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EUROPEAN COMMISSION

Education and Training Monitor 2018

Czech Republic

Volume 2 of the Education and Training Monitor 2018 includes twenty-eight individual country reports. It builds on the most up-to-date quantitative and qualitative evidence to present and assess the main recent and ongoing policy measures in each EU Member State, with a focus on developments since mid-2017. It therefore complements other sources of information which offer descriptions of national education and training systems.

Section 1 presents a statistical overview of the main education and training indicators. Section 2 briefly identifies the main strengths and challenges of the country's education and training system. Section 3 looks at investment in education and training. Section 4 focuses on citizenship education. Section 5 deals with policies to modernise school education. Section 6 discusses measures to modernise higher education. Finally, section 7 covers vocational education and training, while section 8 covers adult learning.

The manuscript was completed on 1 September 2018.

Additional contextual data can be found online (ec.europa.eu/education/monitor)

1. Key indicators

		Czech Republic		EU average	
		2014	2017	2014	2017
Education and training 2020 benchmarks					
Early leavers from education and training (age 18-24)		5.5%	6.7%	11.2%	10.6%
Tertiary educational attainment (age 30-34)		28.2%	34.2%	37.9%	39.9%
Early childhood education and care (from age 4 to starting age of compulsory primary education)		86.4% ¹³	90.7% ¹⁶	94.2% ¹³	95.3% ¹⁶
Proportion of 15 year-olds underachieving in:	Reading	16.9% ¹²	22.0% ¹⁵	17.8% ¹²	19.7% ¹⁵
	Maths	21.0% ¹²	21.7% ¹⁵	22.1% ¹²	22.2% ¹⁵
	Science	13.8% ¹²	20.7% ¹⁵	16.6% ¹²	20.6% ¹⁵
Employment rate of recent graduates by educational attainment (age 20-34 having left education 1-3 years before reference year)	ISCED 3-8 (total)	81.3%	89.9%	76.0%	80.2%
Adult participation in learning (age 25-64)	ISCED 0-8 (total)	9.6%	9.8%	10.8%	10.9%
Learning mobility	Degree mobile graduates (ISCED 5-8)	:	1.7% ¹⁶	:	3.1% ¹⁶
	Credit mobile graduates (ISCED 5-8)	:	6.5% ¹⁶	:	7.6% ¹⁶
Other contextual indicators					
	Public expenditure on education as a percentage of GDP	5.1%	4.5% ¹⁶	4.9%	4.7% ¹⁶
Education investment	Expenditure on public and private institutions per student in € PPS	ISCED 1-2	€4 783	:	€6 494 ^d
		ISCED 3-4	€5 683 ^d	:	€7 741 ^d
		ISCED 5-8	€7 725 ^d	:	€11 187 ^d
Early leavers from education and training (age 18-24)	Native-born	5.4%	6.7%	10.4%	9.6%
	Foreign-born	9.9% ^u	9.5% ^u	20.2%	19.4%
Tertiary educational attainment (age 30-34)	Native-born	27.9%	33.9%	38.6%	40.6%
	Foreign-born	34.0%	39.1%	34.3%	36.3%
Employment rate of recent graduates by educational attainment (age 20-34 having left education 1-3 years before reference year)	ISCED 3-4	81.2%	87.5%	70.7%	74.1%
	ISCED 5-8	81.4%	91.6%	80.5%	84.9%

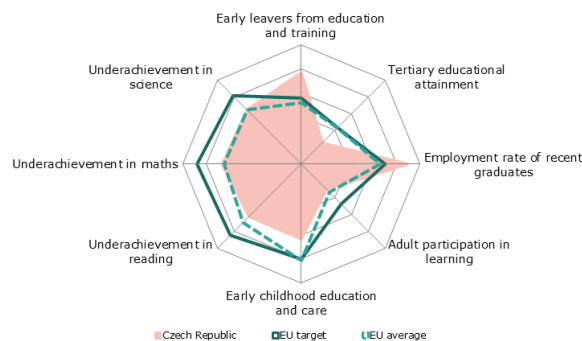
Sources: Eurostat (see section 10 for more details); OECD (PISA).

