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Education and Training Monitor 2022

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EUROPEAN COMMISSION

Education and Training Monitor 2022

HUNGARY

Directorate-General for Education, Youth, Sport and Culture

2022 EN

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/

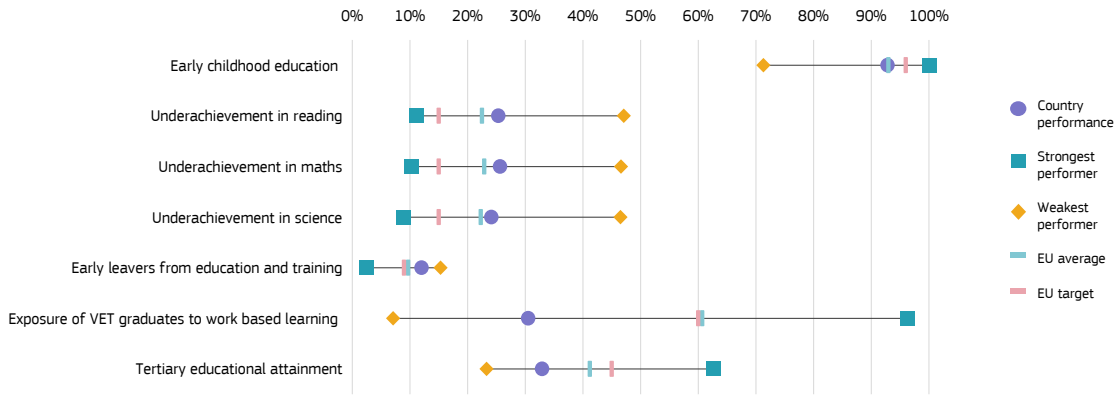
1. Key indicators

Figure 1: Key indicators overview

			Hungary		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 %	88.3% 13	92.8% 20	91.8% 13	93.0% 20
Low achieving eighth-graders in digital skills		< 15%	:	:	:	:
Low achieving 15-year-olds in:	Reading	< 15%	17.6% 09	25.3% 18	19.7% 09	22.5% 18
	Maths	< 15%	22.3% 09	25.6% 18	22.7% 09	22.9% 18
	Science	< 15%	14.1% 09	24.1% 18	18.2% 09	22.3% 18
Early leavers from education and training (age 18-24)		< 9 %	11.4%	12.0% b	13.2%	9.7% b
Exposure of VET graduates to work-based learning		≥ 60 % (2025)	:	30.5% u	:	60.7%
Tertiary educational attainment (age 25-34)		≥ 45 %	28.2%	32.9% b	33.0%	41.2% b
Participation of adults in learning (age 25-64)		≥ 47 % (2025)	:	:	:	:
Other contextual indicators						
Equity indicator (percentage points)			:	28.7 18	:	19.30 18
Early leavers from education and training (age 18-24)	Native		11.4%	11.8% b	11.9%	8.5% b
	EU-born		: u	: bu	25.3%	21.4% b
	Non EU-born		: u	: bu	31.4%	21.6% b
Upper secondary level attainment (age 20-24, ISCED 3-8)			82.7%	84.5% b	79.6%	84.6% b
Tertiary educational attainment (age 25-34)	Native		28.0%	32.7% b	34.3%	42.1% b
	EU-born		35.7%	36.3% b	28.8%	40.7% b
	Non EU-born		37.1% u	43.3% b	23.4%	34.7% b
Education investment	Public expenditure on education as a percentage of GDP		5.0%	4.7% 20	4.9%	5.0% 20
	Public expenditure on education as a share of the total general government expenditure		10.3%	9.2% 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 in 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 teachers

The shortage of teachers is increasingly challenging. Research shows a positive link between teacher quality and student performance. However, most EU countries, including Hungary, face teacher shortages – particularly in high-demand subjects and hard-to-staff schools and areas – and difficulties in attracting new candidates to the profession (European Commission, 2022). Despite the economic uncertainty linked to the COVID-19 pandemic and unlike in other countries, Hungarian pre-primary and primary education teachers belonged to the occupation groups showing the steepest decline: between March 2020 and May 2021, their number fell by more than 3 500, or 3% (Kónya & Krekó, 2021). The teaching workforce is ageing: in 2020, 46% of teachers were aged 50 or older[1]. There is also a shortage of support staff: on average, Hungary has 1 support person for 17 teachers, while the OECD average is 1 support person for 12 teachers. This increases the burden on teachers, who also need to deal with pupils with special educational needs, or psychological and socio-economic problems, among other things.

