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VOCATIONAL EDUCATION  
AND TRAINING IN EUROPE

# NORWAY

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## SYSTEM DESCRIPTION



VET IN EUROPE 2022

Cedefop; Norwegian Directorate for Higher Education and Skills (2022). *Vocational education and training in Europe - Norway: system description* [From Cedefop; ReferNet. Vocational education and training in Europe database]. <https://www.cedefop.europa.eu/en/tools/vet-in-europe/systems/norway-u2>

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## CHAPTER 1.

# Summary of main elements and distinctive features of VET

### Summary of main elements ( 1 )

The Ministry of Education and Research has overall responsibility for education and training at all levels. In upper secondary vocational education and training (VET), both curricula and the VET system structure are laid down in national regulations, and providers are required to comply with them. There is cooperation on upper secondary and tertiary VET, between education and training authorities and the social partners.

The regional county authorities are responsible for general education and VET provision, distributing VET financing provided by the State budget and ensuring apprenticeship placement and supervision.

All young people completing compulsory schooling have a statutory right to 3 years of upper secondary education. Half of them choose between 10 VET programmes.

Upper secondary VET is conducted both in schools and in public and private enterprises. The county authorities must approve training establishments. The main model includes 2 years in school, where students also participate in practical training in workshops and enterprises, followed by 2 years of formalised apprenticeship (training and productive work) in enterprises. The first year of training consists of an introduction to the vocational programme. During the second year, VET students choose specialisations and courses are more trade-specific but core general education subjects are also included. Some trades and crafts follow other models, with 3 years in school or 1 year in school followed by 3 years of formalised apprenticeship.

In the main model, upper secondary VET (2+2 years) is completed with a practical-theoretical trade or journeyman examination (*Fagprøve* or *svenneprøve*) leading to an EQF level 4 qualification: a trade certificate (*Fagbrev*) for industrial and service trades or a journeyman certificate (*Svennebrev*) for traditional crafts. The 10 programme areas offer 197 different certificates. Some crafts are for 3 years of school-based learning, completed by a final exam and EQF level 4 qualification.

There are many possible routes to higher academic education via upper secondary VET. With a trade or journeyman certificate, the options to higher academic education are:

- via a 1-year bridging course in core subjects (*påbyggingsår*);
- direct admission to certain specially designed bachelor programmes (*Y-veien*).

Options without a trade or journeyman certificate are:

- 5 years' experience gained in work and/or education and passing courses in core subjects (for those aged 23 or older);
- recognition of relevant formal, informal, and non-formal learning for people aged 25 or older, who do not meet general entrance requirements;
- completing the bridge course in core subjects after completing the first 2 years of a VET programme;
- successfully completed 2-year full-time higher vocational education, 120 credits (EQF5).

Legal rights shape VET and contribute to making vocational skills visible. Those over 25 are entitled to upper secondary education or training, adapted to their needs and life situation.

Adults also have a right to have prior learning assessed towards national curricula, which may result in exemption from parts of training. The experience-based trade certification scheme enables adults to sit a trade or journeyman examination on proof of sufficient relevant practice. The candidate must demonstrate comprehensive experience in the trade or craft, normally over a minimum of 5 years.

VET colleges offer a wide range of vocational programmes at EQF level 5 for students with a trade or journeyman certificate. Some programmes at this level are also accessible for students with upper secondary general education.

Master craftsperson programmes are for holders of a relevant trade or journeyman certificate with several years' work experience. The programmes are provided by vocational colleges (*Fagskoler*), both private and public, and combine general business management, marketing, and vocational theory.

### **Distinctive features ( 2 )**

Norway has a long-standing tradition of close national and regional cooperation between education authorities and the social partners. National cooperation is organised in the National Council for VET (*Samarbeidsrådet for yrkesopplæring*, SRY), 10 vocational training councils (*Faglige råd*), one for each programme area, and national appeal boards (*Klagenemnder*). Regional cooperation involves county vocational training boards (*Yrkesopplæringsnemnder*) and examination boards (*Prøvene mnder*).

Tripartite cooperation aims to ensure that training provided to Norwegian VET learners meets labour market and skill needs. It informs changes in the VET structure, curriculum development, regional structure and volume of VET provision, the framework of examinations leading to trade or journeyman certificates, and quality control at all levels. At EQF level 5, the social partners participate in the National Council for higher VET (*Nasjonalt fagskoleråd*). In higher education, institutions are requested to set up a consultative council for cooperation with social partners.

Norway has a unified education and training system including both VET and general education as equal. Most education at upper-secondary level is provided by public schools. Young people have a right to attend upper secondary education, and most choose to do so. They also have the right to enrol in one of their top three choices.

More than half of trade and journeyman certificates are awarded to people over 25.

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- [1] Cedefop (2021). Spotlight on VET – 2020 compilation: vocational education and training systems in Europe. Luxembourg: Publications Office. <http://data.europa.eu/doi/10.2801/667443> [accessed 27.8.2021]
- [2] Cedefop (2021). Spotlight on VET – 2020 compilation: vocational education and training systems in Europe. Luxembourg: Publications Office. <http://data.europa.eu/doi/10.2801/667443> [accessed 27.8.2021]
- [1] Based on Cedefop (2021). Spotlight on VET – 2020 compilation: vocational education and training systems in Europe. Luxembourg: Publications Office. <http://data.europa.eu/doi/10.2801/667443>
- [2] This part is based on information collected by Fondazione Brodolini under Cedefop's service contract No 2020/0140. Cedefop (2021). Spotlight on VET – 2020 compilation: vocational education and training systems in Europe. Luxembourg: Publications Office. <http://data.europa.eu/doi/10.2801/667443>
- [1] Based on Cedefop (2021). Spotlight on VET – 2020 compilation: vocational education and training systems in Europe. Luxembourg: Publications Office. <http://data.europa.eu/doi/10.2801/667443>

- [2] Based on Cedefop (2021). Spotlight on VET – 2020 compilation: vocational education and training systems in Europe. Luxembourg: Publications Office. <http://data.europa.eu/doi/10.2801/667443>
- [1] Based on Cedefop (2021). Spotlight on VET – 2020 compilation: vocational education and training systems in Europe. Luxembourg: Publications Office. <http://data.europa.eu/doi/10.2801/667443>
- [2] Based on Cedefop (2021). Spotlight on VET – 2020 compilation: vocational education and training systems in Europe. Luxembourg: Publications Office. <http://data.europa.eu/doi/10.2801/667443>
- [2] Ministry of Education, Youth and Sports [Ministerstvo školství, mládeže a tělovýchovy – MŠMT]. [www.msmt.cz](http://www.msmt.cz)
- [3] Absolutorium is a type of graduate examination, consisting of an exam in theoretical vocational subjects and a foreign language, as well as submitting and defending a graduate thesis which also contains elements of the experience gained through the work placement of the learner. It is organised only by tertiary professional schools and conservatories (higher VET) and leads to a specialist's diploma (DiS.).
- [4] 3-year school-based VET programmes (EQF level 3) and 4-year VET and lyceum programmes (EQF level 4) can be offered as shortened programmes, provided that the school director considers that the learner has completed a programme, at the same EQF level, in a relevant field. Shortened programmes do not lead to a higher EQF level.
- [5] Absolutorium is a type of graduate examination, consisting of an exam in theoretical vocational subjects and a foreign language, as well as submitting and defending a graduate thesis which also contains elements of the experience gained through the work placement of the learner. It is organised only by tertiary professional schools and conservatories (higher VET) and leads to a specialist's diploma (DiS.).
- [1] Cedefop (2021). Spotlight on VET – 2020 compilation: vocational education and training systems in Europe. Luxembourg: Publications Office. <http://data.europa.eu/doi/10.2801/667443>
- [2] Cedefop (2021). Spotlight on VET – 2020 compilation: vocational education and training systems in Europe. Luxembourg: Publications Office. <http://data.europa.eu/doi/10.2801/667443>
- [1] Cedefop (2021). Spotlight on VET – 2020 compilation: vocational education and training systems in Europe. Luxembourg: Publications Office. <http://data.europa.eu/doi/10.2801/667443>
- [3] Based on Cedefop (2021). Spotlight on VET – 2020 compilation: vocational education and training systems in Europe. Luxembourg: Publications Office. <http://data.europa.eu/doi/10.2801/667443>
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- [2] Based on Cedefop (2021). Spotlight on VET – 2020 compilation: vocational education and training systems in Europe. Luxembourg: Publications Office. <http://data.europa.eu/doi/10.2801/667443>
- [1] Based on Cedefop (2021). Spotlight on VET – 2020 compilation: vocational education and training systems in Europe. Luxembourg: Publications Office. <http://data.europa.eu/doi/10.2801/667443>
- [2] As per Amendments to the CROQF Act (Official Gazette No 20/2021), abbreviation 'st' is added to professional qualifications at CROQF level 6 to differentiate these from university qualifications at the same level, indicated by abbreviation 'sv'. 'St' is abbreviated from

stručni (professional), and 'sv' from sveučilišni (university).

- [3] As per Amendments to the CROQF Act (Official Gazette No 20/2021), abbreviation 'st' is added to professional qualifications at CROQF 7 to differentiate these from university qualifications at the same level, indicated by abbreviation 'sv'. 'St' is abbreviated from stručni (professional), and 'sv' from sveučilišni (university).
- [4] Based on Cedefop (2021). Spotlight on VET – 2020 compilation: vocational education and training systems in Europe. Luxembourg: Publications Office.  
<http://data.europa.eu/doi/10.2801/667443>
- [1] Based on Cedefop (2021). Spotlight on VET – 2020 compilation: vocational education and training systems in Europe. Luxembourg: Publications Office.  
<http://data.europa.eu/doi/10.2801/667443>
- [2] Based on Cedefop (forthcoming). Spotlight on VET – 2020 compilation: vocational education and training systems in Europe. Luxembourg: Publications Office.  
<http://data.europa.eu/doi/10.2801/667443>
- [1] Cedefop (2021). Spotlight on VET – 2020 compilation: vocational education and training systems in Europe. Luxembourg: Publications Office.  
<http://data.europa.eu/doi/10.2801/667443>
- [2] Cedefop (2021). Spotlight on VET – 2020 compilation: vocational education and training systems in Europe. Luxembourg: Publications Office.  
<http://data.europa.eu/doi/10.2801/667443>
- [3] Based on Cedefop (2021). Spotlight on VET – 2020 compilation: vocational education and training systems in Europe. Luxembourg: Publications Office.  
<http://data.europa.eu/doi/10.2801/667443>
- [1] Based on Cedefop (2021). Spotlight on VET – 2020 compilation: vocational education and training systems in Europe. Luxembourg: Publications Office.  
<http://data.europa.eu/doi/10.2801/667443>
- [2] Consumer Protection was added to the portfolio of the Ministry for Tourism in December 2020. Its designation is Ministry for Tourism and Consumer Protection (MTCP).  
<https://tourism.gov.mt/en/Pages/MinistryforTourismandConsumerProtection.aspx>
- [3] About the reform at secondary level see Ministry for Education and Employment (2016). My Journey – achieving through different paths. <http://www.myjourney.edu.mt/wp-content/uploads/2017/02/MY-JOURNEY-BOOKLET-WEB-UPLOAD-24FEB17.pdf> . See also: Cedefop; ReferNet (2021). VET REF: developments in vocational education and training policy database. [Unpublished].
- [4] Based on Cedefop (2021). Spotlight on VET – 2020 compilation: vocational education and training systems in Europe. Luxembourg: Publications Office.  
<http://data.europa.eu/doi/10.2801/667443>
- [7] The Malta Chamber of Commerce, Enterprise and Industry is the independent body representing companies from all economic sectors. <https://www.maltachamber.org.mt/>
- [8] Malta Employers Association (MEA) The MEA is a constituted body that represents employers from all sectors of industry and commerce in Malta.  
<https://www.maltaemployers.com/>
- [1] Based on Cedefop (2021). Spotlight on VET – 2020 compilation: vocational education and training systems in Europe. Luxembourg: Publications Office.  
<http://data.europa.eu/doi/10.2801/667443>
- [2] Based on Cedefop (2021). Spotlight on VET – 2020 compilation: vocational education and training systems in Europe. Luxembourg: Publications Office.  
<http://data.europa.eu/doi/10.2801/667443>

## CHAPTER 2.

# Main challenges and policy responses

Skilled workers with VET qualifications will play an important role in the reorganisation of the Norwegian economy. Figures from the Confederation of Norwegian Enterprise (NHO) show that many enterprises lack such employees and consequently lose business. Statistics Norway (SSB) estimates a shortage of almost 100 000 skilled workers in 2035.

The VET system is becoming more digital, labour market relevant and attractive. Initiatives aimed at increasing the number of students who complete their education, as well as teacher competences including digital, are in process. About 50 measures from the white paper Skilled workers for the future (*Fagfolk for fremtiden*) have been implemented, increasing VET attractiveness and labour market relevance. A new programme structure in upper secondary VET, including new curricula, was implemented from 2020/21.

Important changes took place in 2020/21:

- several suggestions on changes for a better upper-secondary education, both general and VET ( 3 );
- a proposal for a new Education Act for primary and upper secondary education was presented ( 4 );
- the Government has suggested several measures to ensure education and work during COVID-19;
- it is a priority to increase the digital teaching competence and establish more study places in higher vocational education;
- a regulation for higher vocational education (EQF 5) was adopted ( 5 );
- a new strategy for higher vocational education (EQF 5);
- measures for increased completion rates in upper secondary were approved by the Government ( 6 ).

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[3] Cedefop (2021). Spotlight on VET – 2020 compilation: vocational education and training systems in Europe. Luxembourg: Publications Office.  
<http://data.europa.eu/doi/10.2801/667443> [accessed 27.8.2021]

[3] This part is based on information collected by Fondazione Brodolini under Cedefop's service contract No 2020/0140.  
Cedefop (2021). Spotlight on VET – 2020 compilation: vocational education and training systems in Europe. Luxembourg: Publications Office.  
<http://data.europa.eu/doi/10.2801/667443>

[3] There is no final version of this document up to date. A draft strategy for 2019-21 is available on [www.mon.bg](http://www.mon.bg). VET priorities are defined under Priority area 7 in the Strategic Framework for development of Education, Training and Learning (2021-2030) which was adopted by the Council of Ministers in February 2021. The strategy is available at the education ministry website <https://mon.bg/bg/143>

[4] Based on Cedefop (2021). Spotlight on VET – 2020 compilation: vocational education and training systems in Europe. Luxembourg: Publications Office.  
<http://data.europa.eu/doi/10.2801/667443>

[3] Based on Cedefop (2021). Spotlight on VET – 2020 compilation: vocational education and training systems in Europe. Luxembourg: Publications Office.  
<http://data.europa.eu/doi/10.2801/667443>

[7] Absolutorium is a type of graduate examination, consisting of an exam in theoretical

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- [8] Národní soustava kvalifikací: [www.narodni-kvalifikace.cz](http://www.narodni-kvalifikace.cz).
- [3] Cedefop (2021). Spotlight on VET – 2020 compilation: vocational education and training systems in Europe. Luxembourg: Publications Office.  
<http://data.europa.eu/doi/10.2801/667443>
- [4] BMBF website on the programme (German only)  
<https://www.bmbf.de/de/bundesprogramm-ausbildungsplaetze-sichern-13371.html>
- [4] Based on Cedefop (2021). Spotlight on VET – 2020 compilation: vocational education and training systems in Europe. Luxembourg: Publications Office.  
<http://data.europa.eu/doi/10.2801/667443>
- [3] Based on Cedefop (2021). Spotlight on VET – 2020 compilation: vocational education and training systems in Europe. Luxembourg: Publications Office.  
<http://data.europa.eu/doi/10.2801/667443>
- [5] Based on Cedefop (2021). Spotlight on VET – 2020 compilation: vocational education and training systems in Europe. Luxembourg: Publications Office.  
<http://data.europa.eu/doi/10.2801/667443>
- [9] The registration numbers of IVET learners for the years 2005-20 are extracted from: <https://mms.is/tolfraediupplysingar> [Accessed: 14.9.2021]. The number for the year 2021 is extracted from a forthcoming update of the website shown in the previous link (containing PBI Statistics on upper secondary schools in the autumn of 2021)).
- [3] Based on Cedefop (2021). Spotlight on VET – 2020 compilation: vocational education and training systems in Europe. Luxembourg: Publications Office.  
<http://data.europa.eu/doi/10.2801/667443>
- [4] Based on Cedefop (2021). Spotlight on VET – 2020 compilation: vocational education and training systems in Europe. Luxembourg: Publications Office.  
<http://data.europa.eu/doi/10.2801/667443>
- [11] Based on Cedefop (2021). Spotlight on VET – 2020 compilation: vocational education and training systems in Europe. Luxembourg: Publications Office.  
<http://data.europa.eu/doi/10.2801/667443>
- [3] NOU 2019:25
- [4] NOU 2019:23
- [5] Based on Cedefop (2021). Spotlight on VET – 2020 compilation: vocational education and training systems in Europe. Luxembourg: Publications Office.  
<http://data.europa.eu/doi/10.2801/667443>

## CHAPTER 3.

# External factors influencing VET

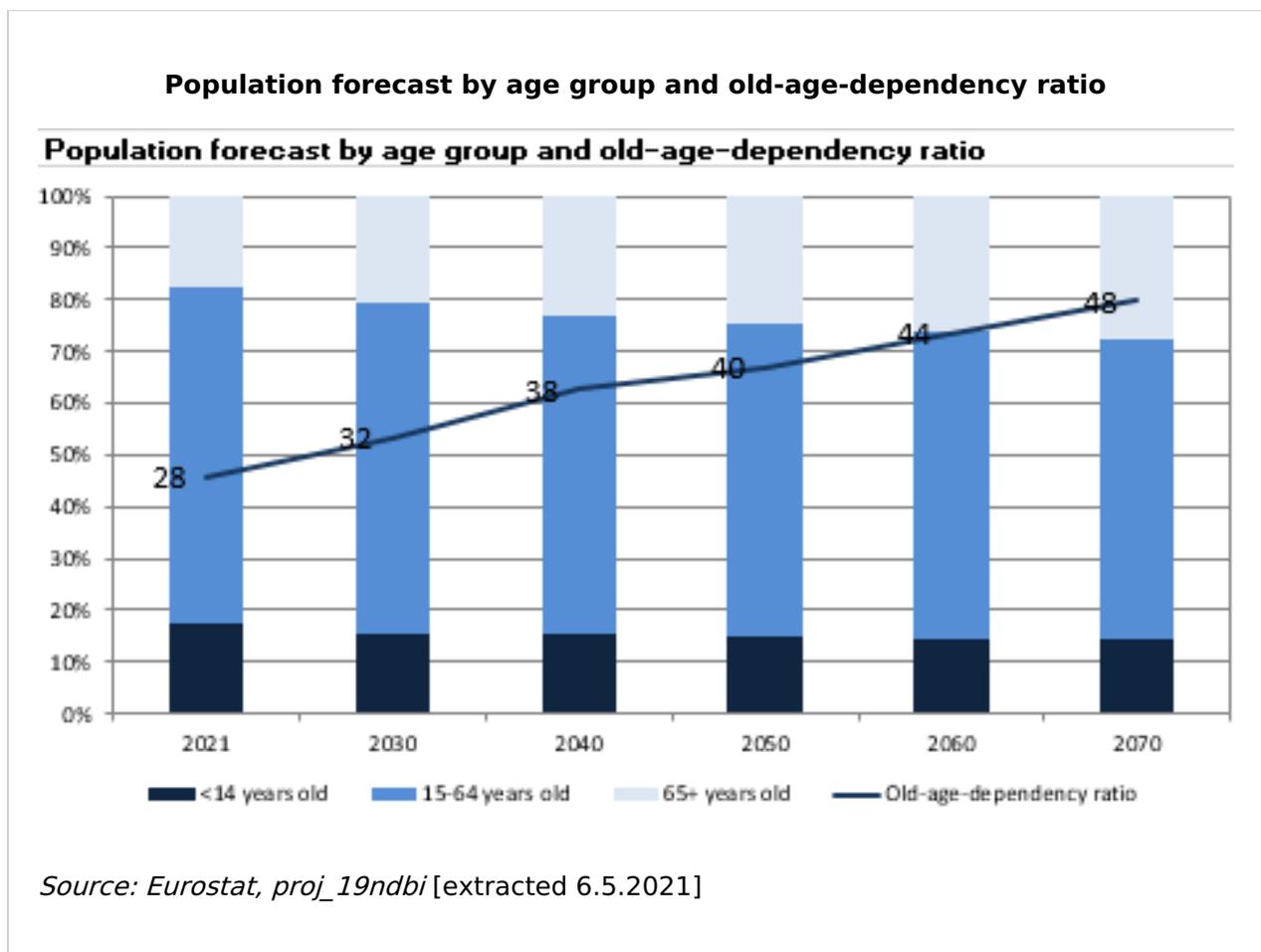
## 3.1 Demographics

Population in 2021: 5 398 804 (1st Quarter) ( 7 ).

It increased since 2013 by 6.8% ( 8 ) due to positive growth and migration.

In 2021, the age group 67+ is 15.8%, an increase of 1.0 percentage points (pp) from 2017, and is expected to increase to 23.2% by 2040, 26.2% by 2060, and 27.7% by 2060 ( 9 ).

The old-age-dependency ratio in Norway is expected to increase:



The demographic has an impact on VET. More people move into the cities, where it is more common to choose general education. In rural areas VET is often preferred ( 10 ).

In Oslo 30.5% of the learners participate in VET. In Nordland 59% of the learners in upper secondary school participate in VET ( 11 ).

At the beginning of 2020, the share of immigrants and those born in Norway to immigrant parents increased by 3.7% from 2019, representing 18.24% of the total population. 37.7% (376

656) of this segment of the population originates in other European countries (EU-27/EEA countries) ( 12 ). The immigrant population is spread all over the country: 76.95% live in Oslo and the four surrounding counties (*Viken, Innlandet, Vestfold og Telemark og Agder*), constituting 21.6% of the population in the area ( 13 ).

Information about external factor impact on VET is not available.

### 3.2 Economics

Small and medium-sized enterprises (SMEs), defined as enterprises with less than 250 employees, are more than 99% of all enterprises. 83.5% of SMEs have fewer than five employees, mainly because 66.8% of enterprises have no registered employees. Only 0.4% of the total number of enterprises has 100 or more employees ( 14 ). These numbers indicate that apprenticeship training in Norwegian upper secondary VET often takes place in SMEs.

Most people in the production sector are employed in non-marketed services, business and transport and domestic trade.

**Employment by production sector 2020**

Sector	Per cent
Primary and utilities sector	4.4
Manufacturing	8.7
Construction	8.3
transport and domestic trade	17.6
Business and other service	27.1
Non-marketed services	33.9
<b>Total</b>	<b>100,0</b>

Source: [Statistics Norway, c \[ 28.9.2021\]](#)

Exports are an important part of the economy thanks to a large oil and gas sector, fishing and fish farming, shipping, and power-intensive manufacturing sectors such as metals production, industrial chemicals and paper.

### 3.3 Labour market

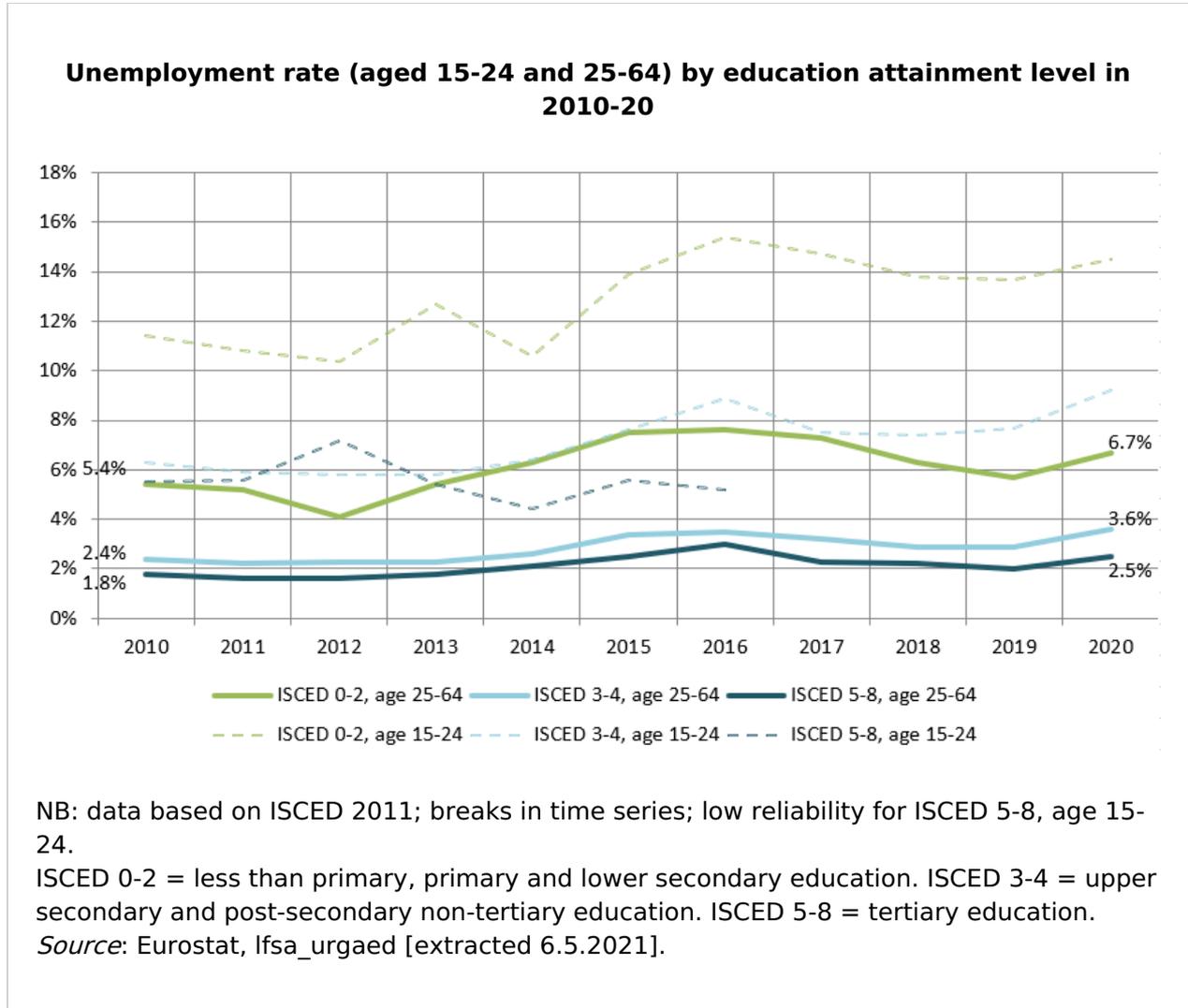
Some trades are regulated and certificates or recognition of qualifications are compulsory to get a job ( 15 ).

There is an increasing number of job vacancies advertisements which require formal education, often a minimum of a bachelor degree. However, in trades where there is lack of employees

and the trade is not regulated, job seekers will find employment without formal education certification.

Total unemployment ( 16 ) (2020): 5% (7.9% in EU-27, May 2021); it increased by 2 percentage points (pp) since 2018 ( 17 ).

Due to the COVID-19 pandemic employment has fallen.

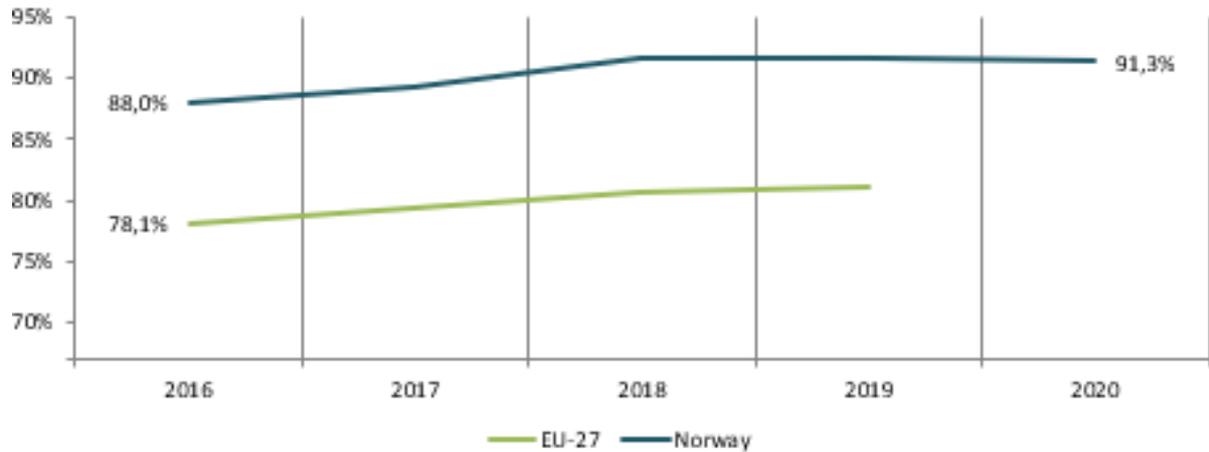


Unemployment rates of people aged 15-24 are generally higher than among people aged 25-64 for each education level, with low-qualified (ISCED levels 0-2) people scoring the highest unemployment rates. The total unemployment rate for the EU27 (percentage of active population, 25 to 74 years old) was 6.2% in 2020. This was down 1.9 pp since 2016 ( 18 ).

