LFS 2021, UOE 2020) and OECD (PISA 2018).

2. A focus on digital education

The low level of digital skills among young people and adults is a major challenge in Bulgaria.

People with at least basic digital skills account for 29% of the population aged 16 to 74, against an EU average of 56%. Only 11% of people have above basic skills, slightly less than a third of the EU average (DESI, 2021). Among young people aged 16-19, only half of them (52%) have basic or above basic digital skills.¹ This is one of the lowest rates in the EU (average 69%). The digital skills of adults are even lower, which is aggravated by a declining working-age population, and the weak link between higher education and adult training and the needs of the labour market. Consequently, companies have difficulties in finding skilled staff to innovate and grow (DESI, 2021). The low percentage of higher education graduates in STEM (science, technology, engineering and mathematics) adds to the problem (Figure 3). In contrast, with 28%, Bulgaria is in the lead in Europe regarding the share of female ICT specialists (compared to the EU average of 19%). Technological workshops for girls are organised at an early school age. The Bulgarian Centre of Women in Technologies encourages women to participate in digital industry.

The pandemic exposed the challenges in digital education and accelerated the process of reforms and investment.

Improving digital skills has become a priority in Bulgaria. During the recent waves of the pandemic, the Ministry of Education and Science continued to distribute laptops to students and teachers. Coding and computer modelling as subjects were progressively introduced in primary education (from the 3rd grade). The number of compulsory teaching hours per week increased. Information

technology, gradually replaced by computer modelling, became compulsory in lower secondary schools. The level of acquired competences is measured by an annual national external assessment. The high speed connectivity of schools has improved. Nowadays, most schools are connected, although digital equipment and IT infrastructure in schools are still lagging behind. Insufficient digital competences of teachers also hamper the use of technology in classrooms.

Investment in digital skills continues. The process of digitalising education has accelerated, also due to the establishment of a national cloud ICT infrastructure for e-learning. A new national platform for e-lessons was launched in April 2022 and will be operational as of the 2022/23 school year. The platform will enable teachers to create digital learning content, such as lessons, exercises or tests, by using different electronic resources². 6 200 teachers will be trained on how to create interactive lessons and another 12 000 on how to work with the platform. This investment is developed under the 'Education for Tomorrow' project of the operational programme 'Science and Education for Smart Growth 2014-2020', co-financed by the European Structural Funds. The national programme 'Digital Bulgaria 2025' provides a framework for modernising and implementing intelligent solutions, including modernising schools and higher education in the field of ICT.

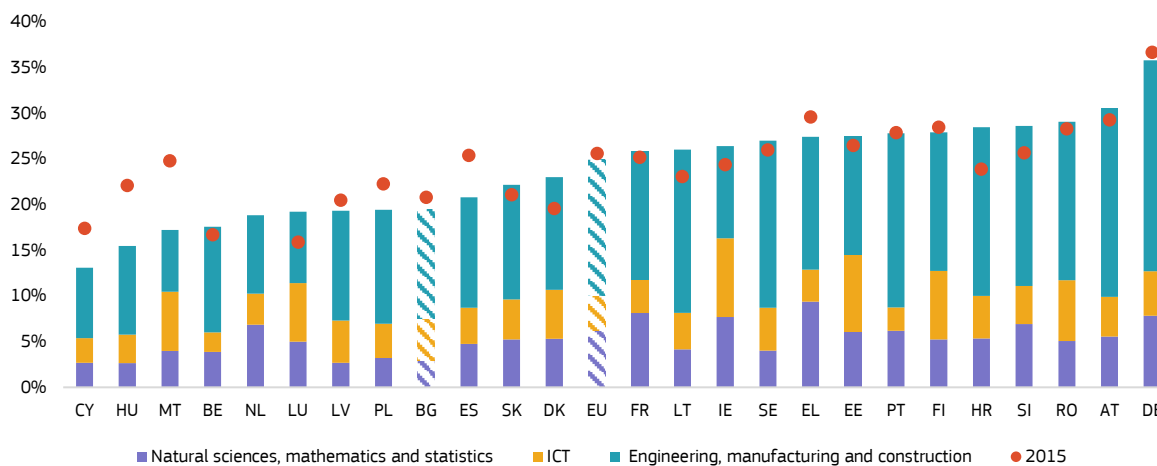
Improving STEM infrastructure is also a priority area in Bulgaria's recovery and resilience plan, endorsed in May 2022.