Low salaries and high workload are key factors in teacher shortages. Competitive salaries that are on a par with the remuneration paid to people with similar education levels working in comparable occupations strengthen the ability of school systems to attract and retain teachers (European Commission, 2022). Teacher salaries in Hungary are the lowest among the EU countries that are OECD members. They are equivalent to only 58-66% of the salaries of other tertiary graduates, depending on educational level. In December 2021, a government decree was published by which teachers would receive a 20% wage supplement from 2022. However, this supplement is not part of the basic salary, so it does not count towards pension rights. The measure was taken while teacher unions were holding strike talks with the government without being able to reach an agreement. Trade unions were requesting a more substantial pay rise and to reduce the weekly teaching hours to 22. In January 2022, they organised a 2-hour warning strike. This led to court cases as the unions and the government could not agree on what services should be maintained during strikes. The government issued a decree listing these, which according to the trade unions would make any further strikes in public education practically impossible.

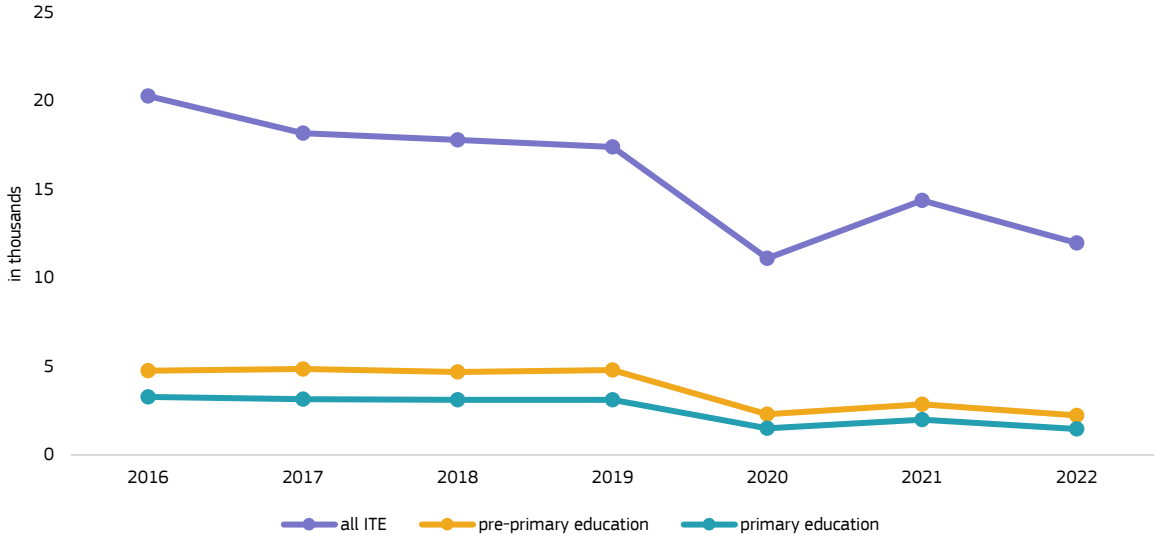
Initial teacher education cannot meet the demand for teachers. Applications for initial teacher education ITE have dropped strongly over the past 3 years (Figure 2). The decline is particularly significant for preschool and primary education. Drop-out rates are high in initial teacher education and less than half of teacher graduates actually enter the profession. In primary education, the proportion of small schools (with fewer than 150 pupils) is particularly high (49.5%) (Lannert et al., 2021). Small schools need to maintain full teaching staff regardless of the number of children, resulting in an uneven distribution of teachers across the country. Teacher shortages are most significant in disadvantaged areas, for mathematics, science subjects and foreign languages, and in vocational education and training (Varga, 2022).

The Klebelsberg scholarship programme aims to attract more candidates to initial teacher education. In 2013/2014, the scheme was launched for secondary education; it was later extended to cover special education and primary education. Beneficiaries commit themselves to teaching in a state school in one of three counties they indicate, for a time corresponding to the length of their studies. Since 2018, 1 292 young graduates have been recruited this way. In 2022, the scheme was extended to include schools run by churches and foundation-based universities. A number of higher education institutions, including church-run ones, are also offering scholarships and other support to attract applicants to initial teacher education programmes.

Initial teacher education has been restructured with lower training and output requirements. As of 2022/2023, initial teacher

[1] [educ_uoe_perp01].

Figure 3: Number of initial teacher education applications between 2016 and 2022



Source: Felvi database, standard procedure.

education for lower and upper secondary teachers will be a uniformly 5-year course. The scope ofthe course will be reduced, and to strengthen the practical aspects, placements will be provided from the beginning of the programme, instead of at the end. An optional 1-year master's course can qualify teachers for preparing pupils for the advanced-level upper secondary education leaving exam, a requirement for entry to any university. An integrated science teacher training programme will also be launched. The outcome standards and requirements have been revised to ensure that universities only prepare students in the spirit of the revised national core curriculum.