In general, the crisis has hit more low-qualified than people with high-level (ISCED levels 5-8) and medium-level qualifications, including most VET graduates (ISCED levels 3 and 4).

The employment rate of 20 to 34-year-old VET graduates increased from 74.3% in 2016 to 76.2% in 2020 (+1.9 pp). ( 19 ).

### Employment rate of VET graduates (20 to 34 years old, ISCED levels 3 and 4)



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 6.5.2021].

For more information about the external drivers influencing VET developments in Norway please see the case study from Cedefop's changing nature and role of VET in Europe project ( 20 ).

[4] NB: Data for population as of 1 January. Eurostat table tps00001 [extracted 27.8.2021].

[6] NB: Data for population as of 1 January. Eurostat table tps00001 [extracted 27.8.2021]

[8] Old-age-dependency ratio is defined as the ratio between the number of persons aged 65 and more over the number of working-age persons (15-64). The value is expressed per 100 persons of working age (15-64).

[10] See [https://www.wko.at/site/fachkraeftepotenzial/b\\_mobile.html](https://www.wko.at/site/fachkraeftepotenzial/b_mobile.html)

[16] See <http://ec.europa.eu/growth/tools-databases/regprof/index.cfm>

[17] Source: Eurostat, une\_rt\_a [extracted 27.8.2021].

[18] Eurostat table edat\_ifse\_24 [extracted 27.8.2021].

[19] NB: Breaks in time series. Eurostat table edat\_ifse\_24 [extracted 27.8.2021].

[21] NB: Breaks in time series. Eurostat table edat\_ifse\_24 [extracted 27.8.2021].

[4] Old-age-dependency ratio is defined as the ratio between the number of persons aged 65 and more over the number of working-age persons (15-64). The value is expressed per 100 persons of working age (15-64).

[5] Source: Statbel.be

[6] <https://economie.fgov.be/fr/publications/aperçu-de-leconomie-belge-note>

[7] <https://statbel.fgov.be/fr/themes/emploi-formation/marche-du-travail/les-professions-en-belgique>

[8] Source: Eurostat, edat\_ifse\_24 [extracted 16.5.2019].

[5] NB: Data for population as of 1 January. Eurostat table tps00001 [extracted 7.5.2021].

- [6] NB: Data for population as of 1 January. Eurostat table tps00001 [extracted 7.5.2021].
- [7] National Agency for Vocational Education and Training (NAVET). Annual reports on the activities of NAVET. [https://www.navet.government.bg/bg/media/doklad-NAPOO-2020\\_VK-3.pdf](https://www.navet.government.bg/bg/media/doklad-NAPOO-2020_VK-3.pdf)
- [8] Percentage of active population, 25 to 64 years old.
- [9] Eurostat, une\_rt\_a [extracted 6.5.2021].
- [10] NB: Data based on ISCED 2011; breaks in time series. ISCED 3-4 = upper secondary and post-secondary non-tertiary education; Eurostat, edat\_ifse\_24 [extracted 6.5.2021].
- [4] NB: Data for population as of 1 January. Eurostat, tps00001 and proj\_19ndbi [Extracted 6.5.2021].
- [5] NB: Data for population as of 1 January. Eurostat, tps00001 and proj\_19ndbi [Extracted 7.5.2021].
- [9] In Greek: Επιστημονικό Τεχνικό Επιμελητήριο Κύπρου: <https://www.etek.org.cy/>
- [10] Percentage of active population, 25 to 64 years old
- [11] Eurostat table une\_rt\_a [Extracted 6.5.2021]
- [12] Source: Eurostat, edat\_ifse\_24 [Extracted 6.5.2021].
- [11] Czech Statistical Office (ČSÚ), Population of territorial units of the Czech Republic, 1 January 2021 [Počet obyvatel v regionech soudržnosti, krajích a okresech České republiky k 1. 1. 2021]. [accessed 12.11.2021] <https://www.czso.cz/documents/10180/142756350/1300722101.pdf/5957c9a9-24b5-4b96-ba77-2fa7a5bfb1b5?version=1.1>
- [12] Czech Statistical Office (ČSÚ), Development of the population of the Czech Republic, Migration [Vývoj obyvatelstva České republiky, migrace], [accessed 12.11.2021] <https://www.czso.cz/documents/10180/121768528/13006920a07.pdf/ac66a9b9-6075-4ae7-9868-cf3b72be2db9?version=1.1>
- [13] Old-age-dependency ratio is defined as the ratio between the number of persons aged 65 and more over the number of working-age persons (15-64). The value is expressed per 100 persons of working age (15-64).
- [14] The number is an expert estimation. Many Roma declare Czech nationality in census and there are methodological as well as ethical problems related to determining exact number of ethnic minority members.
- [17] Czech Statistical Office (ČSÚ) Foreigners in the CR in the years 2004–2020 (as at 31 December 2020) [Cizinci v ČR v letech 2004 – 2020 (stav k 31. 12.)], [accessed 12.11.2021] [https://www.czso.cz/documents/11292/27320905/c01R01\\_2020.pdf/ff126a2b-2698-4b3c-a180-db977090564d?version=1.0](https://www.czso.cz/documents/11292/27320905/c01R01_2020.pdf/ff126a2b-2698-4b3c-a180-db977090564d?version=1.0) .
- [18] Eurostat table, sbs\_sc\_sca\_r, [extracted 17.8.2021]; calculations done by NVF.
- [19] Eurostat. Employment by sex, age and economic activity (LFS, table lfsa\_egan2): [http://ec.europa.eu/eurostat/web/products-datasets/-/lfsa\\_egan2](http://ec.europa.eu/eurostat/web/products-datasets/-/lfsa_egan2) [extracted 17.8.2021].
- [20] This sector includes public administration and defence, education, and health and social work.
- [21] Open and accessible database of professions managed by the Ministry of Labour and Social Affairs of the Czech Republic [Národní soustava povolání] [www.nsp.cz](http://www.nsp.cz)
- [22] Defined in the Trade Licensing Act.
- [23] Percentage of active population, 25 to 64 years old.
- [24] Eurostat table une\_rt\_a [extracted 17.8.2021].
- [25] Eurostat table edat\_ifse\_24 [extracted 18.8.2021].

- [26] Eurostat table edat\_lfse\_24 [extracted d 17.8.2021]
- [5] NB: Data for population as of 1 January. Eurostat table tps00001 and proj\_19ndbi [extracted 7.5.2021].
- [6] NB: Data for population as of 1 January. Eurostat table tps00001 and proj\_19ndbi [extracted 7.5.2021].
- [7] Old-age-dependency ratio is defined as the ratio between the number of persons aged 65 and more over the number of working-age persons (15-64). The value is expressed per 100 persons of working age (15-64).
- [11] Results of the employment accounts within the national accounts (VGR):  
[https://www.destatis.de/DE/Themen/Arbeit/Arbeitsmarkt/Erwerbstaetigkeit/\\_inhalt.html](https://www.destatis.de/DE/Themen/Arbeit/Arbeitsmarkt/Erwerbstaetigkeit/_inhalt.html)
- [14] Percentage of active population, aged 25 to 64.
- [15] Eurostat table une\_rt\_a [extracted 6.5.2021].
- [17] Eurostat table edat\_lfse\_24 [extracted 6.5.2021].
- [5] NB: Data for population as of 1 January; break in series. Eurostat table tps00001 [extracted 7.5.2021].
- [6] NB: Data for population as of 1 January; break in series. Eurostat table tps00001 [extracted 7.5.2021].
- [7] Old-age-dependency ratio is defined as the ratio between the number of persons aged 65 and more over the number of working-age persons (15-64 years). The value is expressed per 100 persons of working age (15-64).
- [8] Percentage of active population, 25 to 64 years old.
- [9] Eurostat table une\_rt\_a [extracted 6.5.2021].
- [10] Percentage of active population, 25 to 64 years old.
- [11] Eurostat table edat\_lfse\_24 [extracted 6.5.2021].
- [12] NB: Break in time series. Eurostat table edat\_lfse\_24 [extracted 6.5.2021].
- [13] NB: Break in time series. Eurostat table edat\_lfse\_24 [extracted 6.5.2021].
- [4] NB: Data for population as of 1 January; break in series. Eurostat table tps00001 [extracted 7.5.2021].
- [5] NB: Data for population as of 1 January; break in series. Eurostat table tps00001 [extracted 7.5.2021].
- [6] Statistics Finland: [www.tilastokeskus.fi/tup/maahanmuutto/maahanmuuttajat-vaestossa/ulkomaan-kansalaiset\\_en.html#tab1483972171375\\_1](http://www.tilastokeskus.fi/tup/maahanmuutto/maahanmuuttajat-vaestossa/ulkomaan-kansalaiset_en.html#tab1483972171375_1)
- [7] Old-age-dependency ratio is defined as the ratio between the number of persons aged 65 and more over the number of working-age persons (15-64 years). The value is expressed per 100 persons of working age (15-64).
- [8] In 2017, it was 61.2 years. Source: Finnish Centre for Pensions: [www.etk.fi/en/statistics-2/statistics/effective-retirement-age/](http://www.etk.fi/en/statistics-2/statistics/effective-retirement-age/)
- [9] [https://www.oph.fi/julkaisut/2011/koulutus\\_ja\\_tyovoiman\\_kysynta\\_2025](https://www.oph.fi/julkaisut/2011/koulutus_ja_tyovoiman_kysynta_2025)
- [10] Source: [https://tilastokeskus.fi/til/tyti/index\\_en.html](https://tilastokeskus.fi/til/tyti/index_en.html) [accessed 25.11.2021].
- [11] Percentage of active population, 25 to 64 years old.
- [12] Eurostat table une\_rt\_a [extracted 6.5.2021].
- [13] NB: Breaks in time series. Eurostat table edat\_lfse\_24 [extracted 6.5.2021].
- [14] Cedefop (2018). The changing nature and role of vocational education and training in Europe. Volume 3: the responsiveness of European VET systems to external change (1995-2015). Case study focusing in Finland. Cedefop research paper; No 67.

[https://www.cedefop.europa.eu/files/finland\\_cedefop\\_changing\\_nature\\_of\\_vet\\_-\\_case\\_study.pdf](https://www.cedefop.europa.eu/files/finland_cedefop_changing_nature_of_vet_-_case_study.pdf)

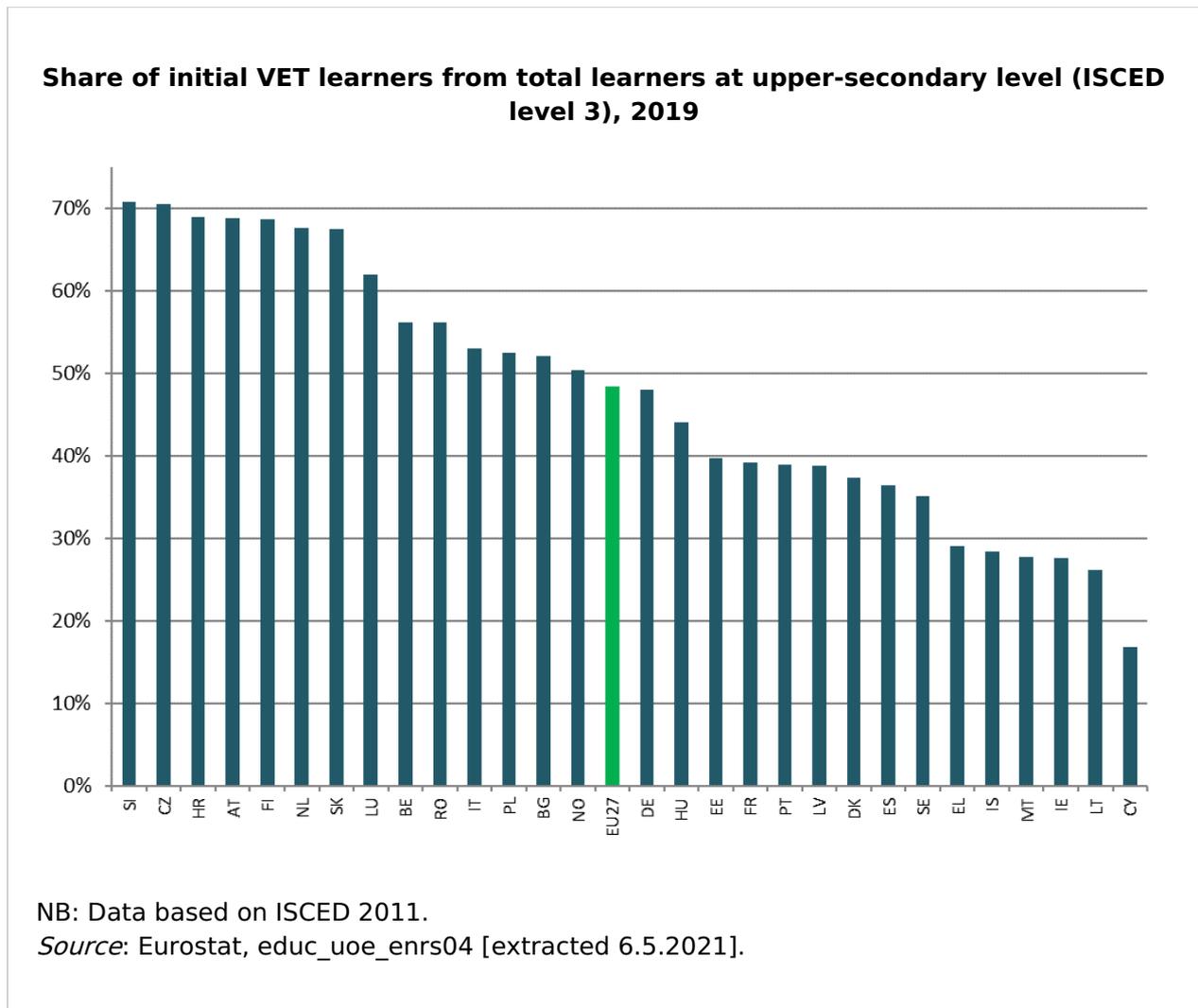
- [6] NB: Data for population as of 1 January. Eurostat table tps00001 [extracted 1.9.2021].
- [7] NB: Data for population as of 1 January. Eurostat table tps00001 [extracted 1.9.2021].
- [13] Percentage of active population, 25 to 74 years old.
- [14] Eurostat, une\_rt\_a [extracted 31.8.2021].
- [15] Eurostat table edat\_ifse\_24 [extracted 30.8.2021].
- [4] NB: Data for population as of 1 January 2020.
- [5] NB: data for population as of 1 January 2020. Eurostat table tps00001 [Extracted 14.9.2021].
- [6] Source: Statistics Iceland. See: [https://px.hagstofa.is/pxis/pxweb/is/lbuar/lbuar\\_\\_mannfjoldi\\_\\_1\\_yfirlit\\_\\_Yfirlit\\_mannfjolda/MA](https://px.hagstofa.is/pxis/pxweb/is/lbuar/lbuar__mannfjoldi__1_yfirlit__Yfirlit_mannfjolda/MA) [Accessed 14.9.2021]. See also Eurostat, proj\_19ndbi [Extracted 7.5.2021].
- [7] This indicator is the ratio between the number of persons aged 65 and over (age when they are generally economically inactive) and the number of persons aged between 15 and 64. The value is expressed per 100 persons of working age (15-64). <https://ec.europa.eu/eurostat/web/products-datasets/-/tps00198> [Accessed: 12.10.2021].
- [8] Adapted by ReferNet Iceland from Statistics Iceland.
- [10] Data from Statistics Iceland.
- [11] Data from Statistics Iceland. [https://px.hagstofa.is/pxis/pxweb/is/Efnahagur/Efnahagur\\_\\_utanrikisverslun\\_\\_3\\_voruthjonust\\_rxid=1a61cf91-98c6-4d19-a48c-3df6b8dfc8e6](https://px.hagstofa.is/pxis/pxweb/is/Efnahagur/Efnahagur__utanrikisverslun__3_voruthjonust_rxid=1a61cf91-98c6-4d19-a48c-3df6b8dfc8e6)
- [12] Percentage of active population, 25 to 64 years old.
- [13] Source: Eurostat, une\_rt\_a [extracted 20.5.2019].
- [14] Source: Eurostat, ifsa\_urgaed [extracted 6.5.2021].
- [15] NB: Break in series. Eurostat table edat\_ifse\_24 [extracted 23.1.2019]. No data for VET graduates for the period 2014-18. The employment rate of all 20-34 year old graduates for the period 2016-20 decreased by 5.3 percentage points.
- [4] NB: Data for population as of 1 January. Eurostat table tps00001 [Extracted 6.5.2021].
- [5] NB: Data for population as of 1 January. Eurostat table tps00001 [Extracted 6.5.2021].
- [7] Percentage of active population, 25 to 64 years old.
- [8] Source: Eurostat, une\_rt\_a [extracted 6.5.2021].
- [9] NB: Breaks in time series. Source: Eurostat, edat\_ifse\_24 [extracted 6.5.2021].
- [10] NB: Breaks in time series. Source: Eurostat, edat\_ifse\_24 [extracted 6.5.2021].
- [4] NB: Data for population as of 1 January; break in series. Eurostat table DEMO\_PJAN [extracted 23.07.2021].
- [5] NB: Data for population as of 1 January; break in series. Eurostat table tps00001 [extracted 23.07.2021].
- [6] Old-age-dependency ratio is defined as the ratio between the number of persons aged 65 and more over the number of working-age persons (15-64). The value is expressed per 100 persons of working age (15-64).
- [7] Foreign citizens residing in Luxembourg can obtain Luxembourgish nationality by naturalisation. Legislation requires them to attend citizenship training and to pass an oral Luxembourgish language exam.
- [8] The latest population census available from 2011.

- [9] Percentage of active population, 25 to 74 years old.
- [10] Eurostat table tps00203 [extracted 06/05/2021].
- [11] Time series for the 15-24 group must be considered with caution due to the small number of observations taken into account.
- [12] Time series for the 15-24 group must be considered with caution due to the small number of observations taken into account.
- [13] Time series must be considered with caution due to the small number of observations taken into account.
- [14] NB: Break in series. Eurostat table edat\_lfse\_24 [extracted 6.5.2021].
- [5] NB: Data for population as of 1 January; break in series. Eurostat table tps00001 [extracted 7.5.2021].
- [6] NB: Data for population as of 1 January; break in series. Eurostat table tps00001 [extracted 7.5.2021].
- [7] Old-age-dependency ratio is defined as the ratio between the number of persons aged 65 and more over the number of working-age persons (15-64). The value is expressed per 100 persons of working age (15-64).
- [8] Percentage of active population, 25 to 64 years old.
- [9] Eurostat table une\_rt\_a [extracted 7.5.2021.].
- [12] NB: Data for population as of 1 January, Eurostat tps00001 [extracted 7.5.2021].
- [13] NB: Data for population as of 1 January, Eurostat tps00001 [extracted 7.5.2021].
- [14] These are estimates for 2018 produced by DIW Econ, based on 2008-16 figures from the structural business statistics database (Eurostat). They are extracted from the Small Business Act (SBA) fact sheet 2019.  
<https://ec.europa.eu/docsroom/documents/38662/attachments/20/translations/en/renditions>
- [16] Recent GDP growth is mostly driven by services. Between 2019 and 2020 professional, scientific and technical activities and the manufacturing sector as a percentage of GDP, increased by 0.4 percentage points when compared to that of the previous year. Information and communication activities together with financial and insurance activities increased by 1.2 percentage points. For arts, entertainment and recreation, the increase was around 0.4 percentage points (Eurostat, 2020). Contrary to the increasing trend observed in the last 3 years, the administrative and support service activities experienced a decline of 0.4 pp when compared to the previous year. The share of added value by agriculture remained stable at a rate of 0.5% of GDP, resulting in the country being dependent on imported food supplies. In contrast, the shares of sectors such as i-gaming, financial services and IT services, legal and accounting services have increased significantly.
- [17] MCAST Gateway to Industry (MG2i). <https://shortcourses.mcast.edu.mt/index>
- [18] Percentage of active population, 25 to 64 years old.
- [19] Eurostat, une\_rt\_a [extracted 6.5.2021].
- [21] NB: Breaks in time series, Eurostat, edat\_lfse\_24 [extracted 6.5.2021].
- [6] White Paper 2020-21
- [7] SSB. Statistics Norway. <https://www.ssb.no/befolkning/faktaside/befolkningen>
- [8] NB: Data for population as of 1 January 2018. Eurostat table tps00001 [extracted 16.5.2019].
- [9] SSB. Statistics Norway: <https://www.ssb.no/utdanning/statistikker/voppl>
- [10] SSB. Statistics Norway. [www.ssb.no](http://www.ssb.no) and Norwegian Directorate for Education and Training. [www.udir.no](http://www.udir.no)

- [11] SSB. Statistics Norway. <https://www.ssb.no/utdanning/statistikker/vgu/aar>
- [12] SSB. Statistics Norway. [Statistics Norway, h](#)
- [13] SSB. Statistics Norway. [Statistics Norway, i](#)
- [14] SSB. Statistics Norway. [Statistics Norway, b](#)
- [15] Norway. National Agency for Quality Assurance in Education. [www.nokut.no](http://www.nokut.no)
- [16] Percentage of active population, 25 to 64 years old.
- [17] Eurostat table une\_rt\_a [extracted 20.5.2019].
- [18] Eurostat, Unemployment by sex and age - annual data, Eurostat table: une\_rt\_a  
[https://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=une\\_rt\\_a&lang=en](https://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=une_rt_a&lang=en)
- [19] Eurostat table edat\_ifse\_24 [extracted 16.5.2019].



The share of learners choosing VET after lower secondary is positive. The goal is now to increase the number of students completing training, helping to prevent a projected lack of about 90 000 skilled workers in 2030.



#### 4.4 Female share

In upper secondary VET, there are more males: 61.2% compared to 38.8% females ( 22 ). In post-secondary VET the number of female learners is slightly higher (45%, autumn 2019) ( 23 ).

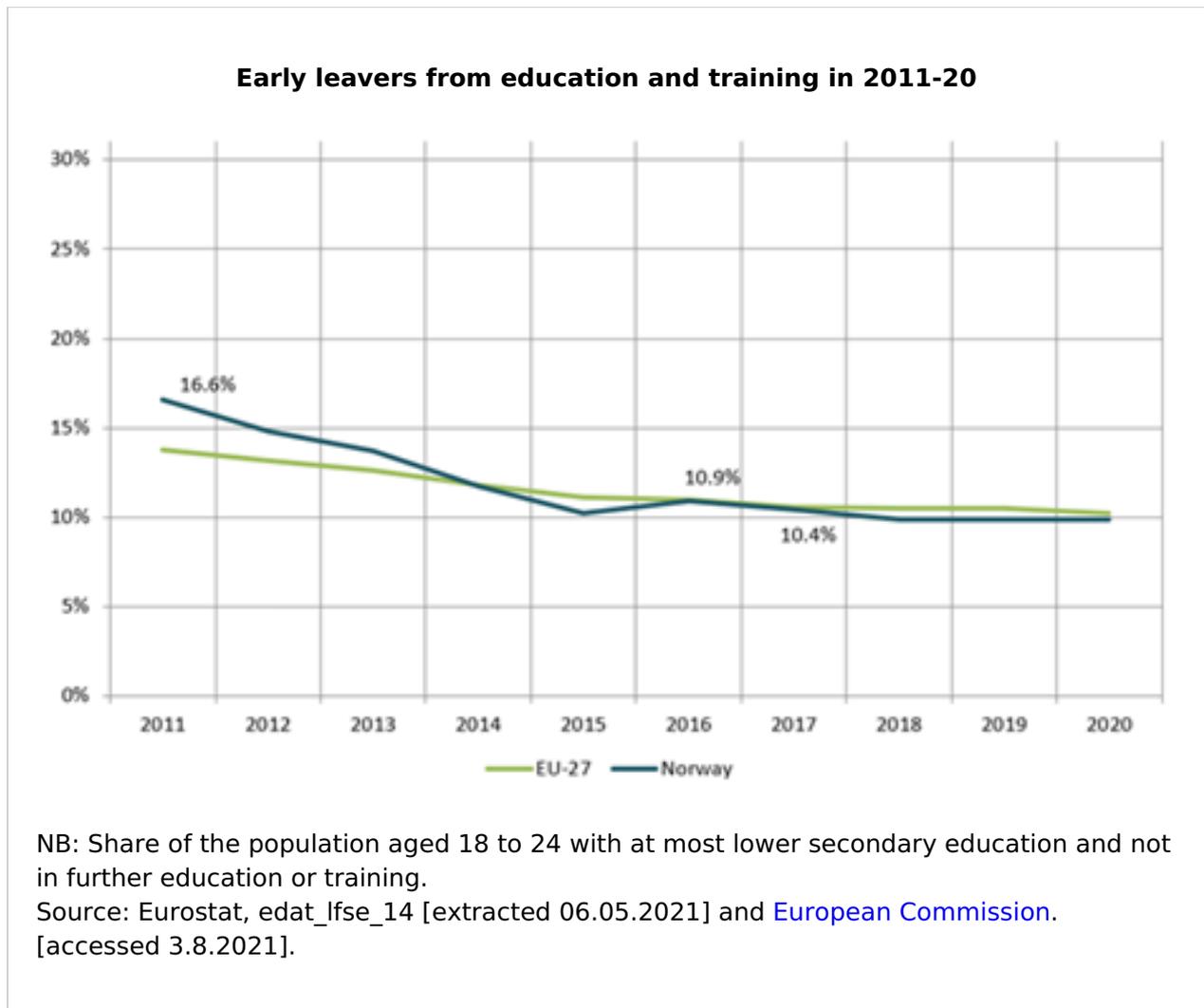
Males prefer technical and industrial production (most popular option), followed by electrical trades and building and construction. Females choose healthcare, childhood and early youth development followed by design, arts and crafts and service trades.

It is a national target to increase the number of underrepresented sexes in all vocational education tracks/programmes.

#### 4.5 Early leavers from education and training

The share of early leavers from education and training has decreased from 16.6% in 2011 to 9.9% in 2020. It is below the EU-27 average of 10.1%.

The target is to reduce the number of school leavers so that 9 out of 10 complete upper secondary education by 2030 ( 24 ). Several measures have been implemented and several more will follow as the Norwegian government aims to maintain the effort ( 25 ).



Drop-out is defined in Norway as non-completion of upper secondary level within a 5-year period after starting upper secondary level 1. More than half of those who do not complete upper secondary education complete by the age of 40.

Drop-out has been widely discussed in recent years, and measures to tackle it are being developed and implemented. Factors have been identified that influence study progression, success rates, and drop-out rates. Two such factors are social background and learning achievements in primary and lower secondary education. Another factor is the lack of apprenticeship placements for VET learners in the transition from school-based training to apprenticeship training. In 2019, 28 600 learners applied for an apprenticeship contract, and 78 per cent received an apprenticeship placement by the end of the year. Most of those who receive apprenticeship placements complete their VET training with a trade or journeyman's certificate; 85.8% pass the exam after 5 years of apprenticeship.

