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#### COMMISSION STAFF WORKING DOCUMENT

**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

**SWEDEN** 





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/

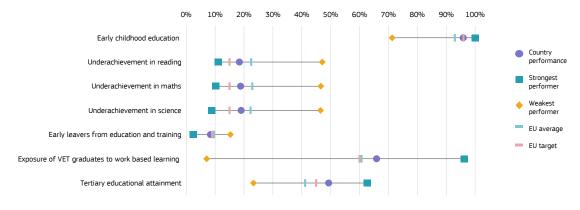


## 1. Key indicators

Figure 1: Key indicator	s overview					
			Sweden		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 %	95.0% 13	95.9% <sup>20</sup>	91.8% <sup>13</sup>	93.0% <sup>20</sup>
Low achieving eighth-graders in digital skills		< 15%	:	:	:	:
Low achieving 15-year-olds in:	Reading	< 15%	17.4% <sup>09</sup>	18.4% 18	19.7% <sup>09</sup>	22.5% 18
	Maths	< 15%	21.1% 09	18.8% 18	22.7% <sup>09</sup>	22.9% 18
	Science	< 15%	19.1% <sup>09</sup>	19.0% 18	18.2% <sup>09</sup>	22.3% 18
Early leavers from education and training (age 18-24)		< 9 %	6.6%	8.4% <sup>b</sup>	13.2%	9.7% <sup>b</sup>
Exposure of VET graduates to work-based learning		≥ 60 % (2025)	:	65.9%	:	60.7%
Tertiary educational attainment (age 25-34)		≥ 45 %	42.8%	49.3% <sup>b</sup>	33.0%	41.2% <sup>b</sup>
Participation of adults in learning (age 25-64)		≥ 47 % (2025)	:	:	:	:
Other contextual indicators						
Equity indicator (percentage points)			:	14.5 <sup>18</sup>	:	19.30 <sup>18</sup>
Forth the conference of the state of the sta	Native		5.8%	6.3% <sup>b</sup>	11.9%	8.5% <sup>b</sup>
Early leavers from education and training 18-24)	EU-born		13.0% <sup>u</sup>	: bu	25.3%	21.4% <sup>b</sup>
	Non EU-born		36.1%	16.3% <sup>bu</sup>	31.4%	21.6% <sup>b</sup>
Upper secondary level attainment (age 20-24, ISCED 3-8)			87.2%	83.0% <sup>b</sup>	79.6%	84.6% <sup>b</sup>
Tertiary educational attainment (age 25-34)	Native		43.6%	50.8% <sup>b</sup>	34.3%	42.1% <sup>b</sup>
	EU-born	EU-born		69.9% <sup>b</sup>	28.8%	40.7% <sup>b</sup>
	Non EU-born		36.1%	39.5% <sup>b</sup>	23.4%	34.7% <sup>b</sup>
Education investment	Public expenditure on e as a percentage of GDF Public expenditure on education		6.3%	7.0% <sup>20</sup>	4.9%	5.0% <sup>20</sup>
	as a share of the total government expenditur	-	12.7%	13.4% <sup>20</sup>	10.0%	9.4% <sup>20</sup>

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 school choice and equity

A number of recent studies confirm a strong link between school choice and increasing segregation of pupils. Despite overall good education outcomes, equity in education is a concern. A national report confirms increasing social and ethnical segregation in schools in Sweden, though it is still below the EU average. Pupils with a similar background tend to attend the same schools (IFAU, 2020). Research suggests that school choice leads to increasing segregation of pupils based on parents' country of birth and level of education (Branden and Bygren, 2021) with the more privileged pupils (also among pupils with a migrant background) more often attending independent schools (Lärarförbundet, 2022b). Interestingly, segregation increases especially in areas with a low residential segregation (Branden and Bygren, 2021). A survey of 690 lower secondary school principals confirms the increasing segregation of schools (Lärarnas 2021). Swedish riksförbund The Schools Inspectorate investigated the link between the queuing time in independent schools and pupils' migrant background. It found shortcomings in most schools, often in terms of applying additional undeclared criteria (Skolinspektionen 2022).

