



Developments in vocational education and training policy in 2015–17

SWEDEN



Cedefop monitoring and analysis of VET policies

**Developments in vocational education and training
policy in 2015-17**

SWEDEN

Cedefop (2018). *Developments in vocational education and training policy in 2015-17: Sweden*. Cedefop monitoring and analysis of VET policies.
<http://www.cedefop.europa.eu/en/publications-and-resources/country-reports/vet-policy-developments-sweden-2017>

© European Centre for the Development of Vocational Training (Cedefop), 2018.
Reproduction is authorised provided the source is acknowledged.

This report was produced by Cedefop and reflects contributions from Cedefop's VET policy and systems team, and Cedefop experts working on common European tools and principles for education and training, and statistics. It is based on detailed information on VET policy implementation submitted by Cedefop's European network of expertise on VET (ReferNet) and other sources.

Table of contents

Aspects of vocational education and training context in 2015.....	5
1. MTD 1 – All forms of work-based learning with special attention to apprenticeships	8
1.1. Policy priorities for 2016-20.....	8
1.2. Main actions taken in 2015-17.....	9
1.2.1. Increasing the offer of work placements	9
1.2.2. Supporting the development of apprenticeship	9
1.2.3. Increasing the quality of work-based learning	9
1.2.4. Discussing further involvement of social partners in work-based learning	9
2. MTD 2 – Quality assurance mechanisms in line with EQAVET and continuous information and feedback loops to IVET and CVET	11
2.1. Quality assurance in line with EQAVET.....	12
2.2. Continuous information and feedback loops in initial VET	13
2.3. Continuous information and feedback loops in continuing VET.....	14
3. MTD 3 – Access to VET and qualifications for all through more flexible/permeable systems, guidance and validation of non-formal and informal learning	15
3.1. Policy priorities for 2016-20.....	15
3.2. Main actions taken in 2015-17.....	15
3.2.1. Boosting adult education	15
3.2.2. Equal opportunity, permeability and flexibility: the right to progression to higher education.....	16
3.2.3. Transparency, recognition, validation	17
3.2.4. Training, reskilling and upskilling vulnerable groups, jobseekers and employees	18
4. MTD 4 – Key competences in both IVET and CVET.....	20
4.1. Key competences in initial VET	21
4.1.1. Integrating aesthetics and creativity.....	22
4.1.2. ICT strategy for education	22
4.1.3. Cross-curricular approach to key competences in work-based learning	22
4.2. Key competences in continuing VET	22
5. MTD 5 – Systematic initial and continuous professional development of VET teachers, trainers and mentors	24

Conclusion	25
List of abbreviations	26
References.....	27

List of tables and figures

Tables

1. Framework data: score on VET indicators in Sweden and in the EU:
2010, last available year and recent trend6

Figures

1. Use of EQAVET indicators13
2. Self-evaluation of acquired skills in general education and VET20
3. Share of 15-year-olds with low achievement in reading, maths and
science.....21

Aspects of vocational education and training context in 2015

In 2009-11, Sweden undertook reforms in vocational education which led to reduced access of upper secondary vocational education and training (VET) graduates to higher education while, at the same time, developing substantially higher vocational education programmes to meet labour market demand for qualified labour (European Commission, 2015, pp. 8-10). Strong partnerships with employers were established in higher VET; this sustained increasing labour market demand for graduates, high graduate employment rates, and growing enrolment in tertiary VET programmes. In upper secondary VET, participation has decreased since then. At the beginning of the reporting period, the proportion of upper secondary students enrolled in VET programmes in Sweden was below the EU average: 43.7% in 2014 compared to 48% in the EU (Cedefop, 2017a, p. 133); 38% in 2015 compared to 47% in the EU ⁽¹⁾. 2.5% of upper secondary initial vocational education and training (IVET) students were following work-based programmes in 2014, compared to 34% in the EU (Cedefop, 2017a, p. 133). but the employment rate of recent upper secondary education graduates remained high at 79.7% in 2014 compared to 70.8% in the EU. When considering VET graduates only, the rate was 81.6% in 2015 (European Commission, 2015, p. 8), compared to the EU average of 73% (Table 1).

In 2015, Sweden was, on the one hand supporting further development of higher VET through allocating more budget and creating additional study places, while, on the other hand, reinforcing upper secondary VET through promoting practical training and encouraging closer participation of employers in programme design. The legislation to allow for employment while in education as an apprentice was introduced in 2014. Expanding access of upper secondary VET students to higher education again was also being considered.

On the adult side, participation in lifelong learning was high: 28.9% in 2014 (European Commission, 2015, p. 9) and 29.4% in 2015 compared to 10.7% on average in 2014 and 2015 in the EU (Cedefop, 2017a, p. 133).

⁽¹⁾ Eurostat, data for 2015.