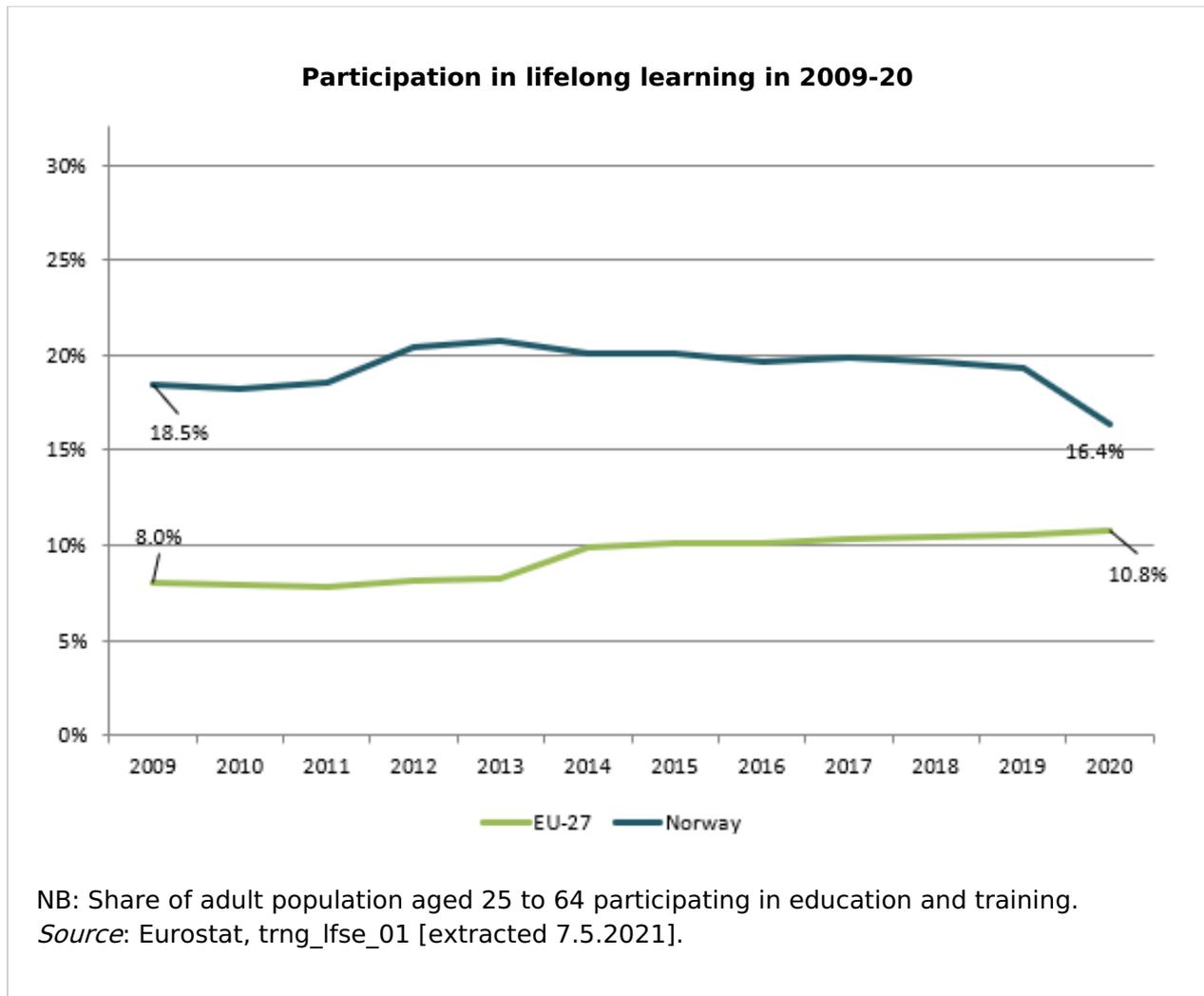
Statistics show significant variations in drop-out rates between education programmes. In restaurant and food processing, around 40% dropped out before completing the programme,

compared to only 3.6% in sport and physical education programmes (one of the general study programmes) the same year ( 26 ). The differences in learners' grades at lower secondary level are seen as a key factor; learners admitted to general study programmes generally have higher marks than learners admitted to vocational programmes.

Measures to reduce drop-out rates include early interventions encouraging young people to learn, guidance and counselling, financial incentives, promoting VET and practice-based learning, and common core subjects in VET.

For more information, please read the VET in Europe report Norway 2018 ( 27 ).

#### 4.6 Participation in lifelong learning



Participation in lifelong learning has been stable in recent years at 16.4% in 2020 (both formal and non-formal further education), significantly above the EU-27 average of 9.2%.

[24] Eurostat table edat\_lfse\_24 [extracted 17.8.2021]

[25] Eurostat table edat\_lfse\_24 [extracted 17.8.2021]

[27] <https://www.qualifikationsregister.at/wp-content/uploads/2018/11/Strategie1.pdf> [accessed 27.8.2021]

- [9] Source: Eurostat, educ\_uoe\_enrs01, educ\_uoe\_enrs04 and educ\_uoe\_enrs07
- [11] National Statistical Institute. Education statistics. <https://infostat.nsi.bg>
- [13] These are the names of the relevant specialisations.
- [14] The European Union Labour Force Survey (EU LFS) is conducted in all Member States of the European Union, four candidate countries and three countries of the European Free Trade Association (EFTA) in accordance with Council Regulation (EEC) No 577/98 of 9 March 1998. LFS microdata for scientific purposes currently contain data for all Member States plus Iceland, Norway and Switzerland. The EU Labour Force Survey is a large household sample survey providing quarterly results on labour participation of people aged 15 and over as well as on persons outside the labour force. All definitions apply to persons aged 15 years and over living in private households. Persons carrying out obligatory military or community service are not included in the target group of the survey, as is also the case for persons in institutions/collective households. The data collection covers the years from 1983 onwards. In general, data for individual countries are available depending on their accession date. The labour force surveys are conducted by the national statistical institutes across Europe and are centrally processed by Eurostat. The national statistical institutes are responsible for selecting the sample, preparing the questionnaires, conducting the direct interviews among households, and forwarding the results to Eurostat in accordance with the requirements of the regulation. Thus, it is possible to make available harmonised data at European level. More information available at: <https://ec.europa.eu/eurostat/web/microdata/european-union-labour-force-survey>
- [27] The common part of the maturita exam is defined by the State, including two obligatory subjects: Czech and foreign language or maths and in certain cases two extra subjects. Schools are responsible for the profile part of the exam (2 to 4 subjects), which is also a compulsory part of the maturita exam. In the profile part of the exam, VET learners should be examined in at least 2 VET subjects.
- [28] 3-year school-based VET programmes (EQF level 3) and 4-year VET and lyceum programmes (EQF level 4) can be offered as shortened programmes, provided that the school director considers that the learner has completed a programme, at the same EQF level, in a relevant field. Shortened programmes do not lead to a higher EQF level.
- [22] Actual expenditures 2017: EUR 97.1 million. Source: BMBF (2018). Berufsbildungsbericht 2018 [Report on vocational education and training 2018]. Bonn: BMBF, p. 121. [https://www.bmbf.de/upload\\_filestore/pub/Berufsbildungsbericht\\_2018.pdf](https://www.bmbf.de/upload_filestore/pub/Berufsbildungsbericht_2018.pdf)
- [15] Measured on 10 November each year; excludes those who: attended classes less than 31 days, were readmitted within 31 days, applied but never attended or who changed programme in the same curriculum group and in the same institution.
- [16] See Chapter 2 for the information on education levels.
- [15] <https://findikaattori.fi/en/>
- [16] Cedefop (2019). The changing nature and role of vocational education and training in Europe. Volume 6: vocationally oriented education and training at higher education level. Expansion and diversification in European countries. Case study focusing on Finland. Cedefop research paper; No 70. [https://www.cedefop.europa.eu/files/finland\\_cedefop\\_changing\\_nature\\_of\\_vet\\_-\\_ce\\_study\\_0.pdf](https://www.cedefop.europa.eu/files/finland_cedefop_changing_nature_of_vet_-_ce_study_0.pdf)
- [17] For example, young graduates from upper secondary education at age of 19 cannot always enter higher education due to limited places available; they often apply several years in a row in order to enrol.
- [16] Eurostat, educ\_uoe\_enrt02 [extracted 30.8.2021].

- [17] Školski e-Rudnik, ŠeR [database] [extracted 30.8.2021].
- [16] Source: Statistics Iceland.
- [17] Source: Statistics Iceland.
- [15] Data from the 2018/19 school year.
- [16] The European Union labour force survey (EU LFS) is conducted in all Member States of the European Union, four candidate countries and three countries of the European Free Trade Association (EFTA) in accordance with Council Regulation (EEC) No 577/98 of 9 March 1998. At the moment, the LFS microdata for scientific purposes contain data for all Member States plus Iceland, Norway and Switzerland. The EU labour force survey is a large household sample survey providing quarterly results on labour participation of people aged 15 and over as well as on persons outside the labour force. All definitions apply to persons aged 15 years and over living in private households. Persons carrying out obligatory military or community service are not included in the target group of the survey, as is also the case for persons in institutions/collective households. The data collection covers the years from 1983 onwards. In general, data for individual countries are available depending on their accession date. The labour force surveys are conducted by the national statistical institutes across Europe and are centrally processed by Eurostat. The national statistical institutes are responsible for selecting the sample, preparing the questionnaires, conducting the direct interviews among households, and forwarding the results to Eurostat in accordance with the requirements of the regulation. Thus, it is possible to make available harmonised data at European level. More information available at: <https://ec.europa.eu/eurostat/web/microdata/european-union-labour-force-survey>
- [17] Istat (2021), Levels of education and participation in training. Year 2020. The gap with the EU in education levels is growing, Statistics Report, 8 October 2021 (Istat (2021), Livelli di istruzione e partecipazione alla formazione. Anno 2020. Cresce il divario con l'Ue nei livelli di istruzione, Statistiche Report, 8 ottobre 2021). [www.istat.it](http://www.istat.it)
- [18] Chamber of Deputies-MLPS-INAPP-ANPAL, XX/XXI Report on Continuing Vocational Training in Italy. Annuality 2018-2019-2020, XVIII Legislature, Parliamentary Act: Document XLII No 2 (Camera dei Deputati-MLPS-INAPP-ANPAL, XX/XXI Rapporto sulla Formazione continua. Annualità 2018-2019-2020, XVIII Legislatura, Atto Parlamentare: Documento XLII No 2). [https://www.camera.it/leg18/494?idLegislatura=18&categoria=042&tipologiaDoc=elenco\\_categoria](https://www.camera.it/leg18/494?idLegislatura=18&categoria=042&tipologiaDoc=elenco_categoria)
- [19] Chamber of Deputies-MLPS-INAPP-ANPAL, XIX Report on Continuing Vocational Training in Italy. Annuality 2017-2018, XVIII Legislature, Parliamentary Act: Document XLII No 1 (Camera dei Deputati-MLPS-INAPP-ANPAL, XIX Rapporto sulla Formazione continua. Annualità 2017-2018, Senato della Repubblica - XVIII Legislatura, Atto Parlamentare: Documento XLII No 1 < <http://www.senato.it/leg/18/BGT/Schede/docnonleg/40068.htm>
- [20] Angotti R, Polli C., Lavoratori over 50 a bassa qualificazione e crisi economica in Italia, Osservatorio Isfol, VI (2016), No 3. pp.37-57. <https://isfoloa.isfol.it/xmlui/handle/123456789/1637>
- [10] Source: Eurostat tables educ\_uae\_enrs01, educ\_uae\_enrs04 and educ\_uae\_enrs07 [accessed 7.5.2021.].
- [22] Norwegian Directorate for education and training. [www.udir.no](http://www.udir.no)
- [23] Norwegian Directorate for higher education and competence. [www.hkdir.no](http://www.hkdir.no)
- [24] White Paper 2020-21
- [25] Norwegian government web page. [www.regjeringen.no](http://www.regjeringen.no)
- [26] The Norwegian Directorate for Education and Training. <https://www.udir.no/om-udir/>
- [28] Statistics Norway. <https://www.ssb.no/>

## CHAPTER 5.

# VET within education and training system

The education and training system comprises:

- first education level, divided into two levels:
  - primary education (from 6 years to 13 years);
  - lower secondary education (EQF 2, ISCED 2);
- upper secondary education (EQF 3 and 4 and ISCED 3. VET is available from upper secondary level;
- post- secondary, non- tertiary VET education (EQF 5, ISCED 453 and 554);
- higher education (EQF 6, 7 and 8, ISCED 6, 7 and 8).

Education is compulsory for 6- to 16-year-olds. It comprises primary education (years 1-7), where learners get no grades, and lower secondary education (years 8-10) where learners are given grades that are also counted for entering upper secondary level. It is under municipality responsibility and free of charge.

Upper secondary education is offered as general education and VET. The regional county authorities are responsible for general education and VET provision. All young people completing compulsory education have a statutory right to 3 years of upper secondary education and most of them use it. Public upper secondary schools are free of charge.

Post-secondary non-tertiary education builds on upper secondary education: an upper secondary certificate or an equivalent qualification is a requirement to enrol. The education can often be combined with work. There are public and private providers.

Norway has 10 universities, six university colleges and five specialised, State-owned university institutions. There are also private institutions for higher education.

Students must pay a small fee each semester, paid to the student welfare organisation at the education institution. The purpose of the fee is to cover expenses relating to the students' welfare needs at their place of learning. The amount varies, but it rarely exceeds EUR 61.

It is possible to attend formal, non-formal, initial and continuing VET. Depending on the programme, learners may attend school-based or work-based learning or a combination of both. It is also possible to take an exam as an external candidate.

To complete a VET programme at upper secondary level, learners need to pass a final craft- or journeyman exam, which is both theoretical and practical. There is one exception; a 3-year option leads to a qualification at EQF level 4.

Initial and continuing VET are part of the formal education system. Initial VET has to be completed to progress to CVET. Initial VET starts at upper secondary school and most pathways leads to an EQF level 4 qualification. CVET is at EQF level 5.

Apprenticeship is at upper secondary level and leads to EQF level 4 qualification.

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[10] IFAPME: Institut wallon de Formation en Alternance et des indépendants et Petites et Moyennes Entreprises - The Walloon Institute for dual training and self-employment in small and medium-sized enterprises.

[11] SYNTRA: Vlaanderen The Flemish Agency for Entrepreneurial Training.

[12] Institut für Aus- und Weiterbildung des Mittelstandes - the Institute for Vocational and

## Educational Training.

- [13] Zentrum für Aus- und Weiterbildung.
- [14] Socio-professional Integration Centres – Centres d'insertion socioprofessionnelle.
- [15] Socio-professional Integration Organisations – Organismes d'insertion socioprofessionnelle.
- [12] Education is compulsory until the age of 16.
- [16] New modern apprenticeship (NMA) is directed towards young people between 14 and 21 years of age at two apprenticeship levels (preparatory and core). Participation in the NMA is not part of compulsory education and is free of charge. The new modern apprenticeship targets two distinct groups of learners:
- learners who have not completed compulsory education lower secondary programmes (third grade of gymnasium) can enrol at the preparatory apprenticeship level. The preparatory apprenticeship has been introduced to provide support to early school leavers between the ages of 14 and 16, by gradually introducing them to the labour market, giving them a taste of VET, and helping them to choose a specialisation when they proceed to the core level of apprenticeship;
  - learners who have either completed compulsory education or preparatory apprenticeship can enrol at the core apprenticeship level.
- [17] In 2012, the education ministry in cooperation with the labour ministry and other stakeholders established, within the context of the education reform, post-secondary institutes of VET, jointly financed by the ESF, which offered further technical specialisation as of the academic year 2012/13. These were in April 2017 by the Cyprus Agency of Quality Assurance and Accreditation in Higher Education granted them tertiary non-university level status.
- [18] Cyprus Agency of Quality Assurance and Accreditation in Higher Education (CYQAA). In Greek: Φορέας Διασφάλισης και Πιστοποίησης της Ποιότητας της Ανώτερης Εκπαίδευσης ( <http://www.dipae.ac.cy/index.php/el/> )
- [19] Private institutions of tertiary education offer a wide range of academic as well as vocational programmes of study at various levels (1- or 2-year diploma, 3-year higher diploma, 4-year bachelor degree and 1- or 2-year master degree) in secretarial studies, aesthetics, food preparation, music, arts and drama, graphic design, hotel and tourism management, computer science, social sciences, education, business studies, management and engineering. English is the language of instruction for most programmes of studies offered, which attracts students from other countries. Furthermore, several private institutions of tertiary education offer academic programmes of study based on validation or franchised agreements with more than 10 European universities and following the provisions of the competent Law of the Republic of Cyprus. Since 1996, the establishment and operation of all private institutions of tertiary education is regulated by law. Each institution sets its own internal regulations, student entry requirements and evaluation, qualifications awarded, tuition fees and teachers' qualifications, which are published in an annual prospectus.
- [20] Cyprus Productivity Centre (CPC). In Greek: Κέντρο Παραγωγικότητας Κύπρου: [http://www.mlsi.gov.cy/mlsi/kepa/kepa\\_new.nsf/index\\_gr/index\\_gr?opendocument](http://www.mlsi.gov.cy/mlsi/kepa/kepa_new.nsf/index_gr/index_gr?opendocument)
- [21] Higher Hotel institute of Cyprus (HHIC). In Greek: Ανώτερο Ξενοδοχειακό Ινστιτούτο Κύπρου: [http://www.hhic.moec.gov.cy/moec/hhic/hhic.nsf/index\\_gr/index\\_gr?OpenDocument&lang=el](http://www.hhic.moec.gov.cy/moec/hhic/hhic.nsf/index_gr/index_gr?OpenDocument&lang=el)
- [30] The Education Act No 561/2004 Coll.: <https://www.msmt.cz/dokumenty-3/skolsky-zakon-ve-zneni-ucinnem-ode-dne-27-2-2021> [accessed 10.11.2021].
- [31] The Higher Education Act No 111/1998 Coll.: <https://www.msmt.cz/dokumenty-3/zakon-c-111-1998-sb-o-vysokych-skolach> [accessed 10.11.2021].
- [32] Ministry of Education, Youth and Sports [Ministerstvo školství, mládeže a tělovýchovy – MŠMT]. [www.msmt.cz](http://www.msmt.cz)
- [33] The Act No 179/2006 Coll., on the Verification and Recognition of Further Education

Results: <https://www.msmt.cz/dokumenty-3/zakon-o-overovani-a-uznavani-vysledku-dalsiho-vzdelavani> [accessed 10.11.2021].

- [34] A complete vocational qualification (úplná profesní kvalifikace) is defined as a professional competence to perform all the tasks within an occupation (e.g. pastry chef, hairdresser, plumber, economist, engineering technician, etc.). It can be acquired either by completing an IVET programme or by the recognition of prior learning.
- [35] Národní soustava kvalifikací: [www.narodni-kvalifikace.cz](http://www.narodni-kvalifikace.cz)
- [36] Data taken from the Ministry of Education, Youth and Sports [Ministerstvo školství, mládeže a tělovýchovy - MŠMT]. [www.msmt.cz](http://www.msmt.cz), NPI's ČR calculation includes all upper and lower secondary and tertiary professional, follow-up and shortened programmes (i.e. all VET types).
- [21] Education and Youth Authority - State examinations: <https://harno.ee/riigieksamid>
- [18] <https://www.finlex.fi/fi/laki/alkup/2017/20170531>
- [18] As per amendments to the CROQF Act (Official Gazette No 20/2021), CSVET represents the Croatian credit system for vocational education and training. One CSVET point corresponds to a workload of 15 to 25 hours lasting 60 minutes.
- [19] Zakon o obrazovanju odraslih (NN 17/07, 107/07, 24/10) [Adult education act]: <https://www.zakon.hr/z/384/Zakon-o-obrazovanju-odraslih>
- [19] There are two main institutions: the IDAN VET training centre (the largest continuing VET institution in Iceland) which offers continuing VET programmes in a variety of sectors (e.g. food and catering, metal and machines, building and construction, printing technology, auto mechanics, computer supported design and hair styling) and the Retraining and Technical Training Centre (Rafiðnaðarskólinn) for electric and electronic technicians.
- [20] These are: the private company Sýni Research Centre which offers various job-related courses for people working in the food industry and the Icelandic Innovation Centre which is a public institution under the Ministry of Industries and Innovation offering courses in project management or personal leadership.
- [22] In 2019 the Ministry of Education, Universities and Research (MIUR) was divided into two ministries, the Ministry of Education and the Ministry of Universities and Research.
- [23] Information retrieved from Eurydice: [https://eacea.ec.europa.eu/national-policies/eurydice/content/italy\\_en](https://eacea.ec.europa.eu/national-policies/eurydice/content/italy_en)
- [18] Following the Law of 29 August 2017 (SCL, 2017d) on secondary education 'general secondary education' is nationally referred to as 'classical secondary education' (éducation secondaire classique - ESC) while 'technical secondary education' is referred to as 'general secondary education' (éducation secondaire générale - ESG). However, to allow comparison at EU level, the previous terminology will be kept.
- [24] <https://www.um.edu.mt/>
- [25] [https://eacea.ec.europa.eu/national-policies/eurydice/content/malta\\_en](https://eacea.ec.europa.eu/national-policies/eurydice/content/malta_en)
- [26] Directorate for Research, Lifelong Learning and Employability (DRLLE): <https://researchandinnovation.gov.mt/en/Pages/Research%20and%20Innovation.aspx>
- [27] Eurostat, Enterprises providing training by type of training and size class - % of all enterprises [[trng\\_cvt\\_01s](#)]

## CHAPTER 6.

# Apprenticeship

At upper secondary level, VET is conducted both in school and in public and private enterprises. The main two-plus-two model normally includes 2 years in school, where students also participate in practical training in workshops and enterprises, followed by 2 years of formalised apprenticeship (training and productive work) in enterprises. The first year of training consists of an introduction to the vocational area. During the second year, VET students choose specialisations and courses that are more trade-specific but core subjects are also included. Some crafts follow varying models with 3 years in school or 1 year in school followed by 3 years of formalised apprenticeship.

Upper secondary VET is completed with a practical-theoretical trade or journeyman's examination (*Fag- eller svenneprøve*) leading to an EQF level 4 qualification: a trade certificate (*Fagbrev*) for industrial and service trades or a journeyman's certificate (*Svennebrev*) for traditional crafts. The ten programme areas offer 197 different certificates.

There are many possible routes to higher education via upper secondary VET.

From Spotlight on VET – 2020 ( 29 ).

Learn more about apprenticeships in the national context from the European database on apprenticeship schemes by Cedefop ( 30 ).

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- [16] Information is based on following publication where you can find also further information on this topic:  
Allinckx, I.; Karno, A.; Monico, D. (2019). Vocational education and training in Europe – Belgium. Cedefop ReferNet VET in Europe reports 2018.  
[http://libserver.cedefop.europa.eu/vetelib/2019/Vocational\\_Education\\_Training\\_Europe\\_Belg](http://libserver.cedefop.europa.eu/vetelib/2019/Vocational_Education_Training_Europe_Belg)
- [18] Institut für Aus- und Weiterbildung des Mittelstandes – the Institute for vocational and educational training in small and medium-sized enterprises.
- [13] Cedefop; ReferNet (2021). VET REF: developments in vocational education and training policy database. [Unpublished].
- [14] Almost 10 000 learners from over 140 schools will be covered by planned project activities.
- [22] In Greek: Διεύθυνση μέσης τεχνικής και επαγγελματικής εκπαίδευσης και κατάρτισης.
- [36] Some occupations only require 2 years and there are also regulations allowing a shorter training period for apprentices with an Abitur (the school leaving certificate allowing entry to higher education).
- [41] <https://www.bibb.de/uebs-digitalisierung>
- [46] [https://www.gesetze-im-internet.de/bbig\\_2005/BBiG.pdf](https://www.gesetze-im-internet.de/bbig_2005/BBiG.pdf)
- [47] See AusbildungPlus database: <http://www.ausbildungplus.de/webapp/suche?typ=zq&neuesuche=true> and Berufsbildungsgesetz 2005: [https://www.gesetze-im-internet.de/bbig\\_2005/BBiG.pdf](https://www.gesetze-im-internet.de/bbig_2005/BBiG.pdf)
- [48] BMBF. Report on vocational education and training  
<https://www.bmbf.de/de/berufsbildungsbericht-2740.html>
- [22] Currently, apprenticeships are not provided in upper secondary VET (ISCED 354).
- [23] Salaries, training materials and maintenance (such as heating and electricity).
- [20] <https://mzo.gov.hr/UserDocImages//dokumenti/Obrazovanje/StrukovnoObrazovanje/Reform>

- [21] <http://www.cedefop.europa.eu/en/publications-and-resources/data-visualisations/apprenticeship-schemes/scheme-fiches>
- [22] Cedefop (2019). Apprenticeship review: Croatia. Improving apprenticeships through stronger support and care. Luxembourg: Publications office. Thematic country reviews. <https://www.cedefop.europa.eu/en/publications-and-resources/publications/4173>
- [21] In Icelandic: IDAN fræðslusetur.
- [21] <https://legilux.public.lu/eli/etat/leg/rgd/2021/08/06/a616/jo>
- [28] <http://justiceservices.gov.mt/DownloadDocument.aspx?app=lp&itemid=28680&l=1>
- [29] MCAST (2021). Administrative data.
- [30] Cedefop. European database on apprenticeship schemes. <http://www.cedefop.europa.eu/en/publications-and-resources/data-visualisations/apprenticeship-schemes/scheme-fiches>

## CHAPTER 7.

# VET governance

Central to the Norwegian education and training system is the Education Act of 17 July 1998 No 61 (*Opplæringsloven*), most recently amended on 1.7.2021. It covers primary, lower and upper secondary general education and VET, including apprenticeship training, for young people and adults, delivered by both public and private institutions. It states that the Ministry of Education and Research (*Kunnskapsdepartementet*) has overall responsibility for national policy development and administration of all levels of education and training. The counties (*fylkeskommuner*) and municipalities (*kommuner*) are responsible for developing comprehensive plans and for organising and financing within their jurisdiction.

The Education Act gives the social partners representation (most often majority) in all important advisory bodies for upper secondary VET at national and county levels:

- the National Council for Vocational Education and Training (*Samarbeidsrådet for yrkesopplæring* (SRY)) gives advice on an overarching level;
- ten vocational training councils (*Faglige råd*) give advice on training in specific groups of trades, one for each VET programme;
- the county vocational training board (*Yrkesopplæringsnemnda*) for each county gives advice on quality, career guidance, regional development and the provision in the county to meet local labour market needs;
- the trade-specific examination boards (*Prøvenemnder*) are situated in each county;
- national appeals boards (*Klagenemnder*) cater for candidates who fail the trade or journeyman's final test at county level.

For post-secondary vocational education (nationally referred as tertiary; *høyere yrkesfaglig utdanning*), the social partners are consulted through the National Council for Tertiary Vocational Education (*Nasjonalt fagskoleråd*) established by the Ministry of Education and Research in 2010. This council has less of a formal function than the vocational training councils have at upper secondary level, as the education and training providers at this level design their own programmes. The Directorate for Higher Education and Skills hosts the secretariat. In addition, advisory bodies with social partner representatives consult on tertiary vocational education. There are six advisory bodies established and two are planning.

Tertiary vocational colleges (*fagskoler*) represent a significant alternative to higher education. The colleges are important for developing competence and specialisation in VET. The objective of the National Council for Vocational Education and Training is to improve cooperation between the colleges, the rest of the education structure, working life, and society in general. The council acts as a coordinating body for the sector and is the advisory body to the Ministry of Education and Research. It comprises representatives from the education sector, employee and employer organisations and learners.

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[31] to learn more about the vocational training assistance see the flyer for Berufsausbildungsassistenz [Vocational training assistant] in English: [https://neba.at/neba-leistungen/berufsausbildungsassistenz/warum-bas?task=callelement&format=raw&item\\_id=624&element=1bd14ef3-f766-4dad-843b-49437aa92d48&method=download&args\[0\]=0](https://neba.at/neba-leistungen/berufsausbildungsassistenz/warum-bas?task=callelement&format=raw&item_id=624&element=1bd14ef3-f766-4dad-843b-49437aa92d48&method=download&args[0]=0) [accessed 27.8.2021]

[20] Vlaamse Dienst voor Arbeidsbemiddeling en Beroepsopleiding – Flemish Service for Employment and Vocational Training.

[21] Commission communautaire française, French Community Commission, responsible for

some competences for French-speakers in Brussels.

