

Vocational education and training in Sweden

Short description



Vocational education and training in Sweden

Short description

Please cite this publication as:

Cedefop (2023). *Vocational education and training in Sweden: short description*. Luxembourg: Publications Office.

<http://data.europa.eu/doi/10.2801/800830>

A great deal of additional information on the European Union is available on the Internet.

It can be accessed through the Europa server (<http://europa.eu>).

Luxembourg:

Publications Office of the European Union, 2023

© Cedefop, 2023

Except otherwise noted, the reuse of this document is authorised under a Creative Commons Attribution 4.0 International (CC BY 4.0) licence (<https://creativecommons.org/licenses/by/4.0/>). This means that reuse is allowed provided appropriate credit is given and any changes made are indicated. For any use or reproduction of photos or other material that is not owned by Cedefop, permission must be sought directly from the copyright holders.

PRINT

ISBN 978-92-896-3583-7

doi:10.2801/320683

TI-09-23-075-EN-C

PDF

ISBN 978-92-896-3581-3

doi:10.2801/800830

TI-09-23-075-EN-N

The European Centre for the Development of Vocational Training (Cedefop) is the European Union's reference centre for vocational education and training, skills and qualifications. We provide information, research, analyses and evidence on vocational education and training, skills and qualifications for policy-making in the EU Member States.

Cedefop was originally established in 1975 by Council Regulation (EEC) No 337/75. This decision was repealed in 2019 by Regulation (EU) 2019/128 establishing Cedefop as a Union Agency with a renewed mandate.

Europe 123, Thessaloniki (Pylea), GREECE
Postal address: Cedefop service post, 570 01 Thermi, GREECE
Tel. +30 2310490111, Fax +30 2310490020
Email: info@cedefop.europa.eu
www.cedefop.europa.eu

Jürgen Siebel, *Executive Director*
Nadine Nerguisian, *Chair of the Management Board*

Foreword

Sweden holds the Presidency of the Council of the European Union in the first semester of 2023, during challenging times of the continuing war in Ukraine and a yet-to-be-completed COVID-19 recovery. As part of the trio Presidency with France and Czechia, which started in January 2022, Sweden will continue the overall political direction, known as the 18-month programme. The aims include further developing the fundamental role of quality investment in education and the continuation of the work on the skills agenda (Council of the European Union, 2021). The main priorities for the Swedish Presidency are security, competitiveness, green and energy transitions as well as democratic values and the rule of law. In education and training the focus is on responding to digital innovation and climate-neutral approaches, to guarantee economic growth and the transition to a circular economy.

Learners in Sweden have the right to different forms of financial support for both upper secondary and tertiary studies. This is considered an important part of the Government's education policy and provides individuals with different backgrounds and in different life situations the possibility to study in Sweden or abroad, making society fairer. Social partners are strongly involved in the Swedish education system, guaranteeing a close link of education to the world of work. They are represented in various councils, such as the national programme councils, which exist for each vocational programme.

The vocational education and training (VET) system includes programmes at upper secondary, post-secondary and higher levels. Three-year upper secondary VET programmes can be followed through two pathways: school-based and apprenticeship. Both include mandatory workplace training and lead to a diploma at European qualifications framework (EQF) level 4. One- to 2-year post-secondary and 2- to 3-year higher VET programmes lead to a diploma at EQF level 5 or 6.

In 2020, the share of initial VET (IVET) learners in total upper secondary learners was quite low, at 35.6%; the employment rate of VET graduates was positive at 89.5% in 2021. Sweden focuses on strengthening the attractiveness of VET, and the Government has already launched various measures, such as raising the offer of higher VET programmes and facilitating progression to higher education on completion of an IVET programme.

Participation in lifelong learning is a high priority in Sweden and was, at more than 34%, the highest among the EU-27 Member States in 2021 (according to

Eurostat). Adult education is provided in many forms and has a long tradition. Learners aged over 20 can access modularised pathways for adults, in line with their individual needs, to gain a qualification in a new field or access to higher vocational or higher general education. Non-formal adult education focuses mainly on specialised skills-oriented courses, especially aiming to integrate unemployed or recently arrived migrants into the labour market.

The VET system faces a high risk of skills mismatch between labour market needs and graduates' qualifications. Decentralised provision through many but small VET schools, public funding and learners' choice are influencing the offer of VET programmes, increasing the risk of skill mismatch. In mid-2022, the Swedish Parliament decided on certain amendments to the Education Act, obliging stakeholders to take labour market needs more under consideration during the planning, dimensioning, and offer of education.

Sweden is considered one of the most competitive economies in the world and is a digital frontrunner at the global level. The Government adopted in 2018 the *National approach to artificial intelligence*, aiming also to become a leader in harnessing the opportunities that the use of artificial intelligence (AI) can offer. In line with the digital economy and society index (DESI) 2022 report, Sweden scores above the EU-27 average concerning its overall digital performance; it has one of the highest shares of ICT specialists (7.5%) in the EU and the proportion of its ICT graduates is above the EU average. However, the economy still lacks ICT specialists, and this is expected to worsen in the coming years.

This short description was drawn up in close collaboration with the Cedefop's ReferNet partner from Sweden. It aims to offer an insight into the Swedish VET system, with its distinctive features, challenges and successes. Understanding VET in its specific country context supports policy learning, building bridges between different national VET systems and supporting learner and teacher mobility. We hope that this publication will be a source of information for researchers, policy-makers, VET providers and other readers across and beyond Europe. This publication forms part of a series of publications produced by Cedefop for the EU countries holding the Presidency of the Council of the European Union ⁽¹⁾.

Jürgen Siebel
Executive Director

Loukas Zahilas
*Head of department
for VET and qualifications*

⁽¹⁾ As well as this short description, the flyer Spotlight on VET and an animated video, presenting the national VET system, are also published for each country holding the Presidency of the Council of the European Union.

Acknowledgements

This publication was produced by Cedefop, Department for VET and Qualifications, under the supervision of Loukas Zahilas. Silke Gadji, Cedefop policy assistant, was responsible for the publication.

Cedefop would like to thank Cecilia Hågemark and Linda Mildner from the Swedish National Agency for Education (Skolverket) without whom this publication would not be possible.

The publication was peer-reviewed by Dmitrijs Kulss, Cedefop expert.

Contents

Foreword	5
Acknowledgements	7
Sweden.....	11
1. External factors influencing VET.....	12
1.1. Demographics.....	13
1.2. Economy and labour-market indicators	15
1.2.1. Economic structure	17
1.2.2. Employment and unemployment	20
1.2.3. Professional regulations.....	23
1.3. Education attainment.....	23
1.4. Employment policies influencing VET.....	26
2. VET provision	29
2.1. Education and training system overview	31
2.2. Government-regulated VET provision	32
2.2.1. Upper secondary education programmes.....	33
2.2.2. Higher VET	40
2.3. Other forms of training	42
2.4. VET governance	43
2.4.1. Governance of upper secondary VET	43
2.4.2. Governance for higher VET	45
2.5. Financing VET	46
2.5.1. Financing of upper secondary VET	46
2.5.2. Financing of higher VET	48
2.5.3. Financing of formal adult education at upper secondary VET	49
2.5.4. Financing of non-formal (liberal) adult education	49
2.6. VET teachers and trainers.....	50
2.6.1. Teachers in vocational schools	50
2.6.2. Trainers in companies and other workplaces.....	51
3. Shaping VET qualifications.....	52
3.1. Anticipating skills needs	53
3.2. Designing qualifications.....	54
3.2.1. Credit structure of VET programmes	55
3.2.2. Designing upper secondary VET qualifications.....	56

3.2.3. Designing partial VET qualifications	57
3.2.4. Designing higher VET qualifications	58
3.3. Recognition of prior learning	58
3.3.1. Validation of non-formal and informal learning	58
3.3.2. Recognition of foreign vocational qualifications	60
3.4. Quality assurance	60
3.4.1. Quality assurance in upper secondary education	60
3.4.2. Quality assurance in higher education	61
4. Promoting VET participation	64
4.1. Incentives for learners	65
4.1.1. Study aid for learners under the age of 20	65
4.1.2. Student aid for learners aged 20 and above	66
4.1.3. Financial support for low-qualified aged 25-64	68
4.1.4. Study grants for studies abroad	68
4.2. Incentives for training companies	68
4.3. Guidance and counselling	69
4.3.1. Upper secondary education	69
4.3.2. Higher education	70
4.3.3. Adult education	71
4.3.4. Public employment service	71
4.3.5. Guidance counsellors	71
4.4. Challenges and development opportunities	73
4.4.1. Skills mismatch	73
4.4.2. Lack of VET teachers	73
4.4.3. High need for digital skills and artificial intelligence	74
Acronyms	76
References	78
Further sources of information	83
Legislation	83
Websites and databases	84

Tables and figures

Tables

1. Net population change 2000-21.....	14
2. Swedish export and import of goods in 2022 (EUR million)	18
3. Twelve VET programmes: learners enrolled in school year 2017/18 and 2020/21.....	35
4. Governance and distribution of responsibilities in Swedish upper secondary education (including IVET).....	45
5. Amount of student grant for full-time studies with full student loan, 2022	67
6. Amounts of education entry grants, 2022 (examples for different numbers of weeks)	67

Figures

1. Population forecast by age group and old-age-dependency ratio	15
2. Real GDP growth rate – volume (percentage change on previous year) ..	17
3. Unemployment rate (aged 15-24 and 25-64) by education attainment level in 2010-21.....	21
4. Employment rate of VET graduates (20- to 34-year-olds, ISCED levels 3 and 4), 2017-21	22
5. Population (aged 25 to 64) by highest education level attained in 2021	24
6. Early leavers from education and training in 2012-21, Sweden and EU-27 (%).....	25
7. Participation in lifelong learning in 2010-21	26
8. VET in the Swedish education and training system in 2021/22.....	30
9. Share of initial VET learners from total learners at upper secondary level (ISCED level 3), 2020	33
10. Average voucher cost per upper secondary VET programme per year as determined by the National Agency for Education, 2021.....	48
11. General credit structure of vocational programmes.....	56

Sweden



© agrus/stock.adobe.com

Area	447 400 km² ⁽²⁾
Capital	Stockholm
System of government	Sweden is a constitutional monarchy and parliamentary democracy. The Prime Minister is the head of Government which exercises executive power; the monarch is the Head of State. Sweden is a unitary state, divided into 21 counties and 290 municipalities ⁽³⁾
Population (2022)	10 493 565 ⁽⁴⁾
Real GDP per capita (2021)	EUR 44 840 ⁽⁵⁾
Legislative power	Single-Chamber parliament ⁽⁶⁾

⁽²⁾ [Eurostat website](#) [accessed 7.11.2022].

⁽³⁾ [SCB database](#) [extracted 7.11.2022].

⁽⁴⁾ SCB database (reference period: July 2022) [accessed 7.11.2022].

⁽⁵⁾ [Eurostat website](#) [accessed 7.11.2022].

⁽⁶⁾ European Union website (country profile: Sweden).

CHAPTER 1.

External factors influencing VET



1.1. Demographics

In July 2022, Sweden had a population of 10 493 565 inhabitants ⁽⁷⁾; it was the third largest country in the European Union with a total land area of 447 400 km². The country has a low population density, even though it increased during the past 10 years and reached 25.7 inhabitants per km² in 2021. The population density varies by county, Stockholm having the highest with 367.2 inhabitants per km² in 2020 and Norrbotten the lowest, with only 2.6 inhabitants per km² ⁽⁸⁾.

For several hundred years Sweden had a higher rate of emigration than immigration, due to poverty and famine. This changed only during the period between the two world wars; first, mainly labour immigrants arrived, and gradually more refugees were arriving ⁽⁹⁾. Following the Syrian civil war, which began in 2011, many Syrian refugees arrived in Sweden and the number of immigrants reached its peak in 2016 with a total of 163 005 people ⁽¹⁰⁾. The migration of refugees continues also in 2022, with around 33 562 Ukrainian refugees arriving until April ⁽¹¹⁾.

The Swedish population has a positive rate of natural change (birth rate minus death rate) ⁽¹²⁾. In 2000, the death rate was at 93 461 and varied in the following years only slightly until 2020, when it reached its peak of 98 124 deaths, due to the COVID-19 pandemic. In the following year, however, the number decreased again to 91 958. The birth rate also varied over the years, though with a clear tendency to an overall increase; compared to 2010, the birth rate increased by 21% in 2021. These developments led to an overall increase of the population by 1.5 million people from 2010 to 2020, which is an increase of 16% of the Swedish population (Table 1).

⁽⁷⁾ [SCB database](#) [extracted 12.9.2022].

⁽⁸⁾ [Statista database](#) [extracted 12. 9.2022].

⁽⁹⁾ [Statista database](#) [accessed 7.11.2022].

⁽¹⁰⁾ Eurostat. [TPS00176](#) [extracted 12.9.2022].

⁽¹¹⁾ [SCB database](#) [extracted on 12.9.2022]

⁽¹²⁾ [Statista database](#) [accessed 12.9.2022].

Table 1. Net population change 2000-21

Year	Population	Births	Deaths	Immigrants	Emigrants
2000	8 882 792	90 441	93 461	58 659	34 091
2005	9 047 752	101 346	91 710	65 229	38 118
2010	9 415 570	115 641	90 487	98 801	48 853
2015	9 851 017	114 870	90 907	134 240	55 830
2016	9 995 153	117 425	90 982	163 005	45 878
2017	10 120 242	115 416	91 972	144 489	45 620
2018	10 230 185	115 832	92 185	132 602	46 981
2019	10 327 589	114 523	88 766	115 805	47 718
2020	10 379 295	113 077	98 124	82 518	48 937
2021	10 452 326	114 263	91 958	90 631	48 284
Change 2000-21	16%	21%	-2%	35%	29%

Source: Data based on SCB [extracted on 7.11.2022].

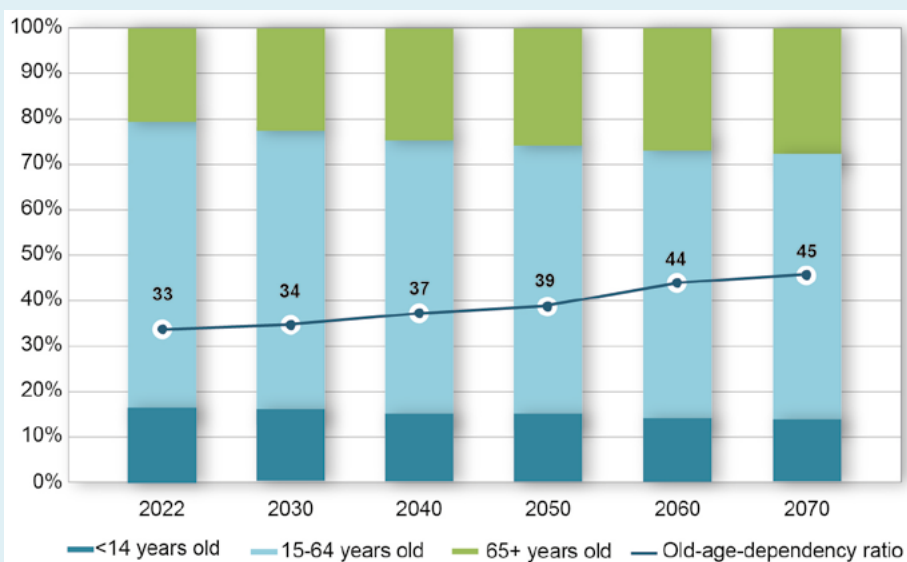
Overall, the number of people living in Sweden but born outside of the country increased over the past 10 years. In 2011 about 1.43 million inhabitants were born outside of Sweden but this number had increased to 2.09 million by 2021 ⁽¹³⁾, around 20% of the Swedish population. In 2021, the number of foreign-born inhabitants in Sweden was the highest for Syrians with a total number of 196 077, followed by Iraqi (146 769), Finnish (136 607), Polish (95 076) and Iranian (83 122). To facilitate the integration of this high number of immigrants, the education and labour markets have taken specific actions, such as facilitating the recognition of prior learning, increasing the offer of individualised programmes and the Swedish language offer, as well as offering study paths leading to partial vocational education and training (VET) qualification (Sections 2.2.1.3 and 3.2.3).

The old age dependency rate is expected to increase from 33 in 2022 to 45 by 2070 (Figure 1). The population forecast for 2022 foresees 62.1% of the population at the age of 15 to 64, 20.1% of over 65 and 17.7% below the age of

⁽¹³⁾ Statista database [accessed 12.9.2022].

14 ⁽¹⁴⁾. By 2070, the population aged over 65 will increase to 26.2%, while the age group 15 to 64 will fall to 58.3% and those below 14 years to 15.5%.

Figure 1. Population forecast by age group and old-age-dependency ratio



Source: Eurostat, proj_19ndbi [extracted on 12.5.2022].

1.2. Economy and labour-market indicators

In the 19th century, Sweden started to develop from an agricultural into an industrialised country. During the two world wars, Sweden declared itself neutral and physical destruction was kept at a low level. During this time, the country profited from international high demand for raw materials and foodstuffs without facing international competition within export activities. Sweden's real GDP per capita overall increased from EUR 33 960 in 2000 to EUR 44 820 in 2021, its highest value ever and the fourth highest among the EU-27 Member States ⁽¹⁵⁾. Today, Sweden is considered one of the most competitive economies in the world.

⁽¹⁴⁾ The old-age-dependency ratio is defined as the ratio between the number of persons aged 65 and more and the number of working-age persons (15-64 years). The value is expressed per 100 persons of working age (15-64).

⁽¹⁵⁾ Eurostat [SDG_08_10](#) [extracted 10.10.2022].

Sweden's real GDP growth rate has experienced few setbacks over the years. Due to the global financial crisis, the economy deteriorated in the second half of 2008 and in 2009 the gross domestic product further decreased by 5% (percentage change on previous year) ⁽¹⁶⁾. In 2010, however, the real GDP growth rate was 6%, much higher than the EU-27 average of 2.2% (Figure 2). It fell in 2012 to -0.6%, due to a debt crisis in the Euro area, meaning that the debts of these countries increased very quickly. In the following years, Sweden's economy began to recover due to the increase in household consumption ⁽¹⁷⁾ and increased further until 2015 to a real GDP growth rate of 4.5%. In the following years, it dropped to reach its highest negative peak of -2.2% in 2020, during the COVID-19 pandemic. The pandemic drove the country into a severe recession, though this was less severe than in the other EU-27 countries, where average GDP growth fell by 5.7% compared to the previous year. This resulted from the different policy Sweden implemented in reaction to the COVID-19 pandemic in 2020. The country was less restrictive concerning the closing of education institutions (Cedefop and ReferNet Sweden, 2020), and companies were not closed, although some restrictions were introduced, such as for bars and restaurants concerning what hours alcohol could be served (Cedefop and ReferNet Sweden, 2020). Overall, the decline was especially strongly felt in professional sectors of hotel and restaurant, trade, transportation, rentals, real estate services, travel services, culture, entertainment and leisure (Adermon et al., 2022).

