



# Developments in vocational education and training policy in 2015–17

## DENMARK



Cedefop monitoring and analysis of VET policies

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# Aspects of vocational education and training context in 2015

In recent years, the proportion of upper secondary students enrolled in vocational education and training (VET) programmes in Denmark has been below the EU average: 43.3% in 2013 (European Commission, 2015, p. 9) and 42% in 2015 <sup>(1)</sup>, compared to 48.9% and 47% on average in the EU respectively in 2013 and 2015. Dropout from VET was high: the completion rate topped 52% in 2012 (European Commission, 2015, p. 9). The proportion of VET students in work-based programmes is among the highest in the EU (99.7% in 2014) (Table 1), however, the number of applicants for apprenticeships exceeds the number of places in companies, so the surplus must then be absorbed by school-based internships. The employment rate of recent upper secondary graduates is high: 81% in 2014 (European Commission, 2015, p. 9) and 79.5% in 2015 (European Commission, 2015, p. 7) compared to 70.8% and 74.1% on average in the EU respectively in 2014 and 2015, although it has been decreasing since the 2008 figure of 90.2%. Yet, Denmark had the highest proportion of adults participating in lifelong learning in the EU: 31.7% in 2014 (European Commission, 2015, p. 9) and 31.3% in 2015 against 10.7% in the EU on average in both years (Table 1).

A VET reform *Better and more attractive vocational education and training programmes* was adopted by the Danish parliament in June 2014. It came into effect in August 2015. It mainly aimed at tackling the loss of attractiveness and the issue of non-completion. Its medium-term targets were:

- (a) to increase the proportion of young people starting a VET programme from 19% in 2015 to 25% in 2020;
- (b) to reach a completion rate of 60% by 2020.

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<sup>(1)</sup> Eurostat, data for 2015.

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

Indicator label	2010		Last available year		Recent trend (per year)			
	DK <sup>f</sup>	EU <sup>f</sup>	Yr	DK <sup>f</sup>	EU <sup>f</sup>	Range	DK	EU
<b>Access, attractiveness and flexibility</b>								
IVET students as % of all upper secondary students	A	A	'14	42.2 <sup>b</sup>	48.0 <sup>b</sup> <sub>E1</sub>	'13-'14	-1.1	-0.9
IVET work-based students as % of all upper secondary IVET	A	A	'14	99.7 <sup>b</sup>	34.0 <sup>b</sup> <sub>E2</sub>	'13-'14	0.1	0.1
IVET students with direct access to tertiary education as % of all upper secondary IVET			'14	56.0	69.2 <sup>E3</sup>	'13-'14	1.0	-1.4
Employees participating in CVT courses (%)	37.0	38.0 <sup>e</sup>	'10	37.0	38.0 <sup>e</sup>			
Employees participating in on-the-job training (%)	16.0	20.0 <sup>e</sup>	'10	16.0	20.0 <sup>e</sup>			
Adults in lifelong learning (%)	32.6		'15	31.3	10.7 <sup>b</sup>	'13-'15	-0.1	0.0
Enterprises providing training (%)	91.0	66.0 <sup>e</sup>	'10	91.0	66.0 <sup>e</sup>			
Female IVET students as % of all female upper secondary students	A	A	'14	37.2 <sup>b</sup>	42.7 <sup>b</sup> <sub>E1</sub>	'13-'14	-1.6	-1.0
Employees of small firms participating in CVT courses (%)	36.0	25.0 <sup>e</sup>	'10	36.0	25.0 <sup>e</sup>			
Young VET graduates in further education and training (%)			'15	38.3 <sup>b</sup>	33.0 <sup>b</sup>	'14-'15	-6.2	-0.3
Older adults in lifelong learning (%)	26.7	5.3	'15	24.9	6.9	'10-'15	-0.3	0.4
Low-educated adults in lifelong learning (%)	23.6		'15	21.7 <sup>C</sup>	4.3 <sup>b</sup> <sub>C</sub>	'13-'15	-0.2	-0.1
Unemployed adults in lifelong learning (%)	33.6		'15	28.9	9.5 <sup>b</sup>	'13-'15	-2.3	-0.4
Individuals who wanted to participate in training but did not (%)	12.5 <sup>B</sup>	9.5 <sup>e</sup> <sub>B</sub>	'11	12.5	9.5 <sup>e</sup>			
Job-related non-formal education and training (%)	83.0 <sup>B</sup>	80.2 <sup>e</sup> <sub>B</sub>	'11	83.0	80.2 <sup>e</sup>			
<b>Skill development and labour market relevance</b>								
IVET public expenditure (% of GDP)			'13		0.56 <sup>b</sup> <sub>E4</sub>			
IVET public expenditure per student (1 000 PPS units)			'13		6.4 <sup>b</sup> <sub>E5</sub>			
Enterprise expenditure on CVT courses as % of total labour cost	0.7	0.8 <sup>e</sup>	'10	0.7	0.8 <sup>e</sup>			
Average number of foreign languages learned in IVET			'14	0.3 <sup>b</sup>	1.0 <sup>b</sup> <sub>E6</sub>	'13-'14	0.0	0.0
STEM graduates from upper secondary IVET (% of total)	A	A	'14	16.5 <sup>b</sup>	30.0 <sup>b</sup> <sub>E7</sub>	'13-'14	0.4	-0.4
Short-cycle VET graduates as % of first time tertiary education graduates			'14	17.3	9.3 <sup>E8</sup>	'13-'14	-0.3	0.4
Innovative enterprises with supportive training practices (%)	29.5	41.5 <sup>E9</sup>	'12	30.3	41.6 <sup>E9</sup>	'10-'12	0.4	0.0
Employment rate for IVET graduates (20- to 34-year-olds)			'15	87.4 <sup>b</sup>	77.2 <sup>b</sup>	'14-'15	1.3	0.3