Table 1. Framework data: score on VET indicators in Sweden and in the EU: 2010, last available year and recent trend

Indicator label	2010		Last available year		Recent trend (per year)		
	SE ^f	EU ^f	Yr	SE ^f EU ^f	Range	SE	EU
Access, attractiveness and flexibility							
IVET students as % of all upper secondary students	A	A	'14	43.7 ^b 48.0 ^b _{E1}	'13-'14	▪ -3.1	▪ -0.9
IVET work-based students as % of all upper secondary IVET	A	A	'14	2.5 ^b 34.0 ^b _{E2}	'13-'14	▪ 0.0	▪ 0.1
IVET students with direct access to tertiary education as % of all upper secondary IVET			'14	31.3 69.2 ^{E3}	'13-'14	▪ 10.5	▪ -1.4
Employees participating in CVT courses (%)	47.0	38.0 ^e	'10	47.0 38.0 ^e			
Employees participating in on-the-job training (%)	24.0	20.0 ^e	'10	24.0 20.0 ^e			
Adults in lifelong learning (%)	24.7		'15	29.4 10.7 ^b	'13-'15	↗ 0.5	→ 0.0
Enterprises providing training (%)	87.0	66.0 ^e	'10	87.0 66.0 ^e			
Female IVET students as % of all female upper secondary students	A	A	'14	41.3 ^b 42.7 ^b _{E1}	'13-'14	▪ -3.3	▪ -1.0
Employees of small firms participating in CVT courses (%)	40.0	25.0 ^e	'10	40.0 25.0 ^e			
Young VET graduates in further education and training (%)			'15	35.7 ^b 33.0 ^b	'14-'15	▪ -1.6	▪ -0.3
Older adults in lifelong learning (%)	18.3	5.3	'15	22.7 6.9	'10-'15	↗ 0.9	↗ 0.4
Low-educated adults in lifelong learning (%)	16.0		'15	20.0 ^C 4.3 ^b _C	'13-'15	→ 0.0	↘ -0.1
Unemployed adults in lifelong learning (%)	40.8		'15	44.0 9.5 ^b	'13-'15	↘ -0.8	↘ -0.4
Individuals who wanted to participate in training but did not (%)	7.2 ^B	9.5 ^e _B	'11	7.2 9.5 ^e			
Job-related non-formal education and training (%)	80.1 ^B	80.2 ^e _B	'11	80.1 80.2 ^e			
Skill development and labour market relevance							
IVET public expenditure (% of GDP)			'13	0.83 ^b 0.56 ^b _{E4}	'12-'13	▪ 0.02	▪ 0.03
IVET public expenditure per student (1 000 PPS units)			'13	11.7 ^b 6.4 ^b _{E5}	'12-'13	▪ 0.5	▪ 0.0
Enterprise expenditure on CVT courses as % of total labour cost	0.9	0.8 ^e	'10	0.9 0.8 ^e			
Average number of foreign languages learned in IVET			'14	1.1 ^b 1.0 ^b _{E6}	'13-'14	▪ 0.0	▪ 0.0
STEM graduates from upper secondary IVET (% of total)	A	A	'14	27.0 ^b 30.0 ^b _{E7}	'13-'14	▪ -0.7	▪ -0.4
Short-cycle VET graduates as % of first time tertiary education graduates			'14	11.2 9.3 ^{E8}	'13-'14	▪ -1.6	▪ 0.4
Innovative enterprises with supportive training practices (%)	23.5	41.5 ^{E9}	'12	26.4 41.6 ^{E9}	'10-'12	▪ 1.4	▪ 0.0
Employment rate for IVET graduates (20- to 34-year-olds)			'15	88.7 ^b 77.2 ^b	'14-'15	▪ 0.7	▪ 0.3
Employment premium for IVET graduates (over general stream)			'15	5.8 ^b 5.3 ^b	'14-'15	▪ 1.4	▪ -1.0

Indicator label	2010		Last available year			Recent trend (per year)		
	SE ^f	EU ^f	Yr	SE ^f	EU ^f	Range	SE	EU
Employment premium for IVET graduates (over low-educated)			'15	26.0 ^b	23.7 ^b	'14-'15	▪ -0.4	▪ -0.1
Workers helped to improve their work by training (%)			'15	71.6	83.7			
Workers with skills matched to their duties (%)	53.1	55.2	'15	55.7	57.3	'10-'15	▪ 0.5	▪ 0.4
Overall transitions and labour market trends								
Early leavers from education and training (%)	6.5	13.9	'15	7.0 ^c	11.0 ^c	'10-'15	↗ 0.1	↘ -0.6
30- to 34-year-olds with tertiary attainment (%)	45.3	33.8	'15	50.2 ^c	38.7 ^c	'10-'15	↗ 1.0	↗ 1.0
NEET rate for 18- to 24-year-olds (%)	10.6	16.6	'15	8.8	15.8	'10-'15	↘ -0.3	↘ -0.1
Unemployment rate for 20- to 34-year-olds (%)	11.7	13.1	'15	9.9	12.9	'10-'15	↘ -0.2	↗ 0.1
Employment rate of recent graduates (%)	83.0	77.4	'15	85.9 ^c	76.9 ^c	'10-'15	↗ 0.5	↘ -0.2
Adults with lower level of educational attainment (%)	18.8	27.3	'15	15.7 ^c	23.5 ^c	'10-'15	↘ -0.6	↘ -0.8
Employment rate for 20- to 64-year-olds (%)	78.1	68.6	'15	80.5	70.0	'10-'15	↗ 0.4	↗ 0.3
Employment rate for 20- to 64-year-olds with lower level of educational attainment (%)	62.8	53.4	'15	60.9 ^c	52.6 ^c	'10-'15	↘ -0.6	↘ -0.2
Medium/high-qualified employment in 2020 (% of total)			'16	89.0 ^d	82.8 ^d			

^(A) UOE (UNESCO OECD Eurostat) back reconstruction of 2010 values based on ISCED (international standard classification of education) 2011 not yet available.

^(B) AES (adult education survey) 2011, used as proxy for 2010 baseline.

^(C) 2014 b flags in Eurostat online tables ignored on the basis of other relevant Eurostat metadata.

^(D) Forecast made in 2016.

^(E1) Based on 28 countries; partial information for NL.