Increased funding for municipalities to address growing inequalities may not reach the schools as needed. Municipalities choose freely where they direct funding. A recent check of all school budgets concluded that 97.9% municipalities have cut school budgets despite receiving more funding. According to the author, a growing number of municipalities cite the establishment of independent schools and its financing as the cause of deficits. A newly created independent school receives per enroled pupil a compensation from the municipality which is calculated on the basis of the municipality's budgeted school costs per pupil for the coming year. As pupils transfer to the new independent school, the municipality's costs per pupil rise, since the municipality doesn't have the time to adjust its own school organisation accordingly. The amount of the compensation increases retroactively although the independent school does not share the municipality's responsibility to provide all pupils with a place in school (Lindquist, 2021). Based on the results of the Equity Inquiry. government proposed to reduce the compensation for independent schools to reflect this difference in responsibility, but the proposal did not pass in Parliament (Riksdagen, 2022e). An inquiry is ongoing into increased government governance and national financing of the school system (Regeringen, 2020).

The government is proposing major reforms to improve equity in schools. Guided by the results of the Equity Inquiry and other research, the government proposed several major changes: abolishing queuing for school admissions<sup>1</sup> 2022a), harmonising school (Regeringen enrolment (Utbildningsdepartementet, 2022e). and introducing a ban on independent school providers' ability to generate profit from their schools. Currently, an inquiry is looking for a way to stop independent providers' profit-making from schools, while allowing the current independent schools to reorganise and continue working. Results are due on 29 February 2024 (Utbildningsdepartementet, 2022f). Stopping profit-making from schools could reduce grade inflation as independent schools are tempted to give better grades to attract pupils, and increase quality and equity.

# 3. Early childhood education and care

Participation in early childhood education and care (ECEC) is high, and new legal amendments aim to tackle the remaining challenges. In 2020, participation in ECEC was among the highest in the EU, both for children under 3 years old (54.1%) and from the age of 3 to the beginning of compulsory primary education (95.9% vs EU 93%). A national inquiry showed

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Also rejected by Parliament.



that fewer children with a low socio-economic status or migrant background attend ECEC (SOU 2020:67). New amendments to the Education Act from 1 July 2022 oblige municipalities to remind guardians of children over the age of 3 who do not attend ECEC of its benefits for the children and the children's right to it. They must also offer a place in ECEC to children who have lived in Sweden for a short time, even if their guardians have not applied for it, and to children who need ECEC for language development (Riksdagen, 2022d).

Few ECEC staff are qualified teachers, and their knowledge of Swedish is sometimes insufficient. The inquiry mentioned above has also shown that only 39.5% of the staff are qualified ECEC teachers - 28.5% in the suburbs, where the population with a migrant background is dominant. There, staff with a migrant background often also lack a sufficient knowledge of Swedish, which negatively affects children's language development (SOU 2020:67). Following this finding, some municipalities have started testing ECEC teachers' knowledge of Swedish to provide them with targeted training.

The government is increasing financial support for quality in ECEC. From 2022, two previous grants in ECEC - for reducing the size of groups and for quality measures - are merged into one grant, with the distribution much more affected by socio-economic factors to better target resources. For 2022, it amounts to EUR 170 million. It will increase by EUR 29.6 million in 2023 and EUR 26 million as of 2024 (Utbildningsdepartementet, 2021b).

The requirements governing educational care have become stricter. Educational care is an alternative to standard ECEC provision and afterschool centres in Sweden, provided at a private home or other premises and organised by the municipality or an independent founder. Qualifications' requirements and adherence to the curricula are less strict (NAE, 2021a). The government requires now that the running of educational care services must be approved and monitored by the municipality to make sure that

children receive appropriate support (Regeringskansliet, 2022a).

#### 4. School education

Sweden is taking action to improve education outcomes and reduce the rising early school leaving. The percentages of low achieving 15-year-olds are below the EU averages, but above the EU-level target for 2030. To improve the quality of education, the Swedish School Inspectorate will be authorised to close schools with serious and recurring shortcomings (Riksdagen, 2022a). From August 2022, school staff are allowed to take justified, immediate and temporary measures to ensure discipline, students' security and peaceful studying. During lessons, students are only allowed to use mobile devices following the teacher's instruction (Riksdagen, 2022f). In 2021, the share of early leavers from education and training (ELET) was below the EU average and the EU-level target (8.4% vs EU 9.7%), but it has slightly increased by 0.7 pps from 2020, in line with the trend in previous years. The change is mostly due to the increase for boys (from 9% in 2020 to 10.2% in 2021), which also led to 1 pps increase in gender gap (3.7 pps in 2021). Foreign-born pupils (15.7%) are twice as likely to leave education and training early as native-born (6.3%). In rural areas, ELET is also nearly twice as high as in cities (11% vs 5.8%), and it has significantly increased (by 2.1 pps between 2020 and 2021). From 1 July 2022, pupils in grades 4-9 of compulsory school are offered two additional hours of assisted study time per week. Pupils in grade 9 who might not be eligible for upper secondary school are offered 25 additional hours of schooling during vacations to increase their chances of getting into it (Riksdagen, 2022c).