Indicator label	2010		Last available year			Recent trend (per year)		
	DK <sup>f</sup>	EU <sup>f</sup>	Yr	DK <sup>f</sup>	EU <sup>f</sup>	Range	DK	EU
Employment premium for IVET graduates (over general stream)			'15	11.4 <sup>b</sup>	5.3 <sup>b</sup>	'14-'15	0.4	-1.0
Employment premium for IVET graduates (over low-educated)			'15	28.6 <sup>b</sup>	23.7 <sup>b</sup>	'14-'15	1.3	-0.1
Workers helped to improve their work by training (%)			'15	81.1	83.7			
Workers with skills matched to their duties (%)	59.6	55.2	'15	54.5	57.3	'10-'15	-1.0	0.4

### Overall transitions and labour market trends

Early leavers from education and training (%)	11.0	13.9	'15	7.8 <sup>c</sup>	11.0 <sup>c</sup>	'10-'15	↘ -0.6	↘ 0.6
30- to 34-year-olds with tertiary attainment (%)	41.2	33.8	'15	47.6 <sup>c</sup>	38.7 <sup>c</sup>	'10-'15	↗ 1.2	↗ 1.0
NEET rate for 18- to 24-year-olds (%)	8.3	16.6	'15	8.4	15.8	'10-'15	↘ -0.1	↘ 0.1
Unemployment rate for 20- to 34-year-olds (%)	9.7	13.1	'15	8.6	12.9	'10-'15	↘ -0.3	↗ 0.1
Employment rate of recent graduates (%)	83.5	77.4	'15	81.7 <sup>c</sup>	76.9 <sup>c</sup>	'10-'15	↘ -0.3	↘ 0.2
Adults with lower level of educational attainment (%)	24.4	27.3	'15	19.6 <sup>c</sup>	23.5 <sup>c</sup>	'10-'15	↘ -0.9	↘ 0.8
Employment rate for 20- to 64-year-olds (%)	75.8	68.6	'15	76.5	70.0	'10-'15	↗ 0.1	↗ 0.3
Employment rate for 20- to 64-year-olds with lower level of educational attainment (%)	62.6	53.4	'15	59.2 <sup>c</sup>	52.6 <sup>c</sup>	'10-'15	↘ -0.7	↘ 0.2
Medium/high-qualified employment in 2020 (% of total)			'16	76.2 <sup>d</sup>	82.8 <sup>d</sup>			

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

(<sup>B</sup>) AES (adult education survey) 2011, used as proxy for 2010 baseline.

(<sup>C</sup>) 2014 b flags in Eurostat online tables ignored on the basis of other relevant Eurostat metadata.

(<sup>D</sup>) Forecast made in 2016.

(<sup>E1</sup>) Based on 28 countries; partial information for NL.

(<sup>E2</sup>) Based on 25 countries (missing: ES, PL, RO); partial information for NL.

(<sup>E3</sup>) Based on 27 countries (missing: NL); partial information for EL, IT.

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

(<sup>E5</sup>) Based on 21 countries (missing: DK, IE, EL, FR, HR, IT, PT).

(<sup>E6</sup>) Partial information for NL.

(<sup>E7</sup>) Based on 25 countries (missing: HR, IT, UK).

(<sup>E8</sup>) Based on 23 countries (missing: BE, IE, FR, CY, UK).

(<sup>E9</sup>) Based on 22 countries (missing: DE, IE, EL, NL, SI, UK).

(<sup>b</sup>) Break after 2010, therefore baseline data not included.

(<sup>u</sup>) Eurostat: 'low reliability'.

(<sup>z</sup>) Eurostat: 'not applicable'.