- [22] Minister for Vocational Training and Minister for Education at the COCOF; Minister for Higher Education and Adult Learning and Minister for Education at the French Community; Minister for Vocational Training and Employment at the Walloon Region. New governments decide about the distribution of tasks within its ministries (there can thus be one, two or three ministers involved).
- [23] Service francophone des métiers et qualifications – the French-language service for jobs and qualifications.
- [24] VDAB: Flemish Employment and Vocational Training Agency. Bruxelles Formation: The Brussels Institute for Vocational Training. SFPME: Service Formation PME: the training service for small and medium-sized enterprises, in Brussels. EFP (Espace Formation des Petites et Moyennes entreprises: the training centre in Brussels for SMEs).
- [15] Cedefop; ReferNet (2021). VET REF: developments in vocational education and training policy database. [Unpublished].
- [23] In Greek: Γενική Διεύθυνση Ευρωπαϊκών Προγραμμάτων, Συντονισμού και Ανάπτυξης (ΓΔ ΕΠΣΑ): [http://www.dgepcd.gov.cy/dgepcd/dgepcd.nsf/index\\_gr/index\\_gr?OpenDocument](http://www.dgepcd.gov.cy/dgepcd/dgepcd.nsf/index_gr/index_gr?OpenDocument)
- [37] Ministry of Education, Youth and Sports [Ministerstvo školství, mládeže a tělovýchovy – MŠMT]. [www.msmt.cz](http://www.msmt.cz)
- [38] Ministry of Labour and Social Affairs [Ministerstvo práce a sociálních věcí – MPSV]. [www.mpsv.cz](http://www.mpsv.cz)
- [40] Absolutorium is a final examination at tertiary professional schools consisting of the theory of vocational subjects, a foreign language, a graduate thesis and its defence. Upon successful passing of the absolutorium, the graduate attains a tertiary professional qualification and the title of a specialist with a diploma (diplomovaný specialista, DiS).
- [50] BBiG: [https://www.gesetze-im-internet.de/bbig\\_2005/](https://www.gesetze-im-internet.de/bbig_2005/)
- [53] Berufsbildungsgesetz (BBiG).
- [54] Kultusministerkonferenz (KMK).
- [55] Zuständige Stellen.
- [24] Vocational Educational Institutions Act (Parliament, 2013); Vocational education standard (Government, 2013), work-based learning regulation (MoER, 2007); Private Schools Act (Parliament, 1998b); Professional Higher Education Institutions Act (Parliament, 1998a); Adult Education Act (Parliament, 2015); Professions Act (Parliament, 2008a); Recognition of Foreign Professional Qualifications Act (Parliament, 2008b); Study Allowances and Study Loans Act (Parliament, 2003a); Youth Work Act (Parliament, 2010b).
- [30] Until the end of 2011 this function was performed by the National Examinations and Qualifications Centre (NEQC) (Riiklik Eksami- ja Kvalifikatsioonikeskus). In 2012, NEQC joined Foundation Innove, and in 2020 Foundation Innove joined the Education and Youth Authority.
- [19] Qualification structure is a system of qualifications. It defines how many there are, initial, further and specialist VET qualifications: their share, titles and competence points (total and for common units; their division within the qualification is decided by the Finnish National Agency for Education).
- [20] Some VET providers are foundations or limited companies; they are categorised as 'private' but municipalities usually have shares in such companies/foundations.
- [23] Zakon o Agenciji za strukovno obrazovanje i obrazovanje odraslih [Act on Agency for VET and Adult Education]; Official Gazette No 24/2010.
- [24] Zakon o izmjenama i dopunama Zakona o strukovnom obrazovanju [Amendments to the Vocational Education and Training Act]; Official Gazette No 25/2018.

- [26] Training chain (filiera formativa): set of pathways to achieve technical education and vocational education diplomas, at the end of the five-year school courses, of technical institutes and professional institutes.
- [27] National Institute for Documentation, Innovation and Educational Research:  
<http://www.indire.it/en/>
- [28] As defined in Inter-ministerial Decree dated 7 February 2013, professional technical hubs are intended to be the functional interconnection between the subjects in the training chain and companies in the production chain and are therefore identified as 'training venues for learning in situ', established thanks to network agreements for sharing public and private workshops that are already operating; this interconnection also establishes venues dedicated to learning in applicative contexts, in order to make full use of existing professional resources, even based on 'workshop at school' and 'enterprise school' modes.
- [24] Ministère de l'Éducation Nationale, de l'Enfance et de la Jeunesse (MENJE). Hereinafter referred to as education ministry.
- [25] Ministère de l'Enseignement Supérieur et de la Recherche (MESR). Hereinafter referred to as higher education ministry.
- [26] Ministère du Travail, de l'Emploi et de l'Économie Sociale et Solidaire (MTE). Hereinafter referred to as labour ministry.
- [28] Chambre de Commerce.
- [29] Chambre des Métiers.
- [30] Chambre d'Agriculture.
- [31] Chambre des Salariés.
- [32] Chambre des Fonctionnaires et Employés Publics.
- [37] Conseil national des programmes.
- [38] This section is based on: INFPC (2019). Vocational education and training in Europe: Luxembourg. Cedefop ReferNet VET in Europe reports 2018.  
[http://libserver.cedefop.europa.eu/vetelib/2019/Vocational\\_Education\\_Training\\_Europe\\_Luxe](http://libserver.cedefop.europa.eu/vetelib/2019/Vocational_Education_Training_Europe_Luxe)
- [15] Izglītības un zinātnes ministrija.
- [16] Valsts izglītības satura centrs (VISC).
- [17] Izglītības kvalitātes valsts dienests (IKVD).
- [18] Valsts izglītības attīstības aģentūra (VIAA).
- [19] Labklājības ministrija (Ministry of Welfare).
- [20] Nodarbinātības valsts aģentūra (NVA).
- [21] Profesionālās izglītības un nodarbinātības trīspusējās sadarbības apakšpadome. It was founded in 2000 by the ministries of welfare, economy, finance, justice, agriculture, education and science, regional development and local government affairs, the Free Trade Union Confederation of Latvia and the Employers' Confederation of Latvia.
- [30] <https://mcast.edu.mt/>
- [31] <https://its.edu.mt/>

## CHAPTER 8.

# VET financing mechanisms

The regional county authorities are responsible for general education and VET provision, distributing VET financing provided by the State budget and ensuring apprenticeship placement and supervision ( 31 ). Enterprises with training contracts, according to the Education Act, receive a grant (*Basistilskudd I*), approximately EUR 69 per month for 2 years (24 months) per apprentice. There are some grant variations depending on type of apprenticeship contract (main model (2+2) or 2, 3 or 4 years of training in enterprise). In addition, the enterprise receives yearly funding of approximately EUR 6 000 per contract.

The grant given to training enterprises accepting adult apprentices (*basistilskudd II*) is about EUR 6 000 per year per apprentice.

Extra funding is also provided for enterprises signing contracts with apprentices in rare and protected crafts.

A EUR 2 million grant to encourage new enterprises to take on apprentices was introduced in 2014. From 2015, the county municipality could define regional criteria for the grant and from 2016 the grant may also be used to reduce unemployment amongst NEETs or ensure high-quality school-based training as an alternative for those without an apprenticeships contract.

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- [25] See also: [https://eacea.ec.europa.eu/national-policies/eurydice/content/adult-education-and-training-funding-3\\_en](https://eacea.ec.europa.eu/national-policies/eurydice/content/adult-education-and-training-funding-3_en)
- [26] See also: [https://eacea.ec.europa.eu/national-policies/eurydice/content/adult-education-and-training-funding-5\\_nl](https://eacea.ec.europa.eu/national-policies/eurydice/content/adult-education-and-training-funding-5_nl)
- [27] <http://www.oecd.org/education/Education-Policy-Outlook-Country-Profile-Belgium.pdf>
- [28] IAWM: Institut für Aus- und Weiterbildung im Mittelstand und in kleinen und mittleren Unternehmen / Institute for vocational and educational training in small and medium-sized companies in BE-DE. ADG: Arbeitsamt der Deutschsprachigen Gemeinschaft, Public Employment Service of the German-speaking Community. Le Forem: Office wallon de la Formation professionnelle et de l'Emploi/ The Walloon Office for Vocational Training and Placement. VDAB: Vlaamse Dienst voor Arbeidsbemiddeling en Beroepsopleiding/ Flemish Employment and Vocational Training Agency. Bruxelles Formation: Institut Bruxellois pour la Formation professionnelle / The Brussels Institut for Vocational Training. Actiris: Brussels Public Employment Service.
- [39] Ministry of Education, Youth and Sports. Vývojová ročenka školství 2021/11-2020/21 [Statistical Yearbook on Education 2010/11-2020/21]. <https://www.msmt.cz/vzdelavani/skolstvi-v-cr/statistika-skolstvi/vyvojova-rocenka-skolstvi-2010-11-2020-21> [accessed 18.8.2021].
- [41] Ministry of Education, Youth and Sports [Ministerstvo školství, mládeže a tělovýchovy – MŠMT]. [www.msmt.cz](http://www.msmt.cz)
- [42] The education ministry sets the limits for each year.
- [43] Ministry of Labour and Social Affairs [Ministerstvo práce a sociálních věcí – MPSV]. [www.mpsv.cz](http://www.mpsv.cz)
- [56] Bundesministerium für Bildung und Forschung (BMBF).
- [57] Bundesministerium für Wirtschaft und Energie (BMWi).
- [58] Bundesministerium für Arbeit und Soziales (BMAS)
- [59] Bundesagentur für Arbeit (BA)

- [61] Bundesinstitut für Berufsbildung (BIBB).
- [64] Überbetriebliche Berufsbildungsstätten (ÜBS) and in the skilled trade sector (ÜLU).
- [65] Ausbildungsverbände.
- [69] Specific information on all public funding activities is available on <http://www.foerderdatenbank.de/>
- [74] Volkshochschulen (VHS).
- [21] The most recent available data of 2017.
- [22] VET providers must collect these data. The system is not fully operational yet as the new financing system will be ready in 2023.
- [25] Local authorities as the legal founders and owners of the schools can also be investors regarding buildings/infrastructure.
- [26] Eurostat, gov\_10a\_exp [extracted 28.7.2021].
- [27] VET System Development Programme 2016-20.
- [28] Zakon o strukovnom obrazovanju [Vocational Education and Training Act]; Official Gazette No 30/2009, 24/2010, 22/2013, 25/2018
- [29] Zakon o obrtu [Crafts Act]; Official Gazette No 143/2013, 127/2019, 41/2020. Pravilnik o minimalnim uvjetima za ugovore o naukovanju [Regulation on minimal conditions for apprenticeship contracts]. Official Gazette No 107/2020.
- [23] <https://tradingeconomics.com/iceland/gdp> [Accessed: 14.10.2021].
- [24] <https://tradingeconomics.com/iceland/government-spending-to-gdp> [Accessed: 14.10.2021].
- [25] See more information on the fund here at Rannis' website: <https://www.rannis.is/sjodir/menntun/vinnustadanamssjodur/> [Accessed: 30.9.2021].
- [26] See the relevant information here at (trade union) Samidn's website: <https://samidn.is/2012/08/31/launataxtar-samtoek-atvinnulifsins/>
- [39] Eurostat - Table gov\_10a\_exp [accessed 02.08.2021].
- [40] OCDE (2020), Regards sur l'éducation 2020 : Les indicateurs de l'OCDE, Éditions OCDE, Paris, <https://doi.org/10.1787/7adde83a-fr>
- [43] <https://guichet.public.lu/fr/citoyens/enseignement-formation/etudes-superieures/aides-logement/aide-financiere.html> [accessed 2.8.2021].
- [31] Cedefop (2019). Spotlight on VET – 2018 compilation: vocational education and training systems in Europe. Luxembourg: Publications Office. <http://www.cedefop.europa.eu/en/publications-and-resources/publications/4168>

## CHAPTER 9.

# Teachers and trainers

## 9.1 VET teacher types

There are three main groups of VET training staff at upper secondary level:

- VET teachers who provide formal school-based education and training;
- training supervisors (*faglige ledere*);
- trainers (*instruktører*) who provide training in enterprises.

### VET teachers

The formal qualification requirements for VET teachers in schools are specified in national regulations. In principle, there is no difference between VET teachers and other teachers. Both groups must have two sets of formal qualifications: qualifications in the relevant subject and in education (pedagogy and didactics). VET teacher education programmes follow the general degree system, with a 3-year bachelor degree and a 2-year master degree. To become a qualified VET teacher, candidates must complete either vocational practical-pedagogical education or vocational teacher education.

Vocational practical-pedagogical education (consecutive model) is a 1-year programme (or 2 years part-time) for learners who already hold a vocational/professional degree or other qualification (see below). The main fields of study are pedagogical theory, vocational didactics and supervised teaching and training practice. The admission requirements are:

- a professionally oriented bachelor or master degree+;
- a minimum of 2 years of professional experience,

or:

- qualification as a skilled craftsperson/worker;
- general university and college admission certification;
- 4 years of relevant occupational experience;
- 2 years of further studies (technical, professional, managerial).

Vocational teacher education is a comprehensive 3-year bachelor programme covering both vocational training and pedagogy. It is also available as a part-time course of study and through work-based provision. The admission requirements are:

- general university and college admission certification;
- mark requirements in mathematics and Norwegian;
- trade or journeyman's certificate;
- minimum 2 years of relevant work experience.

All teacher education programmes for the lower and upper secondary levels (grades 8–13), including those for VET teachers, were revised in the Norwegian national qualifications framework of December 2011, following up both the European qualifications framework for higher education in the Bologna Process (QF-EHEA) and the European qualifications framework for lifelong learning (EQF). The new regulation on the relevant framework curricula came into force in March 2013 and was last amended in August 2016.

Teachers already employed may apply for grants to do a 1-year undergraduate teacher training programme for vocations (60 ECTS) or a vocational teacher education (180 ECTS). The size of

the grant size is from EUR 11 000 to 22 000.

Another option for teachers is to do continuing education in common core subjects. While studying, the teacher may be released with up to 37.5% of the employment.

Several continuing education courses are available from the school year 2020/21, all 15 ECTS. The target group is vocational teachers who teach programme subjects. Training supervisors and trainers in enterprises can also gain admission to continuing education courses for vocational teachers, if places are available.

Secondment as a visiting trainee for VET teachers, trainers and qualified training supervisors has been introduced to facilitate better cooperation between schools and enterprises. The teacher will become familiar with the enterprises and the trainers and qualified training supervisors will get an insight in how training in schools is organised for future apprentices.

### **Training supervisor and trainers**

A training enterprise with an apprentice must appoint a qualified training supervisor and one or more trainers. How training is conducted varies between enterprises, but other employees in the enterprise are often involved in the training. The training enterprise must be able to document how the training is planned, organised and assessed in order to ensure that apprentices can develop the necessary skills and competences. These skills are not assessed by testing and grading, but rather through continuous evaluation by the enterprise and at two meetings a year between the trainer (*instruktør*) and the apprentice.

Training supervisors (*faglige ledere*) in enterprises or other workplaces with apprentices must ensure that the training meets the requirements stipulated in the Education Act. They must have one of the following qualifications:

- a trade or journeyman's certificate in the relevant trade or craft;
- master craftsman's certificate in the relevant craft;
- relevant higher education in the trade or craft;
- adequate educational background in the parts of the trade which, according to the curriculum, will be taught in the enterprise;
- 6 years of experience in the trade or craft.

Trainers (*instruktører*) in training enterprises are vocationally skilled, often with a formal vocational qualification. They are not required to hold a teaching certificate. Some trainers do not hold formal qualifications in their vocational skills, but have instead developed them through work experience. Formal regulations simply state that the management of the training enterprise must ensure that trainers have 'the necessary qualifications' ( 32 ).

### **Initiatives for VET competence development**

Norway will need more vocational education teachers in the years to come to help provide skilled tradespeople for the national workforce. The Government gives priority to increased recruitment and qualification of VET teachers in the national competence development initiative from 2015. The Norwegian Directorate for Education and training is responsible for several VET competence development initiatives. Since 2015 there has been a mapping of skills development among VET teachers, for the best possible adapted schemes to this target group. Course material for trainers (*instruktør*), qualified training supervisor (*faglig leder*) and examination board member is made easily accessible online, together with tips and guidance to apprentices preparing for the qualifying exam.

## **9.2 Continuing professional development of teachers/trainers**

It is not compulsory for teachers and trainers to undertake CPD.

There are, however, many possibilities for those who are interested and funding is available. The funding covers temporary employment and scholarships and is meant as an incentive for continuing education.

The courses are selected by the individuals and approved by the school leader. The courses take place during the school year.

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- [35] For detailed information about the training of teachers and trainers in Austria, see Euryptedia: [https://eacea.ec.europa.eu/national-policies/eurydice/content/teachers-and-education-staff-1\\_en](https://eacea.ec.europa.eu/national-policies/eurydice/content/teachers-and-education-staff-1_en) [accessed 31.8.2021] and <http://www.cedefop.europa.eu/en/publications-and-resources/country-reports/teachers-and-trainers> [accessed 31.8.2021].
- [36] See Federal Law Gazette [https://www.ris.bka.gv.at/Dokument.wxe?Abfrage=BgblAuth&Dokumentnummer=BGBLA\\_2013\\_I\\_211](https://www.ris.bka.gv.at/Dokument.wxe?Abfrage=BgblAuth&Dokumentnummer=BGBLA_2013_I_211) [accessed 31.8.2021].
- [29] IFAPME: Institut wallon de Formation en Alternance et des indépendants et des Petites et Moyennes Entreprises / Walloon Institute for apprenticeship and entrepreneurial training in small and medium enterprises in Wallonia. Bruxelles Formation : Institut Bruxellois pour la Formation professionnelle / The Brussels Institut for Vocational Training. SFPME: Service Formation PME / the training service for small and medium-sized enterprises, in Brussels. Le Forem : Office wallon de la Formation professionnelle et de l'Emploi / The Walloon Office for Vocational Training and Placement.
- [30] <https://www.formaform.be/>
- [31] <http://www.cedefop.europa.eu/en/publications-and-resources/country-reports/teachers-and-trainers>
- [17] Ordinance No 15, active as of 22.07.2019: [https://mon.bg/upload/27985/nrdb15-2019\\_statut\\_uchiteli-izm24092021.pdf](https://mon.bg/upload/27985/nrdb15-2019_statut_uchiteli-izm24092021.pdf)
- [18] <http://iropk.mon.bg/>
- [19] [https://mon.bg/upload/27985/nrdb15-2019\\_statut\\_uchiteli-izm24092021.pdf](https://mon.bg/upload/27985/nrdb15-2019_statut_uchiteli-izm24092021.pdf)
- [20] <http://www.cedefop.europa.eu/en/publications-and-resources/country-reports/teachers-and-trainers>
- [26] Cyprus Pedagogical Institute(CPI). In Greek: Παιδαγωγικό Ινστιτούτο Κύπρου: <http://www.pi.ac.cy/pi/index.php?lang=el>
- [28] <http://www.cedefop.europa.eu/en/publications-and-resources/country-reports/teachers-and-trainers>
- [44] The Act No 563/2004 Coll. on pedagogical staff stipulates what type of study programmes and certificates are required for individual categories of teachers (master degree, absolutorium, matura certificate or VET certificate).
- [45] They are also available for teachers of artistic vocational subjects at elementary artistic schools, secondary schools and conservatoires, as well as teachers at language schools authorised to organise State language examinations.
- [46] Usually people who are specialists from companies wanting to become full-time teachers opt for these programmes.
- [47] National register of qualifications (Národná soustava kvalifikací).
- [48] A teacher with special education/courses who is able to prevent and, if necessary, also effectively solve problematic behaviour or situations that may appear in class or school (drugs, cyber bullying, etc.)
- [50] <http://www.cedefop.europa.eu/en/publications-and-resources/country-reports/teachers->

[and-trainers](#)

- [81] See also: Huismann, A.; Hippach-Schneider, U. (2021). Teachers' and Trainers' professional development to support inclusive and sustainable learning in Germany. Cedefop ReferNet thematic perspectives series. To be published.
- [82] Berufsbildungsgesetz (BBiG), 2005 [https://www.gesetze-im-internet.de/bbig\\_2005/BBiG.pdf](https://www.gesetze-im-internet.de/bbig_2005/BBiG.pdf)
- [83] Ausbilder-Eignungsverordnung (AEVO), last amended in 2009. [https://www.gesetze-im-internet.de/ausbeignv\\_2009/AusbEignV\\_2009.pdf](https://www.gesetze-im-internet.de/ausbeignv_2009/AusbEignV_2009.pdf)
- [84] Vorbereitungsdienst
- [85] Kultusministerkonferenz (KMK).
- [86] This section is based on: Huismann, A.; Hippach-Schneider, U. (2021). Teachers' and Trainers' professional development to support inclusive and sustainable learning in Germany. Cedefop ReferNet thematic perspectives series. To be published.
- [87] See also: Hippach-Schneider, U.; Huismann, A. (2019). Vocational education and training in Europe: Germany. Cedefop ReferNet VET in Europe reports 2018. [http://libserver.cedefop.europa.eu/vetelib/2019/ReferNet\\_Germany\\_VET\\_in\\_Europe\\_2018.pdf](http://libserver.cedefop.europa.eu/vetelib/2019/ReferNet_Germany_VET_in_Europe_2018.pdf)
- [88] AEVO, Ausbildereignungsprüfung.
- [89] geprüfter Aus- und Weiterbildungspädagoge
- [90] geprüfter Berufspädagoge
- [92] Kultusministerkonferenz (KMK).
- [93] This section is based on: Huismann, A.; Hippach-Schneider, U. (2021). Teachers' and Trainers' professional development to support inclusive and sustainable learning in Germany. Cedefop ReferNet thematic perspectives series. To be published.
- [35] European credit transfer and accumulation system.
- [36] Kutsekoda: [https://www.kutsereregister.ee/en/standardid/standardid\\_top2/](https://www.kutsereregister.ee/en/standardid/standardid_top2/)
- [37] <https://www.haridussilm.ee/ee/tasemeharidus/haridustootajad/opetajate-palgaanalus/palk-2007-2019> Õpetajate keskmise brutokuupalk 2007-19
- [38] Source: Estonian education information system (Eesti Hariduse Infosüsteem).
- [40] E.g. healthcare or social services.
- [41] <http://www.cedefop.europa.eu/en/publications-and-resources/country-reports/teachers-and-trainers>
- [23] In-company trainers (nationally referred to as workplace instructors) are responsible for supervising learners during their on-the-job learning periods or apprenticeship training in enterprises.
- [30] Eurostat, educ\_uae\_perp01 [extracted 29.7.2021].
- [31] Pravilnik o napredovanju učitelja, nastavnika, stručnih suradnika i ravnatelja u osnovim i srednjim školama i učeničkim domovima [Regulation on professional advancement of teachers, education professionals and school directors in primary and secondary schools and student dormitories]. Official Gazette No 68/2019, 60/2020, 32/2021.
- [32] As part of the national project Modernisation of the continuous professional development of VET teachers, launched by AVETA in 2017 and co-funded by the European structural and investment fund.
- [33] <http://www.cedefop.europa.eu/en/publications-and-resources/country-reports/teachers-and-trainers>
- [27] European credit transfer and accumulation system (ECTS). is a credit system designed to make it easier for students to move between different countries. Since it is based on the

learning achievements and workload of a course, a student can transfer their credits from one university to another so they are added up to contribute to an individual's degree programme or training. It helps to make learning more student-centred. It is a central tool in the Bologna process, which aims to make national systems more compatible and was adopted into Icelandic legislation with the law on universities No 63/2006 (Parliament, [www.althingi.is](http://www.althingi.is)). It also helps with the planning, delivery and evaluation of study programmes, and makes them more transparent. European credit transfer and accumulation system credits represent the workload and defined learning outcomes ('what the individual knows understands and is able to do') of a given course or programme. 60 credits are the equivalent of a full school year of study or work, or two full semesters. In a standard academic year, 60 credits would usually be broken down into several smaller components. A typical 'first cycle' (or bachelor) degree, would consist of 180 or 240 credits, whereas a typical 'second cycle' (or master) degree, would consist of 90 or 120 credits, with at least 60 credits at second cycle level. The use of European credit transfer and accumulation system at the 'third cycle' (or Ph.D. level) varies. European credit transfer and accumulation system has been adopted by most of the countries in the European higher education area (EHEA), and is increasingly used elsewhere. More information on the European credit transfer and accumulation system available at: [https://ec.europa.eu/education/resources-and-tools/european-credit-transfer-and-accumulation-system-ects\\_en](https://ec.europa.eu/education/resources-and-tools/european-credit-transfer-and-accumulation-system-ects_en) . More information on Bologna process and the European higher education area available at: [https://ec.europa.eu/education/policies/higher-education/bologna-process-and-european-higher-education-area\\_en](https://ec.europa.eu/education/policies/higher-education/bologna-process-and-european-higher-education-area_en)

- [28] <http://www.cedefop.europa.eu/en/publications-and-resources/country-reports/teachers-and-trainers>
- [31] <http://www.cedefop.europa.eu/en/publications-and-resources/country-reports/teachers-and-trainers>
- [47] This section is based on: INFPC (2019). Vocational education and training in Europe: Luxembourg. Cedefop ReferNet VET in Europe reports 2018. [http://libserver.cedefop.europa.eu/vetelib/2019/Vocational\\_Education\\_Training\\_Europe\\_Lux](http://libserver.cedefop.europa.eu/vetelib/2019/Vocational_Education_Training_Europe_Lux)
- [26] Izglītības un zinātnes ministrija
- [32] Information taken from <http://www.cedefop.europa.eu/en/publications-and-resources/country-reports/teachers-and-trainers>
- [35] The previous sectorial agreement between the Government and the Malta Union of Teachers (MUT) included a statutory requirement for teachers to attend an in-service course (INSET) of 3 days duration every 2 years. Educators could also attend CPD on a voluntary basis. This agreement increases the duration of CPD as well as widening the range of CDP provision. It also places responsibility of the school to cover at least 40 hours of CPD out of 80 hours. The current agreement was signed in December 2017 and covers the years 2018-22.
- [36] Up to 2018 Malta College of Arts, Science and Technology (MCAST) regularly offered its staff with the opportunity to take a 30 credit EQF level 6 teacher training course to acquire pedagogical skills.
- [38] Haaga Helia is a Finnish private educational institution which started collaborating with the Institute of Tourism Studies (ITS) in 2015. <http://www.haaga-helia.fi/en/about-haaga-helia/organization?userLang=en>. The organisation helped ITS develop a process for validating informal and non-formal prior learning and therefore customise lecturing staff training programmes. More information on the collaboration available at: Cedefop; ReferNet (2021). VET REF: developments in vocational education and training policy database. [Unpublished].
- [39] Institute of Tourism Studies (2018). News. ITS Graduation – The first ITS Bachelor degree graduates and a certificate with a link to the blockchain certificate.

<https://its.edu.mt/newsitem?id=49>

- [40] In 2014, the DRLLE launched a national diploma programme in teaching adults at EQF level 5. In 2018, the University of Malta launched a course leading to a master in adult education for those who had graduated from the diploma course.
- [41] <http://www.cedefop.europa.eu/en/publications-and-resources/country-reports/teachers-and-trainers>
- [32] Education Act

## CHAPTER 10.

# Shaping VET qualifications

### 10.1 Anticipating skill needs

Demands for new skills and changes in the labour market call for continuous adjustment and revision of upper secondary VET programmes, their content and their modes of delivery. The Ministry, parents, learners, employers, trade unions and others may initiate a need for adjustments or changes.

#### **At upper secondary VET level**

All eight upper secondary VET programmes are closely monitored. Changes are made continuously, based on input and applications from social partners, counties or the vocational training councils (*Faglige råd*) that give advice on training in specific groups of trades ( 33 ).

The Directorate for Education and Training (Directorate) hosts the secretariats of both the National Council for Vocational Education (*Samarbeidsrådet for yrkesopplæring* (SRY)) that gives advice on an overarching level, and the vocational training councils. These councils must report on the situation to the national authorities once in the 4-year nomination period. The report also covers the potential need for changes in their respective VET programmes. The Directorate, in cooperation with vocational training councils, vocational committees (*faglig utvalg*), county municipalities and social partners, reviewed VET programmes available in 2016. The result is a new structure for vocational subjects in upper secondary schools from 2020, which will be the biggest change in vocational education since 2006. The new structure will strengthen the quality and relevance of education.

One element that may limit the social partners' impact on upper secondary VET provision is the emphasis placed on the individual choices of learners. According to legislation ( 34 ), learners are entitled to admission to one out of three preferred upper secondary programmes. In the school year 2021/22, 86% of first-year learners were admitted to their first choice of upper secondary education ( 35 ). County authorities must provide programmes and subjects that correspond to these preferences. In order to balance VET provision with labour market needs, social partners give advice concerning a wide range of topics related to upper secondary VET: training programme structure, curriculum development, regional structure, volume of VET provision, examinations framework for trade and journeyman certificates, and quality control at national, county and local level.