3. Early childhood education and care

Participation in early childhood education and care (ECEC) corresponds to the EU average. From the age of 3, 92.8% of children participate in ECEC (EU average: 93.0%), below the new EU-level target of 96% set for 2030. In 2016, Roma participation was at 91%, close to the national average and by far the highest among Member States in the region (FRA, 2016). However, regional coverage of kindergartens remains unbalanced: in 2020, 31% of settlements had no kindergarten (KSH, 2020). ECEC services are increasingly being taken over by churches and, to some extent, private providers. Over the past decade, the number of children attending kindergartens has fallen by 5%. Participation of children under the age of 3 is low: in 2019, only 16.9% attended childcare (EU average: 35.7%). This is partly linked to the availability of a family allowance for parents staying at home with their children until the age of 3, and partly to the scarcity of nursery places. In 2021, almost 53 000 nursery places were available for children below the age of 3. However, for almost 56 000 children (21%), no place could be provided in their own settlements (KSH, 2022).

The centralised decision on children's school maturity may lead to learning disadvantages. A 2019 amendment to the Act on national public education changed the rules for enrolling children in primary school. Previously, children who were not mature enough for primary school could be allowed by the kindergarten head to stay in kindergarten for another year. Under the new regulations, parents must apply for such an extension 8 months before the start of the school year, after which the education authority must issue an expert decision. The commissioner for fundamental rights of Hungary considered the

new process unlawful, arguing, among other things, that the application deadline is too early and the electronic application process discriminates against disadvantaged families (Ombudsman, 2021). The Parents' Voice community carried out a survey among parents who applied to the education authority to request an extra year of kindergarten for their children (Parents' Voice, 2022). The outcomes of the survey indicate that although most applications (over 90%) are eventually accepted, the criteria used to assess applications differ from one county to another, leading to significant differences in the results. Another concern is that schooling immature children can lead to long-lasting learning difficulties. Research shows that 23% of Hungarian 6-year-olds cannot distinguish all speech sounds yet, which largely increases the risk of developing dyslexia (Zajdó, 2017).

4. School education

The 2018 OECD Programme for International Student Assessment (PISA) survey showed that education outcomes are below the EU average. At the age of 15, mean levels of basic skills are significantly below the EU averages and have declined since 2009, with the sharpest decline in science. The share of low achievers is well above the EU average in all three areas tested: 25.6% in mathematics, 25.3% in reading and 24.1% in science, compared to 22.4%, 21.7% and 21.6% respectively at EU level. The revised national core curriculum of 2020 and its centrally developed framework curricula remain heavily content-oriented, leaving little room for teachers to strengthen pupils' key competences. As of 2022, new features have been introduced into the national competence test: in addition to tests in reading, maths and foreign languages, students also take a science test.

Early school leaving has not improved over the past decade. In 2021, the rate of early leavers from education and training was 12.0% (against an improving EU average of 9.7% and the EU-level target of 9%). The rate is higher in the least developed districts and among Roma (62.7% v 9.9% among non-Roma) (MNTFS, 2022). Data on participation in education show that lowering the compulsory school age from 18 to 16 in 2012/2013 had a significant negative impact on school attendance (KRTK-KTI, 2021). While the reform aimed to facilitate the labour market entry of young people wishing to leave secondary school early, it did not improve the probability of their employment. Instead, the reform increased the probability of being neither in school nor in employment for 16-18-year old drop-outs.

Performance gaps appear early and are exacerbated by the selective school system. The 2015 and 2019 TIMSS[2] results show that performance gaps between pupils emerge early (by grade 4) and belong to the highest in Europe. The rate of disadvantaged pupils in secondary education is extremely unequal across school types. According to available data, this rate is very high in vocational training schools (*szakképző iskola*) (12.96%), lower in vocational secondary schools (*technikum* and *szakgimnázium*) (2.86%) and very low in general upper secondary schools (*gimnázium*) (1.35%) (OH, 2021). This concentration of disadvantaged pupils in certain schools and school types, and pressing teacher shortages make it difficult to retain pupils in education and give them the personalised support they would need. In addition, in many countries, including Hungary, it is often the least experienced and least skilled teachers who are teaching the students with greater needs, which exacerbates academic achievement gaps based on students' socio-economic background. In vocational education and training, two alternative pathways have been launched to support students with learning difficulties, whose impact remains to be seen. Hungary also has the largest urban-rural gap in education outcomes, before accounting for socio-economic status, of all OECD countries (OECD, 2019). There is evidence that tracking policies, either between tracks (academic, vocational) or between schools, reduce education equity, and they have mixed effects on efficiency.