Notes: data refer to weighted EU averages, covering different numbers of Member States depending on the source; d = definition differs, 12 = 2012, 13 = 2013, 15 = 2015, 16 = 2016.

On credit graduate mobility, the EU average is calculated by DG EAC on the available countries; on degree graduate mobility, the EU average is calculated by JRC over Eurostat and OECD data.

Further information can be found in the relevant section of Volume 1 (ec.europa.eu/education/monitor).

Figure 1. Position in relation to strongest (outer ring) and weakest performers (centre)



Source: DG Education and Culture calculations, based on data from Eurostat (LFS 2017, UOE 2016) and OECD (PISA 2015). Note: all scores are set between a maximum (the strongest performers represented by the outer ring) and a minimum (the weakest performers represented by the centre of the figure).

2. Highlights

- Better supporting teachers, reducing inequalities and improving governance are the three priorities of the Czech strategy for education policy until 2020. A recent evaluation shows they remain valid.
- It remains a challenge to make the teaching profession attractive. In 2018 the Council of the EU addressed a country-specific recommendation to the Czech Republic on this issue.
- Implementation of the inclusive education reform needs to be closely monitored if the desired impact on pupils with special needs and those from a disadvantaged background, particularly Roma, is to be achieved.
- Against a background of skills shortages, the importance of continuing vocational education and training is growing.
- Strengthening citizenship education is important given the country's low rate of social participation.

3. Investing in education and training

General government expenditure on education as a share of GDP decreased between 2015 and 2016 to 4.5 %, below the EU 4.7 % average. Expenditure per student remains lower in the Czech Republic than on average across the EU, mainly due to considerably lower teacher salaries (OECD, 2017). Overall annual expenditure on educational institutions per pupil/student for all ISCED 2011 levels (excluding early childhood education and care) was the third lowest in the EU in 2015¹.

The 2018 education budget is 13.5 % higher than in 2017. Teachers' salaries were increased by 15 % from November 2017 in reaction to a strike warning. The increase in funding for higher education benefits the salaries of academic staff, among other things. This is needed, given the low level of spending on higher education by international standards: in 2015 it was 0.77 % of GDP, among the lowest in the EU².

Despite increases in recent years, teachers' salaries remain comparatively very low at all school levels (see Box 1). Furthermore, the salary progression is among the least rewarding (OECD, 2017).

From January 2019, the funding system for regional education will be revised, shifting from funding per pupil to funding linked to pedagogical work or hours taught. The new system aims to reduce differences in funding levels for comparable schools in different regions. It will allow specific regional characteristics to be taken into account. These include the size of schools, the structure of secondary and tertiary vocational education and training, and differences in student populations with special needs.

4. Citizenship education

In the Czech Republic citizenship education is embedded in the broader youth strategy for 2014-2020 and taught at all school levels. It is taught as a cross-curricular theme that is integrated into other compulsory subjects. Teachers are trained to become semi-specialists in teaching citizenship education, together with two or three other subjects (European Commission/EACEA/Eurydice, 2017a). Cross-curricular themes covered include personal and social education, thinking within the European and global context, multicultural education, and

¹ Source: Eurostat, table educ_uoe_fine06.

² Same as above

environmental and media education. As in a number of countries, it is less present in initial vocational education and training (IVET). Still, the IVET curriculum covers democratic citizenship, environmental education and the basics of civic education/social sciences. The methodological portal for teachers includes guidance and resources for citizenship education. The National Programme for Environment supports a network of centres organising curricular and extra-curricular programmes in cooperation with schools and providing guidance for teachers.

5. Modernising school education

The conclusions of the 2017 external evaluation of the strategy for education policy 2020 confirm the relevance of its priorities. These are: (i) supporting high-quality teachers and teaching; (ii) reducing inequalities; and (iii) improving the governance of the education system. Experts consider that most of the measures proposed are relevant but that implementation has not yet been a complete success. They recommend substantially improving the quality of administration and making communication between all involved parties more effective (Eurydice, 2018).