#### **At post-secondary VET level**

In post-secondary vocational education, and in higher education, study programmes are designed by the provider. Each post-secondary vocational education programme must be recognised by Norwegian Agency for Quality Assurance in Education (NOKUT) and is placed at EQF level 5. The vocational colleges offering post-secondary vocational education are not free to establish programmes at above EQF level 5. In other higher education, all accredited institutions can establish programmes at bachelor level (EQF 6), within the scope of their accreditation. Universities are free to establish programmes at all levels, including master and PhD programmes. All tertiary education institutions have external board members, and consultation with relevant labour market players on the design of programmes is common. In some fields there are national framework curricula to ensure some degree of similarity in training for all graduates (including teacher education, nursing, engineering, auditing). For other fields of training, the respective industries have national boards which offer advice to higher education providers. All higher education institutions are required to have a strategy and

a consultative council for cooperation with working life (*Råd for samarbeid med arbeidslivet*).

## 10.2 Designing qualifications

In April 2016, the Government adopted a new white paper ( 36 ) that will lead to renewal of the curriculum reform (*Kunnskapsløftet*) from 2006. The renewal of the school subjects in primary, lower and upper secondary education, including VET, will give learners more in-depth training and a better subject understanding, and more relevant content and links between subjects; the learning process progression will be made clearer. The new curriculum was ready in the autumn of 2020.

### **The national curriculum**

The National curriculum for knowledge promotion (*Kunnskapsløftet 2006*) covers compulsory primary and lower secondary education and upper secondary education and training as a whole.

The curriculum consists of:

- the core curriculum: values and principles in education;
- subject curriculum;
- a framework regulating the distribution of teaching hours per subject.

The core curriculum deepens appreciation of basic values such as moral outlook, creative abilities, preparation for working life and society, general education, cooperation, and ecological understanding. This part of the curriculum underlies all education in Norway, from primary to adult, and provides the binding foundation and values for primary and upper secondary education and training.

The quality framework consists of the principles that clarify the school owners' (municipalities and county authorities) responsibilities. Key competences are integrated into the quality framework, such as learning strategies, social competences, cultural competences, motivation to learn, and learner participation.

The subject curricula consist of outcome-based learning targets, the main subject areas and basic skills. The main subject areas describe what the learner and apprentice should be able to do. The basic skills are: the ability to express oneself orally and in writing, the ability to read, fluency in numeracy, and the ability to use digital tools. The subject curricula also describe which final assessment will be given on completion.

The distribution of teaching hours per subject is set at national level. This is an overview of how the total teaching hours should be distributed per subject per year for the 10-year compulsory education as well as for the upper secondary level, VET included.

The national curriculum encompasses 10-year compulsory education and upper secondary education and training as a whole. The competence objectives state what the learner/apprentice should be able to master at each level after grades 2, 4, 7 and 10, as well as after every stage of upper secondary education and training. Basic skills are decisive for acquiring subject-related knowledge and for communicating and cooperating with others in a wide range of situations. Their aims are integrated with, and adapted to, each subject according to level. The subject curricula also describe the principles for assessment. However, decisions regarding teaching methods are left to the education and training institutions. Curricular activities at local levels are essential in order to implement the national curriculum, particularly the outcome-based competence aims in the subject curricula. School owners must have a system in place for following up the quality of local curricular activities. The Norwegian Directorate for Education and Training develops web-based guidelines to support local

curricular activities as well as other measures to raise competence among school owners and school managements.

#### **Developing VET curricula (EQF level 4)**

The Directorate has responsibility for continuous curriculum development. It makes extensive use of expert groups from both schools and enterprises providing upper secondary education. When the need for a new qualification is identified, a tripartite group is set up to design vocational profiles; these form the basis for developing the subject curricula. The Directorate appoints teams for curricula development consisting of professionals (most often proposed by the employer and employee organisations) and VET teachers.

Within 3 months, the team submits a draft version of the curriculum to the Directorate. The draft is distributed to the sector for a 3-month consultation process and relevant feedback is incorporated. With support from external representatives from the sector, curriculum quality is assured by the Directorate. Depending on the subject, curricula are finally set by the Ministry or the Directorate.

The identified labour market needs will have no direct influence on teachers' training or assessment, but the training of teachers and the assessment of learners and apprentices will be dependent on the subject curricula.

The Directorate also has a follow-up system for curricula (*System for oppfølging av læreplan (SOL)*). The purpose of the system is to obtain a more holistic and systematic overview of the situation for the curricula. SOL entails reviewing, compiling and analysing different sources that inform the situation for the curricula and how they function. These sources include studies, enquiries, evaluation reports and statistics. The intention is that SOL should contribute to making administration of the curricula more systematic, knowledge-based and predictable. The knowledge gained gives the Directorate a basis for initiating necessary and adequate measures for strengthening implementation of the curricula. These measures can support and inform VET providers when adjusting the curricula.

Norway is in the process of renewing all subjects at all levels of education. The renewed subjects and a new core curriculum were implemented in 2020.

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[37] See AMS. Qualification barometer <http://www.ams.at/qualifikationsbarometer> [accessed 31.8.2021].

[38] for more information on the new skills initiative and results see <https://www.ams.at/newskills> [accessed 31.8.2021].

[39] Cedefop. Skills forecast. <http://www.cedefop.europa.eu/en/publications-and-resources/data-visualisations/skills-forecast> [accessed 31.8.2021].

[40] Cedefop. Skills panorama. <https://skillspanorama.cedefop.europa.eu/en/indicators/european-skills-index> [accessed 31.8.2021].

[32] Competent can be freely accessed at the following website: SERV. Sterk door overleg. <https://www.serv.be/serv>

[33] <https://www.steunpuntwerk.be/>

[34] Bassins de l'Enseignement qualifiant – Formation – Emploi, IBEFE.

[35] Previously Brussels Observatory of Employment and Training.

[36] Bruxelles Formation : Institut Bruxellois pour la Formation professionnelle / The Brussels Institut for vocational training.

- [37] <http://www.cedefop.europa.eu/en/publications-and-resources/data-visualisations/skills-forecast>
- [38] <https://skillspanorama.cedefop.europa.eu/en/indicators/european-skills-index>
- [40] Service francophone des métiers et des qualifications – the French-speaking Agency for Professions and Qualifications.
- [41] IAWM: Institut für Aus- und Weiterbildung im Mittelstand und in kleinen und mittleren Unternehmen / Institute for alternating training and small and medium enterprises.
- [42] ADG: Arbeitsamt der Deutschsprachigen Gemeinschaft Belgiens / Employment and Vocational Training Agency in the German-speaking Community.
- [21] <http://www.cedefop.europa.eu/en/publications-and-resources/data-visualisations/skills-forecast>
- [22] <https://skillspanorama.cedefop.europa.eu/en/indicators/european-skills-index>
- [23] <https://www.mon.bg/bg/57>
- [24] <https://www.navet.government.bg/bg/media/ZPOO-2018-1.pdf>
- [25] <http://www.mon.bg> and <http://www.navet.government.bg>
- [26] Framework programmes include: general provisions, including the regulatory basis, the aim and purpose of the programme; requirements: entry (age, medical, previous education and qualification level), career and education pathways, form(s) of training (day full-time, evening, part-time, individual, distance, dual, self-learning); curriculum; training module content (theoretical and practical); graduation requirements (State examinations for full qualifications and final examinations for partial qualifications).
- [27] National Agency for Vocational Education and Training (NAVET). Optimisation of List of professions for VET. <https://www.navet.government.bg/bg/lpvet-opt/>
- [33] <http://www.cedefop.europa.eu/en/publications-and-resources/data-visualisations/skills-forecast>
- [34] <https://skillspanorama.cedefop.europa.eu/en/indicators/european-skills-index>
- [51] <https://www.predikcetrhuprace.cz/>
- [52] Available at [www.infoabsolvent.cz](http://www.infoabsolvent.cz).
- [53] <https://www.infoabsolvent.cz/Temata/ClanekAbsolventi/4-4-02/Charakteristiky-a-perspektivy-odvetvi-ekonomiky-v-34>[accessed 10.11.2021].
- [54] Ministry of Labour and Social Affairs [Ministerstvo práce a sociálních věcí – MPSV]. [www.mpsv.cz](http://www.mpsv.cz)
- [55] Ministry of Education, Youth and Sports [Ministerstvo školství, mládeže a tělovýchovy – MŠMT]. [www.msmt.cz](http://www.msmt.cz)
- [56] <http://www.cedefop.europa.eu/en/publications-and-resources/data-visualisations/skills-forecast>
- [57] <https://skillspanorama.cedefop.europa.eu/en/indicators/european-skills-index>
- [58] [www.narodnikvalifikace.cz](http://www.narodnikvalifikace.cz)
- [59] The Act No 179/2006 Coll., on the Verification and Recognition of Further Education Results: <https://www.msmt.cz/dokumenty-3/zakon-o-overovani-a-uznavani-vysledku-dalsiho-vzdelavani> [accessed 10.11.2021].
- [60] A vocational qualification (profesní kvalifikace) is defined as an ability of a person to perform a task or a set of tasks within an occupation. It corresponds to certain activities (e.g. furniture assembly, installation of lifts, manufacture of upholstered seats, sports massage, flower arrangement, cold dishes catering, production of ice cream, etc.) but does not cover the whole occupation.

- [61] A complete vocational qualification (úplná profesní kvalifikace) is defined as a professional competence to perform all the tasks within an occupation (e.g. pastry chef, hairdresser, plumber, economist, engineering technician, etc.). It can be acquired either by completing an IVET programme or by the recognition of prior learning.
- [62] [www.narodnikvalifikace.cz](http://www.narodnikvalifikace.cz)
- [63] In Czech: Vyšší odborné školy.
- [64] In Czech: Vysoké školy.
- [65] [www.nsp.cz](http://www.nsp.cz)
- [66] <https://www.narodnikvalifikace.cz/>
- [67] [www.nsp.cz](http://www.nsp.cz)
- [68] [https://www.spcr.cz/struktura-sp-cr/45-aktualne/co-by-vas-mohlo-zajimat/10355-zamestnavatele-se-vice-zapoji-do-prakticke-vyuky-;](https://www.spcr.cz/struktura-sp-cr/45-aktualne/co-by-vas-mohlo-zajimat/10355-zamestnavatele-se-vice-zapoji-do-prakticke-vyuky-) <https://1url.cz/TKha1> [accessed 10.11.2021].
- [94] Bündnis für Arbeit, Ausbildung und Wettbewerbsfähigkeit.
- [97] Institut für Arbeitsmarkt und Berufsforschung (IAB).
- [100] Referenz-Betriebs-System (RBS).
- [101] <https://www.bibb.de/de/12471.php>
- [102] <https://www.bibb.de/en/49603.php>
- [107] Arbeitsmarktbarometer.
- [108] <https://www.iab.de/de/daten/arbeitsmarktbarometer>
- [109] <https://www.iab.de/de/befragungen.aspx> ; <https://www.vdi.de/presse/publikationen/> ; [https://www.bitkom.org/de/markt\\_statistik/806.aspx](https://www.bitkom.org/de/markt_statistik/806.aspx) .
- [110] <https://www.boeckler.de/index.htm>
- [111] <https://www.fes.de/>
- [112] <https://www.kas.de/>
- [113] <https://www.bertelsmann-stiftung.de/cps/rde/xchg/bst>
- [115] <http://www.cedefop.europa.eu/en/publications-and-resources/data-visualisations/skills-forecast>
- [116] <https://skillspanorama.cedefop.europa.eu/en/indicators/european-skills-index>
- [117] Ausbildungsberufe.
- [120] Bundesministerium für Wirtschaft und Energie (BMWi)
- [121] Bundesministerium für Bildung und Forschung (BMBF)
- [124] Berufsbildungsgesetz (BBiG)
- [125] Bundesministerium für Wirtschaft und Energie (BMWi).
- [127] Der ‚Bund-Länder-Koordinierungsausschuss Ausbildungsordnungen/Rahmenlehrpläne‘ (KoA).
- [42] Ministry of Economic Affairs and Communications.
- [44] <https://oska.kutsekoda.ee/en/oska-sectors/>
- [45] <http://www.cedefop.europa.eu/en/publications-and-resources/data-visualisations/skills-forecast>
- [46] <https://www.cedefop.europa.eu/en/tools/european-skills-index>
- [47] Kutsekoda: State register of occupational qualifications: <http://www.kutsekoda.ee/kutsereregister>
- [24] <https://beta.oph.fi/fi/tilastot-ja-julkaisut/julkaisut/osaaminen-2035>

- [25] It means that VET providers can decide within the limits of the licence received from Ministry of Education and Culture what qualifications and training programmes to offer.
- [26] This section is based on Cedefop's Skills Panorama (2017). Skills anticipation in Finland. Analytical highlights series.  
[http://skillspanorama.cedefop.europa.eu/en/analytical\\_highlights/skills-anticipation-finland](http://skillspanorama.cedefop.europa.eu/en/analytical_highlights/skills-anticipation-finland)
- [27] A reduction in the number of employees, which is achieved by not replacing those who leave.
- [28] Growth in competences for Finland: proposed objectives for degrees and qualifications for the 2020s (Suomi osaamisen kasvu-uralle. Ehdotus tutkintotavoitteista 2020-luvulle).  
<http://julkaisut.valtioneuvosto.fi/handle/10024/75163>
- [29] <http://www.cedefop.europa.eu/en/publications-and-resources/data-visualisations/skills-forecast>
- [30] <https://www.cedefop.europa.eu/en/tools/european-skills-index>
- [31] <http://www.cedefop.europa.eu/en/events-and-projects/projects/european-credit-system-vocational-education-and-training-ecvet>
- [32] Teachers, guidance and counselling staff and assessors of competence.
- [34] Uredba o praćenju, analizi i predviđanju potreba tržišta rada za pojedinim zvanjima, te izradi i uzimanju u obzir preporuka za obrazovnu upisnu politiku [Government decree on the monitoring, analyses and prediction of labour market needs and the development of an educational enrolment policy]; Official Gazette No 93/2010.
- [35] Public employment service.
- [36] Zakon o Hrvatskom kvalifikacijskom okviru [Croatian Qualification Framework Act]; Official Gazette No 22/2013, 41/2016, 64/2018, 47/2020, 20/2021.
- [37] Strategy of regional development, Industrial strategy, Smart specialisations strategy, Innovation strategy and Strategy of science, education and technology.
- [38] <http://hko.poslovna.hr/>
- [39] <http://www.cedefop.europa.eu/en/publications-and-resources/data-visualisations/skills-forecast>
- [40] Zakon o Hrvatskom kvalifikacijskom okviru [Croatian Qualification Framework Act]; Official Gazette No 22/2013, 41/2016, 64/2018, 47/2020, 20/2021..
- [41] Pravilnik o Registru Hrvatskog kvalifikacijskog okvira [Regulation on CROQF Register]; Official Gazette No 96/2021.
- [29] <https://www.oecd.org/education/implementing-policies/collapsecontents/Menntastefna-2030-Sk%C3%BDrsla-OECD-um-innlei%C3%B0ingu-Menntastefn.pdf>
- [30] <http://www.cedefop.europa.eu/en/publications-and-resources/data-visualisations/skills-forecast>
- [31] Information for Iceland is not available.
- [32] [https://www.government.is/library/01-Ministries/Ministry-of-Education/Curriculum/adskr\\_frsk\\_ens\\_2012.pdf](https://www.government.is/library/01-Ministries/Ministry-of-Education/Curriculum/adskr_frsk_ens_2012.pdf)
- [32] <http://www.unioncamere.gov.it/>
- [33] Information and data collected through the surveys is organised on the basis of the 2011 Classification of occupations and the Classification of economic activities (ATECO).
- [34] <http://www.cedefop.europa.eu/en/publications-and-resources/data-visualisations/skills-forecast>
- [35] <https://skillspanorama.cedefop.europa.eu/en/indicators/european-skills-index>
- [37] The Atlas of work and qualifications (work atlas) is a classification and information tool

created on the basis of the descriptors of the Classification of economic and professional sectors, also pursuant to Art. 8 of Legislative Decree 13/2013 and Art. 3, para. 5 of the Inter-Ministerial Decree of 30 June 2015 and an integral part of the information systems pursuant to Arts. 13 and 15 of Legislative Decree 150/2015.

- [38] Vocational schools (Istituti professionali).
- [39] Repertorio nazionale delle qualifiche.
- [40] Istituti tecnici e istituti professionali.
- [41] Profilo Educativo culturale e professionale P.E.Cu.P.
- [42] Decreto del Presidente della Repubblica, 15 marzo 2010, No 88 and Decreto del Presidente della Repubblica 31 luglio 2017, No 134.
- [43] Decreto Legislativo, 13 aprile 2017, No 61:  
<https://www.gazzettaufficiale.it/eli/id/2017/05/16/17G00069/sg>
- [44] Istruzione e formazione tecnica superiore.
- [45] Istituti di Istruzione Tecnica superiore. More information available at:  
<http://www.sistemailts.it/istituti-tecnici-superiori-its.php>
- [48] This survey is conducted in collaboration with the Luxembourg Bankers' Association, the Luxembourg Confederation of Commerce, the Chamber of Commerce, the Public employment services (Adem) and the education ministry, with support from the European Union (EURES).
- [50] This section is based on: INFPC (2019). Vocational education and training in Europe: Luxembourg. Cedefop ReferNet VET in Europe reports 2018.  
[http://libserver.cedefop.europa.eu/vetelib/2019/Vocational\\_Education\\_Training\\_Europe\\_Luxe](http://libserver.cedefop.europa.eu/vetelib/2019/Vocational_Education_Training_Europe_Luxe)
- [51] <http://www.cedefop.europa.eu/en/publications-and-resources/data-visualisations/skills-forecast>
- [52] <https://skillspanorama.cedefop.europa.eu/en/indicators/european-skills-index>
- [57] Based on: INFPC (2019). Vocational education and training in Europe: Luxembourg. Cedefop ReferNet VET in Europe reports 2018.  
[http://libserver.cedefop.europa.eu/vetelib/2019/Vocational\\_Education\\_Training\\_Europe\\_Luxe](http://libserver.cedefop.europa.eu/vetelib/2019/Vocational_Education_Training_Europe_Luxe)
- [27] Ekonomikas ministrija.
- [28] Nodarbinātības valsts aģentūra (NVA).
- [29] Darba tirgus prognozēšanas konsultatīvā padome.
- [31] <https://cvvp.nva.gov.lv/#/pub/pakalpojumi/prognozes/>
- [32] Centrālā statistikas pārvalde (CSB).
- [33] <https://www.cedefop.europa.eu/en/tools/skills-forecast>
- [34] <https://www.cedefop.europa.eu/en/tools/european-skills-index>
- [42] <https://jobsplus.gov.mt/>
- [43] Organised by the Malta Chamber of Commerce, Enterprise and Industry and PricewaterhouseCoopers. Findings are frequently used in Central Bank of Malta reports.
- [44] For the latest edition, see Ernst & Young Limited (2016). The survey includes information on recruitment problems and skill mismatch.
- [45] Ministry for Finance and Employment, 2021. The National Employment Policy 2021-2030. [online] Government of Malta, pp.232-240. Available at:  
<https://finance.gov.mt/nep/Documents/NATIONAL%20EMPLOYMENT%20POLICY%202021.pdf>
- [46] <http://www.cedefop.europa.eu/en/publications-and-resources/data-visualisations/skills-forecast>
- [47] <https://skillspanorama.cedefop.europa.eu/en/indicators/european-skills-index>

- [50] The structure of qualifications and the procedure of accrediting programmes is to be found in the referencing report 2016 <https://mfhea.mt/wp-content/uploads/2021/03/Referencing-Report-2016.pdf>
- [33] One for each VET programme.
- [34] Section 3-1 of the Education Act.
- [35] <https://www.udir.no/tall-og-forskning/statistikk/statistikk-videregaende-skole/analyser/forsteinntak-til-videregaende-opplaring-2021/>
- [36] Meld.St. 28 (2015-16) Fag – Fordypning – Forståelse — En fornyelse av Kunnskapsløftet {Report No 28 to the Storting, 2015-16, on in-depth learning and better understanding; a renewal of the Knowledge promotion reform} <https://www.regjeringen.no/contentassets/e8e1f41732ca4a64b003fca213ae663b/no/pdfs/st>

## CHAPTER 11.

# Quality assurance

Tripartite cooperation is a crucial quality assurance mechanism for upper secondary VET. The Education Act requires the county authority (*fylkeskommunen*) to consult the county vocational training board (*Yrkesopplæringsnemda*) on quality issues related to school-based and work-based VET. A main task for the board is thus to give advice, especially related to accreditation of apprenticeship training enterprises. The board should also present proposals for quality development, including improving partnerships between schools and enterprises, and skills and competence development for teachers and trainers.

As quality assurance is embedded in the legal framework, the State is responsible for inspecting all activities stipulated in the Education Act. The State also has the authority to issue legally binding orders to rectify unsatisfactory conditions. The Ministry of Education and Research (*Kunnskapsdepartementet*) has delegated this responsibility as the inspectorate at national level to the Norwegian Directorate for Education and Training (*Utdanningsdirektoratet*). The Directorate is responsible for developing and supporting inspections, to facilitate a unified inspection throughout the country, and to provide guidance on legislation. The county governors (*Statsforvalter* ( 37 )) serve as the operational inspection authority for basic training, and have responsibility for activities at county level. They also serve as the appeal body for individual decisions regarding learners in primary and lower secondary school. However, the Ministry still has the authority to exercise supervision, and can instruct the Directorate for Education and Training and the county governors on how inspections should be performed.

Quality standards for VET providers are set out in the Education Act and relevant regulations. The legislation sets standards for examinations, trade and journeyman's certification, approval of apprenticeship training enterprises, and teacher competence. The Education Act also regulates the county governors' responsibility to provide guidance to school owners. This applies to guidance not only on academic matters but also on other matters related to the Education Act. It includes guidance on administrative rules, and is intended to provide the best possible cooperation between the State and school owners.

In addition to the county governors' more general inspections, joint national inspections may also be implemented. These inspections are incident-based, and derive from regional risk assessments made in cooperation with the county governors. Situations may arise that invoke immediate attention by the authorities, and give county governors the authority to perform inspections at their own initiative.

The Norwegian Agency for Quality Assurance in Education (*Nasjonalt organ for kvalitet i utdanningen* (NOKUT)) is responsible for recognition, accreditation and quality assurance in post-secondary vocational education and higher education. The frameworks for these activities are laid down in the respective laws and regulations on quality assurance in higher education and post-secondary vocational education, as well as in supplementary regulations, rules and procedures laid down by NOKUT.

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[41] See Bmbwf. Quality management system for schools. <https://www.qms.at/> [accessed 31.8.2021].

[42] With the Education Reform Act (Federal Law Gazette, I No 138/2017 [https://www.ris.bka.gv.at/Dokumente/BgblAuth/BGBLA\\_2017\\_I\\_138/BGBLA\\_2017\\_I\\_138.pdf](https://www.ris.bka.gv.at/Dokumente/BgblAuth/BGBLA_2017_I_138/BGBLA_2017_I_138.pdf) 31.8.2021]), in force since autumn 2017, new regulations regarding quality assurance at schools have been introduced. This act foresees the establishment of a monitoring system which comprises quality management and resource controlling. QIBB is to be merged with

SQA, the quality management system of general education schools, and further developed. First results of this extensive reform are to be expected for 2020.

- [43] for more information see Bmbwf. Quality management system for schools. <https://www.qms.at/> [accessed 31.8.2021].
- [44] see Federal Institute for Quality Assurance in the Austrian School System. <https://www.iqs.gv.at/> [accessed 31.8.2021].
- [45] See IBW. <https://ibw.at/> [accessed 31.8.2021].
- [36] Decision No 82.592.
- [37] It does not apply in the case of preparatory apprenticeship.
- [38] The term 'field of study' (κλάδος) is broader than the term 'specialisation' (ειδικότητα), as it includes several specialisations. In these terms the field of study 'mechanical engineering' includes four specialisations: 'mechanical engineering', 'vehicle technology', 'building services engineering', and 'natural gas transmission and distribution'.
- [39] Cyprus Agency for Quality Assurance and Accreditation in Higher Education (CYQAA) was established on the basis of the Quality assurance and accreditation of higher education and the establishment and operation of an agency on related matters law, of 2015, and is responsible to ensure the quality of higher education in Cyprus and to support, through the procedures provided by the relevant legislation for the continuous improvement and upgrading of higher education institutions and their programmes of study. More information available at: <https://www.dipae.ac.cy/index.php/en/>
- [70] The School Quality model and related criteria for evaluation were designed and developed within the ESF project The National System for the Inspection Evaluation of the Educational System in the Czech Republic (NIQES), implemented 2011-15.
- [130]Berufsprinzip.
- [132]Berufsbildungsgesetz (BBiG): [https://www.gesetze-im-internet.de/bbig\\_2005/](https://www.gesetze-im-internet.de/bbig_2005/)
- [133]Handwerksordnung (HWO): <https://www.gesetze-im-internet.de/hwo/BjNR014110953.html>
- [134]In the period from 2011 to 2020, 118 occupations (more than a third of all 324 recognised occupations) were modernised, while 4 occupations have been created.
- [136]Kultusministerkonferenz (KMK).
- [137]Last BIBB transition study in 2011: <https://www.bibb.de/de/9039.php>
- [138]<https://www.test.de/thema/weiterbildungsberatung/>
- [139]<https://www.bibb.de/veroeffentlichungen/en/publication/show/8596>
- [140]Deutsches Institut für Erwachsenenbildung (DIE).
- [141]<https://wbmonitor.bibb.de>
- [142]This section is based on: Hippach-Schneider, U.; Huismann, A. (2019). Vocational education and training in Europe: Germany. Cedefop ReferNet VET in Europe reports 2018. [http://libserver.cedefop.europa.eu/vetelib/2019/ReferNet\\_Germany\\_VET\\_in\\_Europe\\_2018.pdf](http://libserver.cedefop.europa.eu/vetelib/2019/ReferNet_Germany_VET_in_Europe_2018.pdf)
- [51] Comprising more than 50% self-learning.
- [52] A curriculum group (e.g. media technologies) comprises curricula from related fields (e.g. multimedia; printing technology; and photography).
- [54] <https://www.haridussilm.ee>
- [33] VET provider collects feedback from learners twice: at the beginning of studies and at the end.
- [34] The term used in the legislation.
- [42] Zakon o Nacionalnom centru za vanjsko vrednovanje obrazovanja [National Centre for

External Evaluation of Education Act]; Official Gazette No 151/2004.

- [43] Pravilnik o načinu provedbe vanjskog vrednovanja i korištenju rezultata vanjskog vrednovanja školskih ustanova [Regulation on the Means of Implementing External Evaluation and Using the Results of External Evaluation of Education Providers]; Official Gazette No 23/2011.
- [44] Zakon o prosvjetnoj inspekciji [School Inspection Act]; Official Gazette No 61/2011, 16/2012, 98/2019, 52/2021.
- [45] Zakon o stručno-pedagoškom nadzoru [Professional-Pedagogical Monitoring Act]; Official Gazette No 73/1997.
- [46] Pravilnik o Registru Hrvatskog kvalifikacijskog okvira [Regulation on CROQF Register]; Official Gazette No 96/2021.
- [47] Zakon o obrtu [Crafts Act]; Official Gazette No 143/2013, 127/2019, 41/2020
- [48] Zakon o obrtu [Crafts Act]; Official Gazette No 143/2013, 127/2019, 41/2020
- [49] Zakon o strukovnom obrazovanju [Vocational Education and Training Act]; Official Gazette No 30/2009, 24/2010, 22/2013, 25/2018.
- [50] Agencija za strukovno obrazovanje i obrazovanje odraslih (2011b). Hrvatski okvir za osiguranje kvalitete u strukovnom obrazovanju i osposobljavanju: Priručnik za samovrjednovanje [Croatian framework for quality assurance in VET: manual for self-assessment].  
<http://www.asoo.hr/UserDocImages/Priru%C4%8Dnik%20za%20samovrjednovanje.pdf>
- [51] <http://e-kvaliteta.asoo.hr>
- [33] IDAN (in Icelandic: IÐAN) is a non-profit education and training provider supported by the federation of employees and unions; a provider of continuing education offering diverse in house- and company courses including accredited programs for qualified professionals in the crafts and trades. Companies have also access to career and vocational counselling through skills assessment, analysis of educational needs and planning and implementation of in-house educational pathways. IÐAN has been heavily involved with the implementation of validation of prior learning in Iceland. IÐAN provides assessment of non-Icelandic professional qualifications and work experience. In addition, a provider of various services for the Ministry of Education, Science and Culture and are involved in creating both national and international partnerships, embracing innovation and meeting new challenges to support the labour market. More information available at:  
<http://viskaproject.eu/about-us/idan/>
- [46] National Institute for the Evaluation of the Education and Training System / Istituto nazionale per la valutazione del sistema di istruzione e formazione (INVALSI):  
<http://www.invalsi.it/invalsi/index.php>
- [47] National Institute for Documentation, Innovation and Educational Research / Istituto nazionale di documentazione, innovazione e ricerca educativa (INDIRE):  
<http://www.indire.it/>
- [48] [www.inapp.org](http://www.inapp.org)
- [58] See EQAVET recommendation at [http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32009H0708\(01\)&from=EN](http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32009H0708(01)&from=EN) [accessed 6.3.2017].
- [59] Plan de développement de l'établissement scolaire (PDS).
- [62] Cellule de développement scolaire (CDS).
- [63] Division du développement des établissements scolaires.
- [65] <https://www.developpement-scolaire.lu/>
- [67] Observatoire national de la qualité scolaire.