[2] The Trends in International Mathematics and Science Study is organised every 4 years by the International Association for the Evaluation of Educational Achievement.

Box 1: Conditions for digital education were found to have been improved

The State Audit Office examined the experience of digital education and how children's right to education was ensured during school closures (ÁSZ, 2021). They found that the spread of broadband internet access had improved the conditions for digital education, but teachers' digital competence had not been strengthened significantly. There were significant differences in schools' and teachers' practices, pupils' family backgrounds, and parents' skills, which affected both access to and the quality of education. Teachers' use of multiple platforms made it difficult to participate in digital education, requiring pupils to learn and use up to half a dozen systems in parallel. In May 2020, a survey on teachers' readiness to switch to digital education found that the use of digital tools in education is still very limited. More than half of respondents assessed their preparation to digital education by their initial education as very weak (DOS, 2020). In spring 2022, the government announced that 560 000 notebooks for students and 55 000 notebooks for teachers would be distributed in a phasing-in system starting from grades 5 and 9 over the next 4 years, worth around HUF 200 billion (EUR 490 million). As part of the revision of the national core curriculum, the former IT subject has been restructured. The new digital culture subject has a broader focus, including internet etiquette, online harassment and privacy.

Public data on the number of Ukrainian pupils in Hungarian public education is scarce. By the end of August, over 2,4 million people have crossed in to Hungary directly from Ukraine or via third countries, but only 29 170 of them had applied for temporary protection (UNHCR, 2022). More than 107 000 people had been granted temporary residence. However, it is difficult for several reasons to determine how many Ukrainian citizens are in Hungary. Many of them have dual Ukrainian-Hungarian nationality, do not need to register and are therefore not recognised as refugees; others do not apply for a refugee status but travel onwards. Ukrainians up to age 16 who either have Hungarian citizenship or have applied for a refugee status, are subject to compulsory schooling. The state school of their place of residence is obliged to admit them to regular education in Hungarian. In September 2022, the total number of children from Ukraine attending education and training in public education institutions was 4,093: 749 in kindergartens and 3,344 in schools. They are spread over 1,247 kindergartens and schools. In addition to access to schooling, both Hungarian- and Ukrainian-speaking children can participate in a 5-hour-per-week remedial or language learning support session in the afternoons, in addition to basic educational services. Schools providing remedial courses receive a monthly subsidy of HUF 130 000 (EUR 319) per pupil. However, schools do not receive any additional professional support apart from free textbooks for learning Hungarian.

5. Vocational education and training and adult learning

Progress has been made in setting up a vocational education and training (VET) graduate tracking mechanism. The Vocational Graduate Tracking System has been developed on the e-KRETA web platform to obtain more information on the further learning and employment of VET graduates. It consists of three pillars: integrated databases, regular administrative data collection, and surveys.

Box 2: European Social Fund project 'Reducing the number of early school leavers in vocational education and training' (2014-2020 Economic Development and Innovation Programme)

The aim of this project was to reduce the number of drop-outs from VET and to improve basic skills in VET. The vocational centres involved drew up and launched the implementation of institutional development plans. These included competence

testing of pupils entering vocational schools (grade 9), small group activities, and mentoring to support basic skills development and improving the sense of belonging to the school. Schools also benefited from digital infrastructure development and in-service teacher training activities.

Between 2016 and 2022, some 374 VET institutions participated. According to the project evaluation, the share of drop-outs had declined in most schools by 2019. However, it raised again in 2020, linked to the school closures.

Budget: EUR 7.2 million.

Finding dual training places in companies is challenging for VET students. Nearly half of upper secondary pupils are enrolled in VET[3] (49.7% in 2020 v 48.7% EU average). Less than 1% of small to medium-sized enterprises offer places for dual training. According to the 2019 VET 4.0 strategy, this is due to the high administrative burden related to apprenticeship contracts, a lack of qualified staff, and a lack of modern infrastructure. To address these challenges, sectoral training centres equipped with state-of-the-art infrastructure are set up – using EU funding – which will be co-owned by vocational centres and small to medium-sized enterprises.