Ongoing efforts to improve monitoring and coordination in education should increase quality and equity. The National Agency for Education (NAE), the Swedish Schools Inspectorate, the Swedish Agency for Special Needs Education and the Swedish Institute for Educational Research have been given the task of devising policies aimed at increasing the quality



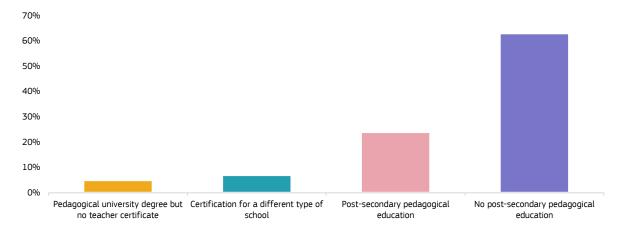
and equity of schools. In cooperation with other authorities, the NAE will propose national objectives for schools and after-school centres; adjustments to existing national objectives and, if needed, develop sub-goals and indicators for follow-up and analysis of principals' activities and results. It will identify, compile and develop success factors for effective school development. It will also offer principals regular dialogues on quality and set up 10 regional offices to provide closer support (Utbildningsdepartementet, 2021c).

The government revised the estimates of teacher shortages and looked into the distribution of teachers by qualification. In 2021, the expected teacher shortage has been recalculated in line with the new population forecast, with 180 000 children fewer. It is now estimated that by 2035. Sweden will still need 12 000 new teachers. In 2020, only 72% of all teachers were qualified (varying between 20% and 85% depending on the type and level of education). Additional 12% had a teaching degree, subject/school-level but not appropriate qualification. The shortages are most acute for special needs teachers, subject teachers in compulsory school and vocational teachers in secondary school (NAE, 2021b). The NAE also

specifically looked into the situation with unqualified teachers in compulsory schools (21% in 2020/2021). Most (63%) had no post-secondary pedagogical education (see Figure 3) (NAE, 2021c). Research into the impact of COVID-19 shows that, due to compulsory schools remaining open, teachers teaching grades 7-9 and 4-6 were among the occupational groups with the highest infection rates (Vlachos et al., 2021). A teachers' union survey shows that the workload and work-related stress of teachers have increased (86% and 60%, respectively), partly due to the need to substitute for absent colleagues (Lärarförbundet 2022a).

A new national professional programme for teachers is under preparation. In June 2022, the government proposed creating a national professional programme for principals, teachers and ECEC teachers that would create a national structure for continuous professional competence development. It would also contain a national merit system for licensed teachers and ECEC teachers. This would enable career progression of teachers and help improve the education outcomes of pupils (Utbildningsdepartementet, 2022d).

Figure 3: Unqualified teachers in compulsory schools (ISCED 1-2) in Sweden according to their qualification status in 2020/2021



Source: National Agency for Education (2021). Obehöriga lärare i grundskolan - läsåret 2020/21 (Unqualified teachers in compulsory school in 2020/21).



The government is investigating grade inflation and introducing central assessment tests in parallel digitalisation. Due to inconsistencies between test results on national tests and grades, the Swedish Schools Inspectorate is looking into differences between the schools and examining the school owners' actions to prevent these discrepancies. Inspections can be increased in schools with wide discrepancies. A report is due by 15 April 2024 (Regeringen, 2021c). The main factors for upper secondary students' success are their grades from lower secondary school and their choice of upper secondary programme. However, among pupils with equal compulsory school grades, those coming from independent schools were less likely to complete upper secondary education successfully (NAE, 2022a). The NAE's task of developing digital national tests for schools by 2022 is extended until 2024 and expanded to include automatic correction for some parts by the system and introduction of central assessment of essays in Swedish and English ((NAE, 2022b) and (NAE, 2022d)). This should contribute to more equal grading and reduce the administrative burden on teachers.