^(E2) Based on 25 countries (missing: ES, PL, RO); partial information for NL.

^(E3) Based on 27 countries (missing: NL); partial information for EL, IT.

^(E4) Based on 19 countries (missing: BE, DK, IE, EL, FR, HR, IT, PT, SK).

^(E5) Based on 21 countries (missing: DK, IE, EL, FR, HR, IT, PT).

^(E6) Partial information for NL.

^(E7) Based on 25 countries (missing: HR, IT, UK).

^(E8) Based on 23 countries (missing: BE, IE, FR, CY, UK).

^(E9) Based on 22 countries (missing: DE, IE, EL, NL, SI, UK).

^(b) Break after 2010, therefore baseline data not included.

^(u) Eurostat: 'low reliability'.

^(z) Eurostat: 'not applicable'.

^(e) Eurostat: 'estimated'.

NB: EU refers to EU-28, unless otherwise specified. Arrows ↗ or ↘ signal a positive or negative trend based on more than two data points and of magnitude 0.1 per year or more. Trends based on more than two data points but of smaller magnitude are indicated by →; trends based on two points only are marked ▪. Trends are estimated by means of regression models.

Source: Cedefop, 2017a, p. 133

CHAPTER 1.

MTD 1 – All forms of work-based learning with special attention to apprenticeships

Regulations and guidelines on work-based learning in VET at all levels existed before 2011, when reform of upper secondary education, including IVET and apprenticeship, was adopted. Upper secondary VET programmes can be either school-based (with compulsory work-based learning for at least 15% of the programme) or offered as apprenticeships (at least 50% of learning takes place at a workplace). A contract is signed between the student (or the student's guardian), the employer and the school. A trainer at the workplace supervises and mentors students. In both pathways, the same syllabuses are applicable and successful completion leads to a vocational diploma. In 2014, an apprenticeship centre ⁽²⁾ was created under the auspices of the Swedish national agency for education to promote apprenticeship, provide advice to VET institutions and employers, train supervisors at workplaces, and stimulate cooperation at regional level between schools and businesses. In 2015 the *education contract* was introduced; this is an agreement between a learner, the employment service and the home municipality and allows the learner to carry out studies in combination with work. The aim is to support unemployed low-qualified people aged 20 to 24 to start or return to studies to acquire an upper secondary qualification.

1.1. Policy priorities for 2016-20

The country's priorities in this area for 2016-20 ⁽³⁾, as set by the Director General for vocational education and training (DGVT), are two-fold:

- (a) develop apprenticeship through increasing the number of apprentices and quality in apprenticeship training;
- (b) increase the quality of work-based learning in school-based VET.

⁽²⁾ <http://www.cedefop.europa.eu/en/news-and-press/news/sweden-apprenticeship-centre-established-2014>

⁽³⁾ According to a survey by Cedefop among Directors General for VET in early 2016.

1.2. Main actions taken in 2015-17

1.2.1. Increasing the offer of work placements

In 2016, amendments to the ordinance on higher VET ⁽⁴⁾ reaffirmed the responsibility of VET institutions for ensuring a sufficient number of relevant and high-quality workplaces. A national commission of inquiry (*Yrkesprogramsutredningen*) suggested establishing trade schools/industry schools for the provision of the work-based component of VET programmes when the trades and industries are too small and have too few applicants, and VET institutions do not have the required infrastructure to provide workplaces. Piloting is planned between 2018 and 2022 ⁽⁵⁾.

1.2.2. Supporting the development of apprenticeship

The apprenticeship centre, acting under the auspices of the Swedish national agency for education, has been playing a key role in the development of apprenticeship. It cooperates with a wide range of stakeholders (VET providers, municipalities, social partners and enterprises). Since 2015, it has organised workshops and provided guidance and support to companies and social partners. National and regional coordinators have been set up to assist schools in their collaboration with local enterprises.

1.2.3. Increasing the quality of work-based learning

Since 2016, enterprises that participate in apprenticeship may receive state-funded grants if their workplace trainers have participated in training-the-trainer programmes (Section 5.1). The aim is to encourage more training enterprises to have qualified trainers.

1.2.4. Discussing further involvement of social partners in work-based learning

At the end of 2015, a national commission (*Yrkesprogramsutredningen*) made proposals ⁽⁶⁾ to the government to strengthen the involvement of social partners

⁽⁴⁾ *Förordning om yrkeshögskolan*
http://www.riksdagen.se/sv/dokument-lagar/dokument/svensk-forfattningssamling/forordning-2009130-om-yrkeshogskolan_sfs-2009-130

⁽⁵⁾ Government proposal to the parliament dated 23.3.2017.

⁽⁶⁾ *Välja yrke*
<http://www.regeringen.se/contentassets/1ccc134ebc9645f199fce4c82984ce81/valja-yrke-sou-201597.pdf>

in providing VET. The options discussed include developing regional support structures. Development of state-funded grants was also considered.

CHAPTER 2.

MTD 2 – Quality assurance mechanisms in line with EQAVET and continuous information and feedback loops to IVET and CVET ⁽⁷⁾

A quality assurance national reference point (QANRP) was established in 2010. A national quality assurance approach was devised and presented in the 2010 education Act. It applies to IVET and related work-based learning. Procedures for internal and external evaluation of VET providers are in place: external evaluation is carried out by the School Inspectorate. To assist VET providers in carrying out their internal evaluation, the national agency for education has developed regulations, guidelines and quality standards (mostly objectives to be reached by the end of the training) and a web-based programme for VET principals and their staff to facilitate their work on continuous improvement. The quality reviews are based on learner achievements.