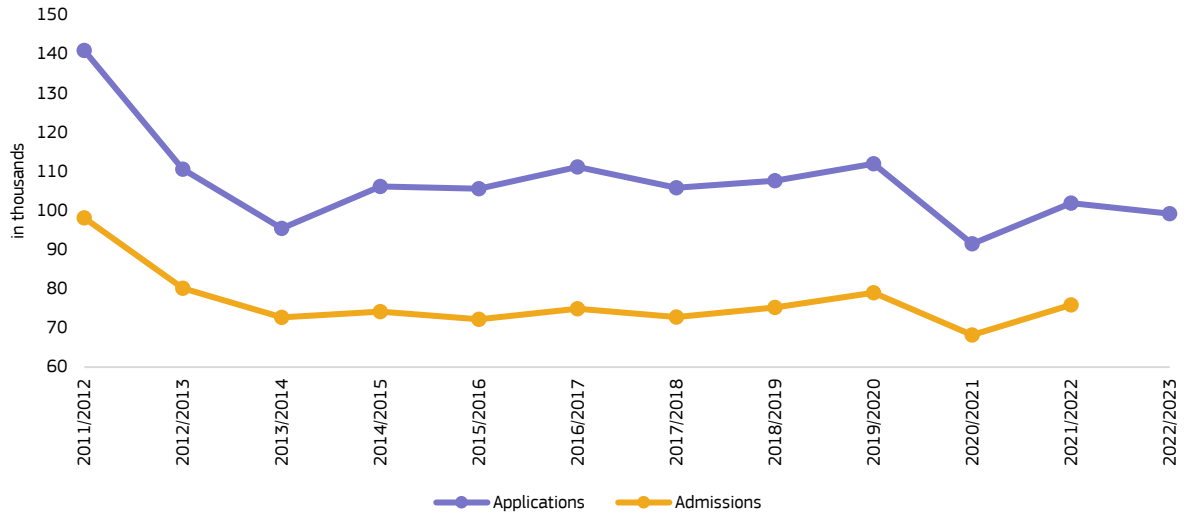
Professional final examination results at technical colleges may be considered for higher education admission. As from the 2021/2022 academic year, pupils participating in the 5-year VET programme at technical colleges can choose to have only the results of the final professional examination taken into account for the calculation of their higher education admission scores, and not their general upper secondary school leaving examination (*matura*) results. The general competence content of VET programmes is significantly lower than in general upper secondary education. Therefore, it is more difficult for technical college students to score well in the *matura*. The new VET-related admission criteria option aims to support technical college pupils' progression to higher education in the same professional field. As part of the VET reform, digital competence standards were included in the training standards and outcome requirements of each VET qualification and they have been referenced to the levels of the DigComp framework.

Adult participation in learning, especially for digital skills, needs further support. Only 5.9% of adults participated in training in a four-week period prior to when they were asked in 2021, compared to the 10.8% EU average. Participation rates of low-skilled and unemployed adults are even lower. 49% of individuals have at least basic digital skills, compared to the EU average of 54% and the Digital Decade target of 80% by 2030 (DESI, 2022). To boost adult learning, various aspects of the 2019 vocational and adult learning reform are being rolled out. In 2022, a new adult training database was published, listing all adult courses and course providers. The database could gain from searchable, harmonised and comparable information on training outcomes.

The financing of adult learning has been changed. In 2021, the public employment services training system was replaced by a job-search incentive allowance. The new scheme offers a more limited financial coverage, which may negatively impact low-skilled workers and jobseekers, whose participation is already low. In May 2021, state-subsidised adult learning study loans were launched. This interest-free scheme has two components: a loan to cover the study fee and a loan to cover any expenses related to the training. In December 2021, the requirements of the first component were tightened while the second component was abolished due to misuse. Loans for shorter trainings and an exemption from repayment on completion for disadvantaged target groups could make the offer more attractive. Hungary is also examining the feasibility of setting up individual learning accounts. Preparations will start in autumn 2022 as part of a Technical Support Instrument project and piloting is planned to be carried out under the Economic Development and Innovation Programme for 2021-2027.

[3] [educ_uoe_enrs05]

Figure 4: Number of applications/admissions to higher education in the general procedure between 2011/2012 and 2021/2022, in thousands



Source: felvi.hu

6. Higher education

The number of tertiary graduates cannot meet the growing demand for a highly skilled workforce. At 32.9%, Hungary has one of the lowest rates of the population aged 25-34 holding a tertiary degree (against an EU average of 41.2% and the EU-level target of 45%). The share of highly skilled women in this age group exceeds that of men by 12.2 percentage points, above the EU average. The employment rate of recent tertiary graduates (91.1%) exceeds the EU average (84.9%). Around a third of full-time students pay a fee for their education; this proportion is higher among part-time students (European Commission, 2020). The low tertiary attainment rate is partly linked to high drop-out rates, which are highest in IT, technical and science programmes. More than one third of bachelor's studies are finished without a degree (OH, 2020). This is partly because an intermediate level foreign language exam used to be a requirement for the diploma (Józsa, 2020). In 2020 and 2021, this requirement was suspended due to the pandemic. As of 2022, higher education institutions may decide if they prescribe a foreign language exam for obtaining a diploma. This may increase graduation numbers.