Young people have good digital skills, and new digitalisation strategy for schools is being developed. In 2021, the share of individuals aged 16-19 with basic or above-basic digital skills overall was above the EU average: 78% vs EU 69%. By 15 December 2022, the NAE will draft the new national digitalisation strategy for the school system for 2023-2027 to help boost learning outcomes and equality in preschool and school (Utbildningsdepartementet, 2022g).

The COVID-19 pandemic increased inequalities and grade inflation. As in other EU countries, the pandemic exacerbated existing inequalities in the school system, as the physical absences of education staff and the transition to distance education reduced schools' ability to provide support to vulnerable pupils and pupils with disabilities. For upper secondary education, the cancellation of national tests in 2020 and 2021 due to the pandemic seems to have led to a 'more generous' grading on average, particularly

in independent schools (Coronakomissionen, 2021b and NAE, 2021d). In April 2022, Sweden removed the option to conduct distance education and the NAE's possibility to cancel national tests (Regeringen 2022b).

Support measures for migrants, Roma and Ukrainian refugees are similar and only generically defined at national level. Due to the decentralised nature of the education system, measures taken at national level for all three groups include language learning, help from a mediator or teacher who speaks the relevant language and financial assistance municipalities for further voluntary measures. Available information from FRA Roma Survey 2019 shows good results: ECEC participation of 4 and 5-year old Roma children (90%) was close to that of the general population, and ELET was the lowest of all surveyed countries. Nevertheless, Roma pupils are still three times more likely to leave education early (around 33%) than their peers (8%)2. The strategy for Roma inclusion for 2012-2032 does not contain any targets or indicators to enable monitoring of progress. The measures focus on employing Roma bridgebuilders with Roma language and cultural skills in schools, studying Romani Chib in mother-tongue education and providing additional funding. An update of the strategy taking into account recent evidence on the situation of Roma would be welcome. Insufficient teaching materials in minority languages are an obstacle, but more concrete support is in development. From autumn 2022, the NAE is responsible for national coordination of the teaching of national minority languages, providing access to remote learning and to educational materials in national minority languages (Regeringskansliet, 2022b). To support children displaced from Ukraine, the NAE is attracting people with relevant language skills to work in the school system, comparing the Ukrainian and Swedish education systems, and helping principals assess the knowledge of newly

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https://fra.europa.eu/sites/default/files/fra\_uploads/fra-2021-roma-and-travellers-survey-country-sheetfrance\_sv.pdf.



arrived pupils and provide them with teaching in their mother tongue. Ukrainian pupils have the right to education in Sweden if their parents so wish, but it is not obligatory. Responsibility for their integration (using the standard integration programme for pupils with a migrant background) lies with the municipalities (NAE, 2022c).









#### Box 1: Uppdrag fullföljd utbildning

Although 98% of pupils in Sweden enrol in upper secondary education, about 25% do not complete it within 5 years. The Swedish Association of Local Authorities and Regions (SALAR) has run projects to reduce early school leaving (ESL).

In 2021, SALAR started the project *Uppdrag fullföljd utbildning* (Assignment Completed Education) to get more students to start and complete upper secondary education. It is mostly financed by the European Social Fund (ESF), but also co-financed by Swedish government with EUR 770 000 per year in 2021 and 2022. It builds on lessons from SALAR's previous projects Yrk In and Plug In.

Plug In has shown that the individual-centred approach, monitoring and follow-up, positive relationships, flexibility and cooperation are very important in preventing ESL, and that prevention needs to happen at three levels: universal, group and individual levels.

Uppdrag fullföljd utbildning takes action in four areas: development of preventive measures and support, research on reasons for ESL, national coordination (development of national ESL prevention strategy), and international cooperation and exchange through forums. The governmental co-financing is focused on developing the transition between school forms and supporting principals by providing process support and competence development initiatives.

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# 5. Vocational education and training and adult learning

The government has launched an inquiry into long-term and needs-adapted vocational education for adults. The skills mismatch hampers many unemployed people to take the jobs available. Attractive vocational education is necessary to boost the supply of skills and remedy the mismatch. Participation in vocational education and training (VET) is relatively low: 35.6% of upper secondary pupils vs EU 48.7% in 2020<sup>3</sup>. The government has appointed an inquiry to look into developing municipal vocational education and making it more effective and better adapted to the needs of the labour market and to jobseekers (Utbildningsdepartementet, 2022c). The inquiry will submit their proposals no later than February 2024.