In 2021, the economy had recovered and the real GDP growth rate compared to the previous year reached 5.1%, slightly below the EU-27 average of 5.4%, but surpassing its pre-pandemic level of 2019.

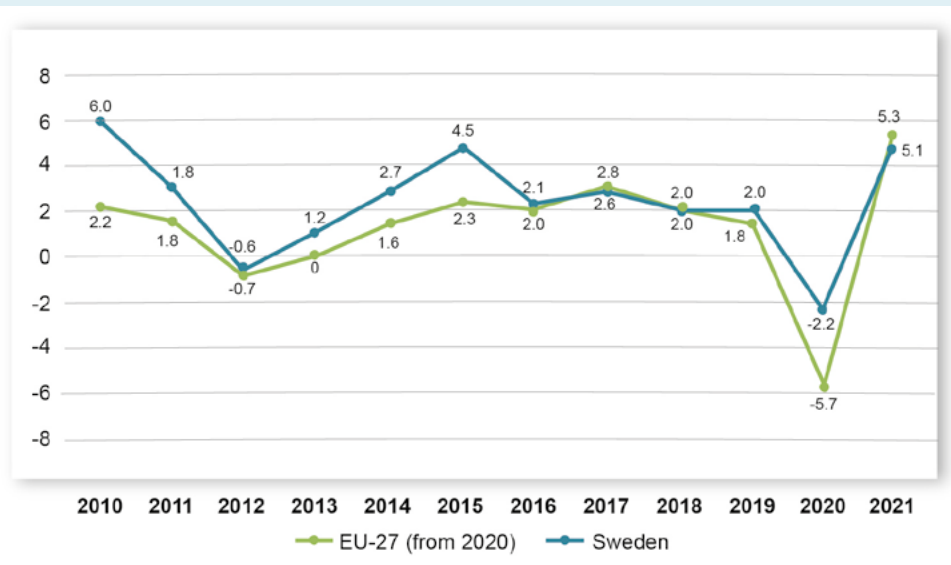
The Russian invasion of Ukraine has only indirect influence on the economy, as Sweden is doing only limited direct trade with Russia and Ukraine; however, it creates overall uncertainty about the future possible impacts. For 2022, economic growth is expected to fall to 2.3% and in 2023 even to 1.4%. At the same time, inflation is at a high level at 8% in July 2022 ⁽¹⁸⁾ and expected to remain close to 6% through 2022 (European Commission, 2022).

⁽¹⁶⁾ [ILO website](#) [accessed 12.9.2022].

⁽¹⁷⁾ [SCB website](#) [accessed 7.11.2022].

⁽¹⁸⁾ [SCB database](#) [accessed 12.9.2022].

Figure 2. Real GDP growth rate – volume (percentage change on previous year)



Source: Eurostat, tec00115 [extracted on 27.6.2022].

1.2.1. Economic structure

In 2021, Sweden had almost 1.2 million companies. Of these, 99.9% were small and medium-sized enterprises (SMEs) with up to 249 employees; 25% were one-person enterprises without any employees. Even though only 0.1% of all companies are considered as large (above 249 employees), they employ more than 1.1 million people, a high proportion of the total workforce of almost 3.2 million in 2021 ⁽¹⁹⁾.

In 2021, 65% of all companies were active in the service sector, in which the retail and wholesale companies, as well as companies in the field of business services (for example consultancy firms), made up the largest part. About 20% of companies work in the agriculture, forestry and fishery sector and 14% in the industry sector. Most employees of the industry sector work in the construction field followed by the manufacturing industry, where the main products are machinery, telecommunications, electronics, vehicles, medications, as well as iron, steel and paper products. In 2021, 70.1% (2 222 239 people) of all employees worked in the service sector, 28.5% (903 312 people) in the industry sector and 1.5% (46 397 people) in the agriculture sector ⁽²⁰⁾.

⁽¹⁹⁾ Ekonomifakta website [extracted 12.9.2022].

⁽²⁰⁾ Ekonomifakta website [extracted on 12.9.2022].

In the first half of 2022, Sweden mainly imported crude petroleum oils, industrial machinery, electronics and telecommunication, road vehicles, food beverage and tobacco, as well as textiles, clothing and footwear ⁽²¹⁾. At the same time, Sweden exported mainly paper/paper products, iron and steel, pharmaceutical products, petroleum products, industrial machinery, electronics and telecommunication, road vehicles, as well as food, beverages and tobacco ⁽²²⁾ (Table 2). An important part of the Swedish export market is knowledge-intensive services, such as research and development, ICT-services and intellectual property like patents and licences. One of the fields of digital technology which is evolving rapidly, is artificial intelligence (AI), for which the further development is considered one of the top priorities (Section 4.4.3) ⁽²³⁾.

The most important export partner countries were Norway, Germany, Denmark, United States and Finland and most imports came from Germany, Norway, Netherlands, China, and Denmark ⁽²⁴⁾.

Table 2. Swedish export and import of goods in 2022 (EUR million)

Goods	Export of Swedish goods (January-June 2022)	Import of Swedish goods (January-June 2022)
Wood and paper products	10 829	2 908
Wood	3 190	
Pulp and waste paper	1 770	
Paper, paper products	5 383	
Minerals	12 363	9 516
Iron ore and concentrates	1 981	
Iron and steel	5 231	4 302
Non-ferrous metals	2 826	2 194
Metalliferous ores, metal scrap		1 358

⁽²¹⁾ SCB database [accessed 12.9.2022].

⁽²²⁾ SCB database [accessed 12.9.2022].

⁽²³⁾ More information: Government offices of Sweden. *The Government Offices* [accessed 12.9.2022].

⁽²⁴⁾ More information: OEC. *Country profile Sweden* [accessed 12.9.2022].

Goods	Export of Swedish goods (January-June 2022)	Import of Swedish goods (January-June 2022)
Chemicals, rubber products	15 942	13 656
Organic/inorganic chemicals	1 642	2 987
Pharmaceuticals products	7 505	3 331
Plastics	2 819	2 761
Crude rubber, rubber products		1 127
Mineral fuels, electric current	11 557	14 819
Crude petroleum oils		8 631
Petroleum products	9 080	4 412
Machinery, transport equipment	40 731	42 063
Manufactures of metals	2 609	3 631
Industrial machinery	12 979	10 025
Electronics, telecommunication	9 661	15 230
Road vehicles	12 711	10 048
Passenger cars	6 463	4 892
Lorries, trucks	2 100	
Parts and accessories	3 152	3 134
Other transport equipment	629	757
Instruments, photo/optical equipment	2 139	2 368
Other products	13 352	22 459
Food, beverages, tobacco	6 537	10 766
Textiles, clothing, footwear	2 652	5 175
Furniture	1 231	1 749
Total	104 773	105 442

NB: Amounts converted from SEK to EUR [converted on 12.9.2022].

Sources: Cedefop, based on data from SCB (Exports by important SITC commodity groups and Imports by important SITC commodity groups) [accessed 12.9.2022].

1.2.2. Employment and unemployment

In 2021, the total unemployment rate of the active population (aged 25-64) was at its peak of 8.8%, which can be still considered as consequence of the COVID-19 pandemic. The last time unemployment was at this high level in Sweden was in 2010 ⁽²⁵⁾, because of the global financial crisis 2008/09 (Arbetslöshetsrapporten, 2022).

From 2011-21, the lowest risk of unemployment was faced by people aged 25 to 64 holding a tertiary qualification at ISCED level 5-8, closely followed by the same age group but holding an upper/post-secondary qualification at ISCED level 3-4 (Figure 3). Their unemployment rate of both groups remained between 3.5% and 5.7%. Those aged 15 to 24 who were holding a qualification at the same ISCED levels (3-4 and 5-8), had a much higher risk of unemployment, which varied from 8.4% to 18.1%.

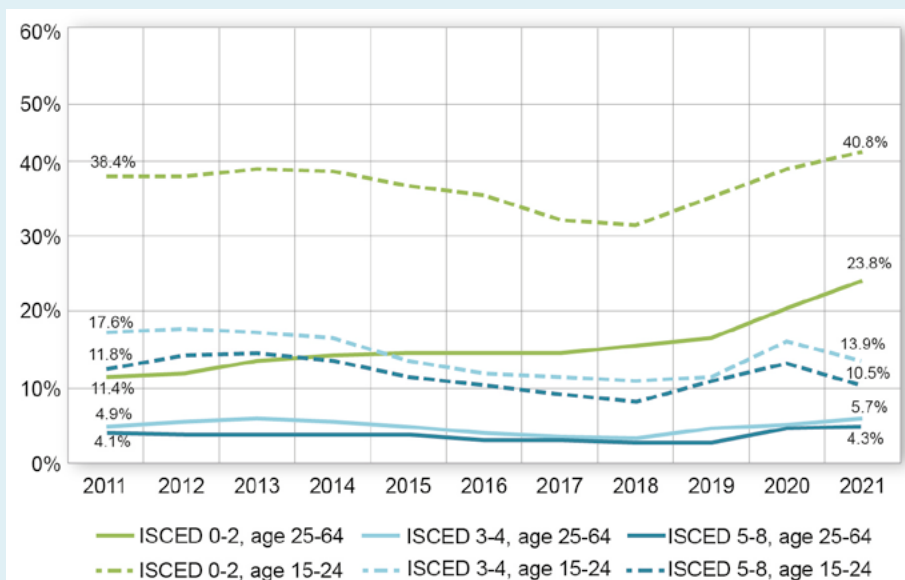
The highest risk of unemployment is faced by young people (aged 15-24) with only a qualification at ISCED level 0-2. Since 2011, their unemployment rate has varied throughout the years at a very high level, from 31.4% to 40.8%. The unemployment rate of the older low-qualified, aged 25 to 64, was much lower but has steadily increased since 2011, from 11.4% to its peak of 23.8% in 2021.

Overall, unemployment has increased since 2019 for almost all age groups and holders of all different ISCED level qualifications ⁽²⁶⁾, due to the COVID-19 pandemic. Many jobs disappeared in the service sector, in which a high number of low-qualified people had been employed and became unemployed. It is also the case that, in a crisis, older people generally face a higher risk of losing their job and of later being stuck in unemployment (Flodberg; Häkkinen Skans och and Wasén, 2022). In 2017, parliament introduced new financial support measures, trying to motivate this target group to start or resume their studies (Section 4.1.3).

⁽²⁵⁾ Eurostat, [TIPSUN20](#) [accessed 12.9.2022].

⁽²⁶⁾ With the exception of the age group 25-64 obtaining an ISCED 5-8 qualification. For them, the unemployment rate decreased from 4.6% to 4.3% from 2020 to 2021.

Figure 3. Unemployment rate (aged 15-24 and 25-64) by education attainment level in 2010-21



NB: Data based on international standard classification of education (ISCED) 2011; breaks in time series.

ISCED 0-2 = less than primary, primary and lower secondary education.

ISCED 3-4 = upper secondary and post-secondary non-tertiary education.

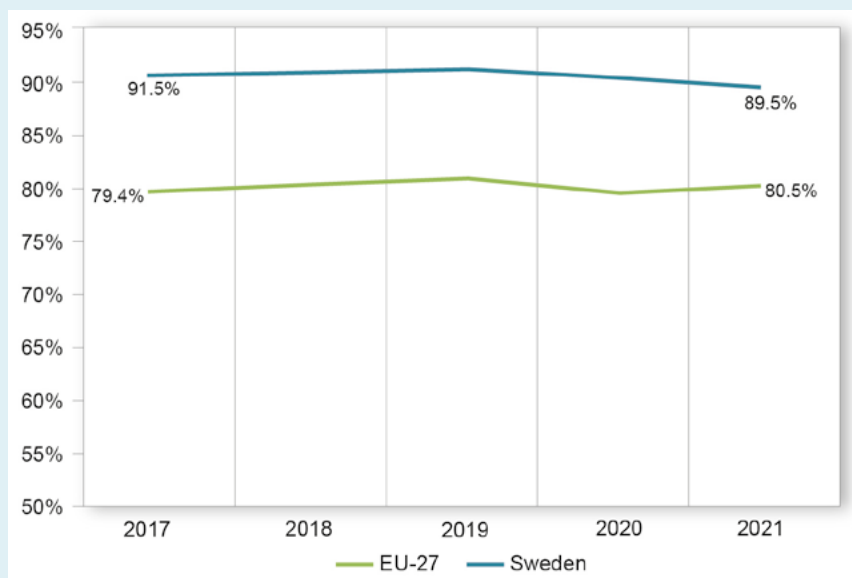
ISCED 5-8 = tertiary education.

Source: Eurostat, Ifsa_urgaed [extracted on 11.10.2022].

Compared to the other EU-27 countries, in 2021 Sweden had the fourth highest rate of unemployment of young people aged 15 to 24 ⁽²⁷⁾. This shows that there is a need to promote participation in VET, considering also that 89.5% of VET graduates aged 20 to 34 years were in employment in 2021, compared to the EU-27 average of 80.5% (Figure 4).

⁽²⁷⁾ Eurostat. TIPSUN20 [accessed 12.9.2022].

Figure 4. **Employment rate of VET graduates (20- to 34-year-olds, ISCED levels 3 and 4), 2017-21**



NB: Data based on ISCED 2011; breaks in time series.

ISCED 3-4 = upper secondary and post-secondary non-tertiary education.

Source: Eurostat, edat_ifse_24 [extracted on 11.10.2022].

According to the Cedefop skills forecast, Sweden is shifting towards a high-skilled economy and, until 2030, it is expected that about two thirds of total job openings need people with high qualification levels. The strongest employment growth until 2030 is expected in the health and social-care sector, education and also in public administration. Most new job openings in the next decade are expected in occupations of health professionals, office associate professionals and researchers and engineers ⁽²⁸⁾. To keep VET attractive, there is a need to respond to this trend and provide VET graduates with the possibility to access higher education pathways more easily (Section 2.2.1.1).

⁽²⁸⁾ The Cedefop skills forecast estimates total job openings by occupational group as the sum of net employment change and replacement needs. Net employment change refers to new jobs created due to the expansion of employment in that sector or occupation. Replacement needs arise as the workforce leaves the occupation due to retirement or career changes. ([Cedefop's database on skills intelligence](#) [accessed 12.9.2022]).

1.2.3. Professional regulations

In Sweden, just a few professions are regulated, requiring a specific degree to access the profession. This applies mainly in education and healthcare. In collective agreements, social partners define salaries for regulated and non-regulated professions, as well as the qualification levels of some professions.

There is little employment legislation or policy in place to regulate the work-based learning part of VET:

- (a) **Work Environment Act** (*Arbetsmiljölagen*), ensuring that work is performed in a healthy and safe environment and therefore defines, for example, safety measures, working hours and time to rest;
- (b) **Employment Protection Act** (*Lag om anställningsskydd*), which protects employees and regulates reasons for temporary positions, minimum notice times, priority of rehiring, termination of employment for reasons of redundancy, behavioural reasons.

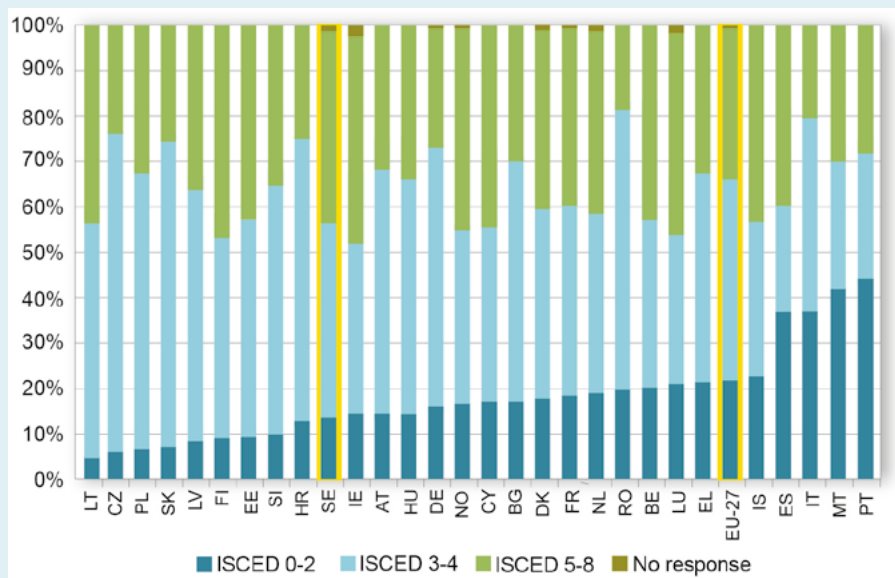
VET learners who are doing their workplace training in a company, are covered by the same legislation as employees. Training companies must ensure that safety measures are provided equally for their VET learners, who are doing their work-based learning in their place. Education providers are responsible for checking that companies comply with employment legislation (Skolverket and ReferNet Sweden, 2019).

1.3. Education attainment

In 2021, only 13.5% of the Swedish population aged 25 to 64 had a low qualification at ISCED level 0-2, which was much lower than the EU-27 average of 21.3% (Figure 5). The share of those holding an upper secondary or post-secondary level qualification at ISCED level 3-4 was 41.7%, below the EU-27 average of 44.5%. However, those people holding a tertiary qualification at ISCED level 5-8, was 44.4%, again much higher than the EU-27 average (34%) and already very close to the EU-level 2030 target of 45%.

In 2021, the percentage of women graduating from national programmes (Section 2.1) was 81.8%, compared to 77.5% for men. In higher education preparatory programmes, 84.3% of women, compared to 78.9% of men, achieved graduation after 3 years. In vocational programmes, in contrast, men to a slightly higher extent (75%) achieved a degree, compared to women (74%) (Skolverket, 2021).

Figure 5. Population (aged 25 to 64) by highest education level attained in 2021



NB: Data based on ISCED 2011.

Low reliability for 'no response' in Czechia and Latvia.

ISCED 0-2 = less than primary, primary and lower secondary education.

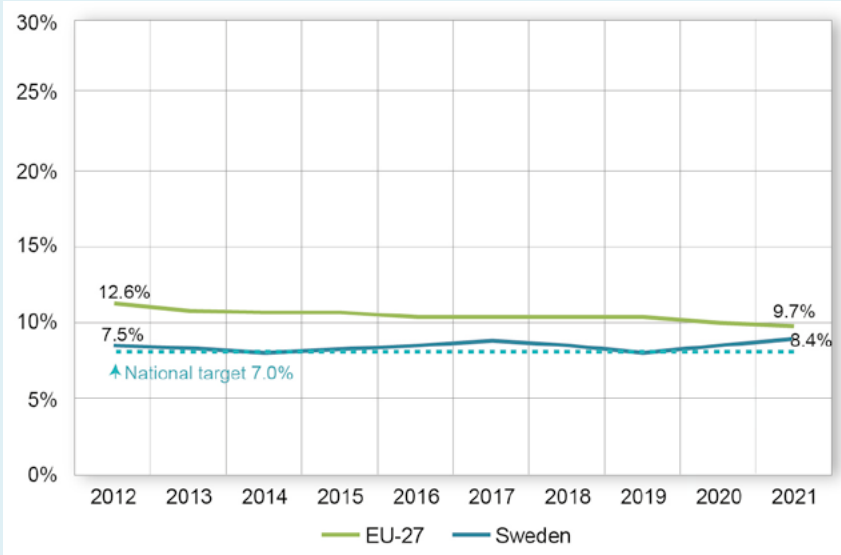
ISCED 3-4 = upper secondary and post-secondary non-tertiary education.