The decline in applications can probably be linked to stricter admission criteria since 2020. In 2022/2023, some 99 192 people applied for higher education; 2 689 fewer than last year and 13 000 fewer than 3 years ago (Figure 4). The number of applicants fell by 45 000 between 2011 and 2013, when self-financing places were introduced[4] and the entry scores for several popular programmes were raised. After this, the number stabilised at around 107 000 with minor fluctuations. In 2020, the number of applicants fell sharply due to stricter entry requirements: a higher passing score and the advanced-level *matura*. A deeper analysis of the data shows that the decline cannot be explained merely by demographic developments and concerns primarily the segments of higher education most affected by the stricter entry requirements (Vit & Holb, 2022). Application numbers fell more in countryside institutions than in the capital, and

[4] The 2011 Law on higher education lays down two financing options for studying in higher education: either using a state scholarship or paying for it oneself. For each higher education institution, the government lays down the maximum number of students. Students need to exceed a threshold score in the admission test to be eligible for a state scholarship.

regional data show deepening territorial inequalities (Polónyi, 2020).

Few disadvantaged people make it to higher education. The share of socio-economically disadvantaged pupils passing the *matura* and applying for tertiary education is only 3% (Varga, 2021). The VET scholarship scheme offers the highest grants in the 3-year vocational secondary track, which does not lead to *matura*, thus offering a short-term advantage for a non-academic, narrow learning path. Disadvantaged pupils may benefit from the Arany János programme for gifted pupils and those eventually entering tertiary education from the Útravaló (Pathfinder) scholarship schemes and the Roma talent support colleges. The proportion of students with disabilities remains below 1% and disabled university students continue to face serious barriers to their studies (Petri & Markos, 2021). Although the situation of students with disabilities in higher education has generally improved over the past decade, accessibility to universities remains poor, which means that students with disabilities often have problems accessing seminars, the library or compulsory practical training sites. The lack of personal assistance is also a major barrier for disabled students. There is no service in the social security system to provide students with the personal assistance they need, whether it is getting dressed in the morning, getting to class or taking notes in class.

Scarcity of accommodation is another barrier to studies. In recent years, rents have doubled in Budapest and increased by at least 50% in other large university cities. Nationwide, there are 54 000 dormitory places, for almost 300 000 students. A survey shows that 69% of students share an accommodation with others and 23% have a dormitory place (Eurostudent, 2021). Meanwhile, the number of foreign students is increasing, the vast majority of whom are provided with places in halls of residence by the universities. The construction of the Chinese Fudan University campus in Budapest met with strong protests because it would take place on land earlier designated for the planned Student City with dormitories, whose 12 000 places would be relocated and reduced to a third.

Hungary invests heavily in attracting foreign students and in international cooperation. Legislative changes have been introduced to reduce barriers for Hungarian universities to participate in the European University Initiative and to facilitate cooperation in joint degree programme development. The Stipendium Hungaricum and more recently the Diaspora Scholarship schemes have been running for years at a considerable expense, providing scholarships for foreigners – mostly from outside Europe – and students of Hungarian origin to study in Hungary. HUF 33 billion (EUR 93 million) was earmarked for the Stipendium Hungaricum in 2020. The number of international students increased 2.4 times between 2010 and 2020, and reached 17.4% of all students in 2020/2021.

Most state universities have been transformed into trust funds. By 2022, all but six universities underwent a model change by which they came under the control of trust funds set up by the government. In October 2021, the government signed public task financing contracts with the trust funds, setting out the level of public support and the performance indicators expected from the universities in return. The grant contracts set out performance indicators per year for 6 years in advance, such as the drop-out rate, the length of the job search period after graduation, or the level of cooperation with businesses. Over the years, much of the funding will gradually become performance-based. Each trust fund also receives a yearly grant of HUF 400-600 million (EUR 0.98-1.47 million) to cover the operating costs of the boards of trustees. An important governance issue is that there are no rules either on the functioning of the boards of trustees or on the relationship between the government (which is responsible for running sectoral policies) and the boards of trustees (as the funders of universities). Thus the boards have all decision power in the universities' key areas without being accountable for their own operation and decisions either to the government or the academic body of the university.

7. References

ÁSz (2021). Állami Számvevőszék - Czifra, B., Nagy, Zs., Tegzesné Czigler, E. (2021): A digitális oktatás tapasztalatainak értékelése. https://www.asz.hu/storage/files/files/elemzesek/2021/E2114.pdf?ctid=1307

DESI (2022). European Commission: Digital Economy and Society Index. Hungary. https://digital-strategy.ec.europa.eu/en/policies/countries-digitisation-performance

DOD (2020). Eszterházy Károly Egyetem Digitális Pedagógia Kutatócsoport és a Digitális Pedagógiai Módszertani Központ: Pedagógusok körében végzett felmérés az iskola digitális helyzetéről.