The reforms and investment in the plan will help develop digital skills and promote STEM fields in schools. STEM laboratories, including high-tech classrooms, will be constructed in schools. Bulgaria will set up one national and three regional STEM centres, which will coordinate trainings for teachers, develop

¹ Eurostat, ISOC_SK_DSKL_I21.

² <https://www.mon.bg/bg/news/4764>

Figure 3: STEM tertiary graduates as a proportion of total graduates in 2015 and 2020, (%)



Source: Eurostat (UOE), [educ_uae_grad02]. Note: 2015 Data for NL not available,

teaching materials, and set up an electronic portal and electronic library. The plan envisages the establishment of a digital platform for e-learning for adults, open to the public in 'digital clubs', staffed and equipped with computers. 500 000 people should receive digital skills training by 2026.

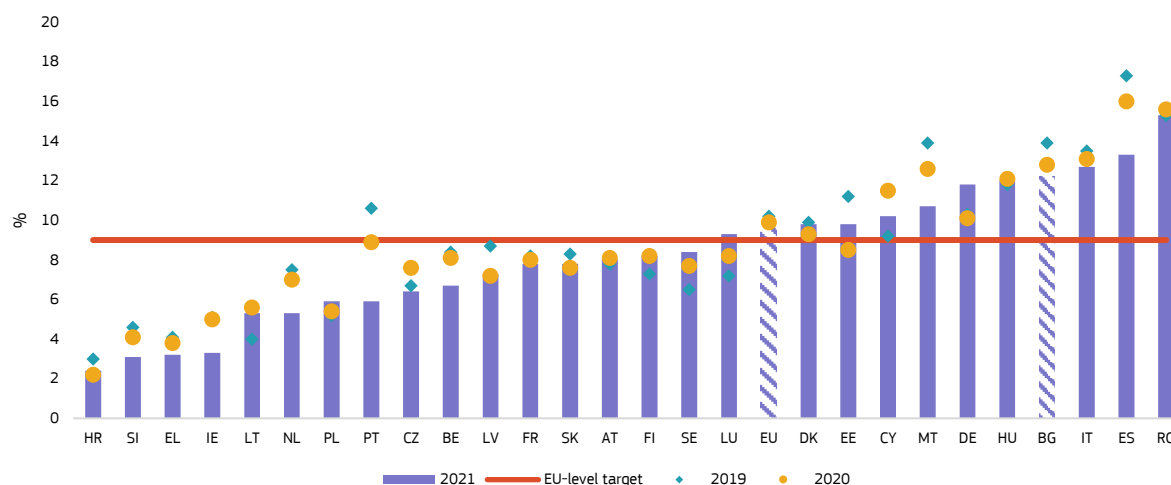
3. Early childhood education and care

Enhancing access to quality early childhood education and care (ECEC) has been a longstanding priority. For the first time since 2014, the participation rate of children aged between 3 and the starting age of compulsory primary education slightly improved and reached 80.1%, but is still well below the EU average of 93% and the EU-level target of 96% by 2030. The reform lowering the starting age of compulsory pre-school education from 5 to 4 entered into force in September 2020. It has been gradually applied across the country and should be implemented in all municipalities by 2023–2024.

A new law approved in spring 2022 allows parents to enrol their children in nurseries and kindergartens without any fees. This should also improve participation in ECEC. In addition, in municipalities where compulsory pre-primary education for 4 year-olds is implemented, financial compensation is offered to families whose children are not granted a place in a kindergarten.