While still below the 10.6 % EU average, the 6.7 % early school leaving rate in 2017 continued the increase seen since 2010, when it was at 4.9 %. The rate now exceeds the 5.5 % national target for 2020. This trend contrasts with the steadily decreasing EU average. Wide regional disparities and a high proportion of early leavers among Roma — estimated at 72 % (FRA, 2016) — call for strengthened analysis of the situation and targeted measures (European Commission, 2018). In the Czech Republic the relationship between socio-economic background and grade repetition — often an early indication of early school leaving — is among the strongest in the EU.

Participation in early childhood education and care (ECEC) continues to catch up with other Member States. Participation by children aged 4-6 reached 90.7 % in 2016, narrowing the gap with the 95.3 % EU average rate.

Since September 2017, participation in ECEC is compulsory for 5 year-olds. The law also entitles 4 year-olds to a place and the same will apply progressively for younger children (European Commission, 2017). This measure is likely to help reduce inequalities and promote inclusion, especially if schools and classes are mixed socially and if there are no (hidden) costs for families. Local authorities may have to strengthen their efforts to inform families and ensure that all children concerned participate.

A number of indicators point to a relatively difficult situation for teachers on many fronts (European Commission, 2017 and 2018). This includes low prestige, demographic challenges, low salaries, insufficient continuing professional development (CPD) and weaknesses in education governance (see box below).

Box 1: The teaching profession: challenges and reforms

The 'Strategy for education policy 2020' identified support for teachers as a pre-requisite for high-quality education. It proposed implementing a new career system and improving future teachers' education and training.

The profession is still facing a number of challenges that indicate a need for further reforms to ensure there will be enough teachers, and of sufficient quality.

The proportion of school teachers younger than 40 is especially low and the share of women among lower secondary education teachers is one of the largest among OECD countries (OECD, 2017). The Czech Republic is among the EU members with the highest and fastest-growing proportion of teachers aged 50 or over in ISCED 3 and 4. At the same time, the numbers of children entering primary education are rising. A number of students opt for initial teacher education as a second choice rather than a first choice, raising questions about their motivation.

The 2013 OECD Teaching and Learning International Survey survey found that the proportion of Czech teachers reporting that their profession is valued in society and that they are satisfied with the job is below the OECD average.

Teachers' salaries have historically been low, both internationally and compared to those of people with similar qualifications. The career structure is flat: teachers cannot move to higher career levels (European Commission, 2018 and European Commission/EACEA/Eurydice, 2018b). Salary increases over the past decade have somewhat improved the situation but as these have often also gone to all public employees, the relative attractiveness of teacher salaries has not always improved.

There are shortages of qualified teachers in some subjects and geographical areas. The situation calls for active planning of the number of teachers needed in future. In this respect, however, the central governance of the system is less developed than in most Member States: there was no central forward planning in 2016/2017. About one third of European education systems offer alternative pathways to a teaching qualification besides the mainstream programmes, often in systems suffering from teacher shortages. No such pathways have been developed in the Czech Republic.

In 2016/2017, the country remained among the few without a regulated induction programme for teachers or appraisal for new teachers. In countries where such appraisal exists, it is intended to ensure that new teachers have acquired the necessary practical skills to work independently. It is therefore likely to contribute to the quality of teaching and to identifying teachers' possible needs. Low participation in CPD is reportedly linked to a lack of incentives, conflicts with work schedules and the absence of compensation for replacement teachers.

The OECD has recommended several measures to make teaching more attractive. These are:

- further increasing salaries;
- developing new entry pathways;
- adopting measures to make teachers' everyday work less isolated and more motivating;
- strengthening the link to practical experience in initial teacher education; and
- raising the quality of course provision (Shewbridge, C., et al., 2016).

Social partners advocate for public campaigns to improve the image of the profession.