(<sup>e</sup>) 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. 41.



## CHAPTER 1.

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

In 2014, VET in Denmark was faced with decreasing attractiveness due to the poor image of teaching quality and doubts about future job opportunities. The 2015 VET reform aimed to develop better and more attractive vocational education and training programmes with a special focus on work-based learning and apprenticeship. It updated the regulatory VET framework. A total cost of approximately DKK 3.6 billion is anticipated for the period 2014-20 to carry out the reform.

### 1.1. Policy priorities for 2016-20

The country's priorities in this area <sup>(2)</sup>, for 2016-20, as set by the Director General for vocational education and training (DGVV), has four key components:

- (a) more young people to choose VET, i.e. the share to be increased to 25% by 2020;
- (b) more students completing VET, i.e. the share to be increased to 60% by 2020;
- (c) VET must challenge all students to be as competent as possible;
- (d) trust and wellbeing at VET schools to be strengthened (commitment made within the European alliance for apprenticeship – EAfA).

### 1.2. Main actions taken in 2015-17

#### 1.2.1. Measures to ensure VET students find an apprenticeship place in company

The number of apprenticeship places available in company is below the number of applications. The search for a training place also sometimes starts too late. To tackle these problems, the government and the social partners agreed on the following measures:

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<sup>(2)</sup> According to a survey by Cedefop among Directors General for VET in early 2016.

- (a) companies receive a bonus when taking apprentices. If they don't take any, or not enough apprentices (compared to their number of employees), they have to pay an extra contribution to the employers' reimbursement scheme;
- (b) initial vocational education and training (IVET) students have to start applying for apprenticeships early;
- (c) VET schools are to take more responsibility for guiding students in finding an apprenticeship. If a student does not apply for any apprenticeships, the school can reduce his/her grant and even exclude him/her.

The Danish government and a number of social partners also agreed in August 2016 on a plan to ensure a sufficient level of skilled labour in the future. Employers committed to supply an additional 8 000 to 10 000 apprenticeship places by 2025 to encourage young people to consider vocational education and thereby meet the required future skills needs. This is expected to help progress towards the long-term target of the 2015 VET reform, with 30% of the youth cohort taking up VET directly after compulsory schooling by 2025.

#### **1.2.2. Integrate work-based learning in newly set up education plans**

The 2015 VET reform requires schools to integrate work-based learning in the new education plans that are being set for different basic courses. In 2016, many schools have designed and implemented education plans containing work-based learning, including case-based and problem-oriented projects.

#### **1.2.3. A new assessment tool to follow up the achievement of policy priorities**

A new assessment tool was introduced in 2016 for the government to monitor VET schools' progress with regard to the 2016-20 priorities (Section 1.1). Schools with a persistently low score have to – with support from national vocational consultants – report on how they intend to improve their performance. Schools with a high score undergo more in-depth assessment to gather knowledge about the reasons for their success, which it is expected are applicable to other schools.

#### **1.2.4. Budget redeployment affecting VET institutes**

The budget for Danish VET institutions was cut in 2016 by EUR 27.5 million, representing a 2% reduction. Similar budget cuts are going to take place every year up until 2020. In return, a specific political agreement was also reached in 2016 to allocate about EUR 17.5 million to other strategic priorities, for example digitisation.

## CHAPTER 2.

# MTD 2 – Quality assurance mechanisms in line with EQAVET and continuous information and feedback loops in IVET and CVET <sup>(3)</sup>

The quality assurance requirements are defined in the Danish vocational education and training Act <sup>(4)</sup>. At national level, the institution in charge of quality assurance is the national agency for education and quality of the Ministry of Education. It monitors VET providers by carrying out pedagogical inspections, collecting data on several quality indicators and checking conformity with legal and financial requirements. The agency is responsible for tests and exams within IVET and developing evaluation systems for IVET. It was appointed as the quality assurance national reference point (QANRP) in 2011.

A national approach for quality assurance has been devised and developed independently of European quality assurance in vocational education and training

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<sup>(3)</sup> EQAVET: European quality assurance in vocational education and training

IVET: initial vocational education and training

CVET: continuing vocational education and training

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

<sup>(4)</sup> Vocational Education Act LBK No 271, 24.3.2017.

(EQAVET). However, it is compatible with the EQAVET framework and applies to IVET, continuing vocational education and training (CVET) and related work-based learning in both cases. The national approach was formally agreed and completed by 2008, but it is continuously developing following the 2015 VET reform. Self-evaluation is considered the backbone of the Danish approach to quality assurance. The statutory order regarding vocational education and training requires all IVET providers to put in place a system for quality assurance to ensure continued quality development, and to publish results. They may choose their own quality concept. They must prepare a self-evaluation report and an annual action plan for enhanced development.