Although ECEC capacities are broadly sufficient across the country, it remains problematic in the capital, which is the main destination for many young families. In spring 2022, in the first round of admissions almost half of the applications in Sofia were refused due to a lack of places. According to the Sofia municipality, the shortage of places in the capital is over 7 000 for children aged 3-6 years old, resulting in many children left without access to pre-school education. Although investment in education is improving, including through the recovery and resilience plan (which will renovate 57 kindergartens), rolling out the inclusive education reform requires additional resources.

Figure 4: Early leavers from education and training, 2019, 2020 and 2021 (%)



Source: Eurostat (EU – LFS), [edat_lfse_14].

4. School education

The rate of early leavers from education and training remained stable in the past decade.

In 2021, it decreased to 12.2% (compared to 12.8% in 2020 and 14% in 2019), but was still above the EU average of 9.7% (Figure 2). The gap between urban and rural areas is significant (6.8% and 23.7%, respectively), and there are wide disparities between regions (from 6.7% in Ugozapaden with the capital of Sofia to 21.6% in Yugoiztochen). Unlike many EU countries, there is no major gender gap among early school leavers.

Increasing the quality of education remains a major issue in primary and secondary education.

As emphasised by a World Bank Survey, learning outcomes in Bulgaria have not changed much over the past 14 years. Underachievement in basic skills, as measured by PISA, is twice as high as the European average (47% in reading, 44% in mathematics and 47% in sciences), with these percentages above 60% among disadvantaged students. Compared to other EU countries, students in Bulgaria performed 67 points lower in reading, which corresponds roughly to more than one-and-a-half years of schooling (World Bank Group, 2020). Bulgaria aims to reduce the proportion of underachieving students to 25% by 2030, which will require major efforts (European Commission, 2021). According to PISA 2018, 6% of Bulgarian students report

speaking another language at home (OECD, 2019). The performance gap between this group and those, whose mother tongue is Bulgarian is significant. A score point difference of 74 in reading (OECD, 2019) is the highest gap in the EU. One of the national programmes adopted in 2022 envisages additional language support for migrant and refugee children to learn

Bulgarian as a foreign language. Being one of the countries hosting the largest number of Ukrainians fleeing war in 2022, Bulgaria has provided minors arriving from Ukraine with the rights and support needed to continue their schooling, including language support.

The government continues its efforts to improve the quality of education.

In 2022 the Ministry of Education and Science commenced a comprehensive review of text books in general school subjects from grade 1 to 12. Also in 2022, for the first time, graduates of higher secondary education were able to choose a matriculation exam in a less widely spoken language, such as Japanese, Chinese, Korean, or Hebrew, if they have studied it as a profiling subject at school. This is regarded as an important step in developing multilingualism competences among students. A new methodology for assessing the added value of the education provided in secondary education will be established and tested, based on the model developed by the World Bank. It will be an important step in

identifying objective measures to evaluate quality in the educational system. It could contribute to ensuring higher-quality education across Bulgaria by collecting relevant data and information, thus helping to provide more targeted support to address shortcomings in learning.



Box 1: National programmes for the development of education

In 2022, the Bulgarian government approved 21 national programmes for the development of education. This is an important step in improving the quality and inclusiveness of education. A new initiative 'Together in arts and sports' will support the personal development of students through collective sports and arts activities. Another programme will support the staff costs of 900 educational mediators and social workers. Funds will be provided for pre-school and school education. The 'Innovation in Action' programme will develop methodology and training resources for STEM education. The 'Back Together' programme will operate for the second consecutive year to overcome the negative consequences of school closures during the pandemic. The Ministry of Education will continue to finance municipal projects for educational desegregation, as well as hiring substitute teachers. All these efforts are welcomed, as they contribute to the overall development of education, and bring Bulgaria closer to reaching EU goals. Nevertheless, an evaluation framework for these policy initiatives would allow more targeted evidence-based interventions and better monitoring and evaluation of the measures implemented.