Despite a lengthy process, the planned new career system for teachers was not adopted in 2017 (European Commission, 2017). It had been proposed to combine performance assessment, career advancement based on standards, strengthened CPD and improved pay. The failure to adopt it was partly due to protests by a new grouping of teachers who feared, among other things, that funding would not be sufficient to bring a real improvement in conditions.

Following the non-adoption, the Education Ministry launched EU-supported projects to improve support to beginning teachers and strengthen the CPD of teachers and school heads (Government Office, 2018). It also finalised standards for university programmes preparing future teachers. In November 2017, it awarded teachers a 15 % pay rise.

The 2018 European Semester country-specific recommendations to the Czech Republic included a recommendation to 'Strengthen the capacity of the education system to deliver quality inclusive education, including by promoting the teaching profession.' (Council of the European Union, 2018).

Inequalities in educational outcomes based on socio-economic background have risen over recent years (European Commission, 2017 and 2018). Differences between schools' educational attainment, as measured by the OECD Programme for International Student Assessment (PISA) and the Progress in International Reading Literacy Study (PIRLS), are among the widest in the EU. Inequalities are particularly concentrated among Roma children.

The 2016 reform for inclusive education represented a major concerted effort by the authorities, with the support of the European Social Fund (ESF). The reform was generally

welcomed by NGOs and experts, although less by teachers and the general public. The evaluation carried out by the Czech School Inspectorate in 2017 indicates the reform has improved support for pupils with special needs in mainstream education. The heavy administrative burden on schools was identified as a drawback and the funding requested by schools for support measures was higher than expected. Furthermore, on top of support measures teachers will need to be equipped with the right skills, training tools and teaching materials to meet the ambitions of the reform. So far the impact on the education of Roma pupils in mainstream education remains limited (Center for Policy Studies Central European University, 2018). This is partly due to its very rapid implementation without piloting. Full implementation and possible adjustments are awaited. The future scope of the reform is somewhat uncertain, in particular due to the uncertainty over sufficient funding. A 2018 amendment of the implementing decree may put the spirit of the law at risk by enabling special schools to open classes for children without mental disabilities but with behavioural/learning difficulties. This could create new forms of social segregation. It calls for close monitoring.

Monitoring of the national Roma integration strategy has identified both positive developments and obstacles. The Roma civil monitor pilot project has reported on implementation of the national Roma integration strategies (Center for Policy Studies Central European University, 2018). It pointed to the Czech School Inspectorate's recent good practice of collecting data on Roma pupils which allows analysis of the correlation between schools' achievements and the proportion of Roma pupils enrolled. It also identified obstacles and measures needed to improve educational outcomes. They include: (i) an insufficient number of places in ECEC facilities, (ii) early tracking and (iii) individual financial support. This last is considered crucial for Roma upper secondary students. It needs to include good facilities and dormitories for students from rural areas.

To promote equal opportunities, in 2018 the Ministry of Education also approved a methodology on equal opportunities in education. This was done under the operational programme on research, development and education funded by the ESF. It focuses on ways schools and school founders can promote access to high-quality pre-school and school education for children from disadvantaged backgrounds.

On inequalities more generally, the OECD has noted that the uneven distribution of teachers across schools is a real concern in the Czech Republic (Shewbridge, C., et al., 2016). Disadvantaged schools are more likely than privileged ones to report shortages of qualified staff even though it is in these schools that the best teachers are needed most. Targeted measures to attract and retain teachers to work in remote or regional areas, or schools with more challenging populations, are lacking.