In continuing vocational education and training (CVET), the agency for higher vocational education monitors CVET programmes which receive government grants. The agency supervises a chosen number of providers each year. All CVET providers must reapply to the agency to continue providing a CVET programme after two years. The agency has produced general guidelines for systematic quality control.

⁽⁷⁾ Sources:

European Centre for the Development of Vocational Training (Cedefop):

<http://www.cedefop.europa.eu/en>

ReferNet: <http://www.cedefop.europa.eu/en/events-and-projects/networks/refernet>

Priorities reported by Directors General for vocational training for the 2016-20 period;

EQAVET (2016 Secretariat survey, website, newsletters): <http://www.eqavet.eu>

2016 compendium of EQAVET NRP *Erasmus+* funding:

http://www.eqavet.eu/Libraries/Annual_Network_Meeting_2016/Compendium_EQAVET_2016.sflb.ashx

Council recommendations on the 2016 national reform programmes:

<http://www.consilium.europa.eu/en/policies/european-semester/2016/#>

Education and training monitor 2016 country reports:

http://ec.europa.eu/education/policy/strategic-framework/et-monitor_en

Since autumn 2011, upper secondary IVET has been guided by national programme councils composed of different stakeholders, including social partners. The councils serve as advisory bodies to the national agency for education. This is expected to ensure that upper secondary IVET meets industry skills needs more closely. The national approach to quality assurance includes a system that collects information on IVET and CVET graduates. Statistics Sweden and the national agency for education collaborate on data collection. The system is based on national register and statistical data, as well as surveys every other year for young adults and once every three years for employer organisations and enterprises. In 2013, a systematic follow up of VET graduates had been prepared but this was still only partly in place in 2015.

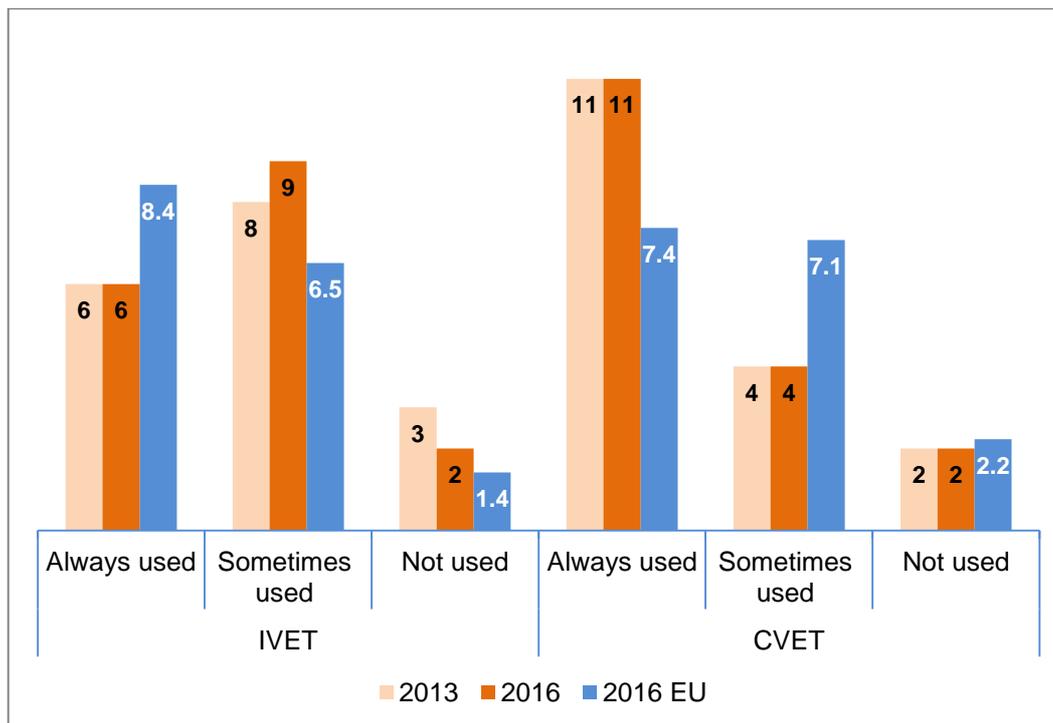
2.1. Quality assurance in line with EQAVET

For 2016-20, the country's priorities in this matter, as set by the Director General for vocational education and training, are to:

- (a) reinforce overall quality in VET;
- (b) strengthen the involvement of social partners in the feedback/development-loop.

EQAVET indicators were used to monitor the VET system. All EQAVET indicators are reported to be used both in IVET and CVET except those on the share of accredited VET providers and on the evidence of the effectiveness of schemes in promoting better access to VET. The number of indicators that are 'always used' is below the EU average in IVET and above the EU average in CVET. Since 2013, one more indicator is being 'sometimes used' in IVET.

Figure 1. Use of EQAVET indicators



NB: Of the 17 indicators suggested by the 2009 EQAVET recommendation, six were 'always used' in IVET in 2013 and 2016 in Sweden compared to 8.4 in the EU on average in 2016.

EU average was calculated based on available information for 31 out of 35 VET systems.

Source: Cedefop calculations based on EQAVET Secretariat surveys for 2013 and 2016 data.

2.2. Continuous information and feedback loops in initial VET

The country's priority in this matter for 2016-20, as set by the Director General for vocational education and training, is to match VET and labour market needs better. The national agency for education has been tasked to develop an extensive system to follow up what VET students and apprentices do after completion of a VET programme. This is expected to make possible in-depth analyses of transition from school to working life. The knowledge gained will feed into planning at both national and local levels.