Source: www.mon.bg

Segregation in education remains a challenge and a main obstacle for access to quality education. The share of Roma children aged 7-15 who attend formal education is 86.2% against 94.6% of the total population (Fundamental Rights Agency, 2022). Only 28% of Roma students aged 20-24 complete upper

secondary education, while for the Bulgarian population as a whole this figure was 83.6%³. Almost two thirds of Roma children aged 6-14 years old attend school or kindergarten where all or most of their schoolmates are Roma. Three quarters of Roma children under 18 are at risk of poverty (Fundamental Rights Agency, 2022). PISA shows that students with similar socio-economic status and performance levels tend to be concentrated in the same schools.⁴ A survey by the EU's Fundamental Rights Agency reports that educational segregation is getting worse in general schools in particular. Parents are withdrawing their children from schools where Roma children are concentrated. Desegregation programmes are limited in scope. Authorities do not collect information about the ethnic origin of students. However, schools do gather information about the parents' educational status. This information helps identify vulnerable groups eligible for additional funding from the state.

The government has implemented measures to improve teachers' situation. Lack of training opportunities and poor education infrastructure impact negatively on the attractiveness of the teaching profession. Almost half of school teachers are aged 50 and above.⁵ From April 2021, the average teacher salary rose by about 12% and reached 125% of the national average. This is already a second rise in teachers' salaries in the past 3 years. It should contribute to the overall effort of increasing the attractiveness of the teaching profession. Despite an increase of 10% in the number of teachers in school education between 2005 and 2018 (World Bank Group, 2020), teacher shortages are emerging, in particular in rural areas, where the concentration of students from disadvantaged backgrounds is higher. Meanwhile, teachers with higher levels of education or experience tend to be concentrated in schools in urban areas or middle-size cities. The

³ Eurostat, [TPS00186] 28.04.2022

⁴ The isolation index of disadvantaged students vs all other students in Bulgaria was 0.29, against the EU average of 0.16, as measured by PISA 2018. This is the worst result in the EU.

⁵ Eurostat: educ_uoe_perp01

measures implemented at national level, such as raising of salaries or programmes related to teacher development, go in the right direction, but their long term results on improving the quality of education remain to be seen. The 'Education for Tomorrow' project, co-funded by the European Social Fund, has been supporting training of teachers, including in digital skills. The European Commission has also supported a comprehensive review of teacher policies and policy recommendations through the Structural Reform Support Programme (World Bank Group, 2020).

A recent national survey 'School time in Bulgaria and Europe' showed that Bulgarian students attend fewer hours of schooling compared to other students in Europe. The total number of compulsory classes 1 to 10 are 7 040 hours per year, while the average for countries in Europe is 8 617 hours⁶. Bulgarian pupils and students also have the longest holidays in Europe – on average 91 school days per year. This is above the average of 70 days in other European countries. As the lower amount of classroom time, combined with other factors, may impact learning outcomes, this survey provoked discussion about the need to restructure the school year and the duration of holidays.

Bulgarian authorities continued to help pupils and students undertake distance learning during the COVID pandemic. Research proves that online learning and teaching can only be effective if students have consistent access to the internet and computers, and are provided with relevant and individualised pedagogical support (Sternadel, 2021). As the school closure continued in 2021 and partially in 2022, the Ministry of Education and Science continued to distribute laptops and other electronic devices. It also plans to analyse the gaps and deficiencies in specific subjects (i.e. maths and Bulgarian language), which occurred due to the pandemic. Under the special programme 'Together Again', individualised assistance is available for children during or after

the summer break to compensate the potential loss of learning time.



Box 2: Support for the Dual Learning System

The aim of this project, co-financed by the European Social Fund (ESF), is to improve the relevance of vocational education and training to labour market needs. The project is providing support for activities focused on increasing the attractiveness of the dual learning system among students and parents, as well as raising awareness among and involvement by businesses.

Students in secondary education are given support to participate in a dual education by enrolling in a 'probationary internship' at a partner company.

Part of the activities are directed at improving the vocational training competences of teachers and trainers and helping mentors in the partner companies to acquire pedagogical and methodological skills.

So far, an electronic platform has been developed and a toolkit for quality assessment of teaching and of the workplace is being elaborated. A total of 159 VET schools have been selected and 20 information campaigns have been conducted in different regions of Bulgaria to promote the dual learning system. A total of 2 180 students have been engaged in additional training and 7296 students participated in a 'probationary internship.'