- [69] Brevet de technicien supérieur.
- [71] Contrat d'établissement pluriannuel entre l'Etat et l'Université du Luxembourg, 2018-21.
- [72] Although there are no agencies registered in Luxembourg three foreign EQAR agencies operate in the country.
- [75] Commission Consultative à l'Éducation des Adultes.
- [76] This section is based on: INFPC (2019). Vocational education and training in Europe: Luxembourg. Cedefop ReferNet VET in Europe reports 2018.  
[http://libserver.cedefop.europa.eu/vetelib/2019/Vocational\\_Education\\_Training\\_Europe\\_Luxe](http://libserver.cedefop.europa.eu/vetelib/2019/Vocational_Education_Training_Europe_Luxe)
- [43] Izglītības kvalitātes valsts dienests (IKVD).
- [44] Examination centre is an accredited commercial company or association in arranging professional qualification exams, which does not implement education programmes.
- [45] Valsts izglītības satura centrs (VISC).
- [46] Augstākās izglītības padome.
- [47] Augstākās izglītības kvalitātes aģentūra (AIKA).
- [48] Akadēmiskās informācijas centrs (AIC).
- [49] ENQA
- [50] <https://www.aika.lv/>
- [37] New gender neutral name from 1.1.2021

## CHAPTER 12.

# Validation of prior learning

Validation of non-formal and informal learning is possible at all levels of education and training in Norway and can be used to acquire modules and/or full qualifications. There are laws and regulations in place relating to each level of education and training, providing a general framework for validation of prior learning. The Norwegian system of validation is based on shared principles across all sectors. One of these principles is that the validation process should be voluntary and of benefit to the individual.

Differences in funding and governance mechanisms found in primary, upper secondary, post-secondary vocational and higher education affect the preconditions for setting up validation procedures. The sectors of education have developed schemes for validation of non-formal and informal learning according to their specific needs and preconditions. Higher education institutions exercise the greatest freedom in the design and delivery of validation, because responsibilities are devolved to each institution. This also concerns post-secondary VET. The national government and its underlying administrations provide guidelines for all educational sectors.

During the autumn 2013, the Norwegian Directorate for Education and Training, in cooperation with stakeholders from the sectors, developed national guidelines (last amended on 16 March 2021) relating to adults who claim the right to have their formal, non-formal and informal learning validated compared to lower or upper secondary level. The guidelines focus mainly on how to interpret the regulations relating to validation and how to implement the different points described in the regulations. The purpose of the national guidelines for validation is to ensure that sound validation procedures are carried out, leading to similar practices in all Norwegian counties and municipalities. By providing a national basis for local practice, the guidelines could spur confidence and legitimacy of the validation practices.

- It is possible to acquire a full qualification on the basis of validation in the Programme for general studies in upper secondary education (university-preparatory).
- In upper secondary VET, it is necessary to take the relevant final (trade) examination to achieve a trade or journeyman's certificate as a skilled worker.
- In higher education, individuals can gain exemptions for parts of study programmes. On the diploma as well as on the diploma supplement, the relevant courses and credits will be identified as having been obtained through validation. In post-secondary VET, the possibility to give exemption from courses and modules on the basis of validation was introduced through regulations of 1 August 2013.

In terms of awarding credits or partial qualifications after validation in primary and upper secondary education and training, the Education Act permits candidates to achieve a partial certificate qualification, called 'certificate of competence' (*kompetansebevis*) at any level through validation. Candidates then have the right to access further education and training, in order to achieve a full trade or journeyman certificate. The certificate of competence is awarded to recognise that an individual has achieved certain objectives (learning outcomes) within an upper secondary curriculum. The certificates can serve as stand-alone evidence of competences and can be used, for example, to support a job application or participation in further education courses.

These partial certificates of competence are recognised in the labour market, as a documentation of parts of the demands in the trade. It is also possible to access education through validation: the individual must be able to show (through documentation or other

means) the required skills and competences to enter a certain level of education and training.

For more information about arrangements for the validation of non-formal and informal learning please visit Cedefop's European database ( 38 ).

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- [47] See [https://www.qualifikationsregister.at/wp-content/uploads/2018/11/Strategie\\_zur\\_Validierung\\_nicht-formalen\\_und\\_informellen\\_Lernens.pdf](https://www.qualifikationsregister.at/wp-content/uploads/2018/11/Strategie_zur_Validierung_nicht-formalen_und_informellen_Lernens.pdf) [ [accessed 31.8.2021].
- [44] <http://www.cedefop.europa.eu/en/publications-and-resources/data-visualisations/european-database-on-validation-of-non-formal-and-informal-learning>
- [28] <https://www.mon.bg/bg/57>
- [29] <https://www.mon.bg/bg/59>
- [30] <https://www.mon.bg/bg/100053>
- [31] <https://www.mon.bg/bg/100305>
- [32] National Agency for Vocational Education and Training (NAVET). Annual reports on the activities of NAVET. <https://www.navet.government.bg/bg/dokumenti/dokumenti-na-napool/>
- [33] [https://cumulus.cedefop.europa.eu/files/vetelib/2016/2016\\_validate\\_BG.pdf](https://cumulus.cedefop.europa.eu/files/vetelib/2016/2016_validate_BG.pdf)
- [40] Decision No 82.592.
- [41] Council Recommendation 2012/C398/01.
- [42] [https://cumulus.cedefop.europa.eu/files/vetelib/2016/2016\\_validate\\_CY.pdf](https://cumulus.cedefop.europa.eu/files/vetelib/2016/2016_validate_CY.pdf)
- [71] The Act No 179/2006 Coll., on the Verification and Recognition of Further Education Results: <https://www.msmt.cz/dokumenty-3/zakon-o-overovani-a-uznavani-vysledku-dalsiho-vzdelavani> [accessed 10.11.2021].
- [72] Authorised entities are licenced by the so-called awarding bodies, which are organisations of State administration relevant to the given field (ministries or the Czech National Bank). In 2016 there were 1216 authorised entities.
- [73] There are 182 complete vocational qualifications in the NSK.
- [74] <http://www.cedefop.europa.eu/en/publications-and-resources/data-visualisations/european-database-on-validation-of-non-formal-and-informal-learning>
- [143] Fachoberschulreife.
- [145] <http://www.bildungsspiegel.de/news/weiterbildung-bildungspolitik/17-valikom-chancen-fuer-menschen-ohne-berufsabschluss>; [www.validierungsverfahren.de](http://www.validierungsverfahren.de);
- [146] Gleichwertigkeitsfeststellung.
- [147] <https://www.valikom.de/fachtagung/content/impressionen/>
- [148] <https://www.validierungsverfahren.de/en/home>
- [149] [www.ihk-fosa.de](http://www.ihk-fosa.de)
- [150] <https://www.bibb.de/en/68882.php>
- [151] <https://www.anererkennung-in-deutschland.de/html/de/>
- [152] Bundesamt für Migration und Flüchtlinge (BAMF).
- [153] <https://www.anererkennung-in-deutschland.de/html/en/skillsanalysis.php>
- [154] <https://www.anererkennung-in-deutschland.de/html/en/pro/data-reports.php>
- [155] This section is based on: Hippach-Schneider, U.; Huismann, A. (2019). Vocational education and training in Europe: Germany. Cedefop ReferNet VET in Europe reports 2018. [http://libserver.cedefop.europa.eu/vetelib/2019/ReferNet\\_Germany\\_VET\\_in\\_Europe\\_2018.pdf](http://libserver.cedefop.europa.eu/vetelib/2019/ReferNet_Germany_VET_in_Europe_2018.pdf)

- [60] Elukestva oppe strateegia täiskasvanuharidusprogramm 2019-22 [Lifelong learning strategy adult education programme 2019-22].  
<https://www.hm.ee/et/tegevused/arengukavad>
- [61] <http://www.cedefop.europa.eu/en/publications-and-resources/data-visualisations/european-database-on-validation-of-non-formal-and-informal-learning>
- [34] In Icelandic: Raunfærnimat.
- [35] [https://cumulus.cedefop.europa.eu/files/vetelib/2016/2016\\_validate\\_IS.pdf](https://cumulus.cedefop.europa.eu/files/vetelib/2016/2016_validate_IS.pdf)
- [52] <http://www.cedefop.europa.eu/en/publications-and-resources/data-visualisations/european-database-on-validation-of-non-formal-and-informal-learning>
- [82] <http://www.cedefop.europa.eu/en/publications-and-resources/data-visualisations/european-database-on-validation-of-non-formal-and-informal-learning>
- [52] Izglītības kvalitātes valsts dienests (IKVD).
- [54] <http://www.haaga-helia.fi/en/frontpage>
- [55] <http://www.justiceservices.gov.mt/DownloadDocument.aspx?app=lom&itemid=11928&l=1>
- [57] <https://jobsplus.gov.mt/>
- [58] <https://bicc.gov.mt/en/Pages/HOME.aspx>
- [38] Cedefop. European database on validation of non-formal and informal learning.  
<http://www.cedefop.europa.eu/en/publications-and-resources/data-visualisations/european-database-on-validation-of-non-formal-and-informal-learning>

## CHAPTER 13.

# Incentives for learners

### Salary during apprenticeship training

The apprenticeship scheme is a critical component of the upper secondary VET 2+2 model. The regulated salary during the apprenticeship training period is a financial incentive to promote learner participation in VET. The salary for apprentices is a given percentage of the initial salary of a worker with a craft certificate in the relevant vocation. The salary increases throughout the apprenticeship.

For apprentices following the main model (2+2), the salary is calculated as follows, for the 2 years of apprenticeship:

- first half of the years in an approved training company: 30 per cent of the initial salary;
- second half: 40 per cent of the initial salary;
- third half: 50 per cent of the initial salary;
- fourth half: 80 per cent of the initial salary.

### Grants and loans for learners

The main purposes of the Act relating to learner grants (*Lov om utdanningsstøtte*) of 1985, most recently amended in 2020, are to:

- improve equity in access to education and training regardless of geography, gender, age and social background;
- improve learning environments and enable learners to study more effectively;
- ensure a qualified workforce for society at large.

Learner loans carry no interest charges during the period of study and up to 40% may be converted to grant after completing education. All registered learners participating in formally recognised study programmes, at both public and private institutions of higher education, may receive grants and subsidised loans from the Norwegian State education loan fund (*Statens lånekasse for utdanning*) for subsistence expenses. Support is also provided to Norwegian learners abroad, who may receive additional support for travel, admission and tuition fees.

Learners in upper secondary school-based VET (learners and apprentices alike) may qualify for grants and subsidised loans from the Norwegian State education loan fund subject to a needs-based assessment. They may receive relocation grants if they have to move away from home to attend school or enterprise-based training, and are also entitled to support from the fund.

The following grants are also available to adult learners:

- additional subsistence grant to cover expenses if they live away from home;
- grants for purchasing compulsory equipment, according to study programme.

Support to learners at upper secondary level is mainly provided in the form of grants.

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[48] For more information about funding in education, see Eurypedia:  
[https://eacea.ec.europa.eu/national-policies/eurydice/content/funding-education-1\\_en](https://eacea.ec.europa.eu/national-policies/eurydice/content/funding-education-1_en)  
[accessed 31.8.2021].

[49] See <https://www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=Bundesnormen&Gesetzesnummer=10009531> [accessed 31.8.2021].

- [50] See <https://www.wko.at/service/bildung-lehre/Lehrlinge.html> [accessed 31.8.2021].
- [43] The grant for the academic year 2018/19 ranges from EUR 1 450 to EUR 1 710. The grant is paid once. [http://www.moec.gov.cy/ypiresia\\_foititikis\\_merimnas/foititiki\\_chorigia.html](http://www.moec.gov.cy/ypiresia_foititikis_merimnas/foititiki_chorigia.html)
- [156][https://www.bmbf.de/bmbf/de/home/\\_documents/die-novellierung-des-berufsbildungsgesetzes-bbig.html](https://www.bmbf.de/bmbf/de/home/_documents/die-novellierung-des-berufsbildungsgesetzes-bbig.html)
- [157]BIBB Datenreport 2021 [VET data report 2021], Chapter A9.1  
[https://www.bibb.de/datenreport/de/datenreport\\_2021.php](https://www.bibb.de/datenreport/de/datenreport_2021.php)
- [158][https://www.die-duale.de/dieduale/de/home/home\\_node.html](https://www.die-duale.de/dieduale/de/home/home_node.html)
- [159]Berufsausbildungsbeihilfe BAB: Standard funding support under p. 56 ff. of the German Social Code (SGB III and BAföG). Actual expenditures 2020: EUR 291.2 million.  
[https://dejure.org/gesetze/SGB\\_III/58.html](https://dejure.org/gesetze/SGB_III/58.html) ; [www.bafoeg.bmbf.de](http://www.bafoeg.bmbf.de) ;  
<https://www.arbeitsagentur.de/bildung/ausbildung/berufsausbildungsbeihilfe-bab>  
<https://www.arbeitsagentur.de/web/content/DE/BuergerinnenUndBuerger/Ausb...> ;  
<http://www.bafoeg-aktuell.de/karriere/berufsausbildungsbeihilfe.html>
- [161]<https://www.arbeitsagentur.de/en/training-allowance-disabled-persons>
- [162]Ausbildungsbegleitende Hilfen abH - Standard funding support for dual apprenticeship and introductory training as defined in the German Social Code. (SGB III, 74 to 80).  
<https://www.arbeitsagentur.de/bildung/ausbildung/ausbildungsbegleitende-hilfen>
- [163]Actual expenditures 2020: EUR 107.38 million (BMBF, 2021 p 106).
- [164]Berufsvorbereitende Bildungsmaßnahmen – BvB (SGB III, 51). [www.arbeitsagentur.de](http://www.arbeitsagentur.de)
- [165]Actual spending for 2020: EUR 193,53 million. (BMBF (2021). Berufsbildungsbericht 2021 [VET data report 2021]. Bonn: BMBF, p. 108.
- [166]Einstiegsqualifizierung – EQ (SGB III, 54a) <https://www.arbeitsagentur.de>
- [167]Actual spending 2020: € 26,72 million (BMBF (2021). Berufsbildungsbericht 2021 [VET data report 2021], Bonn: BMBF, p.111.
- [169]Integration measures for refugees (BMWi, update 4.2019)  
[https://www.bmwi.de/Redaktion/DE/Downloads/C-D/darstellung-der-massnahmen-der-bundesregierung-fuer-die-sprachfoerderung-und-integration-von-fluechtlingen.pdf?\\_\\_blob=publicationFile&v=6](https://www.bmwi.de/Redaktion/DE/Downloads/C-D/darstellung-der-massnahmen-der-bundesregierung-fuer-die-sprachfoerderung-und-integration-von-fluechtlingen.pdf?__blob=publicationFile&v=6)
- [170][www.bamf.de](http://www.bamf.de)
- [171]<https://handbookgermany.de/en.html>
- [172]Vocational orientation – provision for refugees (BOF)  
<https://www.berufsorientierungsprogramm.de/angebote-fuer-zugewanderte/de/berufsorientierung-fuer-fluechtlinge-bof-1955.html>
- [173]Federal ESF integration guideline for asylum seekers and refugees (IvAF)  
<https://www.esf.de/portal/DE/Foerderperiode-2014-2020/ESF-Programme/bmas/esf-integrationsrichtlinie-bund.html>
- [174]<http://www.cedefop.europa.eu/en/news-and-press/news/germany-new-act-aid-refugee-integration> and [https://www.bundesregierung.de/Content/EN/Artikel/2016/07\\_en/2016-05-25-integrationsgesetz-beschlossen\\_en.html;jsessionid=9EF13197E8E4E1732BFC105F9A814042.s1t1](https://www.bundesregierung.de/Content/EN/Artikel/2016/07_en/2016-05-25-integrationsgesetz-beschlossen_en.html;jsessionid=9EF13197E8E4E1732BFC105F9A814042.s1t1)
- [175]Make-it-in-Germany portal <https://www.make-it-in-germany.com/en/> and Information portal for the recognition of foreign professional qualifications <https://www.anererkennung-in-deutschland.de/html/en/immigration.php>
- [176][https://www.aufstiegs-bafoeg.de/aufstiegsbafoeg/de/home/home\\_node.html](https://www.aufstiegs-bafoeg.de/aufstiegsbafoeg/de/home/home_node.html)
- [177]<https://www.bmbf.de/de/das-weiterbildungsstipendium-883.html>
- [178]Bundesministeriums für Bildung und Forschung (BMBF).

- [180]<https://www.bmbf.de/de/das-aufstiegsstipendium-882.html>
- [182]Funding volume in 2020: EUR 29.3 million. BMBF VET report 2021, p. 105.
- [183]<http://www.bildungspraemie.info/>
- [185]KURSNET: <http://kursnet-finden.arbeitsagentur.de/kurs/>
- [186]Several projects on partial qualifications are taking place: DIHK-TQ project website. <https://www.dihk.de/tq-de> ETAPP project's website <https://www.etapp-teilqualifizierung.de/> Website of employer initiative on partial qualification (Bundesweite Initiative zur Fachkräftegewinnung und -entwicklung) <https://www.nachqualifizierung.de/> TQ website of the Federal Employment Agency <https://www.arbeitsagentur.de/bildungstraeger/berufsanschlussfaehige-teilqualifikationen>
- [187][www.arbeitsagentur.de](http://www.arbeitsagentur.de)
- [188]<http://kursnet-finden.arbeitsagentur.de/kurs/>
- [189]Legislation promoting further training amended (AWStG) (7.2016) <https://www.bmas.de/DE/Service/Gesetze-und-Gesetzesvorhaben/arbeitslosenversicherungsschutz-weiterbildungsstaerkungsgesetz.html>
- [190]Qualification Opportunities Act (Qualifizierungschancengesetz) (12.2018) <https://www.bmas.de/DE/Service/Gesetze-und-Gesetzesvorhaben/qualifizierungschancengesetz.html>
- [191]<https://www.bmas.de/DE/Service/Gesetze-und-Gesetzesvorhaben/arbeit-von-morgen-gesetz.html>
- [192]BA website on the Future starters programme <https://www.arbeitsagentur.de/karriere-und-weiterbildung/foerderung-berufliche-weiterbildung>
- [62] Excluding 'non-stationary' programmes, i.e. comprising more than 50% self-learning.
- [64] Excluding 'non-stationary' programmes, i.e. comprising more than 50% self-learning.
- [67] Unemployment Insurance Fund. <https://www.tootukassa.ee/>
- [35] Learners pay taxes from their allowances if they receive income from other source(s).
- [36] In one or multiple periods.
- [37] <https://www.tyollisyysraha.fi/en/adult-education-allowance/>
- [52] Pravilnik o minimalnim uvjetima za ugovore o naukovanju [Regulation on minimal conditions for apprenticeship contracts]. Official Gazette No 107/2020.
- [53] Pravilnik o načinu organiziranja i izvođenju nastave u strukovnim školama [Regulation on the organisation and implementation of teaching and learning in VET schools]; Official Gazette No 140/2009, 130/2020.
- [53] Endowment consists of a nominal monetary amount that the beneficiary can use on the services included in a tailored intervention programme drawn up in agreement with public or private operators (training providers) accredited to provide such services. The amount of the endowment varies in proportion to the level of employability of the subject and the services included in the individual programme. The beneficiary is never given the sum allocated directly: the financial relationship is only established between the providing public body and the accredited public or private operator that provides the service. For some services, the operator receives the relevant public refund based on the outcome of the specific activity and not on its simple provision.
- [54] <<https://www.regione.toscana.it/-/industria-4.0-voucher-formativi-per-professionisti-e-imprenditori-al-via-i-due-bandi>>
- [55] This is a specific initiative by Tuscany Region. Maximum amount: EUR 2 500. <https://por.regione.puglia.it/-/miformoelavoro>
- [56] Amount given varies and depends on different factors (e.g. economic sector).

[http://www301.regione.toscana.it/bancadati/atti/Contenuto.xml?id=5123588&nomeFile=Decreto\\_n.7981\\_del\\_29-07-2016-Allegato-A](http://www301.regione.toscana.it/bancadati/atti/Contenuto.xml?id=5123588&nomeFile=Decreto_n.7981_del_29-07-2016-Allegato-A)

- [57] The voucher can cover between 50 and 70% of total training cost. It can vary in relation to the class size of the company. The beneficiary must be at least 18 years old.
- [58] Legge 8 marzo 2000, No 53, art. 5 <http://www.parlamento.it/parlam/leggi/000531.htm> and : XV Rapporto sulla Formazione Continua in Italia: <https://www.isfol.it/primo-piano/pubblicato-il-xv-rapporto-sulla-formazione-continua>
- [60] Valsts ieņēmumu dienests.
- [59] Students' maintenance grants' board administers the students' maintenance grant scheme. <https://education.gov.mt/en/studentsgrants/Pages/About%20Us/The-SMGB.aspx>
- [60] Students who progress to a top-up degree course at the Malta College of Arts, Science and Technology will have EUR 465.87 made available every year in which they follow a top-up degree course, instead of EUR 232.94, to partly cover expenses related to educational material and equipment and a one-time grant of EUR 465.87.
- [62] The term 'sponsor' refers to organisations or individuals registered and approved by a VET provider to provide the work-based learning component as part of a training programme leading to a qualification.
- [63] In Malta, government bonuses are mandatory quarterly payments made by the employer to the employee, regardless of industry or organisation type. These bonuses are paid in addition to the monthly wage. Over the period of a calendar year an employee would therefore be paid EUR 512.48 under this bonus scheme.
- [64] Directorate for Research, Lifelong Learning and Employability (DRILLE): <https://researchandinnovation.gov.mt/en/Pages/Research%20and%20Innovation.aspx>
- [65] <https://jobsplus.gov.mt/>

## CHAPTER 14.

# Incentives for enterprises to boost their participation in VET provision

The apprenticeship scheme is a critical component of the upper secondary VET 2+2 model. After 2 years of school-based education, most VET programmes involve a 2-year apprenticeship in a training enterprise. This period is equivalent to 1 year of practice-based training and 1 year of productive work for the training enterprise. During the first year as an apprentice with practice-based training the enterprise focus on teaching; there is no expectation of profit-making. The second year with productive work is expected to be profit-making for the company. After 2 years in school, the apprentice signs a legally binding apprenticeship contract with the training enterprise and a representative from the county authorities. By law, apprentices are employees of the enterprise, with the rights and obligations that follow. They are entitled to a salary that increases with the apprentice's productivity during the 2-year apprenticeship period. Salary increases normally start at 30% and increase to 80% of a skilled worker's salary. For the school year 2019/20, 72 111 vocational learners are registered in upper secondary education in Norway and there are 45 000 apprentices with running apprenticeship contracts.

All training enterprises received a State grant of approximately EUR 16 000 per apprentice for a 12-month training period. The grant covers the training period only, not the productive component. The grant is distributed evenly throughout the apprenticeship period in the company. The grant is supposed to cover costs related to training the apprentice. Additional grants are given to enterprises either for offering apprenticeships in rare and protected crafts (*små og verneverdige fag*) or for accepting apprentices or training candidates with special needs.

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[51] See [https://www.wko.at/service/bildung-lehre/Gesamtuebersicht\\_Foerderarten\\_lehre.html](https://www.wko.at/service/bildung-lehre/Gesamtuebersicht_Foerderarten_lehre.html) [accessed 31.8.2021].

[52] See <https://www.initiative-erwachsenenbildung.at/initiative-erwachsenenbildung/was-ist-das/> [accessed 31.8.2021].

[53] See <https://www.bmbwf.gv.at/Themen/schule/schulpraxis/zentralmatura/bm.html> [accessed 31.8.2021].

[46] Dienststelle für Selbstbestimmtes Leben (DSL).

[45] The single-company training programmes in Cyprus provide incentives to employers to design and organise in-company training programmes, implemented by internal or external trainers, to meet the specific needs of the enterprise for the effective utilisation of its personnel. The single-company training programmes abroad provide incentives to employers to participate with their personnel in training programmes abroad to transfer specialised knowledge and skills in areas related to the introduction of innovation, new technology and technical know-how;

[46] The training programmes are implemented by accredited vocational training centres, at accredited vocational training facilities by certified trainers of vocational training. The programmes are subsidised by the Human Resource Development authority (HRDA):

- multi-company training programmes provide continuing training for meeting the training needs of employed and unemployed persons through their participation in training programmes implemented by public or private training institutions and organisations. They cover a broad range of issues in all operations of the enterprise

and in all occupations;

- high-priority multi-company training programmes provide continuing training to meet the training needs of employed persons through their participation in training programmes in specific high-priority issues.

Employees from different companies attend these programmes.

- [193] According to BIBB- VET data report 2021 p. 197: in 2007, 24.1% of all companies provided training against 18.5% in 2019/20 – if only considering the companies entitled to provide training, then 54.4% did provide training in 2019/20.
- [194] For further information on this, please consult: Hippach-Schneider, U.; Huismann, A. (2019). Vocational education and training in Europe: Germany. Cedefop ReferNet VET in Europe reports 2018.  
[http://libserver.cedefop.europa.eu/vetelib/2019/ReferNet\\_Germany\\_VET\\_in\\_Europe\\_2018.pdf](http://libserver.cedefop.europa.eu/vetelib/2019/ReferNet_Germany_VET_in_Europe_2018.pdf)
- [195] Information on federal government website (English)  
<https://www.bundesregierung.de/breg-en/news/ausbildung-corona-1774334>
- [196] [www.bmwi.de/Redaktion/DE/Text-sammlungen/Mittelstand/hand-werk.html?cms\\_artId=243216](http://www.bmwi.de/Redaktion/DE/Text-sammlungen/Mittelstand/hand-werk.html?cms_artId=243216)
- [197] BIBB website on the special programme on digitalisation in ÜBS <https://www.bibb.de/uebs-digitalisierung>
- [199] Website of the Alliance for initial and further training <https://www.aus-und-weiterbildungsallianz.de/AAW/Navigation/DE/Home/home.html>
- [200] JOBSTARTER website <https://www.jobstarter.de/index.html>
- [201] [www.bmwi.de/passgenaue-besetzung](http://www.bmwi.de/passgenaue-besetzung)
- [203] Bundesministerium für Wirtschaft und Energie, BMWi.
- [204] [www.arbeitsagentur.de/personalentwicklung](http://www.arbeitsagentur.de/personalentwicklung)
- [205] <https://www.unternehmen-integrieren-fluechtlinge.de/>
- [206] Information on the chambers Welcome Guides (ZDH)  
<https://www.zdh.de/fachbereiche/gewerbefoerderung/passgenaue-besetzung-willkommenslotsen/willkommenslotsen/>
- [207] KAUSA training and migration service centres <https://www.bildungsketten.de/de/3135.php>
- [54] Zakon o državnoj potpori za obrazovanje i izobrazbu [Act on State Aid for Education and Training]; Official Gazette No 109/2007, 134/2007, 152/2008, 14/2014.
- [37] In Icelandic: Verkiðn: <http://verkidn.is/>
- [59] See: <https://www.mise.gov.it/index.php/it/incentivi/impresa/credito-d-imposta-formazione>
- [60] The 2019 Italian financial Law has introduced a new measure, Transition plan 4.0, aiming to support enterprises in the transition toward the 4.0 model. In this Law, all the previous government interventions are included (industry 4.0, 2017-18). Law 27 December 2019, No 160. State budget for 2020 (Legge 27 dicembre 2019, No 160. Bilancio dello Stato per il 2020) <https://www.gazzettaufficiale.it/eli/id/2020/12/30/20G00202/sg>
- [85] Vocational aptitude diploma (diplôme d'aptitude professionnelle, DAP).
- [86] Vocational capacity certificate (certificat de capacité professionnelle, CCP).
- [88] This section is based on: INFPC (2019). Vocational education and training in Europe: Luxembourg. Cedefop ReferNet VET in Europe reports 2018.  
[http://libserver.cedefop.europa.eu/vetelib/2019/Vocational\\_Education\\_Training\\_Europe\\_Luxembourg](http://libserver.cedefop.europa.eu/vetelib/2019/Vocational_Education_Training_Europe_Luxembourg)
- [66] The term 'exposure phase' refers to the on-the-job training that takes place at the employer's premises where the trainee is placed. During the scheme the trainee must attend 240 hours of placement within a maximum period of 12 weeks.