The first student cohort analysed graduated from the reformed upper secondary VET programmes in 2014. Data were collected two years after graduation and were processed during the reporting period. Results are expected in 2017. They will inform on students' activities after graduation, and if they are working in fields related to their education.

2.3. Continuous information and feedback loops in continuing VET

For 2016-20, the country's priority in this matter, as set by the Director General for vocational education and training, is to ensure a good match between CVET and labour market needs. This will be achieved using an in-depth study on how to improve the yearly follow-up of transition from CVET to employment.

This detailed study is still due. In the reporting period, the issue of how to develop follow-up studies on the impact of CVET was discussed internally at the national agency for higher vocational education, but no decisions were made. Studies were carried out to find out what students are doing after completing CVET, and how successful working life is with the skills acquired. In 2015, the Institute for Evaluation of Labour Market and Education Policy, IFAU ⁽⁸⁾ undertook a major study to follow up the transition from CVET by:

- (a) graduates;
- (b) students who completed their education but did not receive a diploma;
- (c) drop-outs.

IFAU surveyed the extent to which students were in employment and how their income developed, and made a comparison with higher education students. In 2016, the research institute Ratio ⁽⁹⁾ conducted a study on productivity development in technology companies that have recruited CVET students compared to those recruiting higher education students. Studies on student employment show essentially the same results and confirm the results of the follow-up performed by the national agency for higher vocational education.

⁽⁸⁾ <http://www.ifau.se/en/>

⁽⁹⁾ <http://ratio.se/english/>

CHAPTER 3.

MTD 3 – Access to VET and qualifications for all through more flexible/permeable systems, guidance and validation of non-formal and informal learning

3.1. Policy priorities for 2016-20

The country's priorities in this area for 2016-20, as set by the Director General for vocational education and training, are two-fold:

- (a) for young people, ensure:
 - (i) better access to VET for those who do not meet entry requirements for national VET programmes at upper secondary level;
 - (ii) that every young men and women has upper secondary education;
- (b) for adults, ensure that:
 - (i) there is a standing and broad offer of IVET for adults;
 - (ii) recognition of prior learning through validation is a natural part of all adult learning, and access to validation is strengthened;
 - (iii) employer and industry demand for staff is met with a higher vocational education;
 - (iv) adults have better access to higher vocational training.

3.2. Main actions taken in 2015-17

3.2.1. Boosting adult education

The action plan for adult education (*Kunskapslyftet, the knowledge boost*) was introduced in 2015. It is aimed at supporting the Swedish government's goal of making Sweden the European country with the lowest unemployment rates by 2020. The plan addresses four strands:

- (a) higher vocational education;
- (b) liberal adult education through folk high schools;
- (c) adult IVET and adult apprenticeship in IVET;
- (d) adults' right to general education.

Relevant legislation/regulation and funding arrangements have been changed/adopted. The plan aims to, at the same time, help address a shortage of skilled labour and enable people to (re)train.

In January 2017, the Ordinance ⁽¹⁰⁾ on state grants for regional adult training came into force. Regional vocational adult education (*regionalt yrkesvux*) aims to strengthen regional cooperation to meet labour market skills needs better. The regulation contains provisions on government grants for such training at secondary level in municipal adult education, with the condition that the training is carried out as cooperation between municipalities and businesses.

In February 2017, the national agency for education was commissioned by the government to carry out a study on introducing vocational competence tests in municipal adult education at secondary level and upper secondary (school-based and apprenticeship) VET programmes. Test results are expected to help clarify the determinants for obtaining qualifications. The study has proposed an approach for developing the tests (design, implementation, evaluation and documentation) ⁽¹¹⁾.

3.2.2. Equal opportunity, permeability and flexibility: the right to progression to higher education

A national commission was set up in 2015 to conduct an upper secondary education inquiry, targeted at exploring how to ease progression from upper secondary VET to higher VET or higher education more generally. The results were presented in October 2016 ⁽¹²⁾ they included that the falling interest in upper secondary VET can be explained by the uncertainty about the extent to which vocational programmes grant eligibility to apply for tertiary education while, in contrast, higher education preparatory programmes are seen as providing more opportunities for continued study.

⁽¹⁰⁾ https://www.riksdagen.se/sv/dokument-lagar/dokument/svensk-forfattningssamling/forordning-2016937-om-statsbidrag-for-regional_sfs-2016-937 (see 2016:937).

⁽¹¹⁾ See Paragraph 3: *Tillfälliga uppdrag*, No 8: <http://www.esv.se/statsliggaren/regleringsbrev/?RBID=18293>

⁽¹²⁾ <http://www.regeringen.se/contentassets/9caa7eb8000e4354b06473e31d2ddbcb/en-gymnasieutbildning-for-alla--atgarder-for-att-alla-unga-ska-paborja-och-fullfolja-en-gymnasieutbildning-volym-1-hela-dokumentet-sou-201677.pdf>

See pp. 47-63 for a summary in English.

Amendments to the 2010 education Act ⁽¹³⁾ were introduced, coming into effect in January 2017. The amendments give the right to all learners to study courses needed for progression to higher general or vocational education. This includes not only the right to courses needed to comply with general eligibility for tertiary education, but also the right to courses needed for meeting specific entry requirements for any tertiary programme for which the learner has applied.