Source: <https://dual.mon.bg>

5. Vocational education and training and adult learning

Despite ongoing measures, including with EU support, the alignment of vocational education and training (VET) with labour market needs could be further improved. The Ministry of Education and Science has a systematic policy for restructuring the admission plan in VET and dual VET is being rolled out, but the total share of students and schools is relatively low. The latest available data show that the number of new entrants in upper secondary

⁶ <https://www.mon.bg/bg/news/4716>

VET is decreasing. The enrolment rate⁷ was 51.5% in 2020 (EU average: 48.7%), a slight decrease compared to the two previous years.⁸ The employment rate of recent VET graduates⁹ increased from 69.6% in 2020 to 72.4% in 2021, albeit still below the EU27 average of 76.4%.

Work-based learning forms a substantial part of all VET programmes. Amendments to the VET Act from 2018 and 2020 defined requirements related to VET quality assurance, work-based learning included. Employers and trade unions have decision-making and advisory roles in shaping VET through their participation in regional and national councils and their involvement in developing national education standards and in updating the list of professions for vocational education and training (LPVET) and the lists of state-protected specialties. An update of the lists of VET occupations and standards will be piloted under an ESF+ strategic operation to be launched in 2022. As part of the recovery and resilience plan, new amendments to the regulatory framework for VET are envisaged, introducing changes to the list of professions for VET and their programmes, in accordance with the needs of professional competences, including in the green and digital sectors.

Between 2021 and 2027, VET will continue to be supported by the European Social Fund Plus (ESF+). Around EUR 290 million will be earmarked from ESF+ under the 2021-2027 Programme Education to improve attractiveness, accessibility, quality and labour market relevance of VET. Support will be given to piloting and expanding forms of dual VET, including in higher education, career guidance, apprenticeships and developing entrepreneurial skills for students, teacher and mentor training, implementing a graduate tracking system and introducing joint

programmes on areas important for the economy of the regions and the labour market, with innovative digital learning content. In addition, support will be provided for work of 24 VET Centres of Excellence, which will be renovated through the recovery and resilience plan.

Bulgaria continues to have one of the lowest participation rates in adult learning in the EU, despite some measures already undertaken. Bulgaria's population aged 25-64 that participated in education and training during the preceding 4 weeks of the Labour Force Survey decreased from 2% in 2019 to 1.8% in 2021. The participation rate in 2021 falls 9 pps below the EU-27 average for 2021 (10.8%) and behind all European countries. Moreover, a 2021 survey found that just 5% of adults had followed an online course (in the last three months), against an EU average of 18%. This is consistent with the low numbers of people who have at least basic digital skills.

Participation rates in adult learning by low-skilled adults stand at around one quarter of those for the general population. Adult literacy and qualifications for people with a disadvantaged background, such as Roma, also represent a significant challenge. Measures to target low-skilled, low-qualified adults and those with a disadvantaged socio-economic background, as well as upskilling pathways, are included in the Bulgarian 2020-30 Strategic Policy Framework for Education, Training and Learning and 2020-30 Employment Strategy, adopted in 2021. The National Strategy of the Republic of Bulgaria for Equality, Inclusion and Participation of Roma (2021-30) and its action plan (adopted in 2022) encourage the participation of persons from vulnerable groups, including Roma, in continuing education and training.

Bulgaria has set a 2030 target of 35.4% of adults participating in learning every year (three times the baseline rate of 11.8 % in 2016). To this end, substantive amounts were earmarked from the national budget and EU funds for reskilling and upskilling the population, in close cooperation with employers, unions and other civil society organisations. The introduction of

⁷ Eurostat, educ_uoe_enrs05.

⁸ National data (Education Information Database, Center for Information Provision of Education) indicate an increase again in 2021.