Higher vocational education is beina developed to better meet the skills needs. As part of the Knowledge Boost (Kunskapslyftet), the number of places at higher VET per year has doubled and now amounts to approximately 50 000. Short education courses of up to six months in full-time studies have been introduced in order to offer flexible opportunities for those who need to deepen, broaden or renew their skills. They are usually delivered as distance education to working adults. In 2021, the government appointed an inquiry to review the regulations for the higher VET to ensure a stable, efficient and sustainable function for the future as well (Regeringen, 2021a).

Adult learning continues to be a high priority in Sweden, with many new initiatives and funding. The ongoing Knowledge Boost (Kunskapslyftet) has continued with the expansion of permanent educational places within municipal adult education, higher vocational education and training (VET), folk high schools and universities

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Eurostat, [educ\_uoe\_enrs05].



(Regeringskansliet, (2021). In total, the government has provided funds that in 2022 are estimated to cover over 160 000 training places. The government also set aside SEK 1 560 million in 2022 for 14 000 places in combination education, combining vocational education with municipal adult education in Swedish for immigrants or Swedish as a second language (Utbildningsdepartementet, 2021a). Participation is very high, already close to the 2030 target of 60%.

Increased validation of skills in municipal adult education will strengthen the supply of **skills.** A proposal has been adopted to increase number of validations in Sweden (Utbildningsdepartementet, 2022a). The home municipality is obliged to ensure that people who want to have their knowledge mapped before education or examination in municipal adult education (komvux) are offered an initial survey. They are also obliged to ensure that a student in municipal adult education who needs it is offered validation, and that validation is done within the framework of a course paid for by the student's home municipality.

Sweden is investing more in adjustment and skills development. As part of the government's adjustment package for long-term improved flexibility, adaptability and security in the labour market (Riksdagen, 2022b), several new initiatives have been introduced. This includes a new adjustment study fund, enabling a vast majority to study with at least 80 percent of the salary for up to one year. This is a completely new student grant, which complements the regular student grant and aims to improve the conditions for adults to finance studies to boost their future prospects on the labour market. The age limits for regular study grants and study start support have also been raised (Riksdagen, 2021). Employers who finance adjustment and skills support for their employees will be able to receive compensation.

Sweden's national recovery and resilience plan (RRP) covers some reforms and investments in training and adult education and contributes to existing initiatives such as the Knowledge Boost. The investments increase those already planned outside the RRP: an increase in the number of study places in municipal adult education, higher VET, and higher education.



# Box 2: *Kompetens ger tillväxt* (Skills provide growth)

The aim of the project is to boost the skills of employees in companies in Landskrona, and to increase the companies' competitiveness.

It is designed in two parts. In the first part, a survey of the employees' skills development needs is carried out. It highlights the development potential of both the individual and the company. In collaboration with the employers, the survey is then analysed to find common denominators in each individual company but also with other participating companies. In the second part, company employees are offered a training place matching their training needs from the survey.

This strengthens the profile of individual workers in the labour market by boosting their skills and motivation. It also benefits the companies as a whole by boosting most of their employees' skills.

Number of beneficiaries: 566.

Budget: EUR 918 000 (SEK 9 595 795) (ESF support: EUR 614 500 (SEK 6 418 560))

https://www.esf.se/resultat/projektbanken/projekt/?dnr=2021/00 373



## 6. Higher education

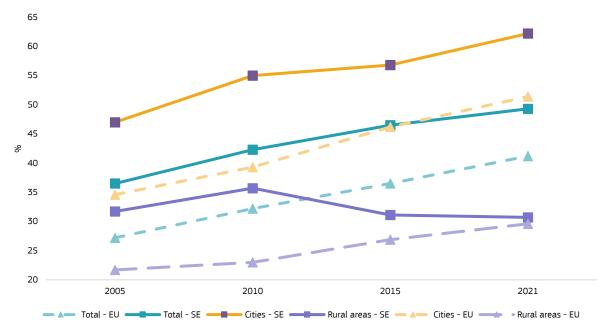
Tertiary education attainment is above the EU target, but the attainment gaps are widening. In 2021, the tertiary education attainment rate (TEA) was 49.3%, above both the EU average (41.2%) and the EU-level target of 45%. The gender gap in favour of women is above the EU average (17.3 pps vs EU 11.1 pps)4. The TEA of the foreign-born population is relatively high (45.3%) but lower than for the native-born (50.8%). The gap between them has been widening since 2017 (when they were 47.6% and 47.5% respectively), as the TEA of people from non-EU countries started decreasing (from 44.2% in 2017 to 39.5% in 2021). The urban-rural gap in the TEA is one of the highest in the EU (31.5 pps vs 21.8 pps). It has been steadily widening and has doubled over the past 16 years (see Figure 4). The employment rate of recent higher education (HE) graduates in 2021 is 90.7%, above the EU

average of 84.9%. The employment rate of secondary VET graduates is equally high.