3.2.3. Transparency, recognition, validation

3.2.3.1. National qualifications framework ⁽¹⁴⁾

A higher education framework had been linked to the qualifications framework in the European higher education area (QF-EHEA) in 2010. A proposal for a national qualifications framework was presented in 2011 but not adopted. In October 2015, the legal basis supporting a Swedish national qualifications framework (SeQF) ⁽¹⁵⁾ came into force ⁽¹⁶⁾. The SeQF is based on an eight-level structure covering public education and training. It is open to private and non-formal qualifications. The SeQF can be considered to have reached (an early) operational status; it was referenced to the European qualifications framework (EQF) in June 2016. It is operated by the national agency for higher vocational education ⁽¹⁷⁾ assisted by a council comprising representatives from the social partners, national education and employment agencies, and student organisations. A register of qualifications was put in place and made accessible via the SeQF web-portal ⁽¹⁸⁾.

⁽¹³⁾ https://www.riksdagen.se/sv/dokument-lagar/dokument/svensk-forfattningssamling/skollag-2010800_sfs-2010-800

(amendments in Chapter 20).

⁽¹⁴⁾ Cedefop, 2017b.

⁽¹⁵⁾ Law No 2015:478: regulating fees linked to the approval of qualifications for lifelong learning. Regulation No 2015:545: on a qualifications framework for lifelong learning.

⁽¹⁶⁾ Legislation allows charging a fee to the organisations that want to link their qualifications to the framework (the fee is to be paid to the national agency).

⁽¹⁷⁾ <https://www.myh.se/In-English/Swedish-National-Agency-for-Higher-Vocational-Education/>

⁽¹⁸⁾ SeQF web portal: <https://www.myh.se/In-English/EQF/>

3.2.3.2. *Validation* ⁽¹⁹⁾

The opportunity for validation has been part of adult education since 2003, and is also referenced in the 2010 education Act, but there is no overall regulation of validation of prior learning. Recommendations for criteria and guidelines were set out in 2012, but application on the ground is decentralised. The Swedish national agency for higher VET (*Myndigheten för yrkeshögskolan*, MYH) coordinates and supports a national structure for validation, ensuring cooperation between authorities, education and training institutions, and labour market partners. However, the validation system remains fragmented. In 2015, a national delegation for validation was set up to develop a strategy for validation. A formal consultation on validation was launched by the government, in preparation for a bill to be presented to Parliament in 2017 ⁽²⁰⁾.

3.2.4. **Training, reskilling and upskilling vulnerable groups, jobseekers and employees**

3.2.4.1. *Retraining the unemployed*

In June 2015, an ordinance ⁽²¹⁾ was adopted by the government to encourage the unemployed aged 20 to 24 without upper secondary qualification to start or return to education and training. Studies within the so-called education contracts may be combined with work or work-experience (also see Introduction to Section 1).

In March 2017, the government submitted to parliament a proposal for a new financial support to stimulate low-qualified unemployed adults (aged 25 to 56) to begin or resume their studies ⁽²²⁾. The target group comprises the unemployed registered with the employment service and having low education levels, in need of education at primary or secondary levels to establish themselves in the labour market. The financial support is EUR 950 per month and lasts up to 50 weeks. Local authorities are responsible for operationalising the programme as part of their municipal responsibility to care for the welfare of all individuals.

⁽¹⁹⁾ Cedefop, 2017b; Cedefop et al., 2017.

⁽²⁰⁾ <http://www.valideringsdelegation.se/om-delegationen/in-english/>

⁽²¹⁾ *Förordning (2015:502) om samverkan för att minska ungdomsarbetslösheten.*
[Regulation (2015: 502) on cooperation to reduce youth unemployment]

⁽²²⁾ 2016/17:158.

3.2.4.2. *'Fast tracks' for migrants*

In 2015, the government started consultations with the social partners, the public employment service and other government agencies to create fast tracks for newly arrived immigrants, to reduce the time from arrival to entry in occupations that face skills shortages. An agreement involving employer and employee organisations assigned the public employment service responsibility for the fast tracks. Employment services at local and regional levels managed the programme, including training in vocationally-oriented Swedish, speedy validation of skills and competences, assessment/recognition of foreign qualifications, and supplementary training with a focus on occupations that face skills shortages. The public employment service also provided enterprises/organisations with support. By May 2016, 22 professions/occupations/sectors were involved. Regulations adopted in spring 2016 allowed for financial support to enterprises/organisations employing newly arrived migrants.

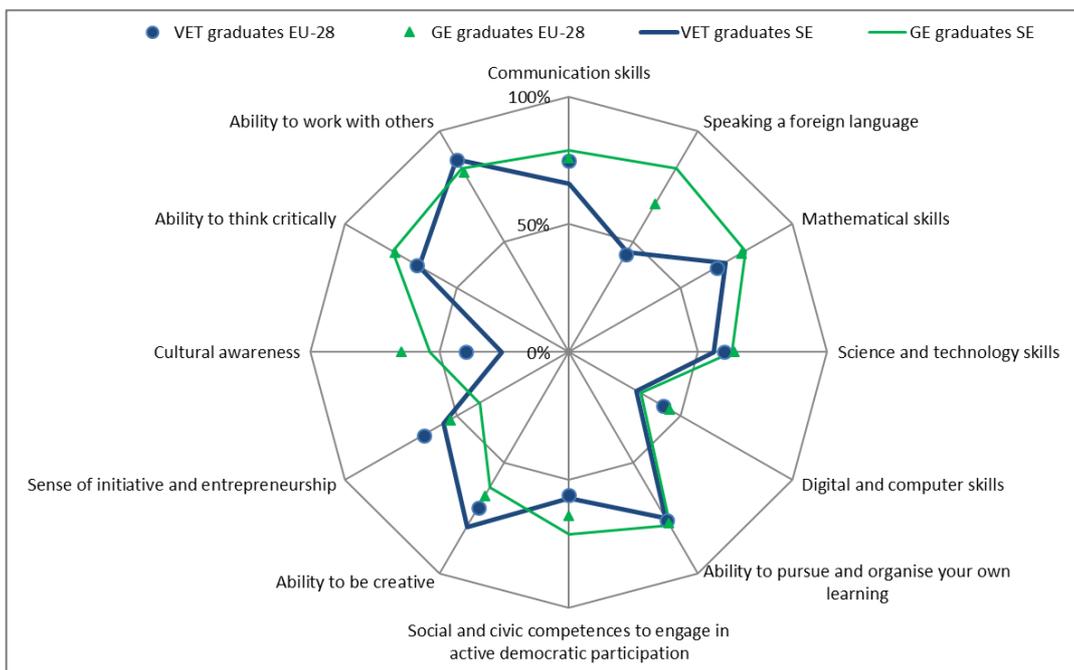
CHAPTER 4.