ISCED 5-8 = tertiary education.

Source: Eurostat, Ifsa_pgaed [extracted on 12.5.2022].

Since 2012 the number of early leavers from education and training has always been close to the national target of 7% and much lower than the EU-27 level, which varied from 12.6% (in 2012) to 9.7% (in 2021) (Figure 6). In 2021, the number of early leavers in Sweden reached 8.4%, which was the highest value for the country for many years, above the national target of 7% but still below the EU-27 average.

Figure 6. Early leavers from education and training in 2012-21, Sweden and EU-27 (%)

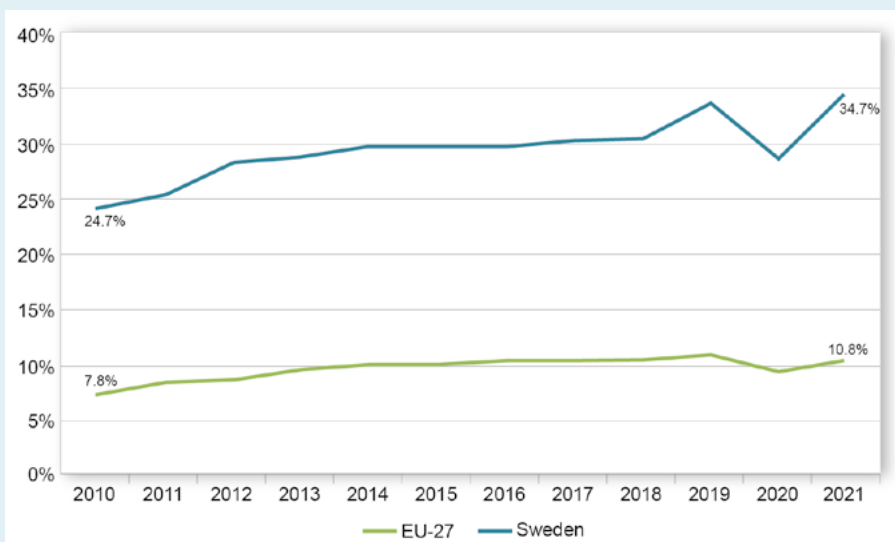


NB: Share of the population aged 18 to 24 with at most lower secondary education and not in further education or training.

Source: Eurostat, edat_ifse_14 [extracted 12.5.2022] and European Commission [extracted 11.10.2022].

The participation rate (Figure 7) of people aged 25 to 64 in lifelong learning, in the last 4 weeks before the survey, fell from 34.3% in 2019 to 28.6% in 2020; however, Sweden still had the highest participation rate among the EU-27 countries and was also far above the EU target of 15% for 2020. The fall in the participation rate, however, might be an after-effect of the COVID-19 pandemic, as in 2020 more people worked from home and had reduced contact with other people and the outside world (ReferNet Sweden and Cedefop, 2020). In 2021, the participation rate in Sweden rose again to 34.7%, which was still the highest among the EU-27 countries and much higher than the EU-27 average of 10.8%.

Figure 7. Participation in lifelong learning in 2010-21



NB: Share of adult population aged 25 to 64 participating in education and training; break in series 2018, 2021.

Source: Eurostat, trng_ifse_01 [extracted 12.5.2022].

1.4. Employment policies influencing VET

A labour force with appropriate skills is of vital importance for innovation and growth. Skills required on the labour market are changing constantly and many related upskilling and reskilling measures were introduced in the past few years, focusing on topics such as digitalisation, climate transition, construction and healthcare. The measures aim to qualify especially low-skilled adults, unemployed and asylum seekers for the labour market. More specifically, the following important employment policies were implemented:

- since 2021, training and education courses have been offered to newly arrived migrants and asylum seekers with experience in healthcare. The training can focus on Swedish language or on theoretical and practical nursing education (Cedefop and ReferNet, forthcoming a);
- vocational packages for adults have been offered for a few years, agreed with industry as entry points into the labour market. In 2021, a total of 82 vocational packages were developed, which consist not only of partial qualifications, but also include building blocks that may be transferred and accumulated towards a full qualification (Cedefop and ReferNet, forthcoming b);

- (c) in 2021, the Government asked the National Agency for Education and public employment service (PES) to analyse information exchange between education and the labour market; the aim is to facilitate the transition for the unemployed to municipal adult education (Cedefop and ReferNet, forthcoming e);
- (d) in 2021, the Government and the opposition designed the new agreement to modernise labour legislation with the focus on addressing skills mismatch and improving the alignment between skills needed on the labour market and the actual skills workers have (Cedefop and ReferNet, forthcoming d). Most of the legislative amendments entered into force at the end of June 2022 and applied for the first time on 1 October 2022 (Ministry of Labour and Ministry of Education, 2022);
- (e) in response to the digital transition, the Government asked the National Agency for Education to present a national information and communication technology strategy for education, including initial VET. Various stakeholders were involved in developing the strategy and revising curricula, including social partners, the national programme councils, universities, ICT experts, teachers and students. In 2020, VET programmes curriculum changes were approved and implemented for the school year 2020/21 (Cedefop and ReferNet, forthcoming c);
- (f) a Government bill on municipal adult education was adopted in 2020 ⁽²⁹⁾, aiming to strengthen competence provision, accelerate the integration of migrants and aid re- and upskilling of adults. Adults have additional opportunities to participate in further education and training, and the conditions for study loans have been improved;
- (g) in 2017, financial support was introduced to stimulate low-qualified unemployed adults (aged 25 to 56), who are registered at the employment service to begin or resume their studies. The financial support lasts up to 50 weeks and amounts to Swedish Krona (SEK) 8 984 (about EUR 830) per month for full-time studies (Cedefop and ReferNet, forthcoming f);
- (h) following the high number of Syrian migrants coming to Sweden in 2015/16, many new VET pathways were introduced allowing for partial qualifications. The training is focused on occupations facing shortage of skilled workers, such as doctors, nurses, cooks, butchers or accountants ⁽³⁰⁾.

⁽²⁹⁾ More information: The Swedish Parliament. [Komvux för stärkt kompetensförsörjning](#) [The Education Committee's report] [accessed 12.9.2022].

⁽³⁰⁾ More information: Public Employment Service. [Snabbspår](#) [Fast track] [accessed 12.9.2022].

Another focus of Swedish employment policies was on increasing the attractiveness of VET by improving higher VET programmes, facilitating progression to higher education, as well as action on validation. More specifically, the following employment policies were taken during the past few years:

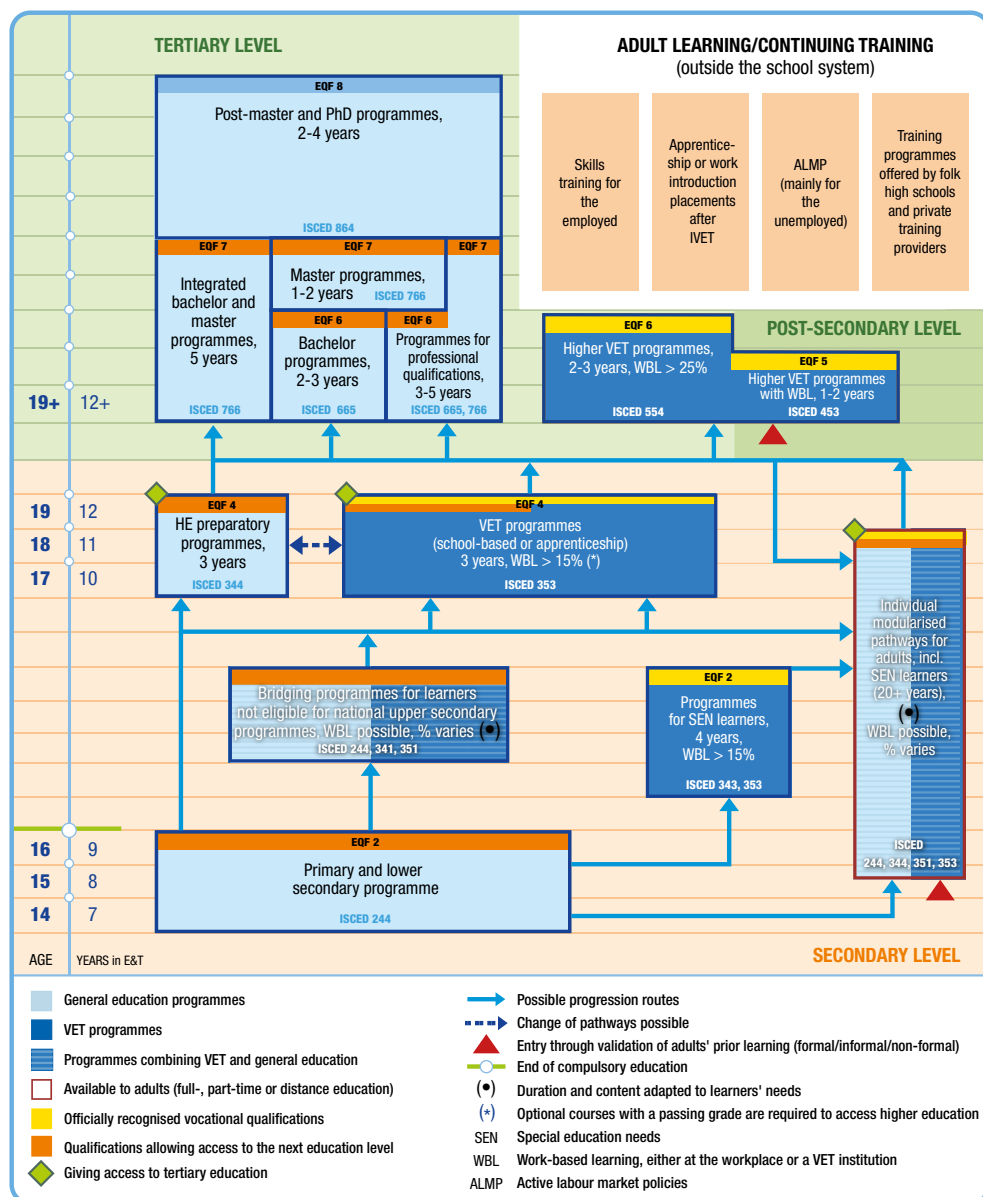
- (a) the Swedish Parliament amended the Swedish Education Act in April 2022, stating that from 2023 onwards, all VET programmes will automatically include courses leading to eligibility to higher education upon completion (at the moment it is still the other way around, so learners need to make an active decision to include these courses in their programme. Further, the number of credits will increase to 2 800, giving enough space for vocational preparation, as well as for courses leading to eligibility for higher education (ReferNet Sweden and Cedefop, 2022a);
- (b) a coherent and permanent validation system is based on adequate regulations, organisations and funding. In January 2020, the National Delegation for Validation (appointed by the Government in 2015) handed over the final report *Validation – for skills supply and lifelong learning* (Regeringen, 2019) to the education ministry. It is scheduled to be decided in 2022 by the parliament (Cedefop and ReferNet, forthcoming h);
- (c) since 2014, the Government has increased its funding to the Agency for Higher Vocational Education, with the objective of increasing the provision of higher VET programmes. The agency was able to increase the number of study places by more than 56% between 2014 and 2019. Additional funding of SEK 245 million (about EUR 24 million), for a temporary addition of higher VET study places, was granted in 2020. A quarter of those funds are earmarked for the new continuing VET (CVET) scheme HVET flex, which is piloting shorter courses until 2023 (Section 3.3.1) (Cedefop and ReferNet, forthcoming g).

CHAPTER 2.

VET provision



Figure 8. VET in the Swedish education and training system in 2021/22



NB: ISCED-P 2011.

Source: Cedefop and ReferNet Sweden, 2022.

2.1. Education and training system overview

In the Swedish education system, school is compulsory for 10 years, from age 6 to 16, as stated in the Education Act (Ministry of Education and Research, 2010a). The Swedish education and training system comprises:

- (a) nursery school or preschool (*Förskola*), which is offered on a voluntary basis to children from age 1 to 5 (ISCED level 0);
- (b) compulsory primary and lower secondary education, which is offered to children from age 6 to 16 (ISCED 1-2). Compulsory school is divided into the following four stages:
 - (i) preschool class (year 0; preschool year) ⁽³¹⁾;
 - (ii) primary school (years 1-3; *lågstadiet*);
 - (iii) middle school (years 4-6; *mellanstadiet*);
 - (iv) high school (years 7-9; *högstadiet*).

Compulsory education is also offered:

- (a) in Sami schools (*sameskolor*) to the children of the indigenous Sami people;
- (b) upper secondary school, for children usually of age 16 to 20 ⁽³²⁾ (ISCED 3-4). This includes 18 regular national programmes, six of which are higher education preparatory programmes and 12 vocational programmes;
- (c) tertiary education, which includes higher VET programmes at ISCED level 5-6, as well as general bachelor, master, post-master and PhD programmes at ISCED level 6-8.

The Swedish school system includes independent schools (*friskola*), which are run by a principal other than a municipality, region or state. They can be run by a foundation, a company, an association, a private person or a faith community. Independent schools need to be approved by the [Schools Inspectorate](#), the government agency responsible for ensuring that all school learners are provided with equal education of good quality in a safe environment. Their number has been increasing since 1992, when they started to receive public funds due to the amendment of the respective law (see Section 2.5.1 for information on the financing) ⁽³³⁾.

⁽³¹⁾ More information: Skolverket. [Skolplikt och rätt till utbildning](#) [Compulsory schooling and the right to education] [accessed 12.9.2022].

⁽³²⁾ A young person must start upper secondary education no later than the first calendar year of the year in which they turn 20. More information: Skolverket. [Antagning till gymnasieskolan](#) [Admission to secondary school] [accessed 12.9.2022].

⁽³³⁾ More information: Friskolornas riksförbund. [Skolor och elever](#) [Schools and students] [accessed 12.9.2022].

Both independent and municipal schools operate within the framework of the Education Act (2010) and are obliged to follow national curricula and syllabuses. Parents and their children have the freedom to choose between independent or municipal school. In the school year 2020/21, 17% of compulsory schools were independent, attracting 16% of all compulsory school learners; for upper secondary schools this level was even higher, with 35% of independent school attracting around 29% of all upper secondary school learners ⁽³⁴⁾. In the school year 2020/21, 63% of learners in independent high schools attended a higher education preparatory programme, 30% a vocational programme and 7% a bridging (introductory) programme (Friskolornas riksförbund, 2022).

Learners with special educational needs (SEN), must follow 9 years of compulsory school, which includes primary school (grades 1-3) and middle school (grades 4-9). Special educational needs compulsory school aims to offer an education adapted to relevant pupils that provides knowledge and values and develops their ability to acquire these. The education should contribute to personal development, prepare them for active life choices and provide a good basis for active participation in society. These 9 years of compulsory school for special educational needs forms the basis for further education.

2.2. Government-regulated VET provision

The Swedish VET system starts after compulsory education and comprises upper secondary, post-secondary and tertiary programmes, leading to qualifications at European qualifications framework (EQF) level 2 to 6 (Figure 8).

To enrol in upper secondary VET programmes, learners need to obtain passing grades in a sufficient number of subjects from the lower secondary programmes in specific subjects: Swedish or Swedish as a second language, English and mathematics, as well as in at least five other subjects. Four bridging programmes are available for those with insufficient passing grades (Section 2.2.1.2). VET programmes, as well as work-based learning, can be included on all four programmes. These programmes provide access right to upper secondary programmes leading to a qualification at EQF level 4 (Section 2.2.1.1). Learners with special educational needs can access specific programmes which last 4 years and lead to a qualification at EQF level 2 (Section 2.2.1.3). Individual modularised pathways, including VET qualifications at upper secondary level, are offered to adults by the formal adult education system and lead to qualifications at ISCED level 244, 344, 351, 353.

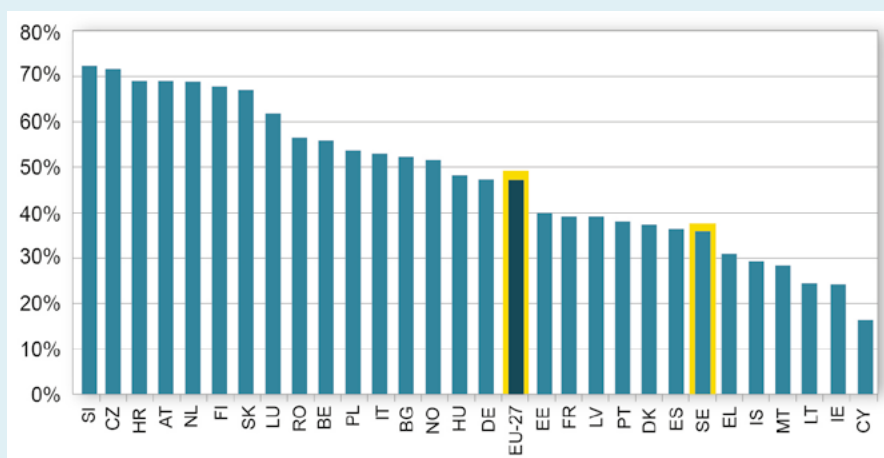
⁽³⁴⁾ More information: [The Swedish school system](#) [accessed 12.9.2022].

At higher level, 1-year post-secondary and 1- to 2-year tertiary VET programmes are offered, leading to a diploma in higher vocational education at EQF level 5 or an advanced diploma in higher vocational education at EQF level 6 (Section 2.2.2).

Learners who have not completed upper secondary school can attend respective programmes offered in municipal adult education or folk high schools (Section 2.2.1.4).

Initial VET learners as a share of total upper secondary learners are quite low (35.6% in 2020), more than 13 percentage points below the EU-27 average of 48.7% (Figure 9). The low number of VET graduates is reflected on the labour market, which lacks skilled workers. The Government has launched multiple measures to increase the attractiveness of VET (Section 1.4).

Figure 9. Share of initial VET learners from total learners at upper secondary level (ISCED level 3), 2020



NB: Data based on ISCED 2011.

Source: Eurostat, educ_uoe_enrs04 [extracted on 12.5.2022].

Upper secondary general and vocational pathways use the upper secondary credit system. In line with the European credit system for vocational education and training (ECVET) points, these credits indicate the effort required to attain the goals for a specific course.