Stakeholders have an important and formal role in the national quality assurance process. At system level, the advisory council for initial vocational education and training – composed of the social partners, schools and teacher associations and other individuals appointed by the ministry – is closely engaged in policy development and objective setting, and provides advice on all aspects of IVET. The national trade committees, representing employees and employers within a sector, approve in-company offers of training places according to specific requirements, and are responsible for their inspection. Quality rules also apply to in-company training, for which the trade committees/social partners are responsible.

CVET in Denmark is understood as continuing education and training leading to a recognised vocational qualification within a certain trade or profession. CVET is generally targeted at both skilled and unskilled workers. Considering that both IVET and CVET are, typically, provided by the same institutions, the quality approach carried out is largely similar, and the national agency for education and quality monitors CVET providers in the same way as described for IVET. The advisory council for adult and continued vocational training, composed of representatives of the social partners, provides advice to the Ministry of Education on any issue related to the development of CVET, such as the development of standards and curriculum for CVET. A national self-evaluation tool *vis kvalitet* was developed in the late 1990s and came into operation in 2000. The national self-evaluation tool is a compulsory element of the CVET self-evaluation and measures participants' satisfaction with the training provided. The tool allows providers to add further questions to the standard ones.

At system level, the advisory council for initial vocational education and training is involved in the development of new VET qualifications and review of existing VET qualifications or, where appropriate, their discontinuation. The national trade committees also report annually to the Ministry of Education about any changes needed for each VET programme, such as their duration and

content. These reports, called *udviklingsredegørelser* (progress reports) are the empiric foundation for any decisions about changes to VET programmes. Finally, the national approach to quality assurance in VET includes the collection of information on IVET graduates' employability and, more specifically, on their entry into the labour market. The information is collected by the agency for information technology (IT) and learning. This agency provides the ministry and VET institutions with data. The information is also used to measure the relevance of each VET programme in relation to the labour market.

## 2.1. Quality assurance mechanisms in line with the EQAVET recommendation

For 2016-20, the country's priority in this matter, as set by the Director General for vocational education and training, consists of improving the monitoring of progress towards the key targets of VET reform, both at national level and at VET school level, and including student and company assessment of VET programmes. The monitoring system will comprise a statistical data bank, school action plans and reporting, and an annual report to the Danish parliament. Comprehensive and long-term external evaluation of the VET reform is included. Action implies extra funding and will involve social partners.

To promote quality improvement, better use of resources and better management in the public sector (KORA), the National Institute for Research, in cooperation with Denmark's Evaluation Institute (EVA), are responsible for the long-term evaluation of the 2015 reform. They have recently published their first report on *An evaluation of the basic programmes in VET* <sup>(5)</sup>, a research project that will continue until 2020.

The Ministry of Education is also finalising an inspiration catalogue for VET colleges to help them develop their 2017 action plans in line with the objectives of the 2015 VET reform. This catalogue is based on a large project conducted by two university colleges that focuses on three areas:

- (a) vocational learning environments for both young and adult learners;
- (b) transition between school periods and in-company training placements;
- (c) use of prior learning assessment in delivering VET for adults.

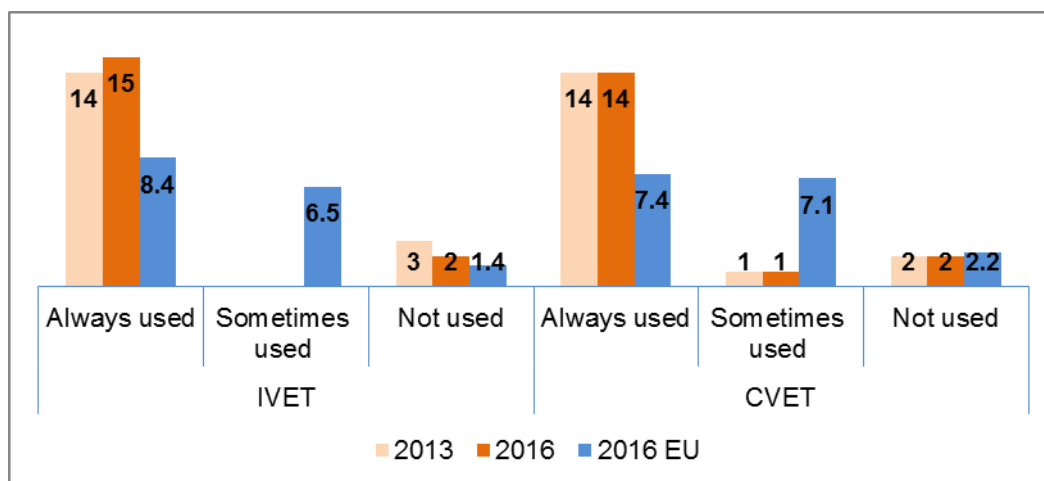
Denmark is above the EU average in IVET and CVET for the systematic use of EQAVET indicators to monitor the VET system ('always used' item in Figure

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<sup>(5)</sup> <http://www.kora.dk/media/6844178/10688-grundforloeb-paa-erhvervsuddannelserne-efter-reformen.pdf>

1). Compared to 2013, one more indicator was used in IVET in 2016, while in CVET the use of EQAVET indicators remained the same. Data on all EQAVET indicators are collected except on the share of accredited VET providers and on the funds invested for the training of teachers and trainers.