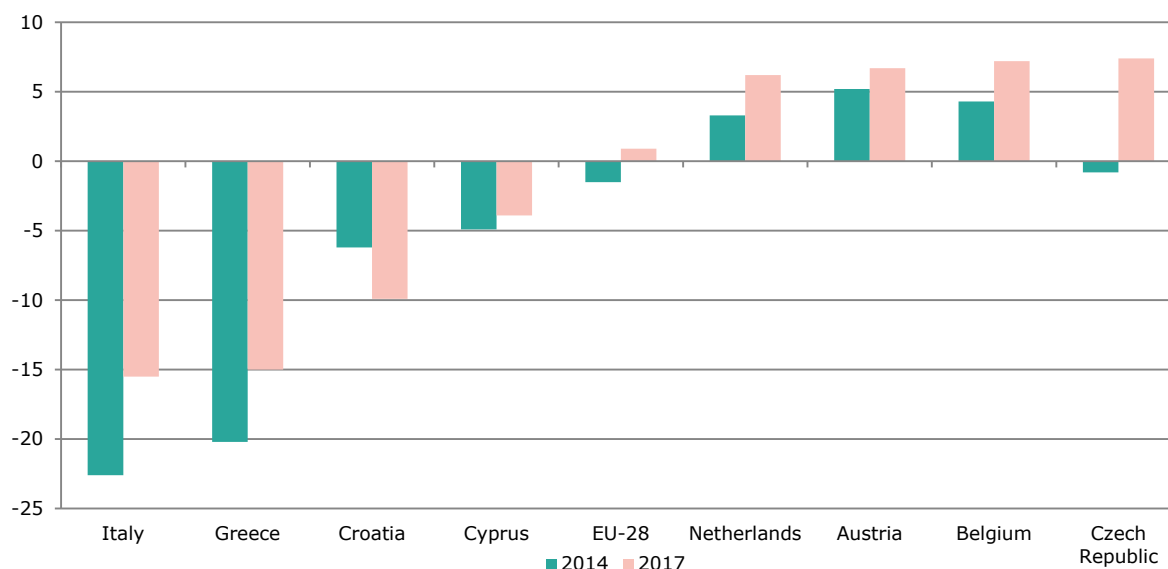
A 2017 report by the Czech School Inspectorate points to delays in implementing the 2015-2020 strategy for digital literacy. It finds that every second school has an information and communications technology (ICT) teacher without relevant qualifications and that the ICT equipment is outdated. EU-supported projects aim to bring ICT teaching into the mainstream and equip schools.

6. Modernising higher education

The 34.2 % of young people aged 30-34 with a tertiary education degree in 2017 is very close to the revised national target of 35 % for 2020. The recent increase in tertiary attainment has been among the fastest in the EU. The Czech Republic has one of the lowest percentages of young people graduating via short tertiary education programmes. At the same time, in a generally very good employment situation, the unemployment rate of Czech graduates holding a bachelor degree is comparatively low, at 3.5 % in 2016 against 7.1 % across the European Higher Education Area (European Commission/EACEA/Eurydice, 2018a). For graduates with a master's degree, the Czech unemployment rate is 3.4 %. The employment premium of a tertiary education degree is high (see Figure 3 below) and tertiary graduates as a whole earn nearly twice as much as those with only an upper secondary qualification — 50 % more for those with a bachelor degree (OECD, 2017). Nevertheless, completion rates for bachelor or equivalent programmes are low, at 37 %. The difference in tertiary educational attainment between women

and men is larger than the EU average, and the gender employment and pay gaps are wide (European Commission, 2018). Only about 1% of students receive a 'social scholarship' (European Commission/EACEA/Eurydice, 2017b).

Figure 3. Employment premium of tertiary graduates (ISCED 5-8), 2014, 2017



Source: EU Labour Force Survey, Eurostat. Online data codes: *edat_lfse_24* and *lfsa_ergaed*.

Note: employment premium (positive or negative) is the comparison of the employment rate of recent graduates aged 20-34 having completed education 1-3 years before the survey with a high-level qualification diploma (ISCED levels 5-8) and who are currently not enrolled in any further formal or non-formal education or training with the employment rate of the 'working age' reference population — adults aged 15-64 holding a high-level qualification diploma (ISCED levels 5-8). A positive premium indicates that employment rate of recent graduates is higher, while a negative rate indicates that employment rate of recent graduates is lower, than in the reference population.

Achieving upward educational mobility remains difficult in the Czech Republic: adults without tertiary-educated parents are less likely to obtain tertiary education themselves than on average in OECD countries (OECD, 2017).