2.2.1. Upper secondary education programmes

The current upper secondary school system was introduced with the national reform in 2011, in the aftermath of the global financial crisis of 2008-09, when

the first recovery took place but the number of long-term unemployed was still at a high level (Section 1.2.2). The main objective was to qualify more people for the labour market.

At upper secondary level, the following four VET pathways are offered, which learners can access, once they have finished their compulsory education:

- (a) VET programmes (school-based or apprenticeship);
- (b) bridging programmes (introductory programmes);
- (c) VET programmes for learners with special educational needs;
- (d) individualised VET pathways for adults.

2.2.1.1. *Initial VET programmes (school-based or apprenticeship)*

Upper secondary initial VET programmes last 3 years, are free of charge and lead to an upper secondary vocational diploma at EQF level 4 which qualifies graduates to enter the labour market directly. Learners enter a VET programme normally at age 16, after having completed compulsory school, but generally can access these programmes until the year when they turn 20; after these, learners can study VET only in adult education (Section 2.2.1.4). To be eligible to enter one of these programmes, learners need to have sufficient passing grades from the lower secondary programme in Swedish or Swedish as a second language, English and mathematics, as well as in at least five other subjects. If learners do not have sufficient grades, they can follow one of the four existing bridging (introductory) programmes (Section 2.2.1.2) or can continue general education for up to 2 years to qualify.

There are 12 upper secondary VET programmes, each focusing on a different vocational field (Table 3). Upper secondary VET programmes are offered either as school-based education or apprenticeship education. Both education forms include mandatory workplace training, which differ in the amount: in school-based education the overall share of work-based learning needs to be at least 15%; in apprenticeship it needs to be at least 50% (Cedefop; 2021a). Learners who follow the apprenticeship, are directed by their education provider to a training company. Apprentices receive minimum remuneration, regulated by collective agreements ⁽³⁵⁾.

Transfer from school-based to apprenticeship-based VET programmes is possible in the first, second and third school year, but with certain limits: if a learner switches to an apprenticeship-based programme only in the third year, the learner needs to have had sufficient work-based learning experience for half

⁽³⁵⁾ GLA. [Vad kostar en gymnasielärling?](#) [What does a high school apprentice cost?] [accessed 12.9.2022].

of the total programme to have been workplace-based training on completing the upper secondary VET programme (Skolverket, 2012a).

The participation rate in the 12 VET programmes increased from 92 500 learners in 2017/18 to 104 420 learners in 2020/21 (Table 3). However, as the overall number of VET learners is still low, compared to the EU-27 average and labour market demand, several measures were taken to increase the attractiveness of VET (Section 1.4). The most popular programmes in the school year 2020/21 were those in electricity and energy, building and construction, vehicle and transport, child and recreation, as well as the health and social care programme.

Table 3. Twelve VET programmes: learners enrolled in school year 2017/18 and 2020/21

Twelve vocational programmes	Learning of knowledge and skills in fields of...	Examples of professional fields	Learners enrolled in school year	
			2017/18	2020/21
1. Electricity and energy	Production, installation and distribution of electricity, energy and water systems	Work with automated production systems, energy systems, environmental and hydro technologies, computers and communication systems, electricians	14 000 (15.1%)	15 601 (15%)
2. Building and construction	Building and construction of new buildings, conversions and renovation	Construction worker, construction machine operator, building worker, house painter, sheet metal worker	12 400 (13.4%)	13 685 (13.1%)
3. Vehicle and transport	Technology in different vehicles or the ability to manage transport	Mechanics, drivers, or in stores or terminals	10 300 (9.7%)	12 859 (12.3%)
4. Child and recreation	Educational methodology	Preschool and childcare, swimming or sports facilities personnel, or personal assistants	8 500 (9.2%)	11 000 (10.5%)
5. Health and social care	Health, ill-health, and functional impairment	Health and social care	9 600 (10.4%)	10 084 (9.7%)
6. Business and administration	Retailing and administration, where service and communication are crucial	Sales people, purchasers, shop managers, or in administrative areas, e.g. ICT administrators	8 400 (9.1%)	10 040 (9.6%)

Twelve vocational programmes	Learning of knowledge and skills in fields of...	Examples of professional fields	Learners enrolled in school year	
			2017/18	2020/21
7. Natural resource use	Harnessing nature and managing natural resources	Natural resource use sector, with plants, animals, land, water or forests, with horses or in park and horticultural environments	8 200 (8.8%)	9 703 (9.3%)
8. Handicrafts	Recurring tasks starting from idea to finished product (planning, choosing tools, materials and techniques, carrying out, reporting, assessing, etc.)	Floristry, hairdressing, carpentry, textiles or handicrafts	6 100 (6.6%)	6 284 (6%)
9. Industrial technology	Process-oriented or automated material handling and production planning, operations and maintenance, or welding and other forms of metal assembly	Welder, caster, machine operator, mechanic, production technician, sawmill operator or carpenter	4 100 (4.4%)	4 580 (4.4%)
10. Restaurant management and food	Work involves close contact with customers, in the first instance using handicraft methods, both traditional and modern	Restaurant and food sector, e.g. in restaurants, bakeries or charcuteries	4 800 (5.2%)	4 414 (4.2%)
11. HVAC and property maintenance	Installation, error detection, repairs, operations and maintenance, management of property, technical facilities and systems (e.g. for heating, ventilation)	Property, refrigeration and heat pumps, ventilation or in heating, ventilation and sanitation	3 716 (3.6%)	3 200 (3.5%)
12. Hotel and tourism	Service and customer reception	Hotel, conference or tourist industries	2 900 (3.1%)	2 454 (2.4%)
Total number of learners in VET programmes			104 420	92 500

Source: Cedefop, based on data provided by Skolverket (Skolverket, 2022a; 2018).

2.2.1.2. Bridging programmes (introductory programmes)

Learners who do not have sufficient passing grades from the lower secondary programmes in specific subjects (in Swedish or Swedish as a second language, English and mathematics, as well as in at least five other subjects), are not eligible to access VET programmes (Section 2.2.1.1). They can follow one of the four existing bridging programmes (*introduktionsprogram*, introductory programmes) until the year they turn 20. Some of them include initial VET courses and learners can acquire a certain number of credits, which can be counted as partial qualification when they follow a VET programme afterwards. The study plans are individually adapted to the needs of each learner; some learners study only compulsory subjects, others take all or part of upper secondary courses and still others might do a large part of their education in the form of work-based learning. Bridging programmes last 1 to 3 years and lead to an upper secondary school certificate (ISCED level 244, 341 and 351), which specifies the education learners have received.

Each learner should be accompanied by a mentor who will follow the learner's knowledge development. The mentor pays particular attention to signs that the learner may need support and, if so, promptly informs the relevant school staff. Graduates of the bridging programmes are eligible to enter a national programme, either the vocational programme or the higher education preparatory programme.

The following four individually adapted bridging programmes are offered (Skolverket, 2021):

- (a) vocational introduction programmes: these provide learners with vocationally oriented education, which makes it easier for them to establish themselves on the labour market or to continue their studies in a vocational programme. The programme includes workplace-based learning or work practice (scope not further defined), as well as compulsory subjects, for which the learner did not achieve the passing grades;
- (b) programme-oriented individual options: these include the compulsory subjects for which the specific learners did not achieve the necessary passing grade to be admitted to a national vocational programme. It also involves workplace-based learning, without further requirements concerning its scope;
- (c) individual alternative programmes: these aim to provide learners the possibility to progress to the vocational introduction programme, or directly lead to access to the labour market. They are designed based on learners needs and their preconditions and might include work-based learning;

- (d) language introduction programmes: these are offered to young migrants who recently arrived in Sweden. The emphasis is on the Swedish language, allowing migrants to progress to upper secondary programmes or any other form of education. The programme includes the compulsory school subjects for which the learners do not have the required passing grades, as well as upper secondary school subject courses. Work-based learning can be included (Skolverket, 2012a).

2.2.1.3. *Programmes for learners with special educational needs*

Programmes for learners with special educational needs last 4 years and lead to a qualification at ISCED 343, 353/ EQF 2. This voluntary type of programme is offered to appropriate young people, who are individually assessed. Learners enter a VET programme normally at age 16, after having completed compulsory school, but generally can access these programmes until the year when they turn 20. According to their needs, SEN learners are either placed in a national programme, which follows the curricula of the upper secondary programmes, or in an individualised programme which is adapted to the learner's specific needs.

There are nine upper secondary vocational programmes for SEN learners, which follow a similar structure to national programmes in upper secondary school for non-SEN learners. The programmes are adjusted to SEN learner need, and focus on the following professional fields:

- (a) retail and administration;
- (b) fine arts;
- (c) property and maintenance;
- (d) care of vehicles and transport;
- (e) handicrafts;
- (f) hotel, restaurant and bakery;
- (g) health and social care;
- (h) natural resource use;
- (i) social and natural science and languages.

Programmes for SEN learners are mainly vocationally oriented, include at least 22 weeks of work-based learning and can also be followed in the form of an apprenticeship. At the end of the programme, learners need to complete a diploma project. Programmes conclude with an upper secondary school certificate (*Gymnasiesärskolebevis*), which describes the skills and experiences the SEN learner has acquired. Graduates can continue their education in SEN education for adults (Skolverket, 2022b).

2.2.1.4. Individualised VET pathways for adults

Formal adult education offers individual modularised pathways corresponding to the upper secondary level of compulsory education at ISCED level 244, 344, 351, 353. Each adult aged at least 20 years old and resident in Sweden has the legal right to access formal adult education free of charge. However, an adult who holds a qualification at EQF level 4 has no right to follow free adult municipal VET and can do this only if the municipality is willing to finance it.

Courses are offered based on the needs of the adult learner; together with the learner, an individual study plan is drawn up. Adult education offers learners the possibility to follow upper secondary courses to gain eligibility for tertiary education and immigrants can follow Swedish language classes. The following individualised pathways for adults are offered for VET:

- (a) vocational qualifications equivalent to initial VET (IVET) diplomas for the young (Section 2.2.1.1);
- (b) vocational training packages for adults: these provide partial qualifications and are entry points into the labour market (Section 3.2.3). They also include building blocks that may be accumulated towards a full qualification (Cedefop and Swedish National Agency for Education, 2022).

Work-based learning is not compulsory, but there are incentives in place in the form of State grants, available to the training provider where 70% of the education is provided through work-based learning in IVET for adult apprentices. State grants are given to training providers for special education if 50% of the education is provided as work-based learning.

Such learning is provided by municipalities, who are responsible for offering sufficient adult education and can be supported by other organisations, such as the so-called folk high schools, where many adults complete their upper secondary education ⁽³⁶⁾. In 2021, a total of 155 folk high schools were offering adult education ⁽³⁷⁾.

These adult education forms are based on the amended Education Act (2012) and the Ordinance on Adult Education (2011) (Ministry of Education and Research, 2011), as well as on the curriculum for municipal adult education (2012) ⁽³⁸⁾. The curriculum for adult education programmes (*Läroplan för vuxenutbildningen*) (Skolverket, 2012b) states that adult education shall transmit

⁽³⁶⁾ In 2017 there were 154 folk high schools. More information: University of Gothenburg. [Adult education in Sweden: an evolving field](#) [accessed 12.9.2022].

⁽³⁷⁾ More information: Sveriges folkhögskolor. [Här finns vi](#) [Here we are] [accessed 12.9.2022].

⁽³⁸⁾ More information: Skolverket. [Läroplan för vuxenutbildningen](#) [Adult education curriculum] [accessed 12.9.2022].

knowledge and support learners so that they can work and take an active role in the community. It also aims to facilitate further studies.

In 2020, municipal education for adults with SEN became integrated in municipal adult education and so strengthened the rights and opportunities for an education for this target group (Cedefop and ReferNet, forthcoming i). Overall, there is still the need to align adult education for adults with SEN more closely to the labour market and be more responsive to the rapid changes and required skills; this is especially so for adults with SEN as they face general difficulties in placing themselves in the labour market. The National Agency for Education presented to the Government nine vocational training packages for adults with SEN at upper secondary level (Cedefop and ReferNet, forthcoming j), which have been offered since the end of 2021 (ReferNet Sweden and Cedefop, 2022a).

2.2.2. Higher VET

At higher level, 1- to 2-year post-secondary and 2- to 3-year higher VET programmes are offered free of charge, leading to a diploma in higher vocational education at EQF level 5 or an advanced diploma in higher vocational education (*kvalificerad yrkeshögskoleexamen*) at EQF level 6. These higher vocational education programmes (*yrkeshögskola*) combine theoretical and practical studies in close cooperation with employers and industry.

Higher VET programmes at EQF level 6 should include a minimum of 25% of workplace learning; for higher VET programmes at EQF level 5 workplace learning is not mandatory but recommended (Ministry of Education and Research, 2009a). About 90% of the higher VET programmes also offer Swedish courses, specific to the vocational fields for students with a mother tongue other than Swedish. Students can choose a higher VET programme in 16 different fields, including finance administration and sales, technology and manufacturing or hotel, restaurant and tourism (Skolverket, 2021). Nationwide, there are hundreds of programmes available, with the largest number offered in the professional fields of business finance, administration and sales, along with manufacturing technology. Other prominent areas include IT, healthcare and agriculture, hospitality and tourism (MYh, 2022).

Applicants must hold the upper secondary school leaving diploma to be eligible to access higher vocational education programmes. In addition, training providers might request specific entry requirements, such as a specific number of credits for certain upper secondary courses or work experience in the related field. Providers have a certain freedom to accept applicants, even though they

might not have fulfilled general and/or specific entry requirements (Ministry of Education and Research, 2009a). Higher education is free of charge for Swedish learners and learners from the EU/EEA. Students who fulfil certain basic criteria are eligible for financial support from the Swedish Board of Student Finance (Centrala studiestödsnämnden, CSN) ⁽³⁹⁾.

Learners need to pass all courses, accumulate at least 400 higher vocational credits and complete a diploma project to receive an advanced diploma in higher vocational education: the higher vocational education qualification consists of a minimum of 200 credits. The credit system differs from that of academic education and cannot automatically be transferred. However, each university has the right to validate and transfer the credits from higher VET, if deemed appropriate (Skolverket and ReferNet Sweden, 2019).

The higher education training providers are also State funded, regardless of whether they are private or public institutions ⁽⁴⁰⁾. They cooperate closely with employers and industries, who contribute with expertise and clarify which types of competences are needed (Sveriges Riksdag, 2009, Chapter 1, Section 6). Since higher VET programmes are tailored to labour market needs, programmes are changing over time in line with changes in skills needed. Programmes need to be approved by the Swedish National Agency for Higher Vocational Education (*Myndigheten för yrkeshögskolan*, MYh) ⁽⁴¹⁾, which only grants approval for a limited time period, to guarantee that it responds to the current skills needed on the labour market. Higher-VET programmes can be approved up to five times, offering the possibility to improve them further. Learners have also the option to complete partial qualifications.

In 2020, the number of available study places in higher vocational education increased to 83 000, three to four times more places than in the years 2014-17, when the figure was between 19 300 and 25 700 (MYh, 2022). This growing demand for higher VET programmes is mainly based on an enhanced partnership with employers in higher VET, which led to increased labour market demand for higher VET graduates, higher graduate employment rates, and so to increased enrolment in tertiary VET programmes (Cedefop and ReferNet, forthcoming g). In 2020, the Government assigned extra funding for higher education institutions, to increase student numbers. Forecasts show that highly educated graduates are in high demand on the labour market and, in many areas, there is the risk

⁽³⁹⁾ More information: Eurydice. [Sweden: higher education](#) [accessed 12.9.2022].

⁽⁴⁰⁾ Higher VET programmes can be organised by State higher education institutions, municipalities, county councils and individuals or legal entities.

⁽⁴¹⁾ The Swedish National Agency for Higher Vocational Education, established in 2009, administers and decides which programmes come under higher vocational education.

of shortages of university-trained graduates by 2035. This is particularly true for programmes in education science and teacher training (Section 4.4.2), as well as most programmes specialising in health and welfare (Swedish Higher Education Authority, Lundh, A., 2021).

2.3. Other forms of training

Sweden has a strong history of non-formal adult education, called *folkbildning*, which could be translated as liberal or popular adult education. Nowadays, non-formal adult education is centred around specialised skills-oriented courses, which aim to support people to return to the labour market after health problems or an unemployment spell, or to facilitate integration of refugees.

Non-formal adult education is mainly provided through the folk high schools (*folkhögskola*) and the study associations (*studieförbund*), which are not tied to any national curriculum. Each school determines its own activities based on its ideology and preferences for particular spheres of knowledge. Overall, there are 10 study associations and around 155 folk high schools that provide courses on a wide range of topics to around 1.7 million people each year (Folkbildningsradet, 2022). The study associations have different profiles and focus on different activities. They are closely connected to social movement organisations, such as those focusing on environmental issues, disability rights or immigrant advocacy. Each folk high school and its principals are responsible for design and content of the courses they offer. They must have a governing body and offer their courses free of charge, to be eligible to receive State grants.

A range of non-formal courses and programmes are financed by companies, organisations and through public grants (Cedefop, 2021a). The Swedish PES also offers labour market training (*arbetsmarknadsutbildning*), while targeting mainly unemployed adults, especially those who are long-term unemployed, who need retraining or further education and training to be able to find employment (Eurydice, 2022). In 2020, 15 527 individuals participated in labour market training (Swedish public employment service, 2021).

The vocational work introduction programme (*yrkesintroduktionsanställning*, *YA-anställning*) was introduced in 2010 outside the formal education system. The programme aims to facilitate the transition from school to working life for young people aged 15 to 24. Work is combined with learning at the workplace, which is followed by a dedicated instructor and based on an individual learning plan and guidance. Normally the young person will hold a full-time position, but the salary will amount only to 75% of a full-time job, as part of the time will consist

of vocational training. The work introduction programme targets unemployed young people (aged 15 to 25), as well as immigrants who have not completed upper secondary education (Cedefop, 2019).

There is a general agreement that it is important that the non-formal adult education runs separately from the State, even though it is financed by public funds. The Swedish National Council of Adult Education (*Folkbildningsrådet*) has the responsibility to distribute Government grants to study associations and folk high schools. Since 2016, non-formal qualifications and certificates can be referenced to the Swedish national qualifications framework (SeQF) (Cedefop and Swedish National Agency for Education, 2022).

2.4. VET governance

The Swedish Parliament, the Government and the education ministry, define the national goals for upper secondary education (including IVET). The Swedish Parliament passed the Education Act (Ministry of Education and Research, 2010a), which includes provision for all education forms and defines the learners' right to education (Table 4). The Government has overall responsibility for the education system and defines for all education levels the policy framework through ordinances, programme-specific content and orientation for VET and higher education programmes as well as the syllabuses for the foundation subjects (Table 4). The Ministry of Education and Research is responsible for most education fields, including upper secondary education, higher VET and adult education. Within the framework of national vocational upper secondary programmes, however, training providers have also some flexibility for local adaptation and can set up programme specialisations, which respond to regional and local labour market needs.