Figure 1. Use of EQAVET indicators



Key: Of the 17 indicators suggested by the 2009 EQAVET recommendation, 15 were 'always used' in IVET in 2016 in Denmark, compared to 14 in 2013 and 8.4 in the EU on average in 2016.

NB: 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.

## 2.2. Continuous information and feedback loops in IVET

For 2016-20, the country's priority in this matter, as set by the Director General for vocational education and training, consists of improving the monitoring of progress towards the key targets of the VET reform, both at national level and at VET school level, and student and company assessment of VET-programmes. Monitoring will comprise a statistical data bank, school action plans and reporting, and an annual report to the Danish parliament. Comprehensive and long-term external evaluation of the VET reform is included. Action implies extra funding and will involve social partners.

From January 2016 to April 2017, the ministry has carried out a survey to collect information on tools for school performance. The aim of the survey was to identify initiatives that have proved effective. The survey results will form the

basis of recommendations to vocational colleges to develop local initiatives to reach the objectives of the 2015 VET reform.

## 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

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

- (a) for young people:
  - (i) ensure that young people who want to acquire a VET qualification obtain the necessary skills and opportunities to access and complete VET programmes;
  - (ii) promote better access for VET graduates to higher education programmes;
- (b) for adults:
  - (i) offer more attractive and targeted VET programmes for adults aged 25+, promoting more unskilled workers to become skilled;
  - (ii) improve adult education and continuing training for unskilled and skilled labour.

### 3.2. Main actions taken in 2015-17

#### 3.2.1. Guidance

##### 3.2.1.1. *Primary school portfolio of educational choice*

A new initiative launched by the Education Ministry, the *Portfolio of educational choice*, is being set up in 2017. The portfolio aims to strengthen reflection on educational choice at primary school (*folkeskole*). From the school year 2017-18, students at the eighth grade of compulsory education must have their training plan attached to a personal portfolio showing how they have taken advantage of the guidance received. It must be clear from the portfolio how the student, based on the guidance received, has made a systematic reflection on their own educational wishes on the basis of self-awareness, knowledge and experiences.



#### 3.2.1.2. *My competence folder for adults*

A new version of the RPL (recognition of prior learning) tool *My competence folder (Min kompetencemappe)* has been launched, aiming to give Danish citizens an overview of their competences when applying for education courses or jobs.

### 3.2.2. **Permeability and flexibility**

#### 3.2.2.1. *Simplifying the access to VET*

The VET system has been restructured and made simpler. Twelve previously existing access channels were merged into four <sup>(6)</sup>. A new study strand was established in compulsory school at 10th grade (EUD 10) to help learners prepare for meeting admission requirements for VET. It is aimed at pupils who are motivated to apply for VET, but either do not meet entry requirements or are uncertain whether it is the right choice for them <sup>(7)</sup>.

#### 3.2.2.2. *Extending the new VET pathway EUX to more VET programmes*

Combined vocational and general upper secondary programmes (EUX) integrate VET and general education at upper secondary level, offering VET qualifications and access to general tertiary education.

#### 3.2.2.3. *New VET programme for adults: EUV (erhvervsuddannelse for voksne)*

EUV is a new VET programme for unskilled adults. It builds on the work experience and prior learning which the adult already possesses. EUV gives adults with at least two years of relevant work experience the option to take part in VET equivalent education without having to follow a basic programme or undertake an internship. The programme is state-funded. Its cost was DKK 26 million in 2015 and DKK 70 million in 2016.

### 3.2.3. **Transparency, recognition, validation**

#### 3.2.3.1. *National qualification framework <sup>(8)</sup>*

Setting up the eight-level framework has been a gradual process, starting in June 2009 when the proposal for the framework was adopted by the Ministry of

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<sup>(6)</sup> Care, health and pedagogy; office, trade and business service; food, agriculture and experiences; technology, construction and transportation.

<sup>(7)</sup> Minimum of 30% must be in cooperation with a VET college.

<sup>(8)</sup> Cedefop, 2017b.

Education, the Ministry of Science, Technology and Innovation, the Ministry of Culture and the Ministry of Economic and Business Affairs. The Danish national qualifications framework for lifelong learning (NQF) was referenced to the European qualifications framework (EQF) in May 2011. NQF and EQF levels have been included in most qualifications and qualification supplements since 2013.