European Commission (2020). National Student Fee and Support Systems in European Higher Education – 2020/21. Eurydice – Facts and Figures. https://op.europa.eu/en/publication-detail/-/publication/01ea3b55-5160-11eb-b59f-01aa75ed71a1/language-en/format-PDF/source-184435368

European Commission (2021). Teachers in Europe - Careers, Development and Well-being. https://eacea.ec.europa.eu/national-policies/eurydice/sites/default/files/teachers_in_europe_2020_1.pdf

European Commission (2022). Investing in education in a post-Covid EU. https://op.europa.eu/en/publication-detail/-/publication/1beda499-ede7-11ec-a534-01aa75ed71a1/language-en

Eurostudent (2021). Hauschildt, K., Gwosć, C., Schirmer, H., Wartenbergh-Cras F.: Social and Economic Conditions of Student Life in Europe - EUROSTUDENT VII Synopsis of Indicators 2018–2021. https://www.eurostudent.eu/download_files/documents/EUROSTUDENT_VII_Synopsis_of_Indicators.pdf?utm_source=pocket_mylist

Józsa (2020). Józsa Gabriella: Lemorzsolódási kockázat és jelentkezés a felsőoktatásba. In: Képzés és Gyakorlat, 18. DOI: 10.17165/TP.2020.1-2.5.

Kónya & Krekó (2021). Kónya, I. and Krekó, J.: Állásvesztés, munkahely- és foglalkozásváltás a járulékbevallások adatai alapján In: Közgazdaság- és Regionális Tudományi Kutatóközpont: Munkaerőpiaci tükör 2020. https://kti.krtk.hu/wp-content/uploads/2022/01/mt_2020_hun_mpt.pdf

KRTK-KTI (2021). Adamecz-Völgyi, A.; Prinz, D.; Szabó-Morvai, Á. and Vujić, S.: The Labor Market and Fertility Impacts of Decreasing the Compulsory Schooling Age. https://kti.krtk.hu/wp-content/uploads/2021/12/CERSIEWP2021040.pdf

KSH (2021). Központi Statisztikai Hivatal: Oktatási adatok, 2021/2022 (előzetes adatok) 16.12.2021. https://www.ksh.hu/docs/hun/xftp/idoszaki/oktat/oktatas2122e/oktatasi_2021_22_elozetes.pdf

KSH (2022). Központi Statisztikai Hivatal: A kisgyermekek napközbeni ellátása, 2021. https://www.ksh.hu/docs/hun/xftp/stattukor/kisgyermnapkozbeni/2021/index.html

Lannert et al. (2021). Lannert, J.: Zárótanulmány az emberierőforrás-szűkösségekről a magyar közoktatásban. https://www.t-tudok.hu/files/2/kutatasi_zarojelentes_t-tudok_magyar_210x297mm.pdf

MNTFS (2022). Government of Hungary: Magyar Nemzeti Társadalmi Felzárkózási Stratégia 2030. 2022 data.

MOE (2021). Magyar Óvodapedagógiai Egyesület: Valós helyzetkép az óvodákról. https://drive.google.com/file/d/1AnMF5wSRSQPlLTXyjvmT1gRSJDF2Kjg6/view

OH (2020). Education authority: Lemorzsolódási vizsgálatok a felsőoktatásban. https://www.oktatas.hu/pub_bin/dload/felsooktatas/projektek/fir/EFOP345_FIR_LEMORZSOLODAS_VIZSGALAT_tanulmany.pdf

Ombudsman (2021). Alapvető jogok biztosa: Jelentés az AJB-694/2021. számú ügyben - A tankötelezettség megkezdésével kapcsolatos új eljárási szabályok bevezetésével összefüggésben.https://www.ajbh.hu/documents/10180/3713052/Jelent%C3%A9s+a+tank%C3%B6telezetts%C3%A9g+megkezd%C3%A9s%C3%A9vel+kapcsolatos+%C3%BAj+elj%C3%A1r%C3%A1si+szab%C3%A1lyok+bevezet%C3%A9sr%C5%91l+694_2021/

Parents' Voice (2022). Szülői Hang Közösség: Így diszkriminál hatéves kisgyerekeket az Oktatási Hivatal. https://szuloihang.hu/iskolaerettseg2022/

Petri & Markos (2021). Petri, G. and Markos, B.: Akadályok felsőfokon - Mozgáskorlátozott emberek egyetemi részvételének akadályai. http://www.meosz.hu/wp-content/uploads/2021/06/MEOSZ_Felsooktatasi-tanulmany-egyesitett-v.pdf

Polónyi (2020). Polónyi, I.: Harmadik csapás: A felsőoktatási felvételi ingadozásai – avagy az oktatáspolitika társadalomismeretének hiánya. In: Iskolakultúra, 30 DOI: 10.14232/iskkult.2020.10.25.