As well as these common governance structures, which apply for upper secondary and higher VET, there are some specific arrangements for each education level, which are further described in Sections 2.4.1 and 2.4.2.

2.4.1. Governance of upper secondary VET

There are some specific features concerning governance of upper secondary VET (Table 4). The central administrative authority for the public school system, including the primary and secondary school system, is the Swedish National Agency for Education, [Skolverket](#). The agency prepares knowledge requirements, syllabuses for subjects (apart from foundation subjects), general guidelines, regulations, and national tests; it is also responsible for official

statistics in the education sector and for conducting evaluations. As a reference centre for vocational education, Skolverket supports education providers, employers and other organisations to improve the quality of upper secondary vocational education and also offers training to trainers in companies offering training to IVET learners (Section 2.6.2). The agency receives advice from stakeholders and social partners; the latter advise and support Skolverket regarding adaptation, development and modernisation of vocational education. Social partners are strongly involved in the education system and so guarantee a close link between education with the world of work. They are represented in various councils, such as the national programme councils, which exist for each vocational programme (Cedefop, 2021a).

Municipalities have the main responsibility for funding VET (Section 2.5), although the actual provision can be delivered by independent providers. Private entities may also be approved as organisers and run independent upper secondary schools (Section 2.1) after approval from the Swedish Schools Inspectorate (*Skolinspektionen*). Independent schools are regulated by the same legislation and governing documents as municipal schools and may offer both upper secondary VET and higher education preparatory programmes. School organisers have a primary responsibility for distributing resources and organising activities so that learners attain the national goals.

The Swedish Schools Inspectorate is a government agency that ensures that all children and school pupils are provided with equal education, based on good quality and safe environment. It ensures that schools comply with legislation and regulations, carrying out inspections and assessing applications to establish independent schools (Skolinspektionen, 2022a).

Table 4. **Governance and distribution of responsibilities in Swedish upper secondary education (including IVET)**

Responsible bodies	Responsibility
Parliament	<ul style="list-style-type: none"> • Education Act
Government	<ul style="list-style-type: none"> • Ordinances, including curricula • Diploma goals • Programme-specific content and orientations of VET programmes • Syllabuses (foundation subject)
The National Agency for Education (Skolverket)	<ul style="list-style-type: none"> • Orientations of VET programmes • Syllabuses (apart from foundation subjects) • Regulations • General guidelines • Support to providers • National tests • Statistics on education
Social partners and stakeholders	<ul style="list-style-type: none"> • Advice to the National Agency for Education • Involvement in various councils, such as national programme councils
Municipalities	<ul style="list-style-type: none"> • Funding of VET
Governing bodies of school organisers (municipalities and independent organisers)	<ul style="list-style-type: none"> • Provision of education
The Schools Inspectorate	<ul style="list-style-type: none"> • Approval of independent schools • Inspections and quality auditing
Training providers	<ul style="list-style-type: none"> • Adaptation to regional and local labour market needs

Source: Cedefop, based on overview from Skolverket.

2.4.2. Governance for higher VET

There are some specific features concerning governance of higher VET. The [Swedish Agency for Higher Vocational Education](#) is responsible for higher VET and its main function is to ensure that higher VET programmes respond to labour market needs for qualified workers. It also approves and finances training providers, to be run by municipalities, counties, State or private stakeholders. It

works closely together with employers and industry representatives, who play an important role in the planning of higher VET programmes and in its content.

Education providers have a lot of freedom in drawing up programmes, deciding on the content. They must send an application to the Swedish Agency for Higher Vocational Education if they want to introduce a new higher VET programme. In this application they need to specify the orientation and goals of the programmes, expressed in terms of knowledge, skills and competences which learners need to attain to complete the programme. They need to provide information about the courses included and the relevant assessment criteria. In their applications, education providers also need to indicate the companies or organisations which have actively participated in developing this higher VET programme.

One important element in higher VET is learner involvement and opportunity to influence the structure and delivery. Each programme must have a plan to ensure that this is achieved. Learners are represented in the governing group of each education provider, alongside representatives from different industries; the group decides on the teaching and teaching materials and carries out systematic quality monitoring. The quality of the programme is also monitored by the Swedish National Agency for Higher Vocational Education, which carries out inspections and quality auditing and ensures that higher VET meets labour market needs for qualified workers (Cedefop, 2021b).

Employers and industry are involved at several levels in higher VET programmes and so have an influence on programme content. They participate as lecturers, join in projects, host study visits and offer work placements (Skolverket ReferNet Sweden, 2019).

2.5. Financing VET

Funding of the Swedish VET system differs between upper secondary VET, higher VET and formal and non-formal adult education at upper secondary level.

2.5.1. Financing of upper secondary VET

Municipal tax revenues provide a major part of the funding of upper secondary education (Section 2.2.1), complemented by funds from the central government tax revenues distributed in form of State grants to municipalities. These State grants are based on an equalisation system to guarantee equivalent financial conditions. The amount of the State grant depends on a number of

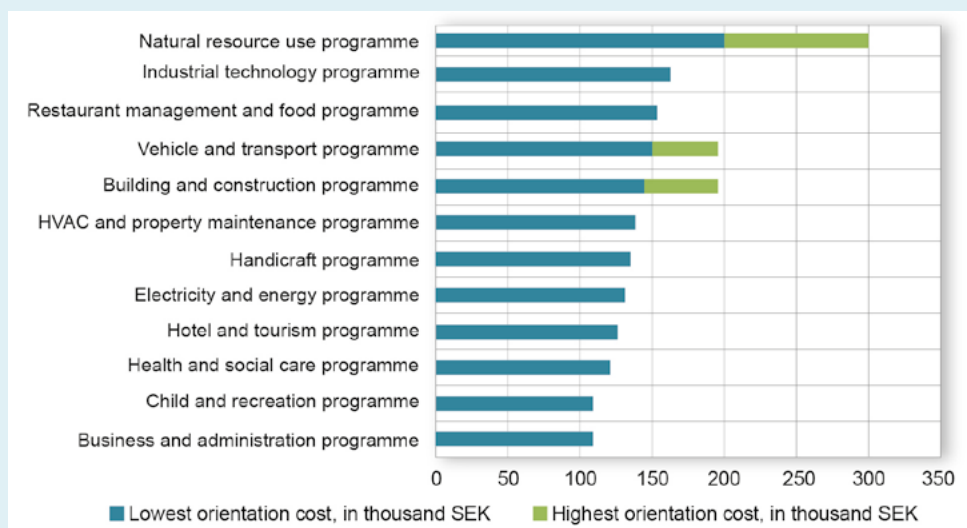
parameters, such as the population size, number of immigrants, as well as on the demographic and social structure. It is up to each municipality to decide on how to allocate this grant. Municipalities also receive additional targeted central government grants for specific upper secondary education initiatives, such as apprenticeship education, adult vocational education and projects to develop the quality of work-based learning. These grants are available to ensure that all residents have access to education of the same quality, regardless of where in Sweden they live.

If a learner has been admitted to education that the home municipality does not offer, neither itself nor in collaboration with others, municipalities must pay a specific amount to the principals of independent schools. The National Agency for Education has decided on the amount of the grants and published a national price list for the compensation to independent schools for 2022 ⁽⁴²⁾.

Upper secondary VET programmes are free of charge for learners. For the training providers, the costs per learner to participate in a certain upper secondary education programmes vary by programme, while VET programmes have the highest cost and the biggest differences between the single programmes. The National Agency for Education has developed a system of calculating how much the participation of a learner in a specific programme should cost per year in average. This system is used by municipalities when financing education through the voucher system in independent schools. In 2021, the most cost-intensive VET programme was the natural resource use programme; this cost more than twice as much as the least costly, the business and administration programme (Figure 10) (Cedefop and Swedish National Agency for Education, 2022).

⁽⁴²⁾ More information: Skolverket. [Riksprislista för ersättning till fristående skolor 2022](#) [National price list for compensation to independent schools 2022] [accessed 10.10.2022].

Figure 10. **Average voucher cost per upper secondary VET programme per year as determined by the National Agency for Education, 2021**



NB: EUR 1 was equivalent to SEK 10.24 on 28.8.2021.

Source: National Agency for Education [accessed 12.9.2022].

2.5.2. Financing of higher VET

The Swedish National Agency for Higher Vocational Education approves higher VET programmes for a limited period and allocates State grants in response to the applications from education providers. Higher VET programmes are free of charge for students apart from minor costs which they need to pay, such as for teaching material and study visits. Students of higher VET programmes are eligible to receive student aid (Section 4.1.2) ⁽⁴³⁾.

Due to an increased employers' demand to have access to highly qualified employees, the Government has increased its funding for higher VET since 2014. With these additional funds, the Agency for Higher Vocational Education has been able to increase the number of approved study places by 56% between 2014 and 2019. The number of higher VET students is expected to increase from 50 000 in 2018 to 70 000 in 2022 (Cedefop and Swedish National Agency for Education, 2022).

⁽⁴³⁾ More information: CSN. [Studiemedel](#) [Student aid] [accessed 12.9.2022].

2.5.3. Financing of formal adult education at upper secondary VET

Municipalities are responsible for the provision of formal adult VET (Section 2.2.1.4), which they often outsource to public or private training providers. The Swedish Government provides a large share of the municipal funding for adult education through State grants. The Government's strategy is to invest in vocational education and apprenticeship for adults, to combat the shortage of skilled labour, while providing people with the opportunity to retrain for a new profession. The strategy also aims to reach adults who have not completed upper secondary education or who have only gained partial vocational upper secondary education, which still needs to be supplemented. Formal adult education at upper secondary level is free of charge for learners.

Since 2017, State grants for regional adult training are available, aiming to strengthen cooperation to meet regional labour market needs better. The regulation supports municipal adult training at secondary level carried out as cooperation between several municipalities and employers, including studies in Swedish as a second language and VET.

For 2022, the National Agency for Education has around SEK 5 193 million (EUR 478 million) ⁽⁴⁴⁾ for the distribution of grants within the regional vocational adult education (Skolverket, 2022c).

2.5.4. Financing of non-formal (liberal) adult education

Non-formal (liberal) adult education, which is provided by adult education associations and folk high schools (Section 2.2.1.4), is mainly financed with funds from the State, regions and municipalities. Around 70% of the grants provided to adult education associations and folk high schools, come from the State and are based on the conditions as defined in the Ordinance on State grants for adult education (Ministry of Education, 2015). The Swedish National Council of Adult Education (*Folkbildningsrådet*) is in charge of distributing State grants, as well as follow-up and evaluation.

Tuition in folk high schools is free of charge and, under certain conditions, learners have the right to student aid (Section 4.1.2) ⁽⁴⁵⁾. Learners are only required to pay for course literature, study material, lunch and any eventual residential costs. Study circles and other activities run by adult education associations are subject to fees and do not qualify for student aid (Cedefop and Swedish National Agency for Education, 2022).

⁽⁴⁴⁾ [More information on currency conversion](#) [retrieved on 26.9.2022].

⁽⁴⁵⁾ More information: CSN. [Studiemedel](#) [Student aid] [accessed 12.9.2022].

2.6. VET teachers and trainers

2.6.1. Teachers in vocational schools

The Education Act of 2010 (Ministry of Education and Research, 2010a) defines the requirements for being a teacher in the Swedish education system.

Entry requirements for vocational teachers are graduation from an upper secondary school, as well as adequate and relevant skills from a vocation. Alternatively, teachers can hold a degree in the vocational subject which, in line with the Swedish qualifications framework, needs to be one SeQF level higher than the level they will teach. The Swedish Council for Higher Education (*Universitets- och Högskolerådet*) has further defined the entry requirements for each vocational subject in vocational teacher training through an ordinance.

The Education Act (2010) has introduced a teacher certification programme, which defines the subjects and years of the education system a teacher is qualified to teach. Current and new teachers must undergo this certification, which is carried out by the National Agency for Education. This teaching certificate is proof of a formal qualification and only certified teachers have the right to permanent employment. A certified teacher with a minimum of 4 years of professional experience can be appointed by the school governing board as a qualified teacher, granting access to a higher salary (The Swedish National Agency for Education, 2022).

Head teachers can hire non-certified teachers on a yearly basis if they judge them as qualified. However, non-certified teachers need to be supervised by a certified teacher when assessing and grading learners. Due to the lack of qualified teachers, teachers in vocational subjects were exempted from this (Cedefop, 2020a).

The Education Act (2010) specifies that the continuing professional development (CPD) of teachers is the responsibility of the head teacher and school founder, without providing specific information on how CPD should be carried out. CPD is regulated by agreements among social partners, and the head teacher has responsibility for distributing CPD time and resources. The National Agency for Education offers a wide range of CPD courses for teachers and other staff. Many programmes are offered to increase the number of VET teachers with a formal teacher qualification, as well as on technical subject skills or on the improvement of work-based learning. A State grant is offered to VET teachers who follow further training in the technical subject they are teaching.

Since 2012, VET teachers have also the opportunity to take part in workplace internships (Cedefop, 2020a).

2.6.2. Trainers in companies and other workplaces

Training enterprises need to have one employee, who is tasked with guiding a VET learner during work-based learning. There are no national qualifications for trainers and therefore no requirements to become a trainer (Swedish National Agency for Education, 2022).

The National Agency for Education offers web-based training to trainers in workplaces. The training is free of charge and can be accessed online in a flexible way, whenever and wherever it suits the trainer. Each module deals with a specific area and contains small scenarios with interactive exercises, including films and notes. As of 2021, 41 000 trainers have completed this web-based training ⁽⁴⁶⁾. If company trainers have participated in any training provided by the National Agency for Education, the companies can receive government grants to compensate for non-productive employee worktime for anyone in charge of training the IVET learners. The National Agency for Education has also commissioned universities to offer training programmes for trainers, equivalent to the web-based programme.

Training companies have received State-funded grants, since 2016, if their workplace trainers participate in training-the-trainer programmes. The National Agency for Education is responsible for reviewing the applications and distributing the funds (Cedefop and ReferNet, forthcoming k).

⁽⁴⁶⁾ Data received from Skolverket.

CHAPTER 3.

Shaping VET qualifications



3.1. Anticipating skills needs

Sweden has a long history of skills assessment and forecasting. There are several skills anticipation activities undertaken and the following government institutions monitor the Swedish labour market:

- (a) the [Swedish PES](#) (*arbetsförmedlingen*) is responsible for short-term projections;
- (b) [Statistics Sweden](#) (*statistiska centralbyrån*, SCB) is the national statistics office, producing medium- and long-term forecasts;
- (c) The [National Institute of Economic Research](#) (*Konjunkturinstitutet*, NIER) performs analyses and forecasts of the Swedish and international economy and produces in-depth report on specific topics.

The PES offers the [Job compass](#) (*Yrkeskompassen*) search engine, a web-based guidance tool. It provides jobseekers with information about current job opportunities, as well as an estimate of future demand for these occupations 1 or 5 years into the future.

Statistics Sweden and the PES maintain close cooperation with the employers' confederation, trade unions, education institutions and employers themselves, to gain additional information on the current state of the labour market. The most important examples of this cooperation are the sector councils and the panel of experts, which contribute extensively to exchange of knowledge about the labour market and how it develops (Swedish public employment service, 2020). Both bodies are administered by the PES (Cedefop, 2017).

According to the Cedefop [European skills index](#) (ESI), Sweden ranks 11th in 2022, a decline compared to its 5th position in 2020. It belongs with the middle achievers, ranking 8th in skills development and 4th in skills activation but only 18th in skills matching ⁽⁴⁷⁾. The low ranking in skills matching originates from the fact that the provision of VET is very much driven by learners' interests. Providers of formal VET operate in a competitive market and receive State grants per learner (Section 2.5.1). Therefore, they adjust their VET provision in line with learner educational preferences, leading to a gap between supply and demand: while certain sectors lack skilled employees, in other sectors there are more skilled workers than available workplaces so graduates cannot all find an appropriate job on the labour market. To counteract this skills gap, guidance and

⁽⁴⁷⁾ Cedefop's European skills index measures the performance of EU skills systems in three skills areas: development, activation and matching. A score of 100 corresponds to the highest score showing a perfect performance, while a score of 0 equals to the lowest score, the worst performance.

information are provided to direct learners to specific vocational programmes (Section 4.3).

The Swedish VET system faces structural challenges in the provision of a broad supply of programmes and specialisations at upper secondary level. Certain municipalities are too small to be able to offer a wide range of different upper secondary programmes. To counteract this challenge, municipalities cooperate in confederations to coordinate the supply of upper secondary programmes. However, there is still a tendency towards falling interest in following an IVET programme; at the same time, certain IVET programmes are extremely costly. Therefore, a commission of enquiry has been set up, which has developed a regionally based model for financing and steering of upper secondary education programmes (including municipal adult education), which they presented to the Government and the National Agency for Education in the beginning of 2020. By March 2022, a more detailed proposal was set up and the parliament accepted legislative amendments which will enter into force on 1 July 2023 and apply for the first time to education starting in 2025 ⁽⁴⁸⁾.

3.2. Designing qualifications

In Sweden, the Parliament, the Government and the State agencies are responsible for education and have set up a structure for education provision which meets the needs of the individual, society and the labour market. Overall, there are only a few professions which are regulated, and most qualifications are determined by social partners and stakeholders. Depending on the education level, the design of qualifications involves different stakeholders. Open consultation through meetings and websites are methods of collecting views and proposals for the design process at all education levels (Cedefop and Swedish National Agency for Education, 2022).

Upper secondary education and higher VET are based on the learning-outcomes-based Swedish national qualifications' framework, which consists of eight levels and follows the basic EQF structure (Cedefop, 2021b). All formal education is referenced to the SeQF but, for qualifications outside the formal education system, an application must be submitted to the National Agency for Education ⁽⁴⁹⁾.

⁽⁴⁸⁾ More information: The Swedish Parliament. [Dimensionering av gymnasial utbildning för bättre kompetensförsörjning](#) [Dimensioning of upper secondary education for better skills supply] [accessed 12.9.2022].

⁽⁴⁹⁾ More information: Cedefop. [National qualifications frameworks \(NQFs\) \[online tool\]](#) [accessed 12.9.2022].

3.2.1. Credit structure of VET programmes

All VET programmes (as well as general ones) follow a specified credit structure (Figure 11); this can total up to 2 500 upper secondary credits and needs to be considered when designing a vocational qualification.

Upper secondary foundation subjects consist of 600 credits for vocational programmes, much less than required for higher education preparatory programmes. They include the following common to all upper secondary programmes:

- (a) English;
- (b) history;
- (c) physical education and health;
- (d) mathematics;
- (e) science studies;
- (f) religion;
- (g) social studies;
- (h) Swedish or Swedish as a second language.