In 2015-17, NQF and EQF levels have continued to be gradually added to qualifications and certificates. The NQF and the levelling of qualifications thus became a visible part of national education databases. The framework was brought to the operational stage and formed an integrated part of the Danish education and training landscape. Two (interconnected) websites were also set up: the NQF.DK website <sup>(9)</sup>, targeted at the international public; and the UG.DK website <sup>(10)</sup>, which provides the national public with comprehensive information on qualifications, programmes, and access.

#### 3.2.3.2. *Validation* <sup>(11)</sup>

A legal framework for the validation of prior learning has been in place since 2007. The 2015 VET reform introduced the new VET for adults (EUV) programme for 25-year-olds or older, building on the validation of prior formal, non-formal and informal learning and work experience (Section 3.2.2.3). In spring 2016, the government launched a number of new initiatives targeting refugees. These promoted the use of validation and recognition of refugees' skills and competences (Section 3.2.4) and included a new web portal on existing measures and tools, based on a tripartite agreement with the social partners and a bipartite agreement with the municipalities in Denmark. Nevertheless, the use of validation arrangements by stakeholders remains low.

#### **3.2.4. Training, reskilling and upskilling vulnerable groups**

A new vocational programme for newly arrived migrants (new basic integration programme, IGU) has been agreed between the government and the social partners, and started in July 2016. It is a dual training programme of 24 months duration (including a 20-month education programme and four months of practical training in a company). The newly arrived migrants who are following this training receive a minimum salary. Access to the Danish unemployment

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<sup>(9)</sup> [www.nqf.dk](http://www.nqf.dk)

<sup>(10)</sup> <https://www.ug.dk/>

<sup>(11)</sup> Cedefop, 2017b; Cedefop et al., 2017.

benefit system is granted on successful completion of the programme. Companies employing and training newly arrived migrants receive financial incentives. In March 2017, 268 people were enrolled in the IGU programme.

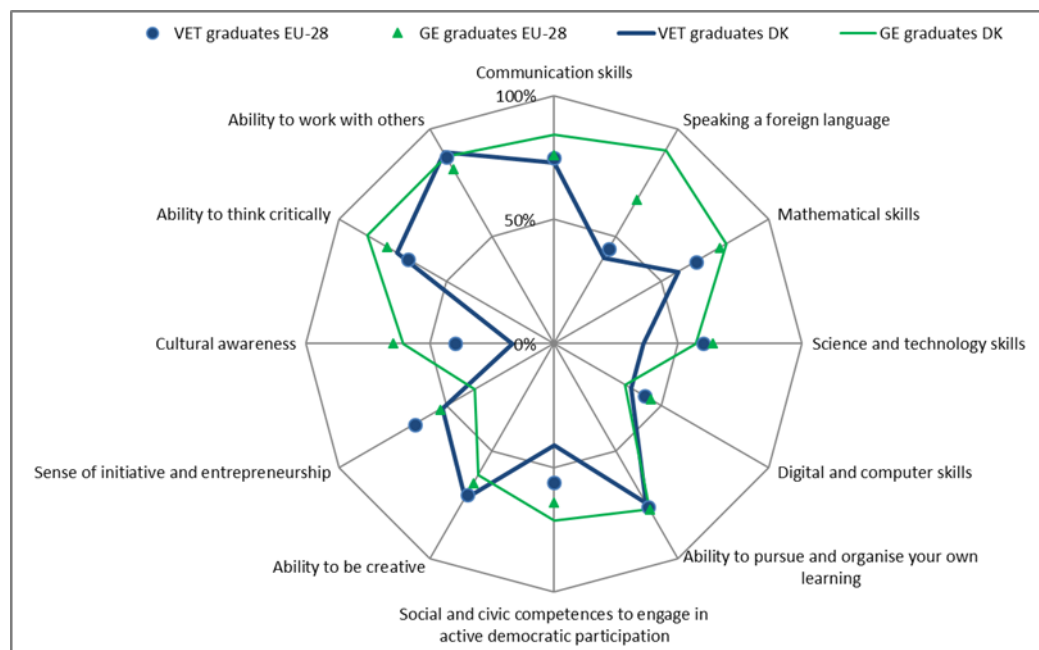
## CHAPTER 4.

# MTD 4 – Key competences in both IVET and CVET

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

- (a) stronger:
  - (i) sense of initiative and entrepreneurship;
  - (ii) ability to be creative;
  - (iii) ability to work with others;
- (b) weaker:
  - (i) foreign language speaking;
  - (ii) cultural awareness;
  - (iii) social and civic competences (Figure 2Figure 1).