⁹ Eurostat, edat_lfse_24.

individual learning accounts (ILAs) is included in the 2021-27 ESF+ Human Resources Development (HRD) programme, starting as a pilot. A recent focus on digital skills, for which around EUR 286 million are allocated under the ESF+, complements the efforts under the national recovery and resilience plan. Moreover, the Bulgarian authorities are open to implementing the new ALMA initiative (Aim, Learn, Master, Achieve), under the Social innovation priority theme, part of ESF+ HRD programme. EUR 78 million will be also earmarked under the 2021-2027 ESF+ programmes to support adult literacy.

A roadmap of skills governance has been developed by the Ministry of Education and Science, in cooperation with Cedefop. The Ministry of Education and Science and Ministry of Labour and Social Policy agreed to synchronise the information provided on labour market forecasts with the system of VET qualifications, while synergies will be achieved within an interactive platform for analyses and labour market forecasts. In addition, Bulgaria is working with the OECD on developing a national Skills Strategy, through a project funded under the Technical Support Instrument.

6. Higher education

The tertiary educational attainment level remains comparatively low. Students' socio-economic background affects their academic ambitions. On average, one third of the Bulgarian population aged 25-34 holds a tertiary degree. This rate did not improve significantly over the last 5 years (33.6% in 2021) and remains below the EU average of 41.2% and the EU-level target of 45% by 2030. The gap between the tertiary attainment in the urban and rural areas remains considerable (47.4% and 13.7%, respectively). The tertiary educational attainment in Bulgarian cities is close to the EU average of 51.4%. The regional disparities in tertiary educational attainment also remain visible and differ between 20.8% in the North-West Region and 46.5% in South-West Region (with the capital in Sofia). This is linked to the concentration of universities in Sofia. The adoption of the National Map of Higher Education

– one of the milestones of the recovery and resilience plan – should help promote a more balanced distribution of the higher education offer across the country. At the same time, the gender gap persists, with 39.5% of women aged 25-34 educated at tertiary level, compared to 28% of men.

Although participation rates in tertiary education show positive trends since 2013¹⁰, the transition to the labour market is still difficult. The Bulgarian government is making an effort to foster the relevance of higher education to the labour market. The number of graduates was highest in business and administration (23.6%), education (14.4%), social and behavioural sciences (9.9%), engineering and engineering trades (9.2%) and health (8.8%).¹¹ Tracking of graduates shows that 53% of them have worked in positions requiring higher education (an increase of almost 10% compared to 2014). Bulgaria is also advancing cooperation between higher education, science and business. A new national scientific programme 'Enhancing research capacity in the field of mathematical sciences (PICOM)' will be implemented by 2025. It will support the policy of equal access to quality higher education, developing scientific potential and building a sustainable relationship between education, science, and business.

The quality of higher education remains a priority for the Bulgarian authorities. Amendments to the Higher Education Act and the Act on Development of Academic staff are expected to improve the quality and internationalisation of Bulgarian universities¹².

¹⁰ Eurostat: [educ_uoe_enrt01] and [demo_pjan].

¹¹ https://nsi.bg/sites/default/files/files/press_releases/Education2021_en_OCQ5H5R.pdf

¹² In 2021, more than 8% of all students enrolled at universities in Bulgaria were foreign students, which is almost 6% more than in the previous year and 24% more than in 2017/2018. Almost half of the foreign students come from Greece, the UK and Germany (https://nsi.bg/sites/default/files/files/pressreleases/Education2021_en_OCQ5H5R.pdf). At the same time, the top 3 destinations for Bulgarians under the Erasmus+ in 2020 were Spain, Romania and Greece.

Bulgaria is raising requirements for teaching staff, improving the accreditation system, changing the teaching staff attestation and introducing measures against plagiarism. The latter is a widespread phenomenon, hence measures against it are highly relevant for improving the quality of education. The Ministry of Education and Science proposes a two-tier structure to check plagiarism: scientific organisations and higher education institutions as a first tier, and the National Commission on Academic Ethics as the upper one. The 2022 budget envisages an increase in student and PhD scholarships, as well as academic staff salaries. Still, investment and salaries in higher education are low in Bulgaria, which limits the attractiveness of an academic career. The ESF+ programme will provide support to enhance the quality of higher education by investing in its human capital. The infrastructure of higher education institutions also impacts the quality of education. The recovery and resilience plan, together with European Regional Development Fund programme, will help improve the infrastructure by modernising and constructing university campuses and student dormitories.