MTD 4 – Key competences in both IVET and CVET

Compared with general education graduates, those who completed VET programmes feel they have:

- (a) stronger (ranked by priority):
 - (i) ability to be creative;
 - (ii) sense of initiative and entrepreneurship;
 - (iii) ability to work with others;
- (b) weaker:
 - (i) foreign language speaking;
 - (ii) cultural awareness;
 - (iii) social and civic competences to engage in active democratic participation (Figure 2).

Figure 2. **Self-evaluation of acquired skills in general education and VET**



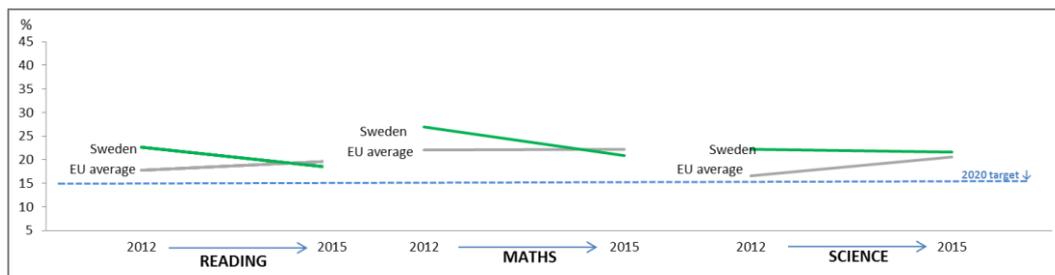
NB: GE stands for general education.

Respondents who attended upper secondary education. Interviewees were asked in summer 2016 about their overall experience in upper secondary education. Aggregated data do not take account of different types and sectors of VET and age groups of respondents.

Source: Cedefop, 2017c.

The context of key competences in 2015 was mainly characterised by a decreasing share of young low achievers in reading, maths and science compared with 2012 (Figure 3). In reading and maths, the share of low achievers in Sweden is lower than in the EU on average, where the trend is reverse.

Figure 3. **Share of 15-year-olds with low achievement in reading, maths and science**



NB: Low achievement means failing level 2 on the PISA (programme for international student assessment) scale.

Source: OECD, 2014; OECD, 2016.

As VET enrolls 38% of all upper secondary learners in the country ⁽²³⁾, this trend is likely to be reflected in the key competences trained for in VET programmes. In the 1990s, the length of upper-secondary VET programmes had been extended from two to three years, comprising one-third of general (core) subjects, including key competences. Key competences are included in curricula, diploma objectives or course syllabi. In some cases, they are cross-curricular objectives, mentioned in diploma objectives or as one of the eight upper secondary foundation (general) subjects. Some key competences are emphasised as specific learning outcomes within vocational subjects ⁽²⁴⁾.

4.1. Key competences in initial VET

For 2016-20, the country's priorities in this area, as set by the Director General for vocational education and training, are to strengthen innovation and entrepreneurship in education, and ensure basic eligibility for higher education for IVET learners.

⁽²³⁾ Calculated from Eurostat, data for 2015.

⁽²⁴⁾ For more information on key competences in VET see Skolverket (2016).

4.1.1. Integrating aesthetics and creativity

Cultural expression is included in the curricula for initial VET as a transversal competence. If relevant to the sector, it is also included in the programme objectives (called diploma goals) and as a specific learning outcome. To emphasise the importance of aesthetics and creativity, a national commission has been set up (*Gymnasieutredningen*) to investigate how a specific module or subject could be integrated into upper secondary education, including VET. As of 2017, reflections are continuing.

4.1.2. ICT strategy for education

In 2016, the national education agency presented to the government a national information and communication technology (ICT) strategy for education, including initial VET. A broad range of stakeholders were involved in developing the strategy and revising curricula: national programme councils, other national agencies, universities, ICT experts, teachers and students. Social partners have been consulted to identify industry-specific digital skills that VET learners will need to develop to stay competitive. In March 2017, the government approved new curricula to address the ICT strategy objectives. Programming skills are now embedded in primary and lower secondary education, especially through technology and mathematics. Amendments include qualification-tailored digital skills. For example, the *Child and recreation programme* stresses the responsible use of digital technology to support children. The new curricula are to be implemented as of 2017-18, also in all VET programmes.

4.1.3. Cross-curricular approach to key competences in work-based learning

In the reporting period, the national education agency has organised conferences for teaching staff in upper secondary initial VET (vocational teachers and teachers in foundation subjects such as Swedish and mathematics) to develop a cross-curricular approach to key competence development and to encourage it during work-based learning.