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



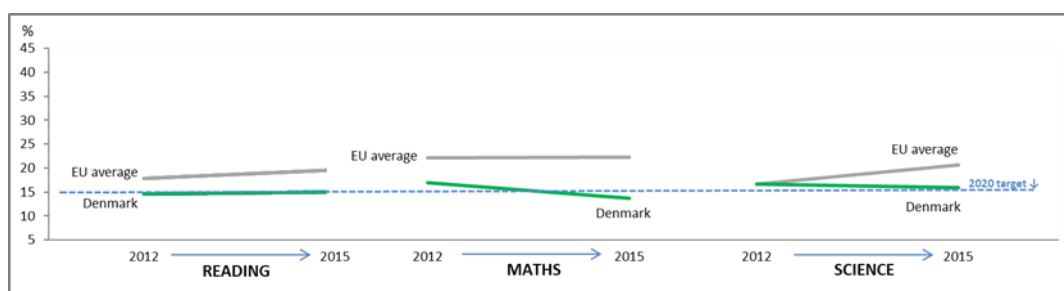
NB: GE: general education.

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 maths and science and similar levels for reading compared with 2012 (Figure 3). In addition, the share of low achievers in Denmark is much smaller than in the EU average, where the trend is going in the reverse direction.

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 42% of all upper secondary learners in the country <sup>(12)</sup>, this trend is likely to be reflected in the key competences trained for in VET programmes. Key competences are integrated into the entire VET system, from the general objectives in the legal framework for VET to the single subjects in the basic and main programmes <sup>(13)</sup>.

#### 4.1. Policy priorities for 2016-20

For 2016-20, the country's priority in this area, as set by the Director General for vocational education and training, consists of improving the proficiency of VET learners in key competences and vocational skills to make the best use of learning and to meet higher education requirements.

<sup>(12)</sup> Calculated from Eurostat, data for 2015.

<sup>(13)</sup> For more information see Andersen and Kruse, 2016.

## 4.2. Main actions taken in 2015-17

The 2015 VET reform has changed how key competences are promoted in VET. It set up two basic programmes of 20 weeks each: basic programme 1 (*grundforløb 1* – GF1) and basic programme 2 (*grundforløb 2* – GF2). Both programmes focus on key competences, but in different ways. GF1 is designed mainly to give a basic introduction to vocational study, including workplace culture, processes and methods, society and health, Danish and various elective subjects. It is only meant for students entering VET directly from compulsory schooling. GF2 is organised as a specific training course, depending on which education direction the student has chosen. It contains basic subjects and elective subjects. The basic subjects that include key competences have played a more significant role since the reform <sup>(14)</sup>.

As part of the reform, the strategy for improving key competences in VET supports learners in achieving the highest possible level. Measures include:

- (a) admission requirements to VET from compulsory schooling have been raised for Danish and maths;
- (b) VET learners are now offered higher levels of communication and ICT skills;
- (c) following a pilot, EUX is now fully operational;
- (d) the Danish Evaluation Institute has piloted the strategy at the digital VET college and published results online that have given VET colleges the inspiration to progress towards addressing the strategic priorities <sup>(15)</sup>;
- (e) teachers' vocational and pedagogical competences are being strengthened to raise attainment levels in key competences.

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<sup>(14)</sup> Ibid.

<sup>(15)</sup> Managing and setting up a common pedagogical-didactical foundation; knowledge sharing; a new way of designing teaching; stronger interplay between learning in VET colleges and learning in enterprises.

## CHAPTER 5.

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

Approximately 8 000 VET teachers work in IVET and adult learning in around 100 VET colleges. In 2008, VET teacher training was upgraded. Until 2010, VET staff were required to have IVET qualifications in the field they were going to teach, plus five years of relevant and recent work experience and continuing training. Following their appointment, they had to attend training in pedagogy to combine theory and practice. In 2010, entry requirements for studying VET pedagogy (pedagogical diploma programme, DEP) were raised considerably at bachelor/diploma level. Within three years of starting their teaching career, they were also expected to acquire general knowledge at secondary level in two or three general subject areas like Danish, mathematics, natural science or foreign languages. DEP also includes teaching adults and groups at risk.

### 5.1. Initial training for teaching/training staff in VET schools

For 2016-20, the country's priority in this area, as set by the Director General for vocational education and training, is that more teachers employed after 2010 obtain pedagogical competences at diploma level within four years of starting employment, as opposed to six years previously.

Following the reform, legislation requires that VET teachers start their studies in vocational pedagogy at the latest one year after having been employed, and complete it at least four years after recruitment at bachelor/diploma level (60 ECTS – European credit transfer and accumulation system, EQF level 6). Four out of six modules are mandatory and focus on teaching and learning, planning and didactics, pedagogical science theory and a final thesis. The two elective modules include digital technologies. It is also possible to take final exams in pedagogy for at-risk-groups.