[67] Jobplus subsidies prospective employee training through European social fund.

[68] Malta Enterprise (2020). Skills Development 2020.

[https://maltaenterprise.com/sites/default/files/Skills%20Development%20Scheme%202020%](https://maltaenterprise.com/sites/default/files/Skills%20Development%20Scheme%202020%20.pdf)

## CHAPTER 15.

# Guidance and counselling

Legislation ( 39 ) guarantees the right of every learner to receive guidance on educational and vocational matters as well as for social or personal character.

Guidance and guidance services are provided by different institutions according to level of education and relationship to the labour market. The main guidance services are organised within the school system. Learners in primary and secondary education have the right to 'necessary guidance on education, vocational opportunities, vocational choices and social matters'. The provision is organised by the individual schools. All learners are entitled to guidance according to their needs.

A whole-school approach to guidance has been adopted, meaning that individual teachers, and all other personnel in schools, have a responsibility to provide guidance to learners. One subject in the curriculum for lower secondary schools, the study elective programme subject (*Utdanningsvalg*), is specifically aimed at providing learners with the competences they need to make informed educational and vocational choices. A similar subject is offered in VET programmes in upper secondary schools. With a different responsibility for guidance, guidance counsellors in lower and upper secondary education provide guidance to learners in school. Guidance counsellors in the Follow-up Service (*Oppfølgingstjenesten*) provide guidance to those aged between 16 and 24 who are neither in education nor in employment.

All counties have allocated funding from the State budget to establish partnerships for career guidance; most have established such partnerships or other forms of regional cooperation. Local and regional school authorities, the Norwegian Labour and Welfare Administration (NAV), the business sector, and social partners are often partners in these initiatives. Several counties have established career centres to provide guidance for everyone, primarily adults aged 19 and above. The career centres also play a role in helping improve the competence of guidance counsellors in schools, in local NAV offices and other institutions offering career guidance. The National Unit for Lifelong guidance in Competence Norway is in charge of managing and monitoring partnerships in career guidance.

Career guidance is available as a master degree. Career guidance strengthens the individual's ability and competence to make informed education and vocational choices.

Although all learners in upper secondary education have the right to guidance under the Education Act, apprentices do not have this right. An official Norwegian report ( 40 ) recommends a right to guidance also for apprentices. An online guidance platform to increase the quality of guidance in both lower and upper secondary schools is available. Universities and some university colleges have established career centres to provide guidance to learners. Adults who need guidance may use the local offices of the NAV or visit regional career centres established by partnerships in career guidance. A small number of private agencies also provide career guidance on a commercial basis.

Please see also:

- guidance and outreach Norway national report ( 41 );
- Cedefop's inventory of lifelong guidance systems and practices ( 42 ).

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[54] BMS (Berufsbildende mittlere Schule): school for intermediate vocational education; BHS (Berufsbildende höhere Schule): college for higher vocational education.

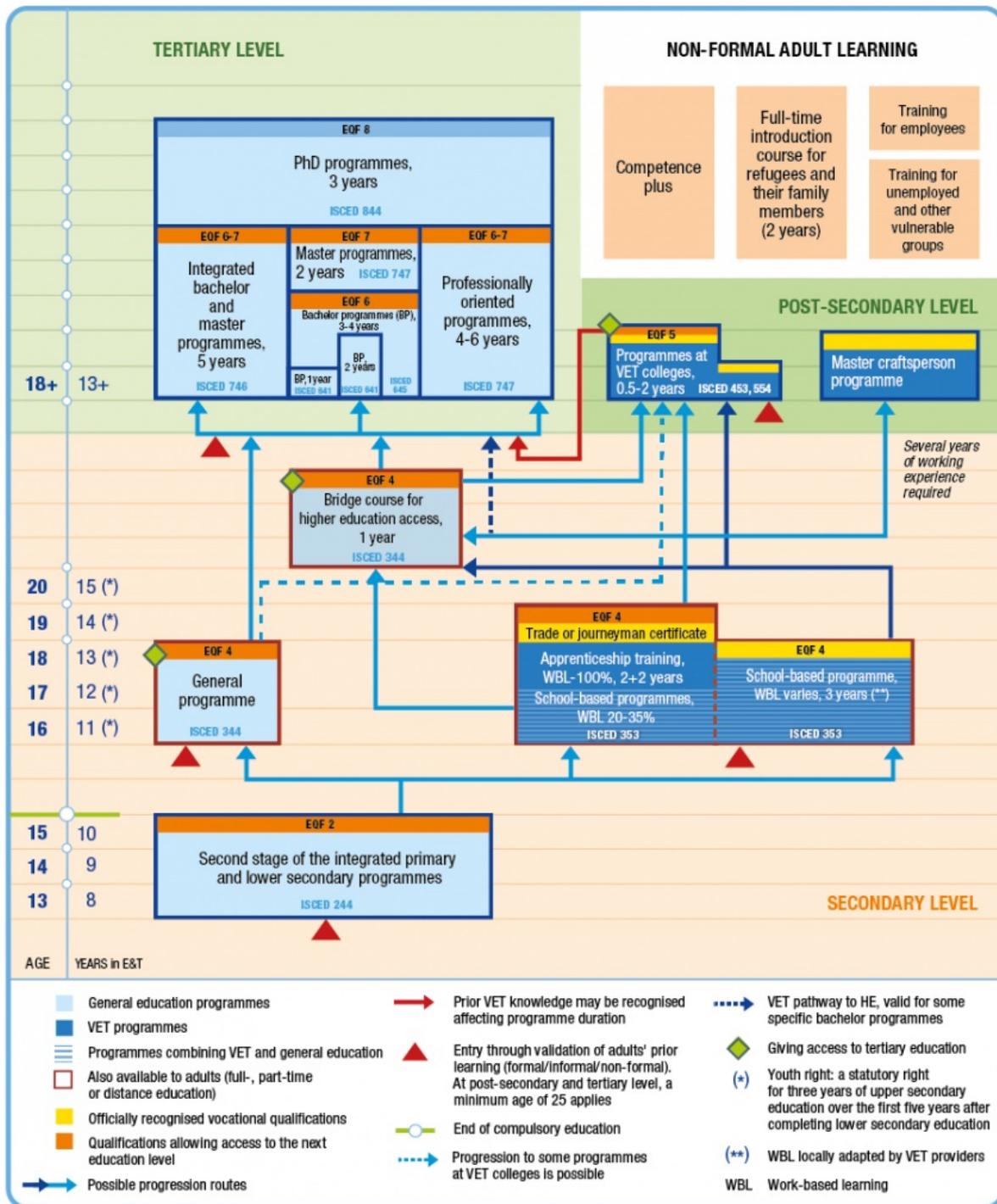
[55] <http://www.erwachsenenbildung.at> [accessed 31.8.2021].

- [56] Accessible online at the landing page <https://www.karrierekompass.at/> [accessed 31.8.2021].
- [58] <https://www.bic.at> [accessed 31.8.2021].
- [60] <http://www.cedefop.europa.eu/en/publications-and-resources/country-reports/guidance-and-outreach-inactive-and-unemployed-austria> [accessed 31.8.2021].
- [61] <http://www.cedefop.europa.eu/en/toolkits/resources-guidance/toolkit/where-can-you-find-more-information-in-your-country-and-elsewhere> [accessed 31.8.2021].
- [62] <https://www.cedefop.europa.eu/en/country-reports/inventory-lifelong-guidance-systems-and-practices> [accessed 31.8.2021].
- [47] [https://cumulus.cedefop.europa.eu/files/vetelib/2018/guidance\\_outreach\\_Belgium\\_Cedefop\\_](https://cumulus.cedefop.europa.eu/files/vetelib/2018/guidance_outreach_Belgium_Cedefop_)
- [48] <http://www.cedefop.europa.eu/en/toolkits/resources-guidance/toolkit/where-can-you-find-more-information-in-your-country-and-elsewhere>
- [49] <https://www.cedefop.europa.eu/en/publications-and-resources/country-reports/inventory-lifelong-guidance-systems-and-practices>
- [35] <http://www.cedefop.europa.eu/en/toolkits/resources-guidance/toolkit/where-can-you-find-more-information-in-your-country-and-elsewhere>
- [36] <https://www.cedefop.europa.eu/en/publications-and-resources/country-reports/inventory-lifelong-guidance-systems-and-practices>
- [48] <http://www.cedefop.europa.eu/en/toolkits/resources-guidance/toolkit/where-can-you-find-more-information-in-your-country-and-elsewhere/cyprus>
- [49] <https://www.cedefop.europa.eu/en/publications-and-resources/country-reports/inventory-lifelong-guidance-systems-and-practices>
- [75] <http://www.cedefop.europa.eu/events-and-projects/networks/refernet/thematic-perspectives/guidance-outreach>
- [76] [www.infoabsolvent.cz](http://www.infoabsolvent.cz)
- [77] <https://www.cedefop.europa.eu/en/publications-and-resources/country-reports/inventory-lifelong-guidance-systems-and-practices>
- [78] <http://www.cedefop.europa.eu/en/toolkits/resources-guidance/toolkit/where-can-you-find-more-information-in-your-country-and-elsewhere>
- [209] <https://www.bildungsketten.de/> and <https://www.berufsorientierungsprogramm.de/>
- [210] <https://www.jba-hamburg.de/English-71>
- [211] <https://www.servicestelle-jba.de/wws/9.php#/wms/ueber-uns.php>
- [212] <https://www.berufsorientierungsprogramm.de/angebote-fuer-fluechtlinge/de/english-1993.html>
- [213] <https://www.bmas.de/DE/Themen/Arbeitsmarkt/Modellprogramme/respekt-pilotprogramm.html>
- [214] <https://www.studienabbruch-und-dann.de/>
- [215] <https://www.arbeitsagentur.de/karriere-und-weiterbildung>
- [216] [https://www.der-weiterbildungsratgeber.de/weiterbildungsratgeber/de/home/home\\_node.html](https://www.der-weiterbildungsratgeber.de/weiterbildungsratgeber/de/home/home_node.html)
- [217] BIBB. Überaus. <https://www.ueberaus.de/wms/dossier-uebergangsmanagement.php>
- [218] BMBF. Die Transferinitiative [the transfer initiative] <https://www.transferinitiative.de/>
- [219] <https://www.arbeitsagentur.de/karriere-und-weiterbildung> ;  
<https://berufenet.arbeitsagentur.de> ; <https://con.arbeitsagentur.de/prod/berufetv/start> ;  
<https://kursnet-finden.arbeitsagentur.de> ;  
<https://www.arbeitsagentur.de/bildung/ausbildung/azubiwelt>

- [220] <https://www.bibb.de/dienst/abp/de/index.php>
- [221] <https://planet-beruf.de/schuelerinnen>
- [222] <https://abi.de/>
- [223] <https://studienwahl.de/>
- [224] <https://www.bildungserver.de/>
- [225] <https://www.iwwb.de/kurssuche/startseite.html>
- [226] <http://www.cedefop.europa.eu/events-and-projects/networks/refernet/thematic-perspectives/guidance-outreach>
- [227] <https://www.cedefop.europa.eu/en/publications-and-resources/country-reports/inventory-lifelong-guidance-systems-and-practices-germany>
- [72] <http://www.cedefop.europa.eu/en/publications-and-resources/country-reports>
- [73] <http://www.cedefop.europa.eu/en/toolkits/resources-guidance/toolkit/where-can-you-find-more-information-in-your-country-and-elsewhere>
- [74] <https://www.cedefop.europa.eu/en/publications-and-resources/country-reports/inventory-lifelong-guidance-systems-and-practices>
- [38] <http://www.cedefop.europa.eu/events-and-projects/networks/refernet/thematic-perspectives/guidance-outreach>
- [39] <http://www.cedefop.europa.eu/en/toolkits/resources-guidance/toolkit/where-can-you-find-more-information-in-your-country-and-elsewhere>
- [40] <https://www.cedefop.europa.eu/en/publications-and-resources/country-reports/inventory-lifelong-guidance-systems-and-practices-finland>
- [55] <http://www.cisok.hr>
- [56] [www.e-Usmjeravanje.hzz.hr](http://www.e-Usmjeravanje.hzz.hr)
- [57] <http://www.cedefop.europa.eu/events-and-projects/networks/refernet/thematic-perspectives/guidance-outreach>
- [58] <https://www.cedefop.europa.eu/en/publications-and-resources/country-reports/inventory-lifelong-guidance-systems-and-practices>
- [38] <http://www.cedefop.europa.eu/events-and-projects/networks/refernet/thematic-perspectives/guidance-outreach>
- [39] <http://www.cedefop.europa.eu/en/toolkits/resources-guidance/toolkit/where-can-you-find-more-information-in-your-country-and-elsewhere>
- [40] <https://www.cedefop.europa.eu/en/publications-and-resources/country-reports/inventory-lifelong-guidance-systems-and-practices>
- [64] <http://www.cedefop.europa.eu/en/toolkits/resources-guidance/toolkit/where-can-you-find-more-information-in-your-country-and-elsewhere>
- [65] <https://www.cedefop.europa.eu/en/publications-and-resources/country-reports/inventory-lifelong-guidance-systems-and-practices>
- [93] <https://www.beruffer.anelo.lu/>
- [94] <http://www.cedefop.europa.eu/events-and-projects/networks/refernet/thematic-perspectives/guidance-outreach>
- [95] <http://www.cedefop.europa.eu/en/toolkits/resources-guidance/toolkit/where-can-you-find-more-information-in-your-country-and-elsewhere>
- [96] <https://www.cedefop.europa.eu/en/country-reports/inventory-lifelong-guidance-systems-and-practices>
- [68] See [www.niid.lv](http://www.niid.lv) [accessed 11.10.2021].

- [69] See [www.profesijupasaule.lv](http://www.profesijupasaule.lv) [accessed 11.10.2021].
- [70] See Karjeras pakalpojumi: <http://www.nva.gov.lv/karjera> [accessed 11.10.2021].
- [72] See [www.prakse.lv](http://www.prakse.lv) [accessed 11.10.2021].
- [73] <http://www.cedefop.europa.eu/events-and-projects/networks/refernet/thematic-perspectives/guidance-outreach>
- [74] <http://www.cedefop.europa.eu/en/toolkits/resources-guidance/toolkit/where-can-you-find-more-information-in-your-country-and-elsewhere>
- [70] Career guidance platform can be accessed at: <http://exploremoreproject.eu/en/>
- [72] <http://www.cedefop.europa.eu/events-and-projects/networks/refernet/thematic-perspectives/guidance-outreach>
- [73] <http://www.cedefop.europa.eu/events-and-projects/networks/refernet/thematic-perspectives/guidance-outreach>
- [74] <https://www.cedefop.europa.eu/en/publications-and-resources/country-reports/inventory-lifelong-guidance-systems-and-practices>
- [39] Under the Education Act (Opplæringsloven); came into force 1.1.2009.
- [40] NOU 2016:7 NOU 2016:7 Norge I omstilling – karriereveiledning for individ og samfunn [Career guidance for individuals and society].  
<https://www.regjeringen.no/en/topics/education/voksnes-laring-og-kompetanse/artikler/sammendrag-av-nou-20167-karriereveiledning-for-individ-og-samfunn/id2485528/>

# Vocational education and training system chart



NB: ISCED-P 2011.

Source: Cedefop and ReferNet Norway, 2022.

# VET Programme Types

EQF 4
Apprenticeship training, WBL -100% 2+2 years School-based programmes, WBL 20-35% ISCED level 353

**The main model 2+2 pathway (apprenticeship model) leading to EQF level 4, ISCED level 353 (2+2 modellen).**

<b>EQF level</b> 4	<b>ISCED-P 2011 level</b> 353
<b>Usual entry grade</b> 11	<b>Usual completion grade</b> 14
<b>Usual entry age</b> 16	<b>Usual completion age</b> 19
<b>Length of a programme (years)</b> 4	
<b>Is it part of compulsory education and training?</b> ✗	<b>Is it part of formal education and training system?</b> ✓
<b>Is it initial VET?</b> ✓	<b>Is it continuing VET?</b> ✗
<b>Is it offered free of charge?</b> ✓ Upper secondary school is free of charge.	<b>Is it available for adults?</b> ✓

**ECVET or other credits** Credits are not available at this level of education.

**Learning forms (e.g. dual, part-time, distance)** The model entails 2 years of education in school followed by 2 years of formal apprenticeship training in company.

**Main providers**

- VET schools in the first 2 years
- Training companies in the second 2 years

<b>Share of work-based learning provided by schools and companies</b>	<p>=20-35% in the first 2 years</p> <p>=100% in the second 2 years</p>
<b>Work-based learning type (workshops at schools, in-company training / apprenticeships)</b>	<ul style="list-style-type: none"> <li>• practical training at school and / or in company training during the first 2 years</li> <li>• apprenticeship in company in the second 2 years</li> </ul>
<b>Main target groups</b>	<p>Mainly young people, 16- to18-year-olds (85%).</p> <p>The age group 19-24 represent 9.6%, 25-29=2.1%, 30-34=1.4% and 35+ represents 1.8% ( 44 ).</p>
<b>Entry requirements for learners (qualification/education level, age)</b>	<p>Completed lower secondary education is required.</p>
<b>Assessment of learning outcomes</b>	<p>Upper secondary VET is completed with a practical-theoretical trade or journeyman's examination (<i>Fag- eller svenneprøve</i>). In the test, candidates demonstrate their vocational skills, and explain and justify the methods chosen to solve the test assignments.</p> <p>A county-appointed, trade-specific examination board prepares and assesses the examination. The minimum requirement for being a board member is a formal vocational education. The county authorities award the certificate.</p> <p>Following the main model, the apprentice takes the final exam 4 years after starting upper secondary education.</p> <p>In 2018, 53.9% of candidates who entered a VET programme in 2014 passed the exam, 3.1% completed their apprenticeship but failed the exam, 14.8% failed to complete their apprenticeship and 28.1% are still undertaking their apprenticeship ( 45 ).</p> <p>Learner competences are assessed continuously throughout the 4 years of education and training, in school by the teacher and in apprenticeship by the training supervisor. They must also take exams in individual subjects developed at local and county level. Learners may also be randomly selected to take nationally organised examinations in common core subjects. Most learners have passed exams in vocational subjects after 2 and 4 years of training. After 2 years in school, learners take an interdisciplinary local practical exam which covers all the vocational subjects.</p>

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**Diplomas/certificates provided**

Upper secondary VET practical-theoretical trade or journeyman's examination lead to an EQF level 4 qualification: a trade certificate (*Fagbrev*) for industrial and service trades or a journeyman's certificate (*Svennebrev*) for traditional crafts.

The two certificates have equal status based on similar sets of theoretical knowledge and practical skills.

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**Examples of qualifications**

Goldsmith, winder, painter, roofer.

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**Progression opportunities for learners after graduation** There are many progression opportunities to post-secondary and tertiary education from upper secondary VET.

With a trade or journeyman certificate, the options are:

- higher vocational education (EQF level 5), 6 to 24 months specialisation/further education;
- via a 1-year bridging course in core subjects (påbyggingsår); direct admission to certain specially designed bachelor programmes (*Y-veien*).

Options without a trade or journeyman certificate are:

- 5 years' experience gained in work and/or education and passing a course in core subjects (for those aged 23 or older);
- recognition of relevant formal, informal and non-formal learning for people aged 25 or older who do not meet general entrance requirements;
- completed 2 years in vocational college;
- completing the bridge course (*Påbygging til generell studiekompetanse*) after completing the first 2 years of a VET programme. This option is a choice made by more than a quarter of upper secondary VET learners. In 2017, 8 200 learners (27.8% of VET learners) selected this option after their second year in a VET programme ( 46 ). After 2 years in a VET programme, learners may transfer to a third year of supplementary studies that qualify them to enter higher education. This year leads to a qualification at NQF level 4B and EQF level 4. This pathway replaces the 2-year apprenticeship period, and the learners will thus not receive a trade or journeyman certificate. The third year is a 'package' course in the six key academic subjects of Norwegian, English, mathematics, natural sciences, social sciences, and history; successful candidates satisfy the general admission requirements to higher education (on par with those taking general study programmes). Apprentices also have a statutory right to a year of supplementary studies after passing the trade or journeyman test, a fifth year of training. The fifth year is supplementary studies which qualify for higher education.

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**Destination of graduates** Information for this programme is not available.

Graduates are tracked up to 5 years after completing a vocational education. 84% of all 2016-17 graduates are employed 4 years after completing the final exam, 1.9% are in education and 3.6% have completed the apprentice without an exam; 10.6% did not complete the apprenticeship ( 47 ).

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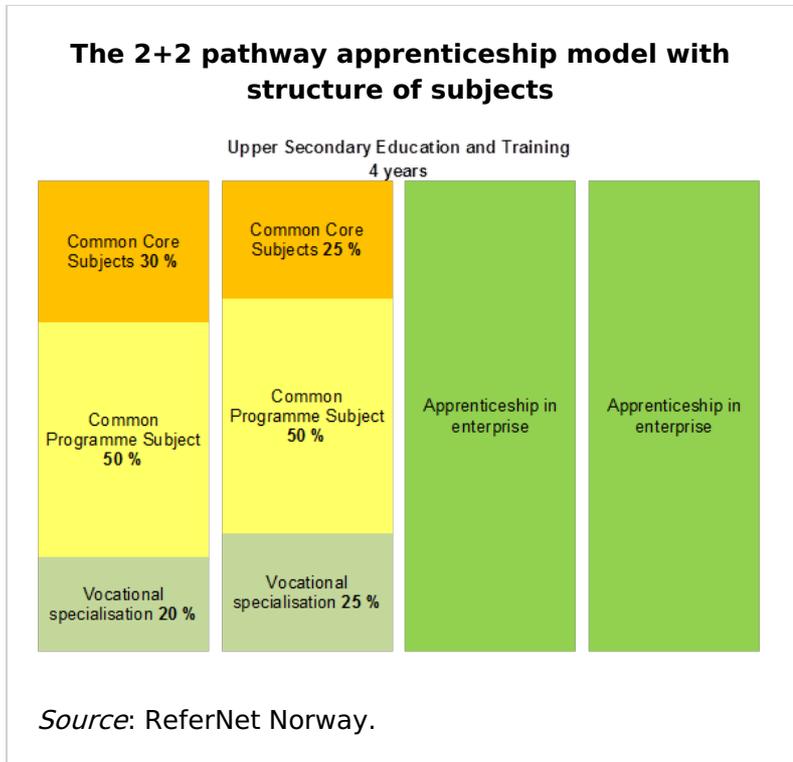
**Awards through validation of prior learning** ✓

Validation of prior learning is always an option.

The Directorate of Education and training has developed national guidelines for the assessment of prior learning in lower and upper secondary school for adults.

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**General education subjects** ✓



The common core subjects (*fellesfag*) (Norwegian, English, mathematics, physical education, natural sciences and social sciences) are the same for all VET programmes.

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**Key competences** ✓

The key competences are integrated in the competence aims for the subject.

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**Application of learning outcomes approach** ✓

The programme is based on learning outcomes.

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<b>Share of learners in this programme type compared with the total number of VET learners</b>	No information available on the share of learners.
	At upper secondary level, 72% of the vocational programmes are structured according to the two main models (2+2 apprenticeships and 3+0 school based).
	75.7% of all the learners applying for an apprenticeship signed a contract in December 2020.

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[44] Statistics Norway: <https://www.ssb.no/vgu>

[45] Norwegian Directorate for Education and Training. <https://skoleporten.udir.no>

[46] Norwegian Directorate for education and training. <https://skoleporten.udir.no/>

[47] Norwegian Directorate for education and training. <https://www.udir.no/om-udir/>

## Master craftsperson programme (Mesterbrevordningen)

<b>EQF level</b>	Not applicable	<b>ISCED-P 2011 level</b>	Not applicable
<b>Usual entry grade</b>	Not applicable	<b>Usual completion grade</b>	Not applicable
<b>Usual entry age</b>	Not applicable	<b>Usual completion age</b>	Not applicable
<b>Length of a programme (years)</b>	1.5 - 2 (part-time)		
<b>Is it part of compulsory education and training?</b>	✗	<b>Is it part of formal education and training system?</b>	✗ The craftsman education is part of the formal education and training system, but is not linked to NKF/EQF
<b>Is it initial VET?</b>	✗	<b>Is it continuing VET?</b>	✓ A trade or journeyman certificate is required, as well as several years of relevant work experience.
<b>Is it offered free of charge?</b>	✗	<b>Is it available for adults?</b>	✓
<b>ECVET or other credits</b>	Not applicable		
<b>Learning forms (e.g. dual, part-time, distance)</b>	<p>The master craftsperson programme covers general administrative subjects, e.g. organisation and management, marketing and financial control, as well as craft theory.</p> <p>Common subjects are delivered part-time over the course of 2 years (the training is typically combined with full-time work as an employee or owner of an SME). ICT is integrated throughout the course. Both common subjects and craft theory are offered as evening and part-time courses. Distance education courses are also available.</p>		
<b>Main providers</b>	Four institutions provide master craftsman education: <i>Folkeuniversitetet (FU)</i> , <i>Norges grønne fagskole - Veia</i> , <i>Blimester</i> and <i>Norges mesterakademi ( 48 )( 49 )</i> .		