Programme-specific subjects are mandatory, define the nature of the programme and are the foundation for further studies in the programme. Their credit numbers vary, depending on the programme. In vocational programmes, they have a higher emphasis than in the higher education preparatory programmes. The Government has decided which subjects are specific to each vocational programme and on their scope, based on a proposal from the National Agency for Education.

Orientations are part of all upper secondary programmes (apart from health and social care) and are the basis for further in-depth studies. The orientations can begin in the first, second or third year, depending on the specific programme. The Government has decided on the orientations of the programmes, based on a proposal from the National Agency for Education. Their credit numbers vary depending on the programme.

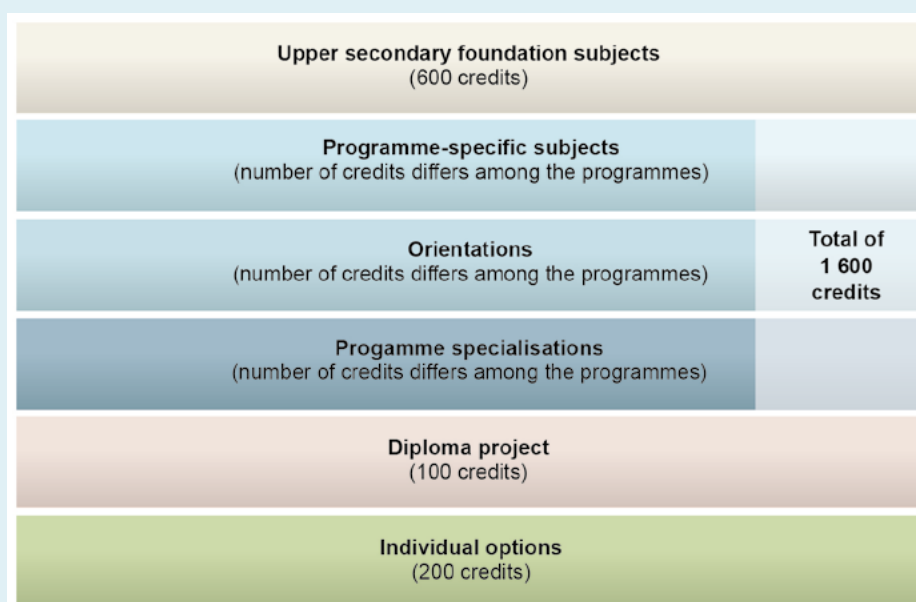
Programme specialisations cover courses and subjects which are within the framework of the diploma goals and the nature of the programme. Courses in entrepreneurship are included as specialisation in all programmes, if they are not otherwise included within an orientation. The scope of specialisations in vocational programmes varies between the different vocational programmes, but is generally greater than in higher education preparatory programmes. The National Agency for Education has determined which courses can be offered as programme specialisations in the different programmes; it is then up to the organiser to decide which of these courses will be offered. Their credit numbers

vary depending on the programme, but, together with the orientations and programme-specific subjects, they reach a total of 1 600 credits.

Learners need to carry out a diploma project, amounting to 100 credits in all programmes. Such projects can be carried out in a group or individually, but each learner is assessed and graded individually. The project or vocational programmes should demonstrate that the student can carry out recurring tasks in the vocational area (Skolverket, 2012a).

Within the individual options, learners can choose any subject they are interested in, even if it is not directly related to the vocational field of the programme they chose.

Figure 11. **General credit structure of vocational programmes**



Source: Cedefop, based on Skolverket, 2012a [accessed 7.11.2022].

3.2.2. Designing upper secondary VET qualifications

The National Agency for Education meets with upper secondary VET providers and stakeholders to ensure that the programmes respond to the labour market needs. Each vocational programme is monitored by a national programme council, which consists of industry representatives and social partners of the vocational area of the related programme; sometimes representatives from the PES are also involved. The national programme councils advise and support the National

Agency for Education concerning adaptation, development and modernisation of the content of the upper secondary VET programme and ensures thereby that the competences required by the labour market are met. Programme councils have a consultative function but are not decision-making bodies. At local level, there are at least one, sometimes several local programme councils (*lokala programråd*), which cover all upper secondary vocational programmes. Their tasks are not regulated, but possible tasks could be assisting the provider in arranging work-based learning placements, participating in the assessment of diploma projects and advising the school about skills needed locally or on the courses where the school could use in programme specialisations to meet the local needs.

If a revision of a certain upper secondary VET programme is considered necessary, the National Agency for Education consults focus groups of teachers and learners; it publishes it on their website, so that teachers, learners and other stakeholders can express their opinions. Before taking any final decision, the National Agency sends a copy of the proposed change to other national agencies, interest groups, social partners and stakeholders (including school organisers), giving them the opportunity to comment on it. If many consultees oppose to the proposal, the National Agency for Education may decide to revise the proposal or even not to proceed. The same process is used if it concerns specifically the core and foundation courses, which are decided by the Government. In these instances, the National Agency for Education acts on behalf of the Government and makes proposals to the Government after following the same review process. By using such a transparent way of updating upper secondary programmes, it is more likely that the adjustments suit the needs of the stakeholders and are of better quality (Cedefop and Swedish National Agency for Education, 2022).

3.2.3. Designing partial VET qualifications

In 2016, the Government commissioned the National Agency for Education to propose vocational training packages for adults. As agreed with the industry, these packages include courses providing partial qualifications, which are entry points into the labour market. They also include building blocks that may be accumulated towards a full qualification. In 2017, the objective was extended to include bridging programmes (Section 2.2.1.2) for recently arrived young immigrants (Section 1.1), who are not eligible for admission to an upper secondary VET programme. By June 2021, 80 packages covering a wide range of vocational areas had been developed, but more are to come (Cedefop and Swedish National Agency for Education, 2022).

3.2.4. Designing higher VET qualifications

Higher VET programmes are designed by the education providers and the Swedish National Agency for Higher Vocational Education. For those higher VET programmes which require nationally equivalent content, the Swedish National Agency for Higher Vocational Education issues regulations on the skills, knowledge and competences learners must have attained on completion (Cedefop and Swedish National Agency for Education, 2022).

Higher VET programmes need to respond to labour market needs, so the Swedish National Agency for Higher Vocational Education analyses and collects information about the skills needed in different industries and regions. In this respect, the agency is supported with labour market information provided by the Labour Market Council (*arbetsmarknadsråd*), which consists of representatives of the PES and the social partners. The Council highlights any new qualifications needed on the labour market, as well as any existing ones being phased out. Alongside external stakeholders, such as employers and industry organisations, central and regional authorities provide data on the labour market to the national agency. Based on this information, the Swedish National Agency decides which higher VET programmes are to be approved, how many study places are allocated to each programme and where in Sweden they are offered.

3.3. Recognition of prior learning

3.3.1. Validation of non-formal and informal learning

The procedure for validation is based on national criteria and guidelines, which also describe the responsibilities at national, regional, local, social partner and provider level. Adaptation of the validation procedure to the specific needs of the relevant education level is the responsibility of the providers (European Commission; Cedefop and ICF International, 2014). Applicants need to pay a specified fee for the validation of their non-formal and informal education.

The Swedish National Agency for Higher Vocational Education is responsible for coordinating and supporting the development of a national framework for recognition of prior learning and validation of skills and competences. The agency has the main role in raising awareness and providing information on validation, together with the Swedish National Agency for Education, which is responsible for this for adult education ⁽⁵⁰⁾.

⁽⁵⁰⁾ More information: European Commission. [YouthWiki](#) [accessed 12.9.2022].

A learner in upper secondary education may validate his or her knowledge and skills through an extended test, if s/he has received a 'fail' grade or wants to cover courses which s/he did not study but might need now due to having changed programme or orientation. Knowledge, skills and competences acquired through job experience or otherwise can also be validated and recognised as part of a programme, for which the education provider is responsible.

Validation in municipal adult education at upper secondary level is possible and is based on the learner's needs and circumstances. It is mainly used to customise the content of a programme according to a learner's needs and shorten the education duration, or to assess knowledge and skills that are required for eligibility for a particular education. The learner receives a certificate through validation. To obtain a formal grade, the learner needs to pass an extended test, covering the content of the particular course for which the provider is responsible.

The National Delegation for Validation, which consists of representatives from the trade unions, employers' associations and national authorities, proposes to elaborate a national coherent strategy for skills supply and lifelong learning, in which validation plays an important role and which should also include the establishment of a council with overall responsibility for validation. To support sector validation (Cedefop and ReferNet, forthcoming h), the delegation proposed to establish a government grant, regulated to develop validation of vocational skills. This has now been established through the Ordinance No 2020:268, which introduced in 2020 a new State grant, which targets social partners who want to adapt existing qualifications and validation models or develop new ones (Cedefop, 2021b).

In 2020, the HVE-Flex pilot project began, aiming to ease and speed up gaining higher vocational education qualifications at EQF level 5 and 6 for individuals who have considerable professional experience in a certain vocational field. The Swedish Government allocated SEK 29 million (about EUR 2.85 million) per year for 2020, 2021 and 2022 to be distributed to education providers through Swedish National Agency for Higher Vocational Education. This funding covers both validation and individual complementary training in the HVE-flex model for about 500 individuals per year. On average, those learners who participated in the HVE-Flex programme were exempted from 60% of the HVE programme, reducing the costs of education by half (ReferNet Sweden and Cedefop, 2021). Most applications were in the educational areas of healthcare, social work, economics, as well as in administration and sales ⁽⁵¹⁾.

⁽⁵¹⁾ More information: MYh. [YH-flex](#) [accessed 12.9.2022].

3.3.2. Recognition of foreign vocational qualifications

The Swedish Council for Higher Education supports people who want to evaluate their foreign qualifications ⁽⁵²⁾. The aim is to facilitate their integration into the labour market and the education system. There are the following two options for assessment, free of charge:

- (a) the recognition statement ⁽⁵³⁾ is a document that shows what a foreign qualification corresponds to in the Swedish education system. A recognition statement for upper secondary education shows if you are eligible for university studies, what average grade points you have acquired, and for which subjects you are qualified;
- (b) the [qualifications assessment tool](#) shows what your qualification corresponds to in Sweden, when applying for a job.

In 2021, a total of 22 581 applications were submitted for the recognition of foreign qualifications in Sweden; the highest number of applications, 29 187, were submitted in 2017, following the high number of refugees arriving from Syria (Universitets- och högskolerådet, 2022d).

3.4. Quality assurance

3.4.1. Quality assurance in upper secondary education

All education providers in Sweden are required by law to have a systematic quality assurance process in place. How the quality assurance is implemented is not regulated in detail, but it is common for schools to use in their analysis indicators, such as:

- (a) participation rates;
- (b) average grades;
- (c) completion rates;
- (d) placement rates.

Most organisers also conduct surveys among their learners and consider their feedback on education, facilities and wellbeing (Skolverket, 2022d).

⁽⁵²⁾ Swedish Council for Higher Education. [Application for foreign qualification assessment](#) [accessed 12.9.2022].

⁽⁵³⁾ Swedish Council for Higher Education. [Assessment of your foreign qualifications](#) [accessed 12.9.2022].

The Swedish Schools Inspectorate (*Skolinspektionen*) is responsible for the supervision and quality audit of upper secondary schools and municipal adult education. Their mission is to ensure that all learners receive an equal education of good quality, based on a stimulating education in a safe environment. The inspectorate conducts regular school supervision according to several assessment criteria. Vocational education, and especially apprenticeship education, is very much in focus, with regular supervision and quality auditing. Structured cooperation between education providers and the workplace is an important factor for success in work-based learning (Skolinspektionen, 2022b).

Even though the education providers are responsible for carrying out systematic quality assessment, the Government supports and stimulates quality development in VET via different initiatives and funding schemes. This includes specific tasks delegated to the Swedish National Agency, such as the development of guidelines for work-based learning. Also, the Government has introduced an extensive funding scheme, consisting of grants to education providers who want to improve the quality of work-based learning (Skolverket, 2022g).

3.4.2. Quality assurance in higher education

The Swedish Higher Education Authority and the higher education institutes share responsibility for quality assurance in higher education and research. The quality assurance system in higher education is developed and implemented in line with the:

- (a) Higher Education Act (Ministry of Education and Research, 1992);
- (b) Higher Education Ordinance (Ministry of Education and Research, 1993);
- (c) standards and guidelines for quality assurance in the European higher education area (ESG) (Swedish Higher Education Authority, 2022).

At the end of 2018, the National agency for higher VET published quality criteria for higher VET programmes, which have since been used to assess the quality of higher VET programmes. There are criteria concerning the quality of teaching, competence of teachers and trainers as well as others concerning the management team:

- (a) have good knowledge of the competence needs that exist in the professional field;
- (b) ensure a strong connection to working life in all parts of the education;
- (c) ensure that systematic quality work is carried out (MYh, 2019).

Most of the European quality assurance in vocational education and training (EQAVET) indicators are also used to monitor IVET and CVET (Cedefop, 2020a). Institutional reviews of the higher education institutions (HEIs) aim to ensure quality. The reviews assess the following six areas:

- (a) governance and organisation;
- (b) preconditions;
- (c) design, implementation and outcomes;
- (d) student and doctoral student perspective;
- (e) working life and collaboration;
- (f) gender equality.

The reviews are based on the following methods:

- (a) higher education institution self-evaluation: the HEIs are asked to describe, analyse and evaluate how they systematically ensure and follow-up the assessment areas;
- (b) student report: the local student union can submit a written statement, on their opinion of how the quality assurance work is done at their HEI;
- (c) site visits with accompanying interviews: during the first site visit, the assessor can ask questions concerning the HEI self-evaluation. Representatives from HEI, students and work are with which the HEI is cooperating do participate;
- (d) audit trails: the assessors examine one or more areas of focus to see how well quality assurance processes work in practice, through random sampling of the process during their site visit;
- (e) other assessment material: the Swedish higher education authority produces data for the HEI, which are relevant to the aspects to be examined.

The overall assessment of the higher education institutions is based on three levels:

- (a) approved quality assurance processes: all assessment areas are judged as satisfactory;
- (b) approved quality assurance processes with reservation: the HEI quality assurance processes are well-functioning in practice but certain assessment areas are not satisfactory and the HEI needs to follow them up and take action to remedy them within a specified period. The HEI needs to present the measures taken to improve quality in the respective area not later than 2 years after the decision. If it leads to a positive assessment, the HEI quality assurance process will be approved in its entirety. Otherwise, the overall assessment 'approved with reservations' will remain, no additional follow-up will be conducted;

- (c) quality assurance processes under review: there are several severe deficiencies in the HEI quality process, which need to be reviewed again in their entirety ⁽⁵⁴⁾. The Swedish Higher Education Authority (UKÄ) and the HEI will decide on the time for the follow/up review. If it leads to a positive assessment, the HEI quality assurance process will be approved in its entirety. Otherwise, the overall assessment of 'under review' will remain, no additional follow-up will be conducted (The Swedish Higher Education Authority, 2021).

⁽⁵⁴⁾ More information: UKÄ. [Institutional reviews of the HEIs' quality assurance processes](#) [accessed 12.9.2022].

CHAPTER 4.

Promoting VET participation



4.1. Incentives for learners

State financial aid for learners has a long tradition in Sweden and is considered as an important part of the Government's education policy. It provides individuals from different backgrounds and in different life situations the possibility to study in Sweden or abroad, which makes society fairer, by levelling out the social differences between individuals and groups of population. Learners have the right to different forms of financial support for both upper secondary and tertiary studies. Employees have the right to take leave of absence for education, if they meet one of the following requirements:

- (a) have been employed by the employer for the past 6 months;
- (b) have been employed by the employer for at least 12 months in the past 2 years (Ministry of Labour, 1974).

The Swedish Board for Study Support (*Centrala Studiestödsnämnden*, CSN) is responsible for learner support and administers most of it. The Study Financial Aid Ordinance (Ministry of Education and Research, 2000) defines the education programmes for which respective learners are entitled to receive support. The form and size of the financial support varies, depending on the age and life situation of the learner and also on the scope and level of studies.

Studiestöd is the umbrella term for all financial study support provided to learners until the age of 60 in the Swedish education system. In 2021, 588 709 learners received student financial aid, which is the highest number to date. The increase is explained mainly due to the COVID-19 pandemic, which led to higher unemployment, as well as due to the investments made in education during the pandemic. In 2021, a total of SEK 40.5 billion (EUR 3.71 billion) were disbursed in loans (SEK 25.4 billion/EUR 2.33 billion) and grants (SEK 15.1 billion/EUR 1.38 billion) (CSN, 2022b).

Alongside financial incentives, non-financial incentives to attract more learners to VET are also in place, including the vocational work introduction programme (Section 4.1.3) (Cedefop and Swedish National Agency for Education, 2021).

4.1.1. Study aid for learners under the age of 20

Learners studying full-time at upper secondary level are eligible to receive study aid until the June of the year they turn 20. The study aid consists of:

- (a) study grant;
- (b) extra supplements, granted to learners of families with low income;
- (c) boarding supplement, in case that learners need to move to follow their education.

The study grant amounts to SEK 1 250 per month (around EUR 115), which is usually paid out over 10 months, from September to June. If a learner is frequently absent, s/he runs the risk of losing the support and may be asked to refund the grant. The school is obliged to report to the Swedish Board for Study Support when a learner is absent without a valid reason. Under certain circumstances, the grant can also be awarded for studies abroad.

Learners are entitled to receive further grants if:

- (a) they/their family has a low income;
- (b) their specific education is not provided in their home municipality so that the learner needs to move. In this case, learners can apply for a boarding supplement from the Swedish Board for Study Support or from the municipality;
- (c) they are taking a secondary apprenticeship or an apprentice-like education on an introductory programme; the supplement is meant to cover extra living costs, such as travel expenses to the workplace and lunch;
- (d) they study at the national upper secondary school for the disabled or hard of hearing or the deaf (CSN, 2022a).

Apart from these study allowances, since 2014, apprentices can be employed in what is called an upper secondary apprentice position (*Gymnasial lärlingsanställning*, GLA). This foresees that the employer pays remuneration to the apprentice who then no longer has the right to apply for any supplement (Section 2.2.1.1).

4.1.2. Student aid for learners aged 20 and above

Student aid (*studiemedel*) can be granted to learners aged 20 and above, who are studying an education pathway, which provides the right for this aid, such as upper secondary, post-secondary and higher education, as well as vocational education offered in folk high schools⁽⁵⁵⁾. Student aid comprises two parts which are paid at the same time to the learner: a loan and a grant.

The amount of the loan depends on the study rate (100%, 75% or 50%), how many weeks the learner studies and how much income the learner has. The student loan needs to be paid back by the learner with an interest rate of 0% in 2022.

The study grant amounts to 840 SEK (around EUR 77) per week (Table 5).

⁽⁵⁵⁾ More information: CSN. [Krav på din utbildning](#) [Requirements for your education] [accessed 7.11.2022].