Quality assurance in higher education is being strengthened. Following the 2016 reform, internal quality assurance is being upgraded in a number of institutions and the first requests for institutional accreditation have been submitted to the national accreditation authority (European Commission, 2017 and Government Office, 2018). The Ministry is carrying out surveys and studies on different topics in order to better steer future policy-making on higher education (European Commission/Eurydice, 2018a). The Czech Republic will be one of the countries piloting the European graduate survey in autumn 2018. The survey will be conducted among bachelor, master and tertiary short-cycle graduates 1 and 5 years after graduation. It will assess their integration into the world of work, perceived skills, career paths, working conditions and the effect of other contextual factors on them.

To improve quality, the diversification of institutions and programmes, and completion rates, in 2018 the Ministry revised the system for allocating funding to institutions. This decision built partly on recommendations from a peer counselling activity held in 2015 with the support of the European Commission. Funding is made up of a fixed part to ensure stability and predictability, and a variable part based on quality and performance criteria. These criteria now include course completion rates. For performance-based funding allocation, institutions have been grouped into four categories to ensure diversification of profiles and courses. The funding is first distributed to each category, so that institutions only compete within their category with similar types of institutions and according to indicators and weights that are specific to that category. The system reflects the different needs of different types of institutions.

The country is dynamically digitising higher education and adapting programmes for digitisation (Europea Commission/EACEA/Eurydice, 2018a). New resources are being invested in digital infrastructure as well as in developing related skills for academic staff and learners.

7. Modernising vocational education and training

The Czech Republic continues to improve the quality of vocational education and training (VET) and its relevance to labour market needs. The outcomes of secondary VET continue improving, with the graduate employment rate reaching 87.5 % in 2017 — well above the 76.6 % EU average. IVET is largely school-based, with mandatory practical training and work placement. There is scope to increase work-based learning as a proportion of VET, particularly through greater involvement of small businesses. The main policy development is a three-year ESF-supported project launched by the Ministry of Education, Youth and Sports in May 2017 on 'Modernisation of VET'. The aim is to ensure the quality of IVET and make secondary VET graduates more employable. It focuses on modernising the general and vocational parts of the upper secondary VET curriculum (school curricula) in order to further develop students' key competences for employability and lifelong learning (Cedefop ReferNet, 2018).

Box 2: The Creative Partnership for Inclusive School project

The Creative Partnership for Inclusive School project was launched in 2016 by the partnership of the Society for Creativity in Education and the Palacký University in Olomouc. It aims to:

- develop pupils' key competences, functional literacy and motivation to learn;
- improve the social climate in class; and
- support pupils from socially disadvantaged or culturally different backgrounds.

The concept is based on structured cooperation between artists and educators, teaching creative methods and arts in relation to all school subjects, and focusing on individual support of pupils. In addition to being introduced at several primary schools across the country, the programme is being piloted in vocational schools without a school-leaving examination. Implementation runs from October 2016 to September 2019. In total, 14 elementary and secondary schools are involved. Around 1 000 pupils will be supported, of whom at least 290 will come from socially disadvantaged or culturally diverse settings.

8. Promoting adult learning

Against a background of skills shortages and mismatches, attention to the importance of continuing VET (CVET) and of realising greater synergies between CVET and IVET continues to grow. According to the Continuing Vocational Training Survey, 90.6 % of Czech companies (well above the EU average of 72.6 %) provided vocational training to their employees in 2015, and 83.7 % of employees participated (the highest rate in the EU). The majority of Czech businesses indicated that the main skills they need in order to develop are customer handling skills and technical, practical and job-specific skills. Through the above-mentioned project 'Modernisation of VET', the link of IVET to the National Register of Qualifications (the reference point for accrediting continuing VET programmes) will be piloted under an EU-supported project. Principles of the European Credit system for VET will be used to ensure better communication between IVET and CVET programmes and a more transparent description of practical training taking place in companies. Cooperation with employers is key to the project's successful implementation. As part of the project, working groups were set up involving representatives from 77 upper secondary schools (representing 42 % of the school cohort), the Ministry of Education, Youth and Sport and employers to develop innovative educational modules. A key development in adult learning took place under the national 'digital literacy strategy for 2015-20'. Another EU-supported project, involving 2 000 companies and 2 500 job seekers, aims to increase employability through in-company training. More than 50 % of job seekers were offered a job at the end of their traineeship. A project called DigiKatalog was launched in October 2017 to enable users to assess their transferable digital skills and identify further education programmes. It will create an online tool called 'Smart Online System (SOS)' that will contain a catalogue of transferable digital skills for 500 key occupations.