UNHCR (2022). United Nations High Commissioner for Refugees: Hungary: UNHCR Ukraine Refugee Situation Operational Update - 26 September 2022. https://data.unhcr.org/en/documents/details/95796

Varga (2022). Varga, J. (ed): A közoktatás indikátorrendszere 2021. https://kti.krtk.hu/wp-content/uploads/2022/02/A_kozoktatas_indikatorrendszere_2021.pdf

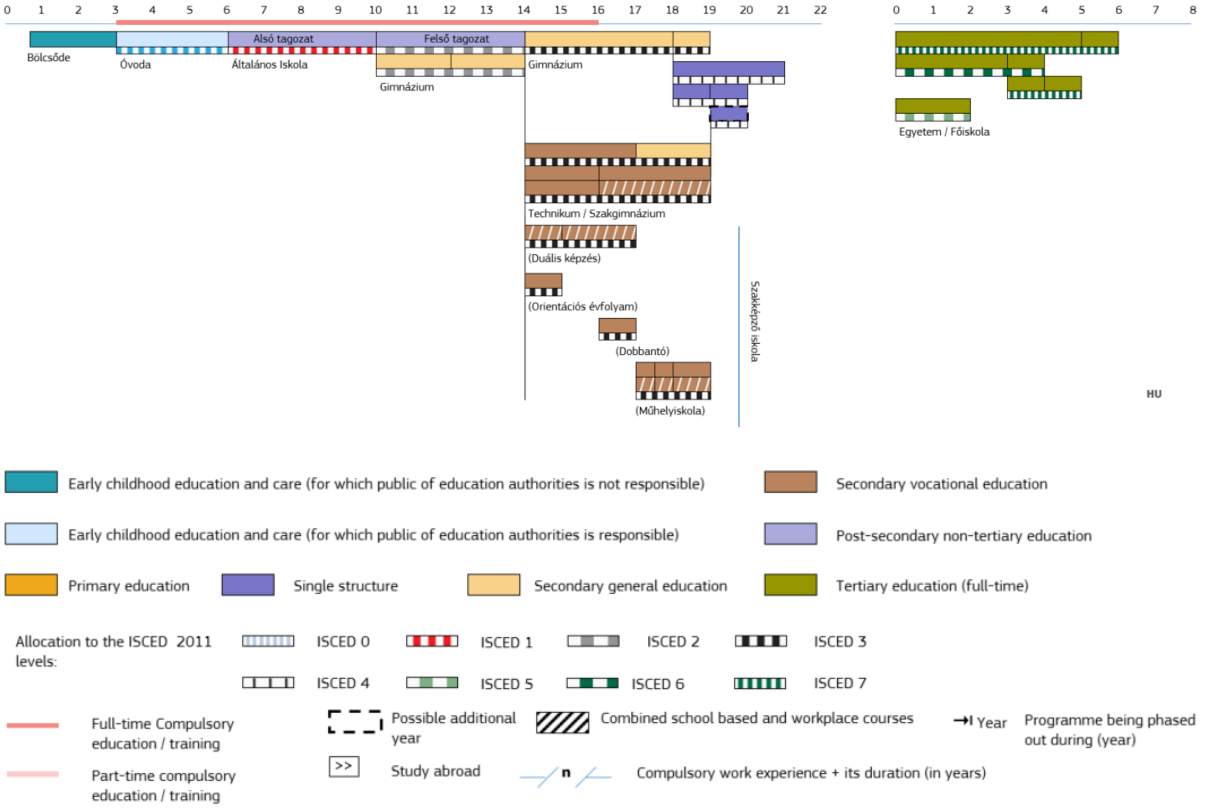
Vit & Holb (2022). Vit, E. and Holb É.M.: A felsőoktatási jelentkezőszámok visszaesése és a felvételi követelmények változása egy év távlatából In: Iskolakultúra, 32. évfolyam, 2022/1. szám. http://www.iskolakultura.hu/index.php/iskolakultura/article/view/43568/42685

Zajdó (2017). Zajdó, Krisztina: Speech sound acquisition in 3-8 years old children acquiring Hungarian: Data from 1975 and 2016. Poster presented at the 2017 Annual Convention of the American Speech, Language and Hearing Association, Los Angeles, CA, November 10, 2017.

Annex I: Key indicators sources

Indicator	Source
Participation in early childhood education	Eurostat (UOE), educ_uoe_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. *Notes:* every student under 18 who has completed compulsory education, but dropped out afterwards without completing any other courses has to continue her/his education and training until the acquisition of at least one partial VET qualification.

Please email any comments or questions to:
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