Table 5. Amount of student grant for full-time studies with full student loan, 2022

	Amounts per 1 week		Amounts per 4 weeks	
	SEK	(EUR)	SEK	(EUR) (*)
Study grant	840	(77)	3 360	(307)
Loan	1 932	(177)	7 728	(707)
Total	2 772	(254)	11 088	(1 014)

NB: (*) A payment normally covers 4 weeks, while the first and last payments for the term may vary in size. Currency converter used on 26.9.2022.

Source: Information based on CSN.

Learners can also receive the [education entry grant](#) when fulfilling certain conditions:

- (a) being unemployed for at least 6 months during the past 12 months;
- (b) are aged 25 to 60;
- (c) are registered at the PES;
- (d) have only short previous education and the need for education at primary or upper secondary level.

The education entry grant is normally paid for a maximum for 4 weeks. The amount depends on whether the learner studies full or part-time (minimum of 50%), for how many weeks and whether the learner will receive another income (Table 6).

Table 6. Amounts of education entry grants, 2022 (examples for different numbers of weeks)

	Amounts per 1 week		Amounts per 4 weeks	
	SEK	(EUR)	SEK	(EUR)
Full time, 100%	2 294	(208)	9 176	(833)
Part-time, 75%	1 719	(156)	6 876	(624)
Part-time, 50%	1 149	(104)	4 596	(417)

NB: Currency converter used on 13.10.2022.

Source: Based on CSN.

4.1.3. Financial support for low-qualified aged 25-64

In 2017, the parliament introduced a new financial support scheme, targeting low-qualified unemployed adults aged 25 to 56 who are registered at the PES and need education at primary or secondary levels. The financial support of approximately EUR 830 per month, is paid to people following full-time studies for up to 50 weeks and aims to attract these low-qualified people to start or resume their studies (Cedefop and ReferNet Sweden, 2021).

4.1.4. Study grants for studies abroad

Sweden has one of the world's most generous student financial aid system for studies abroad. A student can receive grants and loans for living expenses, tuition fees, travel and insurance, with the amount adapted to the costs of the country of studies. In 2021, 21 600 people received grants for studies abroad; this is fewer than in 2020, as a result of the COVID-19 pandemic (CSN, 2022).

4.2. Incentives for training companies

Companies which provide training places in school-based VET and apprenticeship (adult education programmes included), receive financial and non-financial support through different schemes from the State.

Enterprises offering training places for apprenticeship receive a State-funded grant if their workplace trainer has participated in training-the-trainer programmes. Employers who are offering training workplaces receive compensation of SEK 115 (around EUR 11) per day for the trainer in the workplace; in addition, 31.42% of the employment taxes is paid by the PES. Training companies receive State grants to improve their cooperation with upper secondary VET providers (including adult education programmes) at regional level (Cedefop and Swedish National Agency for Education, 2022).

Non-financial incentives also are offered to attract employers to offer training to vocational learners. Apprenticeship centres, which act under the auspices of the Swedish National Agency for Education, cooperate with a wide range of stakeholders, such as VET providers, municipalities, social partners and enterprises. They offer workshops and provide guidance and support to companies, social partners and VET institutions. They also offer training for supervisors at workplaces and stimulate cooperation at regional level between the enterprises and vocational schools. National and regional coordinators have

been set up to assist schools in cooperating with local enterprises (Cedefop and ReferNet, forthcoming i).

4.3. Guidance and counselling

The municipalities in Sweden have the main responsibility for providing guidance services throughout the entire education system. They have a lot of freedom in how to form their own guidance and counselling services but are bound to the national curricula and school ordinances. The Swedish National Agency for Education has established general guidelines on career education and guidance (Skolverket, 2013). These aim to support each municipality in designing its own guidance and counselling services and so ensure the consistent implementation of the relevant school legislation. The Ministry of Education and Research and the Ministry of Employment are steering the guidance process.

As defined by law, the guidance service is usually provided in:

- (a) upper secondary schools;
- (b) higher education institutions;
- (c) PES.

In many municipalities, fairs presenting upper secondary and/or higher vocational education providers, in cooperation with social partners, are held regionally. Further, industry-specific trade fairs present the education programmes offered at upper secondary and tertiary level. Some municipalities offer guidance also through an external central guidance centre.

Guidance is also offered through publicly funded web services. The National Agency for Education portal *Utbildningsguiden* offers information from primary education across secondary and to adult education. It targets learners, parents and education professionals and provides information on access criteria, situation on the labour market in the field, funding, as well as on other important issues relevant when choosing a study path (Euroguidance, 2022a; Cedefop and Swedish National Agency for Education, 2022).

4.3.1. Upper secondary education

The head teachers have the responsibility in upper secondary education to provide guidance and counselling to learners prior to the time when they need to make any study choices in school, and before choosing their future education paths and professions. Counselling is provided to learners both individually and in group sessions. In upper secondary school, learners in the school years 8 and

9 to spend a minimum of 10 working days in a workplace, or in a vocational upper secondary programme if the school cannot provide sufficient work placements. This vocational orientation is compulsory and most of the learners meet their school counsellor before they spend this time in working life. During personal interviews with their counsellor, learners discuss their future plans and the choice of programme in upper secondary school. There are continuous efforts to integrate career guidance in teaching and handle it as a responsibility of the entire school.

4.3.2. Higher education

The Higher Vocational Education Ordinance (*Förordningen om yrkeshögskolan*) (Ministry of Education and Research, 1993) defines the responsibility of the governing bodies of education providers. It ensures that there is guidance and counselling available concerning admissions and entry, alternative study paths, as well as concerning vocational guidance. Within these regulations, the higher education institutions have a lot of freedom in how they organise their guidance and counselling service. The [Swedish Higher Education Authority](#) is in charge of reviewing the quality of higher education and has also the capacity to review the provided guidance services at university level.

Sweden has about 50 university colleges, universities and independent higher education providers. There are no official statistics on the number of guidance counsellors at university level, but it is estimated that about 700 experts provide guidance services at higher education institutions. Guidance services at universities are organised for the first contacts centrally, at departments and/or faculty level (concerning study counselling) and at career centres (concerning career choices, summer jobs, trainee vacancies, etc.). Study counsellors with a general degree, working as counsellors at a university, receive in-service training in guidance theory and practice (Euroguidance, 2022b).

Guidance in higher education is also provided over online information on the website of the Swedish National Agency for Higher Vocational Education. It presents general information about higher vocational education, as well as information about current higher vocational education programmes, and provides links to various education provider websites ⁽⁵⁶⁾. Information about higher education studies is also available on the web portal studera.nu.

⁽⁵⁶⁾ More information: MYh. [Swedish National Agency for Higher Vocational Education](#) [accessed 12.9.2022].

4.3.3. Adult education

The Swedish National Council of Adult Education (*Folkbildningsrådet*) is in charge of providing information services for Swedish folk high schools (*Folkhögskolornas informationstjänst*) and for the recruitment of course participants. The portal *Folkhögskola.nu* provides general information on vocational education and other courses offered by the 155 folk high schools in Sweden (Cedefop and ReferNet Sweden, 2021).

4.3.4. Public employment service

The public employment service (PES) provides guidance for employment through their website, over Skype and telephone and personal meetings at the local PES-offices around the country. The main aim of the PES is to improve matching between jobseekers and working life. Over the PES, about 340 career counsellor specialists and 9 000 non-specialists in guidance ⁽⁵⁷⁾ provide information and career advice. Employees working in guidance receive in-service training in the form of different modules in guidance methods and practices (Euroguidance, 2022b).

The PES website provides information on finding jobs in different professions. The portal *Hitta yrkesprognoser* (Find career forecasts) shows the current labour market situation and future prospects in 1 or 5 years for about 174 professions in 20 areas.

4.3.5. Guidance counsellors

Within the Swedish school system, about 2 000 people are employed as guidance counsellors, often working for several schools in parallel. Each guidance practitioner in the school system supports a great number of learners depending on the education level. At compulsory level, they are responsible for about 520 learners, at upper secondary level for about 380 learners and for about 320 learners within municipal adult education ⁽⁵⁸⁾.

No compulsory education is foreseen for guidance counsellors but there is the possibility to follow higher education programmes. The Bachelor of arts in study and career guidance programme is offered by three universities and can be followed either on the campus or by distance learning. The degree aims to provide deeper knowledge of how individuals construct their careers, both from individual and societal perspectives, and includes periods of placements, mainly

⁽⁵⁷⁾ Administrative officials working at PES can have different academic degrees and not all have a qualification as a career counsellor specialist.

⁽⁵⁸⁾ More information: Euroguidance. *National guidance systems: guidance system in Sweden* [accessed 12.9.2022].

in schools. The Master in career development and career counselling provides deeper knowledge of how individuals build up their careers.

Guidance counsellors can follow in-service training offered by their employer or another further training opportunity offered by national associations and networks: the Swedish Association of Guidance Counsellors, the Swedish Research Network for Career Development and Guidance, and the National Union of Teachers support practitioners' professionalisation and training. Euroguidance Sweden supports counsellors in their role of providing information about opportunities for studying and work placement in another country (Euroguidance, 2022b).

The Swedish Association of Guidance Counsellors (*Sveriges Vägledarför-ening*, SAGC) has developed a *Declaration of ethical principles* to provide guide- lines and support to guidance counsellors. The declaration is based on ethical values, as emphasised in the UN *Universal declaration of human rights*, the EU Resolution on guidance (9286/04) and the OECD (2007) *Career guidance: handbook for decision-makers*. The association has also appointed a Council of Ethics (*Etiska rådet*), which has the task of developing and following up any issues concerning the ethics of guidance. The Council may also be of assistance when difficult guidance situations arise. Around 1 200 Swedish guidance profes- sionals are part of this association.

The National Union of Teachers (*Lärarnas Riksförbund*) is a trade union for qualified teachers and also for guidance counsellors. They organise around 2 000 Swedish career guidance counsellors and have published ethical occupational guidelines.

The Swedish National Agency for Education has developed web-based tools to support study and career counsellors, as well as vocational teachers who map learner's professional skills in upper secondary schools or municipal adult education ⁽⁵⁹⁾. The target group are people who have professional or equivalent experience and need to have their vocational skills and competences validated. The tool especially targets newly arrived migrants aiming to make individuals aware of their skills so that their study time can be shortened and their integration into the labour market facilitated.

⁽⁵⁹⁾ More information: Skolverket. *Verktyg för kartläggning av yrkeskunskaper på gymnasial nivå* [Tools for mapping professional skills at upper secondary level] [accessed 12.9.2022].

4.4. Challenges and development opportunities

4.4.1. Skills mismatch

Sweden has many VET schools but mostly of small size. Decentralised provision, public funding and learner choice influence the offer of VET programmes. This leads to high competition among the providers and higher risk of skills mismatch between labour market needs and graduate qualifications. Following an inquiry, proposals have been made to assign an authority for planning and dimensioning upper secondary education provision, securing skills supply that meets demand on the regional and national labour market (Cedefop, 2021a). In June 2022, the parliament decided on amending the Education Act accordingly (Ministry of Education and Research, 2010a).

One effect of the amendments is that labour market needs must be considered when planning upper secondary education. Further, the municipalities must collaborate and agree with at least two other municipalities, concerning planning, dimensioning and offering a specific education programme in a primary collaboration area. Another amendment covers providing the learner with adequate information about what the education path the learner is considering could lead to. These legislative amendments will apply for the first time to education starting in 2025 (Swedish Parliament, 2022).

4.4.2. Lack of VET teachers

For several years the Swedish education system has suffered from a lack of teachers, especially VET teachers; there is a risk that this situation is going to worsen. According to the teacher's union, the average age of upper secondary teachers in Sweden is 40 years, which means that a fairly large proportion of teachers are aged between 55 and 65 (Skolvärlden, 2020). In the near future, many teachers will retire and it is estimated that, by 2033, about 12 500 full-time VET teachers need to be recruited. The number of students in VET teacher programmes must more than double in the coming decade if teacher demand is to be met. Due to the lack of qualified teachers, the quality of IVET is also at risk to deteriorate.

The teacher shortage is the worst in the rural areas, where it can happen that no teacher is certified for the subject they teach. In response, the Law from 30 June 2021 introduces the use of distance education: learners are taught in distance mode by a qualified teacher from another school (Cedefop, 2021).

One reason for this shortage of teachers might be the salaries, they are individually defined and it is up to the employer to decide on them. Sometimes it is difficult for tax-funded education providers to compete with other employers on the labour market: a carpenter may be paid a lot more in a private business than a teacher.

The Government has tasked the National Agency for Education to raise the interest of young people in entering VET teacher training. Several campaigns have been launched to promote the VET teacher profession (Swedish National Agency for Education, 2022; Skolvärlden, 2020; Solverket, 2019).

4.4.3. High need for digital skills and artificial intelligence

The Swedish digitalisation strategy of 2017 ⁽⁶⁰⁾ guides the country's work to meet its goals and to become one of the world's leaders in the digital transformation. This original strategy is further developed by others, such as the data strategy (2021) ⁽⁶¹⁾.

In the 2022 edition of the Digital economy and society index (DESI) ⁽⁶²⁾, Sweden ranks 4th of 27 EU Member States. It scores above the overall EU average, although the progress is not as fast as before. The share of the population with both at least basic digital skills (67%) and above basic digital skills (36%) is above the EU-27 average. One third of the companies are offering ICT training to their employees, which is 12 percentage points higher than the EU average of 20%. Although the country has one of the highest shares of ICT specialists (7.5%, with 21% female) and the proportion of ICT graduates is above the EU average, the economy lacks ICT specialists. In 2020, 55.1% of the companies seeking to recruit ICT specialists, reported difficulties in filling their vacancies. The initiative [Digital skills Sweden](#) estimates that by 2024 the country will have a shortage of 70 000 skilled ICT workers. It is important that Sweden takes measures to counteract this shortage to avoid delaying the digital transformation of the businesses (European Commission, 2021).

In 2018, the [National Coalition for digital skills and jobs](#) was launched, coordinated by the Swedish information technology and Telecom Industries and comprising more than 24 organisations. The coalition highlights the need for best practices in promoting action on digital competence in Sweden, in digital skills in education, for the labour force, for ICT professionals and for the whole population. A special focus is on artificial intelligence, which has been

⁽⁶⁰⁾ Regeringen. [Nationell digitaliseringsstrategi för skolväsendet](#) [National digitalisation strategy for the school system] [accessed 16.11.2022].

⁽⁶¹⁾ More information: [Regeringskansliet](#) [accessed 12.9.2022].

⁽⁶²⁾ The data presented in the DESI 2022 report refer mainly to the year 2021.

identified as an area which will have a strong impact on the Swedish society and in which Sweden can demonstrate excellence. The Government adopted in 2018 the [National approach to artificial intelligence](#) with the aim of making the Nordic country a leader in harnessing the opportunities that the use of AI can offer. Several public-private initiatives support activities in AI, such as the Swedish national centre for applied artificial intelligence; the Wallenberg AI, [AI Sweden](#), Autonomous systems and software programme (WASP) and the [Research Institutes of Sweden](#) (RISE), where AI research is combined with cross-disciplinary research (European Commission, 2021).

Over recent years, the country has performed well overall in respect of its digital transition, scoring above the EU average. However, its progress has slowed. To contribute to [Europe's digital targets for 2030](#) and remain a digital frontrunner at the global level, it is important that Sweden continues to improve its performance (European Commission, 2021b).

Acronyms

AI	artificial intelligence
CPD	continuing professional development
CSN	<i>Centrala studiestödsnämnden</i> Swedish Board of Student Finance
CVET	continuing vocational education and training
DESI	digital economy and society index
ECVET	European credit system for vocational education and training
EEA	European economic area
EQAVET	European quality assurance in vocational education and training
EQF	European qualifications framework
ESG	standards and guidelines for quality assurance in the European higher education area
ESI	European skills index
EUR	Euro
GDP	gross domestic product
HEI	higher education institution
ICT	information and communications technology
ISCED	international standard classification of education
IT	information technology
IVET	initial vocational education and training
MYh	<i>Myndigheten för yrkeshögskolan</i> Swedish National Agency for Higher Vocational Education
NIER	National Institute of Economic Research

NQF	national qualifications framework
PES	public employment service
SAGC	<i>Sveriges Vägledarförening</i> , xls
SCB	<i>statistiska centralbyrån</i> statistic authority of Sweden
SEK	Swedish Krona
SeQF	Sweden's qualifications framework
SEN	special educational needs
SME	small and medium-sized enterprises
VET	vocational education and training

References

[URLs accessed 5.12.2022]

- Adermon, A. et al. (2022). *Coronapandemin, arbetsinkomsterna och välfärds-systemets skyddsgrad: Befolkningens inkomstutveckling under 2020* [The coronavirus pandemic, labour income and the degree of protection of the welfare system: Income development of the population in 2020].
<https://coronakommissionen.com/wp-content/uploads/2022/02/underlagsrapport-coronapandemin-arbetsinkomsterna-och-vacc88lfacc88rds-systemets-skyddsgrad.pdf>
- Cedefop (2017). *Skills anticipation in Sweden*. Skills intelligence.
<https://www.cedefop.europa.eu/en/data-insights/skills-anticipation-sweden>
- Cedefop (2019). *European database on apprenticeship schemes: country fiche Sweden*. <https://www.cedefop.europa.eu/en/tools/apprenticeship-schemes/country-fiches/sweden>
- Cedefop (2020a). *Developments in vocational education and training policy in 2015-19: Sweden*. Cedefop monitoring and analysis of VET policies.
https://www.cedefop.europa.eu/files/developments_in_vocational_education_and_training_policy_in_2015-19_sweden.pdf
- Cedefop (2021a). VET in Sweden. In: Cedefop (2021). *Spotlight on VET: 2020 compilation: vocational education and training systems in Europe*, pp. 70-71. https://www.cedefop.europa.eu/files/vet_in_sweden.pdf
- Cedefop (2021b). *European inventory on NQF 2020: Sweden*.
<https://www.cedefop.europa.eu/en/country-reports/sweden-european-inventory-nqf-2020>
- Cedefop and Refernet (forthcoming a). *Integrating newly arrived migrants in the health care sector: Sweden*. Timeline of VET policies in Europe [online tool].
- Cedefop and Refernet (forthcoming b). *Partial qualifications: vocational packages for adults: Sweden*. Timeline of VET policies in Europe [online tool].
- Cedefop and Refernet (forthcoming c). *Addressing curricular digital skills: Sweden*. Timeline of VET policies in Europe [online tool].
- Cedefop and Refernet (forthcoming d). *Updating labour legislation to combat skill mismatch: Sweden*. Timeline of VET policies in Europe [online tool].