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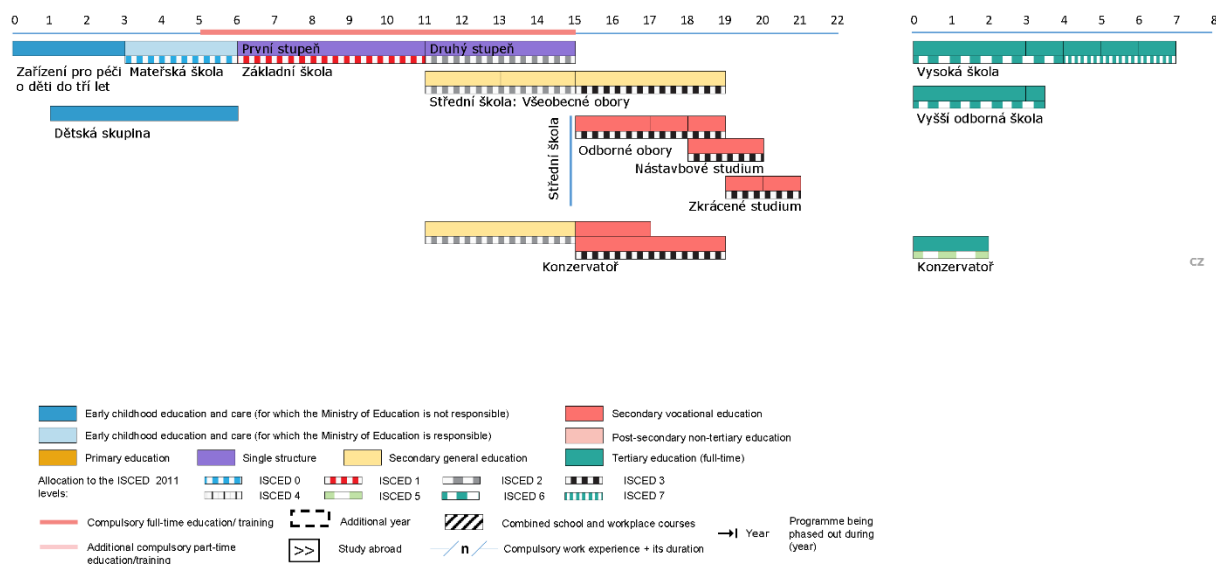
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10. Annex I: Key indicator sources

Indicator	Eurostat online data code
Early leavers from education and training	edat_lfse_14 + edat_lfse_02
Tertiary educational attainment	edat_lfse_03 + edat_lfs_9912
Early childhood education and care	educ_uoe_enra10
Underachievement in reading, maths, science	OECD (PISA)
Employment rate of recent graduates	edat_lfse_24
Adult participation in learning	trng_lfse_03
Public expenditure on education as a percentage of GDP	gov_10a_exp
Expenditure on public and private institutions per student	educ_uoe_fini04
Learning mobility: Degree mobile graduates	JRC computation based on Eurostat / UIS / OECD data
Credit mobile graduates	educ_uoe_mobc02

11. Annex II: Structure of the education system



Source: European Commission/EACEA/Eurydice, 2017. *The Structure of the European Education Systems 2017/18: Schematic Diagrams*. Eurydice Facts and Figures. Luxembourg: Publications Office of the European Union.

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