## 5.2. Initial training for trainers and mentors in enterprises

Social partners are responsible for the company-based part of apprenticeship training and the qualifications requirements of in-company trainers. They have decided not to have compulsory training for trainers. However, trainers can follow 10-day or six-week courses of public labour market training leading to formal qualifications at EQF levels 2 to 5, such as for coaching or pedagogical guidance. These courses are primarily used in the social and healthcare sector.

## 5.3. Continuing professional development for teaching/training staff in VET schools

For 2016-20, the country's priority in this area, as set by the Director General for vocational education and training, is that all VET teachers obtain 10 ECTS VET pedagogical qualifications at diploma level by 2020 (NQF 5) in a way that positively influences their teaching.

This continuing professional development (CDP) requirement is in line with the higher qualification requirement for newly recruited VET teachers. It is based on a competence needs analysis carried out by the ministry to accommodate the goals of the 2015 VET reform. Training focuses on:

- (a) learning processes and learners' progression;
- (b) related classroom management;
- (c) planning, differentiated teaching;
- (d) practice-related teaching and helping learners to link college-based and company-based learning;
- (e) activating learners;
- (f) use of ICT in teaching and learning.

Training modules are needs- and practice-oriented. More recently, the programme has been complemented by a module on entrepreneurship and an elective on practice-based-teaching. It also includes training to support disadvantaged learners. Teachers can also complete a qualification in teaching Danish as a second language.

Training is provided by universities but takes place at VET colleges. Training outcomes are to be assessed by the university/ university college. Estimates have suggested that approximately 64% of all VET teachers would need to participate in this type of training.

Responsibility for VET teachers' continuing professional development has been decentralised. Following the 2015 VET reform, every college needs to draw



up competence development plans for all teaching staff. These plans are developed for the staff as a whole, and individually, with their agreement <sup>(16)</sup>. For competence development in pedagogy, managers choose what is needed for their college.

The education ministry encourages VET colleges to cooperate with local enterprises to secure teacher placements. Between February 2015 and February 2016, a pilot conducted by the Metropolitan University College and the Danish Technological Institute with 23 VET institutions aimed to understand how internships could benefit VET teachers, such as through research and developmental projects.

#### 5.4. Continuing professional development for trainers and mentors in enterprises

CPD of in-company trainers is the responsibility of their employers.

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<sup>(16)</sup> The main Ministerial Order on VET, Paragraph 12, points 6 and 7:  
<https://www.retsinformation.dk/Forms/R0710.aspx?id=179825#id6e3a034a-ba81-4375-96c5-3b3d26278be9>

## Conclusion

Since 2015, Denmark has taken action to enhance work-based learning and apprenticeships, ensuring companies' involvement and reinforcing policy governance and funding. Quality assurance mechanisms and information systems have been strengthened to improve the development of IVET provision. Initiatives have also been taken to make VET and VET qualifications more accessible to all, in particular through measures improving guidance, increasing permeability and providing opportunities to newly arrived migrants and refugees. Development of key competences was also supported. A reform of the initial and continuing training of VET school teachers was undertaken.

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. Yet, information available to Cedefop at the time suggests that an issue which could benefit from further consideration is the support given to entrepreneurship education. Consideration could perhaps also be given to making the differentiated actions specifically targeted at adults more visible, and to the related priorities for the remaining period until 2020, particularly the development of key competences and the monitoring of training and work transitions (information and feedback loops). Priorities for the initial and continuing training of in-company trainers and mentors could also be developed.

## List of abbreviations

AES	adult education survey
CPD	continuing professional development
CVET	continuing vocational education and training
DEP	pedagogical diploma programme
DGVT	Director General for vocational education and training
EaFA	European alliance for apprenticeship
ECTS	European credit transfer and accumulation system
EQAVET	European quality assurance in vocational education and training
EQF	European qualifications framework
Eurostat	statistical office of the European Union
EUV	VET for adults
EUX	combined vocational and general upper secondary programme
EVA	Denmark's Evaluation Institute
GDP	gross domestic product
GE	general education
GF1	<i>grundforløb 1</i> basic programme 1
GF2	<i>grundforløb 2</i> basic programme 2
IGU	new basic integration programme
ISCED	international standard classification of education
IT	information technology
IVET	initial vocational education and training
KORA	National Institute for Research and Analysis
NEETs	not in education, employment, or training
NQF	national qualifications framework
OECD	Organisation for Economic Cooperation and Development
PISA	programme for international student assessment
PPS	purchasing power standards
QANRP	quality assurance national reference point
RPL	recognition of prior learning
STEM	science, technology, engineering and math programmes
UOE	UNESCO OECD Eurostat
VET	vocational education and training

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