- Cedefop and Refernet (forthcoming e). *Easing transition from unemployment to adult education: Sweden*. Timeline of VET policies in Europe [online tool].
- Cedefop and Refernet (forthcoming f). *Financial study support to stimulate low-qualified unemployed adults: Sweden*. Timeline of VET policies in Europe [online tool].
- Cedefop and Refernet (forthcoming g). *Expansion of higher VET: Sweden*. Timeline of VET policies in Europe [online tool].
- Cedefop and Refernet (forthcoming h). *National strategy for validation: Sweden*. Timeline of VET policies in Europe [online tool].
- Cedefop and Refernet (forthcoming i). *Opening up municipal adult education: Sweden*. Timeline of VET policies in Europe [online tool].
- Cedefop and Refernet (forthcoming j). *Partial qualifications: vocational packages for adults: Sweden*. Timeline of VET policies in Europe [online tool].
- Cedefop and Refernet (forthcoming k). *Financial incentives for training companies: Sweden*. Timeline of VET policies in Europe [online tool].
- Cedefop and Refernet (forthcoming l). *The apprenticeship centre: Sweden*. Timeline of VET policies in Europe [online tool].
- Cedefop and ReferNet Sweden (2020). *Swedish actions on education in response to the corona pandemic*. National news on VET.
<https://www.cedefop.europa.eu/en/news/swedish-actions-education-response-corona-pandemic>
- Cedefop and Swedish National Agency for Education (2022). *Vocational education and training in Europe: Sweden: system description*. In: Cedefop; ReferNet. Vocational education and training in Europe database.
<https://www.cedefop.europa.eu/en/print/pdf/node/145997>
- Council of the European Union (2021). *Taking forward the strategic agenda: 18-month programme of the Council (1 January 2022 – 30 June 2023)*. Council of the European Union, 14441/21. <https://data.consilium.europa.eu/doc/document/ST-14441-2021-INIT/en/pdf>
- CSN (2022a). *Bidrag för gymnasiestudier i Sverige* [Grants for upper secondary studies in Sweden]. <https://www.csn.se/bidrag-och-lan/studiestod/bidrag-for-gymnasiestudier-i-sverige.html>
- CSN (2022b). *Kortfakta om studiestödet* [Short facts about student financial aid]. <https://www.csn.se/om-csn/statistik-och-rapporter/kortfakta-om-studiestodet.html>
- European Commission (2022). *Commission staff working document: 2022 country report – Sweden*. COM(2022) 625 final – SWD(2022) 640 final.

https://commission.europa.eu/system/files/2022-05/2022-european-semester-country-report-sweden_en.pdf

European Commission (2021). *Digital economy and society index (DESI) 2021: Sweden*. <https://digital-strategy.ec.europa.eu/en/library/digital-economy-and-society-index-desi-2021>

European Commission; Cedefop and ICF International (2014). *European inventory on validation of non-formal and informal learning 2014: country report Sweden*. http://libserver.cedefop.europa.eu/vetelib/2014/87075_SE

Eurydice (2022). *National education systems: Sweden: adult education and training*. <https://eurydice.eacea.ec.europa.eu/national-education-systems/sweden/adult-education-and-training>

Flodberg, C.; Häkkinen Skans och, L. and Wasén, P. (2022). *Ekonomisk kommentar: Långtidsarbetslösheten i pandemins spår* [Economic commentary: long-term unemployment in the wake of the pandemic]. No 2, 10.2.2022.

<https://www.riksbank.se/globalassets/media/rapporter/ekonomiska-kommentarer/svenska/2022/langtidsarbetslosheten-i-pandemins-spar.pdf>

Folkbildningsradet (2022). *Om studieförbund* [About study associations]. <https://www.folkbildningsradet.se/studieforbund/> and <https://www.folkbildningsradet.se/om-folkbildningsradet/translations/english/the-study-associations/> [in English]

Government Offices of Sweden (2019). *National approach to artificial intelligence*. https://wp.oecd.ai/app/uploads/2021/12/Sweden_National_Approach_to_Artificial_Intelligence_2018.pdf

MYh (2022). *Statistic Årsrapport* [Statistical annual report]. https://assets.myh.se/docs/publikationer/statistiska-arsrapporter/statistisk-arsrapport_2022.pdf

ReferNet Sweden and Cedefop (2020). *Swedish actions on education in response to the corona pandemic*. National news on VET. <https://www.cedefop.europa.eu/en/news/swedish-actions-education-response-corona-pandemic>

ReferNet Sweden and Cedefop (2021). *Sweden: HVE-flex: fast track to higher VET qualifications through validation*. National news on VET. <https://www.cedefop.europa.eu/en/news/sweden-hve-flex-fast-track-higher-vet-qualifications-through-validation>

ReferNet Sweden and Cedefop (2022a). *Sweden: increasing attractiveness of secondary VET through access to higher education*. National news on VET.

- <https://www.cedefop.europa.eu/en/news/sweden-increasing-attractiveness-secondary-vet-through-access-higher-education>
- ReferNet Sweden and Cedefop (2022b). *Sweden: improved vocational training opportunities for adults with learning disabilities*. National news on VET. <https://www.cedefop.europa.eu/en/news/sweden-improved-vocational-training-opportunities-adults-learning-disabilities>
- Regeringen (2017). *Nationell digitaliseringsstrategi för skolväsendet* [National digitalisation strategy for the school system]. <https://www.regeringen.se/4aa9d5/contentassets/72ff9b9845854d6c8689017999228e53/nationell-digitaliseringsstrategi-for-skolvasendet.pdf>
- Regeringen (2019). *Validation for skills supply and lifelong learning: final report*. <http://sou.gov.se/valideringsdelegationen/in-english/sou-201969-validation-for-skills-supply-and-lifelong-learning/>
- Skolverket (2012a). *Upper secondary school 2011*. <https://www.skolverket.se/getFile?file=2801>
- Skolverket (2012b). *Läroplan för vuxenutbildningen* [Adult education curriculum]. <https://www.skolverket.se/undervisning/vuxenutbildningen/komvux-gymnasial/laroplan-for-vux-och-amnesplaner-for-komvux-gymnasial/laroplan-lvux12-for-vuxenutbildningen>
- Skolverket (2013). *Arbete med studie och yrkesvägledning* [General guidelines on career education and guidance]. <http://kbaweb8.tripnet.se/globalassets/utbildning-och-barnomsorg/dokument/vuxenutbildning/allmanna-rad-om-arbete-med-studie--och-yrkesvagledning.pdf>
- Skolverket (2018). *Elever i gymnasieskolan Läsåret 2017/18* [Students in upper secondary school year 2017/18]. <https://www.skolverket.se/getFile?file=3922>
- Skolverket (2020). *Redovisning av Skolverkets uppdrag om att genomföra insatser som bidrar till att stärka tillgången på yrkeslärare i gymnasieskolan och kommunal vuxenutbildning* [Report of the Swedish National Agency for Education's mission to implement initiatives that contribute to strengthening the availability of vocational teachers in upper secondary school and municipal adult education]. <https://www.skolverket.se/download/18.289d0776170c4f42576cf1/1585133813962/Pdf6500.pdf>
- Skolverket (2021). *Betyg- och studieresultat i gymnasieskolan år 2021* [Grades and study results in upper secondary school in 2021]. <https://www.skolverket.se/getFile?file=8892>
- Skolverket (2022a). *Elever i gymnasieskolan Läsåret 2021/22* [Students in upper secondary school year].

<https://www.skolverket.se/download/18.3253018117f029df83d8df/1646642007287/pdf9439.pdf>

Skolverket (2021). *Yrkesutbildningar inom komvux som särskild utbildning på gymnasial nivå* [Vocational training in municipal adult education as special education at upper secondary level]. <https://www.skolverket.se/undervisning/vuxenutbildningen/komvux-som-sarskild-utbildning-pa-gymnasial-niva>

Skolverket and ReferNet Sweden (2019). *Vocational education and training in Europe: Sweden*. Cedefop ReferNet VET in Europe reports, 2018. http://libserver.cedefop.europa.eu/vetelib/2019/Vocational_Education_Training_Europe_Sweden_2018_Cedefop_ReferNet.pdf

Sveriges Riksdag (2009). *Lag (2009:128) om yrkeshögskolan*. [Act (2009:128) on higher vocational education.] https://www.ilo.org/dyn/natlex/natlex4.detail?p_lang=en&p_isn=94124

Swedish Higher Education Authority (2021). *Guidelines for reviewing the HEIs' quality assurance processes for research: revised in May 2021*. https://english.uka.se/download/18.6914d29817a75e5afb2e517/1629280862453/Guidelines%20for%20reviewing%20the%20HEIs%20quality%20assurance%20processes%20for%20research_revised%20in%20May%202021.pdf

Swedish Higher Education Authority, Lundh, A. (2021). *An overview of Swedish higher education and research 2021*. Stockholm: Universitetskanslersämbetets publikationer. <https://doi.org/10.53340/UKAP-2>

Swedish National Agency for Education (2022). *Teachers and trainers in a changing world: Sweden: building up competences for inclusive, green and digitalised vocational education and training (VET)*. Cedefop ReferNet thematic perspectives series. http://libserver.cedefop.europa.eu/vetelib/2022/teachers_and_trainers_in_a_changing_world_Sweden_Cedefop_ReferNet.pdf

Swedish public employment service (2020). *Strategiskt arbetsgivararbete Återrapport regleringsbrev 2020* [Strategic employer work: report on appropriation directions 2020]. https://arbetsformedlingen.se/download/18.3563c7d6172c13113cbcc0c/3_4%20%C3%85terrapport%20Strategiskt%20arbetsgivararbete1.0.pdf

Swedish public employment service (2021). *En effektiv, strategisk och jämställd Arbetsmarknadsutbildning Återrapport 2020* [An efficient, strategic and equal opportunity labour market training report 2020]. <https://arbetsformedlingen.se/download/18.45f2840b17863cf8a23391f/1618498401577/en-effektiv-strategisk-och-jamstalld-arbetsmarknadsutbildning.pdf>

Further sources of information

[URLs accessed 5.12.2022]

Legislation

Ordinances

Ministry of Education and Research (1993). *The Higher Education Ordinance (1993:100)*. <https://www.uhr.se/en/start/laws-and-regulations/laws-and-regulations/the-higher-education-ordinance/>

Ministry of Education and Research (2000). *Studiestödsförordning (2000:655)* [Student financial aid Ordinance (2000:655)]. https://www.riksdagen.se/sv/dokument-lagar/dokument/svensk-forfattnings-samling/studiestodsforordning-2000655_sfs-2000-655

Ministry of Education and Research (2009a). *Förordning (2009:130) om yrkeshögskolan* [Ordinance on university of applied sciences (2009:130)]. https://www.riksdagen.se/sv/dokument-lagar/dokument/svensk-forfattnings-samling/forordning-2009130-om-yrkeshogskolan_sfs-2009-130#K3

Ministry of Education and Research (2010b). *Gymnasieförordning (2010:2039)* [Upper secondary school Ordinance (2010:2039)]. https://www.riksdagen.se/sv/dokument-lagar/dokument/svensk-forfattnings-samling/gymnasieforordning-20102039_sfs-2010-2039

Ministry of Education and Research (2011). *Förordning (2011:1108) om vuxenutbildning* [Ordinance on adult education (2011:1108)]. https://www.riksdagen.se/sv/dokument-lagar/dokument/svensk-forfattnings-samling/forordning-20111108-om-vuxenutbildning_sfs-2011-1108

Ministry of Education and Research (2015). *Förordning (2015:218) om statsbidrag till folkbildningen* [Ordinance on State grants for adult education (2015:218)]. https://www.riksdagen.se/sv/dokument-lagar/dokument/svensk-forfattnings-samling/forordning-2015218-om-statsbidrag-till_sfs-2015-218

Acts

Ministry of Education and Research (1992). *The Swedish higher education Act (1992:1434)*. <https://www.uhr.se/en/start/laws-and-regulations/Laws-and-regulations/The-Swedish-Higher-Education-Act/>

Ministry of Education and Research (2009b). *Lag om yrkeshögskolan (2009:128)* [Act on the university of applied sciences (2009:128)].

https://www.riksdagen.se/sv/dokument-lagar/dokument/_sfs-2009-128

Ministry of Education and Research (2010a). *Skollag (2010:800)* [The Education Act (2010:800)]. https://www.riksdagen.se/sv/dokument-lagar/dokument/svensk-forfattningssamling/skollag-2010800_sfs-2010-800

Ministry of Labour (1974). *Lag (1974:981) om arbetstagares rätt till ledighet för utbildning* [Act on employees' right to leave for training (1974:981)]. https://www.riksdagen.se/sv/dokument-lagar/dokument/svensk-forfattningsamling/lag-1974981-om-arbetstagares-ratt-till_sfs-1974-981

Proposals

Swedish Government (1992). *Regeringens proposition om valfrihet och fristående skolor: Proposition 1991/92:95* [Government Proposal on freedom of choice and independent schools (1991/92:95)]. https://www.riksdagen.se/sv/dokument-lagar/dokument/proposition/valfrihet-och-fristaende-skolor_GF0395

Websites and databases

Cedefop. *European database on apprenticeship schemes: Sweden* [database]. <https://www.cedefop.europa.eu/en/tools/apprenticeship-schemes/country-fiches/sweden>

Cedefop. *National qualifications frameworks (NQFs) online tool* [database]. <https://www.cedefop.europa.eu/en/tools/nqfs-online-tool/countries/sweden-2020>

Cedefop. *Skills intelligence* [database]. <https://www.cedefop.europa.eu/en/tools/skills-intelligence/countries?country=SE#1>

Cedefop and Swedish National Agency for Education (2021). Vocational education and training in Europe: Sweden: system description. In: Cedefop and ReferNet. *Vocational education and training in Europe database*. <https://www.cedefop.europa.eu/en/tools/vet-in-europe/systems/sweden-u2>

CSN. *Kortfakta om studiestödet*. [Short facts about student financial aid]. <https://www.csn.se/om-csn/statistik-och-rapporter/kortfakta-om-studies-todet.html#h-Studiemedel>

Ekonomifakta. *Ekonomifakta*. <https://www.ekonomifakta.se/>

Euroguidance (2022a). *Euroguidance Sweden*. <https://www.euroguidance.eu/sweden>

- Euroguidance (2022b). *Guidance systems in Sweden*.
<https://www.euroguidance.eu/guidance-system-in-sweden>
- Eurostat. *Eurostat celebrates Sweden*. <https://ec.europa.eu/eurostat/web/products-eurostat-news/-/edn-20180606-1>
- Ministry of Labour and Ministry of Education (2022). *Flexibilitet, omställningsförmåga och trygghet på arbetsmarknaden* [Flexibility, adaptability and security in the labour market]. <https://www.regeringen.se/rattsliga-dokument/proposition/2022/03/prop.-202122176/>
- MYh. *Swedish National Agency for Higher Vocational Education*.
<https://www.myh.se/in-english>
- MYh (2019). *Kvalitetskriterier för yrkeshögskolan* [Quality criteria for the university of applied sciences]. [in Swedish only]. <https://assets.myh.se/docs/publikationer/informationsmaterial/faktablad-kvalitetskriterier-for-yrkeshogskolan.pdf>
- Friskolornas riksförbund. *Skolor och elever* [Schools and students].
<https://www.friskola.se/skolor-och-elever/>
- SCB. *Statistics Sweden*. <https://www.scb.se/>
- Skolinspektionen (2022a). *Om Skolinspektionen* [About the Swedish Schools Inspectorate]. <https://www.skolinspektionen.se/other-languages/english-engelska/>
- Skolinspektionen (2022b). *Uppdrag och verksamhet* [Mission and operations].
<https://www.skolinspektionen.se/om-oss/uppdrag-och-verksamhet/>
- Skolvärlden. *Är det rimligt att lärare offras?* [Is it reasonable for teachers to be sacrificed?] <https://skolvarlden.se/bloggar/kornhall/ar-det-rimligt-att-larare-offras>
- Skolverket (2019). *Lärarprognos 2019* [Teacher forecast 2019].
<https://www.skolverket.se/getFile?file=5394>
- Skolverket (2022b). *Gymnasiesärskolan* [Special needs upper secondary school]. <https://www.skolverket.se/undervisning/gymnasiesarskolan>
- Skolverket (2022c). *Statsbidrag för yrkesvux 2022* [State grant for vocational adult education in 2022]. <https://www.skolverket.se/skolutveckling/statsbidrag/statsbidrag-for-yrkesvux-2022#h-Hurstortarstatsbidraget>
- Skolverket (2022d). *Sy systematiskt kvalitetsarbete: så fungerar det* [Systematic quality work: this is how it works] <https://www.skolverket.se/skolutveckling/leda-och-organisera-skolan/systematiskt-kvalitetsarbete/systematiskt-kvalitetsarbete-i-skola-och-forskola>

Skolverket (2022e). *Introduktionsprogram* [Introductory program].

<https://www.skolverket.se/undervisning/gymnasieskolan/laroplan-program-och-amnen-i-gymnasieskolan/gymnasieprogrammen/introduktionsprogram>

Skolvärlden. *Är det rimligt att lärare offras?* [Is it reasonable for teachers to be sacrificed?]. <https://skolvärlden.se/bloggar/kornhall/ar-det-rimligt-att-larare-offras>

Statista. *Empowering people with data: Insights and facts across 170 industries and 150+ countries* <https://www.statista.com/>

Swedish Parliament. *Dimensionering av gymnasial utbildning för bättre kompetensförsörjning* [Dimensioning of upper secondary education for better skills supply]. https://www.riksdagen.se/sv/dokument-lagar/arende/betankande/dimensionering-av-gymnasial-utbildning-for-bättre_H901UbU25

Universitets-och högskolerådet. *Statistik och rapporter* [Statistics and reports]. <https://www.uhr.se/bedomning-av-utlandsk-utbildning/rapport-och-statistik/>

Swedish Higher Education Authority (2018). *Quality assurance of higher education and research*. <https://english.uka.se/quality-assurance/quality-assurance-of-higher-education.html>

Vocational education and training in Sweden

Short description

This publication contributes to better understanding of vocational education and training (VET) in Sweden and how it operates within the socioeconomic context.

In Sweden, learners can follow upper secondary initial VET programmes in school-based form or as an apprenticeship, achieving a qualification at EQF level 4. At higher VET, 1- to 2-year and 2- to 3-year VET programmes are offered at EQF levels 5 and 6.

The employment rate of VET graduates is higher than the EU-27 average, but the share of initial VET learners in total upper secondary education is quite low (35.6%). The country has above 34% participation in lifelong learning, the highest among the EU-27 Member States.

Lack of teachers, ICT specialists and the skills mismatch between labour market needs and graduate qualifications are current challenges for the country. To increase the attractiveness of VET, several measures were launched, such as facilitating progression to higher education.



CEDEFOP

European Centre for the Development
of Vocational Training

Europe 123, 570 01 Thessaloniki (Pylea), GREECE

Postal address: Cedefop service post, 570 01 Themi, GREECE

Tel. +30 2310490111, Fax +30 2310490020, Email: info@cedefop.europa.eu

visit our portal www.cedefop.europa.eu



Publications Office
of the European Union