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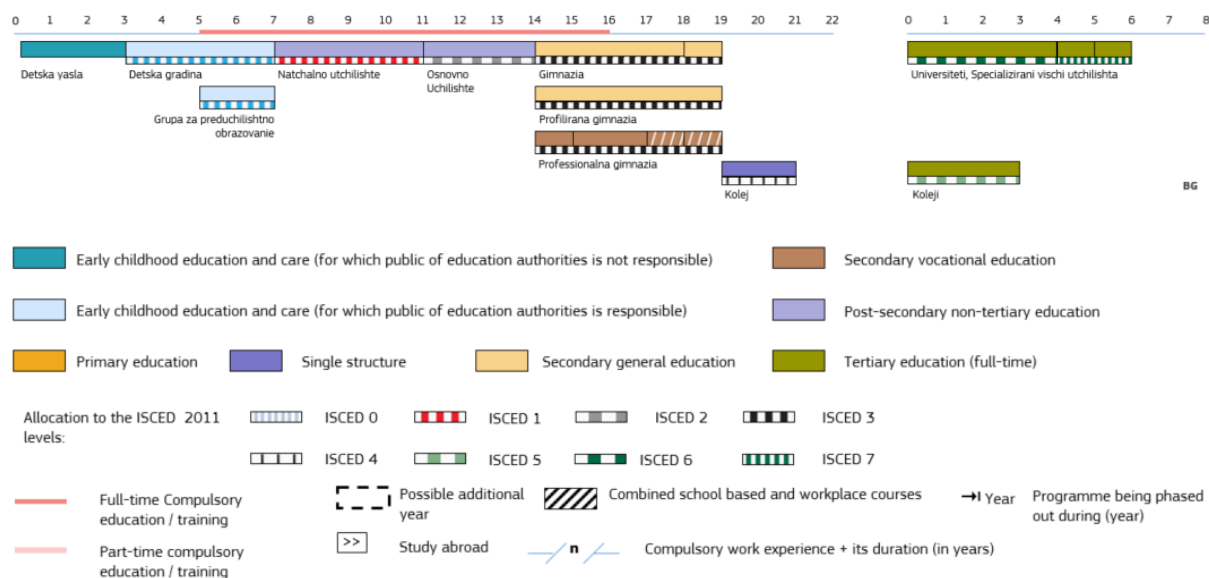
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Annex I: Key indicators sources

Indicator	Source
Participation in early childhood education	Eurostat (UOE), educ_uae_enra21
Low achieving eighth-graders in digital skills	IEA, ICILS
Low achieving 15-year-olds in reading, maths and science	OECD (PISA)
Early leavers from education and training	Main data: Eurostat (LFS), edat_lfse_14 Data by country of birth: Eurostat (LFS), edat_lfse_02
Exposure of VET graduates to work based learning	Eurostat (LFS), edat_lfs_9919
Tertiary educational attainment	Main data: Eurostat (LFS), edat_lfse_03 Data by country of birth: Eurostat (LFS), edat_lfse_9912
Participation of adults in learning	Data for this EU-level target is not available. Data collection starts in 2022. Source: EU LFS.
Equity indicator	European Commission (Joint Research Centre) calculations based on OECD's PISA 2018 data
Upper secondary level attainment	Eurostat (LFS), edat_lfse_03
Public expenditure on education as a percentage of GDP	Eurostat (COFOG), gov_10a_exp
Public expenditure on education as a share of the total general government expenditure	Eurostat (COFOG), gov_10a_exp

Annex II: Structure of the education system



Source: European Commission/EACEA/Eurydice, 2022. The Structure of the European Education Systems 2022/2023: Schematic Diagrams. Eurydice Facts and Figures. Luxembourg: Publications Office of the European Union.

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