**Sweden has many STEM graduates, and an above average proportion are women.** The share of STEM graduates is above average (27% vs EU average of 24.9%). This is also true for the share of women in STEM studies: 15.9% of all female graduates are STEM graduates (EU: 14.1%), and they make up 37.1% of all STEM graduates (EU: 32.5%). Both the share of STEM graduates and the share of female STEM graduates in overall graduates (10%) rose by about 1 pps between 2015 and 2020.

There is a growing accent on national and international cooperation between universities. In December 2021, the Council for Higher Education (UHR) was instructed to create a 'boost for higher education (HE) pedagogical development'. It will collect and share information and good examples, and enable national exchange of experience to increase the quality of teaching in HE. This will be supported by SEK 10 million (EUR 956 000) in 2022 and SEK 20 million (EUR 1 912 000) in 2023 (Regeringen 2021f).

Figure 4: Tertiary educational attainment level (25-34) by degree of urbanisation (%), 2005-2021



Source: Eurostat (EU LFS), [edat\_lfs\_9913].

Eurostat, [edat\_lfse\_03].



Moreover, thirteen Swedish universities have been granted funding as partners under the European Universities initiative.

Efforts continue to increase the number of graduates in shortage professions, aided by **EU funding.** The shortage of health professionals and teachers is a long-standing issue. In the past, the government has requested that higher education institutions (HEIs) open more study places for those professions. However, this has not achieved the expected results, mostly due to too low interest in those studies and difficulties in arranging expansion (Riksrevisionen, 2021). Efforts continue to increase the number of graduates in those fields. The government has set targets for HEIs for the number of degrees in medical and teacher education in the period 2021-2024, and new goals are planned for 2025-2028 (Regeringen, 2021b). One of the measures in Sweden's RRP is increasing the number of study places at HEIs by 35 900 places until the end of 2025, giving priority to shortage occupations (CID Annex. 2022).

Two initiatives with alternative pathways to teaching profession are ongoing. One is a pilot project organised by several universities to enable more people with a previous degree from a university or college to become teachers through supplementary pedagogical education. HEIs will need to collaborate and document their work, accounting for the number of full-time students, previous degrees and educational their specialisations arranged for them, and to report on the outcome. Linköping University, as the coordinator, proposed a distribution of educational places between the HEIs for 2023-2027 (Regeringen, 2021f). The other similarly enables those with a doctors' degree to become teachers. Priority is given to applicants with subject knowledge in mathematics, biology, chemistry, physics or technology, followed by people with subject knowledge in other shortage subjects (Regeringen, 2021e)..

The responsibility for university aptitude exams has now been permanently transferred from HEIs to the Council for Higher Education and checks will be

introduced prevent cheating. to This responsibility was temporarily transferred in the autumn of 2020 due to the pandemic. It will now become permanent to facilitate the management of exams (Utbildningsdepartementet, 2022b). To prevent cheating, the law introduced entry and exit checks and body searches of exam participants. From 1 July 2023, checks by security guards may be carried out in as many premises as needed. Any participants refusing the check will not be allowed to enter the exam room. (Riksdagen, 2022g).

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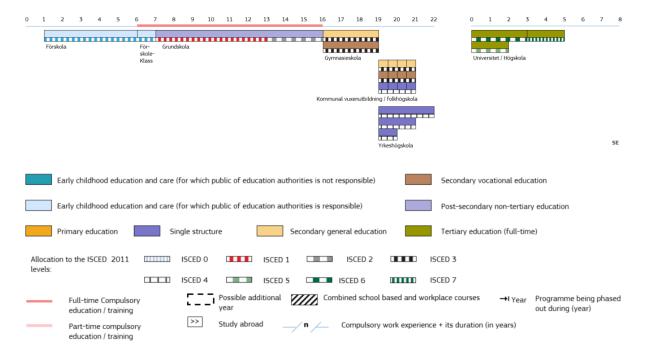
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## **Annex I: Key indicators sources**

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.

Please email any comments or questions to:

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