4.2. Key competences in continuing VET

Fast tracks for immigrant entry to the labour market were organised in 2015 (Section 3.2.4.2). Training includes key competences depending on individual needs. Modules on teaching language to newly-arrived immigrants were developed within the framework of the online training programme for workplace trainers, implemented by the committee for work-based learning in the

professional introductory period of employment (*Delegationen för arbetsplatslärande vid yrkesintroduktionsanställningar*).

Amendments to the education Act were also adopted in 2015 to make tuition of Swedish for immigrants an integrated part of municipal adult education. The aim is to integrate Swedish language learning with other training, such as initial VET modules in adult education. Since 2016, municipalities may apply for grants for this type of combined programme as well.

CHAPTER 5.

MTD 5 – Systematic initial and continuous professional development of VET teachers, trainers and mentors

The 2010 education Act states the educational requirements for being a teacher in the Swedish school system, while specifying that continuous professional development (CPD) is the responsibility of the head teacher and/or school founder based on agreements between social partners.

Action has been taken on initial training for trainers and mentors in enterprises. For 2016-20, the country's priority in this area, as set by the Director General for vocational education and training, is to increase the quality of work-based learning through developing participation of workplace trainers in training for trainers.

Since 2016, financial support to companies who train apprentices is subject to the condition that workplace trainers undergo training for trainers (Section 1.2.3). The training consists of four introductory general modules along with a supplementary module that addresses apprenticeship training. Each module deals with a specific area/theme and contains small scenes with interactive exercises (including films, for example).

Conclusion

Since 2015, Sweden has taken measures on several fronts: to increase the volume and quality of work-based learning and apprenticeship; reinforce the follow-up of student transitions to the labour market to inform VET development strategy better; further open access of all to VET and qualifications by boosting adult education, making access to higher education easier, implementing the first operational version of the Swedish national qualifications framework, and providing the unemployed and newly arrived migrants with opportunities for training. Work towards setting up legislation for validation of prior learning and work experience has also started. Initiatives were taken to foster key competences in initial and continuing VET.

The actions carried out show that the main lines of the Riga conclusions and the country's policy priorities for 2016-20 are being addressed but information currently available to Cedefop suggests issues which could benefit from further consideration:

- (a) initiatives to support entrepreneurship education;
- (b) further expanding the use of EQAVET indicators in the monitoring of IVET;
- (c) initial and continuing training of VET school teachers and trainers;
- (d) continuing professional development of trainers and mentors in enterprises.

Guidance also seems to have been overlooked over the past three years. Setting out priorities for key competences in CVET and continuous professional development of in-company trainers and mentors for the remaining period until 2020 could also be considered.

List of abbreviations

AES	adult education survey
CPD	continuing professional development
CVET	continuing vocational education and training
DGVT	Director General for vocational education and training
EQAVET	European quality assurance in vocational education and training
EQF	European qualifications framework
Eurostat	statistical office of the European Union
GDP	gross domestic product
GE	general education
ICT	information and communication technology
IFAU	Institute for Evaluation of Labour Market and Education Policy
ISCED	international standard classification of education
IVET	initial vocational education and training
MYH	<i>Myndigheten för yrkeshögskolan</i> Swedish national agency for higher VET
NEET	not in education, employment, or training
OECD	Organisation for Economic Cooperation and Development
PISA	programme for international student assessment
PPS	purchasing power standards
QANRP	quality assurance national reference point
SeQF	Swedish national qualifications framework
STEM	science, technology, engineering and math programmes
UOE	UNESCO OECD Eurostat
VET	vocational education and training

References

[URLs accessed 14.12.2017]

- Cedefop (2017a). *On the way to 2020: data for vocational education and training policies: country statistical overviews: 2016 update*. Luxembourg: Publications Office. <http://www.cedefop.europa.eu/en/publications-and-resources/publications/5561>
- Cedefop (2017b). *European inventory on national qualifications framework 2016: Sweden*. <http://www.cedefop.europa.eu/en/publications-and-resources/country-reports/sweden-european-inventory-nqf-2016>
- Cedefop (2017c). *European public opinion survey on vocational education and training*. Luxembourg: Publications Office. <http://www.cedefop.europa.eu/en/publications-and-resources/publications/5562>
- Cedefop; European Commission; ICF (2017). *2016 update to the European inventory on validation of non-formal and informal learning: country report: Sweden*. Luxembourg: Publications Office. https://cumulus.cedefop.europa.eu/files/vetelib/2016/2016_validate_SE.pdf
- European Commission (2015). *Education and training monitor 2015: Sweden*. Luxembourg: Publications Office. http://ec.europa.eu/dgs/education_culture/repository/education/tools/docs/2015/monitor2015-sweden_en.pdf
- Eurostat. *Pupils enrolled in upper secondary education by programme orientation, sex, type of institution and intensity of participation* [database]. http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=educ_uoe_enrs04&lang=en
- OECD (2014). *PISA 2012 results in focus: what 15-year-olds know and what they can do with what they know*. <https://www.oecd.org/pisa/keyfindings/pisa-2012-results-overview.pdf>
- OECD (2016). *PISA 2015: PISA results in focus*. <https://www.oecd.org/pisa/pisa-2015-results-in-focus.pdf>
- Skolverket (2016). *Key competences in vocational education and training: Sweden*. Cedefop ReferNet thematic perspectives series. https://cumulus.cedefop.europa.eu/files/vetelib/2016/ReferNet_SE_KC.pdf