<b>Share of work-based learning provided by schools and companies</b>	This education targets people already in work, and the education is organised to allow for full-time work besides studies.
<b>Work-based learning type (workshops at schools, in-company training / apprenticeships)</b>	<ul style="list-style-type: none"> <li>• Theory studies, e.g. in administration, economics and leadership.</li> <li>• Both classroom teaching and web-based education supplemented by study gatherings are offered.</li> </ul>
<b>Main target groups</b>	Master craftsman education is for holders of a trade or journeyman certificate who also have several years of relevant work experience and wish to set up their own business or hold a managerial position in a craft enterprise.
<b>Entry requirements for learners (qualification/education level, age)</b>	Trade or journeyman certificate and several years of relevant work experience.
<b>Assessment of learning outcomes</b>	<p>Courses in common subjects conclude with a written examination. In craft theory, a written examination is held for each master craftsman subject. Learners may also take the examination as private candidates.</p> <p>The master craftsmen programme is administered by the publicly appointed Master Craftsman Certificate Committee (<i>Mesterbrevnemnda</i>, MCC), which determines training standards and practice requirements and awards the certificate.</p> <p>In recent years, MCC has further extended the education system for master crafts persons. As a result, learning output-based degrees from other providers can also be recognised.</p>
<b>Diplomas/certificates provided</b>	<p>Successful candidates obtain the title Master craftsperson.</p> <p>The master craftsman certificate is awarded in 73 different crafts covering all traditional trades in which journeyman examinations are held and journeyman certificates issued, as well as some (newer) trades with craft examinations and certificates.</p>
<b>Examples of qualifications</b>	<p>Example of qualifications (out of more than 70):</p> <ul style="list-style-type: none"> <li>• masonry;</li> <li>• goldsmith;</li> <li>• woodcarving.</li> </ul>

<b>Progression opportunities for learners after graduation</b>	<p>Mater craftsman education does not qualify for further education.</p> <p>The education qualifies for:</p> <ul style="list-style-type: none"> <li>• setting up own business;</li> <li>• taking a managerial position in a craft enterprise.</li> </ul>
<b>Destination of graduates</b>	The education is primarily for people already in work, who undertake the education part-time.
<b>Awards through validation of prior learning</b>	<p>✓</p> <p>Validation of prior learning in order to achieve the mastercraftsman tribunal (<i>Mesterbrevnemnda</i>) is possible.</p>
<b>General education subjects</b>	Master craftsperson education combines general administrative subjects such as business organisation and management, marketing, financial control, and vocational theory.
<b>Key competences</b>	✗
<b>Application of learning outcomes approach</b>	✓
<b>Share of learners in this programme type compared with the total number of VET learners</b>	Not applicable

[48] The Norwegian national web portal for information about education and occupation. <https://utdanning.no/>

[49] Bilmester.com. <https://www.blimester.com/omblimester>

EQF 5

Post-secondary

VET colleges,

0.5-2 years

ISCED 453, 554

**Post-secondary vocation education (nationally referred as tertiary) leading to EQF level 5, ISCED 453 and 554 (fagskoleutdanning)**

<b>EQF level</b>	<b>5</b>	<b>ISCED-P 2011 level</b>	<b>453 and 554</b>
<b>Usual entry grade</b>	Not applicable	<b>Usual completion grade</b>	Not applicable
<b>Usual entry age</b>	<p>Not applicable</p> <p>Share of learners in a range of age groups is as following:</p> <ul style="list-style-type: none"> <li>• 27.7% 21-25 years old.</li> <li>• 19.8% 26-30 years old</li> <li>• 15.2% 31-35 years old</li> <li>• 11.4% 36-40 years old</li> <li>• 8.2% 41-45 years old</li> <li>• 6.8% 46-50 years old</li> <li>• 5.8% 51+ years old</li> </ul> <p>Data from 2020 ( 50 ).</p>	<b>Usual completion age</b>	6 months up to 2 years after study entry.
<b>Length of a programme (years)</b>	From 0.5 year to 2 years (up to 3 years in special cases)		
<b>Is it part of compulsory education and training?</b>	✗	<b>Is it part of formal education and training system?</b>	✓
<b>Is it initial VET?</b>	✗	<b>Is it continuing VET?</b>	✓
<b>Is it offered free of charge?</b>	Depending on the study, some are free of charge and some have a tuition fee.		<b>Is it available for adults?</b> ✓

<b>ECVET or other credits</b>	From 30 – 120 higher vocational education credits. In special cases, 180 credits
<b>Learning forms (e.g. dual, part-time, distance)</b>	Education at this level is available as: <ul style="list-style-type: none"> <li>• full-time on campus;</li> <li>• part-time studies to be combined with work;</li> <li>• online studies;</li> <li>• combination of online studies and campus.</li> </ul> <p>Training is available at school and within an enterprise.</p>
<b>Main providers</b>	Post-secondary (nationally referred as tertiary) vocational colleges ( <i>fagskoler</i> ), private and public
<b>Share of work-based learning provided by schools and companies</b>	The share of work-based learning depends on the study and varies.
<b>Work-based learning type (workshops at schools, in-company training / apprenticeships)</b>	Work-based learning may be: <ul style="list-style-type: none"> <li>• practical training at school;</li> <li>• in-company practice.</li> </ul>
<b>Main target groups</b>	Programmes are available both for young people and for working adults.  The education especially targets working adults and study is often adapted to fit a combination of work and study.
<b>Entry requirements for learners (qualification/education level, age)</b>	Access is based on an upper secondary general or vocational qualification, depending on the branch of study, or validated prior learning (VPL).  No practical work experience is required. However, many programmes, particularly those aimed at the health and social service sector, are designed as part-time courses, where learners are required to work part-time and undertake project assignments at a workplace, often their own.
<b>Assessment of learning outcomes</b>	The education is based on learning outcomes and the students have to pass a final examination.
<b>Diplomas/certificates provided</b>	VET students at this level may receive three qualifications: <ul style="list-style-type: none"> <li>• higher professional degree (120-180 credits);</li> <li>• professional degree (60-90 credits);</li> <li>• certificate without a degree.</li> </ul>
<b>Examples of qualifications</b>	Mechanical engineer, electro-technician, fashion designer and pattern maker.

<b>Progression opportunities for learners after graduation</b>	<p>Candidates who have completed a 2-year post-secondary VET programme qualify for engineering education and technical education at tertiary level. The framework curricula for the bachelor programmes in engineering allow for the recognition of relevant 2-year technical post-secondary vocational education as 1 year of the engineering programme.</p> <p>Some vocational education colleges have agreements with higher education institutions whereby their graduates are directly admitted to the second year of engineering programmes in the relevant field of study. However, such agreements often set conditions for technical vocational college learners. For instance, engineering at tertiary education level requires college candidates to spend 3½ or 4 years on completing their bachelor degree.</p> <p>A higher professional degree (120 credits) gives higher education access</p>
<b>Destination of graduates</b>	Information not available
<b>Awards through validation of prior learning</b>	<p>✓</p> <p>Recognition of prior learning (RPL): Access based on individual assessment of formal, informal and non-formal qualifications is open to applicants aged 25 or above. Applications for admission on the basis of RPL are processed locally at each institution.</p>
<b>General education subjects</b>	✗
<b>Key competences</b>	✗
<b>Application of learning outcomes approach</b>	✓
<b>Share of learners in this programme type compared with the total number of VET learners</b>	<p>Information for this type of programme is not available.</p> <p>In general, there are 22 369 students at post-secondary level compared to 306 367 students at universities and university colleges.</p> <p>Data from 2020 ( 51 ).</p>

[51] SSB. *Statistics Norway*. <https://www.ssb.no/fagskoler>

## References

[5] Statistik Austria (2022): Population 2002-2022 by citizenship and country of birth [Bevölkerung 2002-2022 nach Staatsangehörigkeit und

Geburtsland] <https://www.statistik.at/statistiken/bevoelkerung-und-soziales/bevoelkerung/bevoelkerungsstand/bevoelkerung-nach-staatsangehoerigkeit/-geburtsland> [accessed 23.6.2022]

- [9] Oberwimmer, K. et al. (2019). Nationaler Bildungsbericht Österreich 2018, Band 1 [National education report, Volume 1]; Das Schulsystem im Spiegel von Daten und Indikatoren [Education in facts and figures], p. 25. [https://www.iqs.gv.at/\\_Resources/Persistent/db972c5b2eb2dc267191b05ae55adb5a05b8b0](https://www.iqs.gv.at/_Resources/Persistent/db972c5b2eb2dc267191b05ae55adb5a05b8b0) [accessed 27.8.2021]
- [11] BMDW (2021). KMU im Fokus 2020. Bericht über die Situation und Entwicklung kleiner und mittlerer Unternehmen der österreichischen Wirtschaft [SMEs in Focus 2020. Report on the situation and development of small and medium-sized enterprises in the Austrian economy]. Vienna. [https://www.bmdw.gv.at/dam/jcr:8efe9893-101a-496c-a63f-8ff185a68587/NEU\\_KMU%20im%20Fokus\\_2020\\_barrierefrei.pdf](https://www.bmdw.gv.at/dam/jcr:8efe9893-101a-496c-a63f-8ff185a68587/NEU_KMU%20im%20Fokus_2020_barrierefrei.pdf) [accessed 27.8.2021]
- [12] BMDW (2021). KMU im Fokus 2020: Bericht über die Situation und Entwicklung kleiner und mittlerer Unternehmen der österreichischen Wirtschaft [SMEs in Focus 2020: report on the situation and development of small and medium-sized enterprises in the Austrian economy]. Vienna. [https://www.bmdw.gv.at/dam/jcr:8efe9893-101a-496c-a63f-8ff185a68587/NEU\\_KMU%20im%20Fokus\\_2020\\_barrierefrei.pdf](https://www.bmdw.gv.at/dam/jcr:8efe9893-101a-496c-a63f-8ff185a68587/NEU_KMU%20im%20Fokus_2020_barrierefrei.pdf) [accessed 29.11.2021]
- [13] Statistik Austria (2022). Österreich. Zahlen. Daten. Fakten 2021/22 [Austria. Numbers. Data. Facts 21/22]. Wien. <https://www.statistik.at/services/tools/services/publikationen/detail/1079?cHash=b5d1c51e8b19c2131e5f322397791ed2> [accessed 23.6.2022]
- [14] WKÖ- Austrian Economic Chamber (2021). Statistical Yearbook 2021. [https://wko.at/statistik/jahrbuch/YEARBOOK\\_2021.pdf](https://wko.at/statistik/jahrbuch/YEARBOOK_2021.pdf) [accessed 27.8.2021]
- [15] WKÖ-Austrian Economic Chamber (2021). Österreichische Exportwirtschaft 2021 [Austrian foreign trade 2021], S. 12f. <https://www.wko.at/service/aussenwirtschaft/exportwirtschaft.pdf> [accessed 27.8.2021].
- [20] Cedefop (2018). Vocational education and training in Austria: short description [unpublished working paper].
- [22] Cedefop (2018). Vocational education and training in Austria: short description [unpublished working paper].
- [23] Cedefop (2019). The changing nature and role of vocational education and training in Europe. Volume 6: vocationally oriented education and training at higher education level. Expansion and diversification in European countries. Case study focusing on Austria. Cedefop research paper; No 70. [https://www.cedefop.europa.eu/files/austria\\_cedefop\\_changing\\_nature\\_of\\_vet\\_-\\_case\\_study.pdf](https://www.cedefop.europa.eu/files/austria_cedefop_changing_nature_of_vet_-_case_study.pdf)
- [26] Dornmayr, H.; Nowak, S. (2020). Lehrlingsausbildung im Überblick 2020 – Strukturdaten, Trends und Perspektiven [Apprenticeship overview 2020: structural data, trends and perspectives]. Vienna: ibw research report; No 203. <https://ibw.at/bibliothek/id/521/>.
- [28] Eurostat (2021): Adult learning statistics. [https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Adult\\_learning\\_statistics&oldid=535026#Participation\\_rate\\_of\\_adults\\_in\\_learning\\_in\\_t](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Adult_learning_statistics&oldid=535026#Participation_rate_of_adults_in_learning_in_t) [accessed 29.11.2021]
- [29] Cedefop (2018). Vocational education and training in Austria: short description [unpublished working paper].
- [30] Dornmayr H.; Nowak, S. (2020). Lehrlingsausbildung im Überblick 2020 – Strukturdaten, Trends und Perspektiven [Apprenticeship overview 2020: structural data, trends and perspectives]. Vienna: ibw research report; No 203. <https://ibw.at/bibliothek/id/521/>.

- [32] Tritscher-Archan, S. (2016). Vocational education and training in Europe – Austria. Cedefop ReferNet VET in Europe reports.  
[http://libserver.cedefop.europa.eu/vetelib/2016/2016\\_CR\\_AT.pdf](http://libserver.cedefop.europa.eu/vetelib/2016/2016_CR_AT.pdf)
- [33] Cedefop (2018). Vocational education and training in Austria: short description [unpublished working paper].
- [34] Dornmayr, H.; Nowak, S. (2020). Lehrlingsausbildung im Überblick 2020 – Strukturdaten, Trends und Perspektiven [Apprenticeship overview 2020: structural data, trends and perspectives]. Vienna: ibw research report; No 203.  
<https://ibw.at/resource/download/2114/ibw-forschungsbericht-203.pdf>. [accessed 31.8.2021] For more information on the model calculation, see p. 112ff.
- [46] UEAPME (ed.) (2018). European guidelines on quality assurance in higher VET.  
<https://www.ibw.at/bibliothek/id/356/>[accessed 31.8.2021].
- [57] <http://www.ams.at/lehrstellen>
- [59] Tritscher-Archan, S. (2016). Vocational education and training in Europe – Austria. Cedefop ReferNet VET in Europe reports.  
[http://libserver.cedefop.europa.eu/vetelib/2016/2016\\_CR\\_AT.pdf](http://libserver.cedefop.europa.eu/vetelib/2016/2016_CR_AT.pdf) [accessed 31.8.2021].
- [17] Dual learning [Duaal leren] <https://onderwijs.vlaanderen.be/nl/directies-en-administraties/secundair-onderwijs/duaal-leren>
- [19] Allinckx, I.; Karno, A.; Monico, D. (2019). Vocational education and training in Europe – Belgium. Cedefop ReferNet VET in Europe reports 2018.  
[http://libserver.cedefop.europa.eu/vetelib/2019/Vocational\\_Education\\_Training\\_Europe\\_Belg](http://libserver.cedefop.europa.eu/vetelib/2019/Vocational_Education_Training_Europe_Belg)
- [39] Allinckx, I.; Karno, A.; Monico, D. (2019). Vocational education and training in Europe – Belgium. Cedefop ReferNet VET in Europe reports 2018.  
[http://libserver.cedefop.europa.eu/vetelib/2019/Vocational\\_Education\\_Training\\_Europe\\_Belg](http://libserver.cedefop.europa.eu/vetelib/2019/Vocational_Education_Training_Europe_Belg)
- [43] ] Allinckx, I.; Karno, A.; Monico, D. (2019). Vocational education and training in Europe – Belgium. Cedefop ReferNet VET in Europe reports 2018.  
[http://libserver.cedefop.europa.eu/vetelib/2019/Vocational\\_Education\\_Training\\_Europe\\_Belg](http://libserver.cedefop.europa.eu/vetelib/2019/Vocational_Education_Training_Europe_Belg)
- [45] Allinckx, I.; Karno, A.; Monico, D. (2019). Vocational education and training in Europe – Belgium. Cedefop ReferNet VET in Europe reports 2018.  
[http://libserver.cedefop.europa.eu/vetelib/2019/Vocational\\_Education\\_Training\\_Europe\\_Belg](http://libserver.cedefop.europa.eu/vetelib/2019/Vocational_Education_Training_Europe_Belg)
- [16] National Agency for Vocational Education and Training (NAVET). Annual reports on the activities of NAVET. [https://www.navet.government.bg/bg/media/doklad-NAPOO-2020\\_VK-3.pdf](https://www.navet.government.bg/bg/media/doklad-NAPOO-2020_VK-3.pdf)
- [34] Krasteva L. (2018). Guidance and outreach for inactive and unemployed – Bulgaria. Cedefop ReferNet thematic perspectives series:  
<https://www.cedefop.europa.eu/en/publications-and-resources/country-reports/guidance-and-outreach-inactive-and-unemployed-bulgaria>
- [6] CYSTAT. SECONDARY EDUCATION, 2017/2018 / SECONDARY EDUCATION, 2018/2019.  
<https://www.cystat.gov.cy/en/KeyFiguresList?s=33>.
- [7] CYSTAT. BIRTHS, DEATHS, MIGRATION, 1974-2019.  
<https://www.cystat.gov.cy/en/KeyFiguresList?s=46>
- [8] Ministry of Labour, Welfare and Social Insurance (2018). General statistics 2018.  
[http://www.mlsi.gov.cy/mlsi/sid/sidv2.nsf/page21\\_en/page21\\_en?OpenDocument](http://www.mlsi.gov.cy/mlsi/sid/sidv2.nsf/page21_en/page21_en?OpenDocument)
- [15] Cedefop; ReferNet (2021). VET REF: developments in vocational education and training policy database. [Unpublished].
- [24] CYSTAT. STATISTICAL ABSTRACT - TIMESERIES, CHAPTERS A-I (EN).  
<https://www.cystat.gov.cy/en/PublicationList?&p=3>
- [25] CYSTAT. FINANCIAL STATISTICS OF EDUCATION, 2018.

<https://www.cystat.gov.cy/en/KeyFiguresList?s=33>

- [27] Cedefop; ReferNet (2021). VET REF: developments in vocational education and training policy database. [Unpublished].
- [29] Human Resource Development Authority (2017a). Προβλέψεις Απασχόλησης στην Κυπριακή Οικονομία 2017-27 [Forecasts of employment needs in the Cyprus economy 2017-27].  
<https://www.anad.org.cy/wps/portal/hrda/hrdaExternal/researchAndStudies/employmentFore>
- [30] Human Resource Development Authority (2017b). Annual report 2016.  
[https://www.anad.org.cy/wps/wcm/connect/hrda/6618b244-b306-4517-8b3c-07c9813fedce/ANNUAL+REPORT+2016+%2815-05-18%29+HI.pdf?MOD=AJPERES&CONVERT\\_TO=url&CACHEID=ROOTWORKSPACE.Z18\\_HHHAH900NGE980A76618b244-b306-4517-8b3c-07c9813fedce-memtmDf](https://www.anad.org.cy/wps/wcm/connect/hrda/6618b244-b306-4517-8b3c-07c9813fedce/ANNUAL+REPORT+2016+%2815-05-18%29+HI.pdf?MOD=AJPERES&CONVERT_TO=url&CACHEID=ROOTWORKSPACE.Z18_HHHAH900NGE980A76618b244-b306-4517-8b3c-07c9813fedce-memtmDf)
- [31] Human Resource Development Authority (2016). Εντοπισμός Αναγκών σε Γαλάζιες Δεξιότητες στην Κυπριακή Οικονομία 2016-2026 [Identification of blue skill needs in the Cyprus economy 2016-26 ]. [https://www.anad.org.cy/wps/wcm/connect/hrda/9359405e-8412-4fb0-9f2c-8929bc43315b/%CE%95%CE%BD%CF%84%CE%BF%CF%80%CE%B9%CF%83%CE%BC%CFMOD=AJPERES&CONVERT\\_TO=url&CACHEID=ROOTWORKSPACE.Z18\\_HHHAH900NGE980A79359405e-8412-4fb0-9f2c-8929bc43315b-ngFD23N](https://www.anad.org.cy/wps/wcm/connect/hrda/9359405e-8412-4fb0-9f2c-8929bc43315b/%CE%95%CE%BD%CF%84%CE%BF%CF%80%CE%B9%CF%83%CE%BC%CFMOD=AJPERES&CONVERT_TO=url&CACHEID=ROOTWORKSPACE.Z18_HHHAH900NGE980A79359405e-8412-4fb0-9f2c-8929bc43315b-ngFD23N)
- [32] Human Resource Development Authority (2018). Εντοπισμός Αναγκών σε Πράσινες Δεξιότητες στην Κυπριακή Οικονομία 2017-2027 [Identification of green skill needs in the Cyprus economy 2017-27]. [https://www.anad.org.cy/wps/wcm/connect/hrda/f07f831e-7d5c-4bf6-81bd-7074dd520541/C452~1.PDF?MOD=AJPERES&CONVERT\\_TO=url&CACHEID=ROOTWORKSPACE.Z18\\_HHHAH900NGE980A7f07f831e-7d5c-4bf6-81bd-7074dd520541-ngBxi1U](https://www.anad.org.cy/wps/wcm/connect/hrda/f07f831e-7d5c-4bf6-81bd-7074dd520541/C452~1.PDF?MOD=AJPERES&CONVERT_TO=url&CACHEID=ROOTWORKSPACE.Z18_HHHAH900NGE980A7f07f831e-7d5c-4bf6-81bd-7074dd520541-ngBxi1U)
- [35] Council of the European Union (2012). Council Recommendation of 20 December 2012 on the validation of non-formal and informal learning. Official Journal of the European Union, C 398, 22.12.2012, pp. 1-5.
- [47] Korelli, Y.; Mourouzides, Y. (2018). Guidance and outreach for inactive and unemployed – Cyprus. Cedefop ReferNet thematic perspectives series.  
<https://www.cedefop.europa.eu/en/publications-and-resources/country-reports/guidance-and-outreach-inactive-and-unemployed-cyprus>
- [1] Based on Cedefop (2021). Spotlight on VET – 2020 compilation: vocational education and training systems in Europe. Luxembourg: Publications Office. <http://data.europa.eu/doi/10.2801/667443>
- [6] Based on Cedefop (2021). Spotlight on VET – 2020 compilation: vocational education and training systems in Europe. Luxembourg: Publications Office. <http://data.europa.eu/doi/10.2801/667443>
- [9] Ministry of Education, Youth and Sports (2020). Strategie vzdělávací politiky ČR do roku 2030+ [Strategy for the Education Policy of the Czech Republic]. Prague: Ministry of Education, Youth and Sports.  
[https://www.msmt.cz/uploads/brozura\\_S2030\\_en\\_fin\\_online.pdf](https://www.msmt.cz/uploads/brozura_S2030_en_fin_online.pdf)
- [10] Cedefop (2021). Spotlight on VET – 2020 compilation: vocational education and training systems in Europe. Luxembourg: Publications Office.  
<http://data.europa.eu/doi/10.2801/667443>
- [15] Government of the Czech Republic (no date). Zpráva o stavu romské menšiny v ČR za rok 2019 [Report on the situation of the Roma Minority in the Czech Republic in 2019].  
<https://www.vlada.cz/assets/ppov/zalezitosti-romske-komunity/aktuality/Zprava-o-stavu-romske-mensiny-2019.pdf>

- [16] Czech Statistical Office (ČSÚ) (2014). Národnostní struktura obyvatel [Ethnic structure of population]. <https://www.czso.cz/documents/10180/20551765/170223-14.pdf>
- [29] Ministry of Education, Youth and Sports (2020). Strategie vzdělávací politiky ČR do roku 2030+ [Strategy for the Education Policy of the Czech Republic]. Prague: Ministry of Education, Youth and Sports. [https://www.msmt.cz/uploads/brozura\\_S2030\\_en\\_fin\\_online.pdf](https://www.msmt.cz/uploads/brozura_S2030_en_fin_online.pdf)
- [49] Ministry of Education, Youth and Sports (2020). Strategie vzdělávací politiky ČR do roku 2030+ [Strategy for the Education Policy of the Czech Republic]. Prague: Ministry of Education, Youth and Sports. [https://www.msmt.cz/uploads/brozura\\_S2030\\_en\\_fin\\_online.pdf](https://www.msmt.cz/uploads/brozura_S2030_en_fin_online.pdf)
- [69] Ministry of Education, Youth and Sports [Ministerstvo školství, mládeže a tělovýchovy – MŠMT]. [www.msmt.cz](http://www.msmt.cz)
- [8] BIBB. Das Projekt QuBe - Qualifikation und Beruf in der Zukunft [The QuBe project - Qualification and profession in the future] <https://www.bibb.de/de/11727.php>
- [9] Maier, T.; Kalinowski, M. et al. (2021). Should I stay or should I go? Bonn. BIBB. Report 1/2021. <https://www.bibb.de/dienst/veroeffentlichungen/de/publication/show/17275>
- [10] BIBB (2021). Datenreport zum Berufsbildungsbericht 2021 [VET data report 2021.] Bonn: BIBB. See also: [https://www.destatis.de/DE/Themen/Branchen-Unternehmen/Unternehmen/\\_inhalt.html](https://www.destatis.de/DE/Themen/Branchen-Unternehmen/Unternehmen/_inhalt.html)
- [12] <https://www.destatis.de/DE/Themen/Arbeit/Arbeitsmarkt/Erwerbstaetigkeit/ArbeitsmarktstruCovid19.html>
- [13] BIBB (2021). Datenreport zum Berufsbildungsbericht 2021 [VET data report 2021.] Bonn: BIBB. p.15.
- [16] [https://www.destatis.de/DE/Themen/Arbeit/Arbeitsmarkt/Erwerbstaetigkeit/\\_inhalt.html](https://www.destatis.de/DE/Themen/Arbeit/Arbeitsmarkt/Erwerbstaetigkeit/_inhalt.html)
- [18] Cedefop (2018). The changing nature and role of vocational education and training in Europe. Volume 3: the responsiveness of European VET systems to external change (1995-2015). Case study focusing on England. Cedefop research paper; No 67. [https://www.cedefop.europa.eu/files/england\\_cedefop\\_changing\\_nature\\_of\\_vet\\_-\\_case\\_study.pdf](https://www.cedefop.europa.eu/files/england_cedefop_changing_nature_of_vet_-_case_study.pdf)
- [19] Cedefop (2019). The changing nature and role of vocational education and training in Europe. Volume 6: vocationally oriented education and training at higher education level. Expansion and diversification in European countries. Case study focusing on Germany. Cedefop research paper; No 70. [https://www.cedefop.europa.eu/files/germany\\_cedefop\\_changing\\_nature\\_of\\_vet\\_-\\_case\\_study.pdf](https://www.cedefop.europa.eu/files/germany_cedefop_changing_nature_of_vet_-_case_study.pdf)
- [20] BIBB (2020). Datenreport zum Berufsbildungsbericht 2021 [VET data report 2021.] Bonn: BIBB. p. 37 See also: <https://www-genesis.destatis.de/genesis/online?operation=abruftabelleBearbeiten&levelindex=1&levelid=1632933787211&auswahloperati0001&auswahltext=&werteabruf=Werteabruf#abreadcrumb>
- [21] BIBB (2021). Datenreport zum Berufsbildungsbericht 2021 [VET data report 2021.] Bonn: BIBB. p.250.
- [23] Huismann, A. (2018). Guidance and outreach for inactive and unemployed – Germany. Cedefop ReferNet thematic perspectives series, pp. 22-26. [http://libserver.cedefop.europa.eu/vetelib/2018/guidance\\_outreach\\_Germany\\_Cedefop\\_ReferNet.pdf](http://libserver.cedefop.europa.eu/vetelib/2018/guidance_outreach_Germany_Cedefop_ReferNet.pdf)
- [24] BMBF (2018). Berufsbildungsbericht 2018 [Report on vocational education and training 2018]. Bonn: BMBF, p. 90. [https://www.bmbf.de/upload\\_filestore/pub/Berufsbildungsbericht\\_2018.pdf](https://www.bmbf.de/upload_filestore/pub/Berufsbildungsbericht_2018.pdf)
- [25] BMBF(2018). Weiterbildungsverhalten in Deutschland:

[https://www.bmbf.de/upload\\_filestore/pub/Weiterbildungsverhalten\\_in\\_Deutschland\\_2018.pdf](https://www.bmbf.de/upload_filestore/pub/Weiterbildungsverhalten_in_Deutschland_2018.pdf)

More recent data about Germany in 2020 will be published by the end of 2021.

- [26] BIBB (2018). Datenreport zum Berufsbildungsbericht 2018 [VET data report 2018]. Bonn: BIBB, p. 85, 88 and 167. [https://www.bibb.de/dokumente/pdf/bibb\\_datenreport\\_2018.pdf](https://www.bibb.de/dokumente/pdf/bibb_datenreport_2018.pdf)  
BIBB (2017). VET data report Germany 2016-17: facts and analyses to accompany the Federal Government report on VET: selected findings. Bonn: BIBB, p 39-41. <https://www.bibb.de/datenreport/en/60595.php>
- [27] BIBB (2021): Verzeichnis der anerkannten Ausbildungsberufe 2021 [List of recognised training occupations 2021]. Bonn: BIBB. <https://www.bibb.de/de/65925.php>
- [28] BIBB (2021). Datenreport zum Berufsbildungsbericht 2021 [VET data report 2021]. Bonn: BIBB, p. 78. <https://www.bibb.de/dokumente/pdf/bibb-datenreport-2021.pdf>
- [29] Cedefop (2021). Spotlight on VET – 2020 compilation: vocational education and training systems in Europe. Luxembourg: Publications Office.  
<http://data.europa.eu/10.2801/667443>
- [30] BBiG: [http://www.gesetze-im-internet.de/bbig\\_2005/\\_53b.html](http://www.gesetze-im-internet.de/bbig_2005/_53b.html)
- [31] Hauptausschuss; <https://www.bibb.de/de/463.php>
- [32] Fachhochschulen
- [33] Deutscher Bundestag (2021): Zwischenbericht zur Wissenschaftlichen Studie „Duales Studium: Umsetzungsmodelle und Entwicklungsbedarfe [Interim report on the scientific study ‚Duales Studium: Implementation models and development needs‘]. Berlin: Deutscher Bundestag, p.4. <https://dserver.bundestag.de/btd/19/312/1931267.pdf>
- [34] BIBB (2021): Verzeichnis der anerkannten Ausbildungsberufe 2021 [List of recognised training occupations 2021]. Bonn: BIBB. <https://www.bibb.de/de/65925.php>
- [35] BIBB (2021). Datenreport zum Berufsbildungsbericht 2021 [VET data report 2021]. Bonn: BIBB, p. 90. <https://www.bibb.de/dokumente/pdf/bibb-datenreport-2021.pdf>
- [37] BIBB (2021). Datenreport zum Berufsbildungsbericht 2021 [VET data report 2021]. Bonn: BIBB, p.164. <https://www.bibb.de/dokumente/pdf/bibb-datenreport-2021.pdf>
- [38] BIBB (2021). Datenreport zum Berufsbildungsbericht 2021 [VET data report 2021]. Bonn: BIBB, p. 131. <https://www.bibb.de/dokumente/pdf/bibb-datenreport-2021.pdf>
- [39] BIBB (2021). Datenreport zum Berufsbildungsbericht 2021 [VET data report 2021]. Bonn: BIBB, p. 92. <https://www.bibb.de/dokumente/pdf/bibb-datenreport-2021.pdf>
- [40] Standardberufsbildpositionen: <https://www.bibb.de/en/134898.php>
- [42] BIBB (2021). Datenreport zum Berufsbildungsbericht 2021 [VET data report 2021]. Bonn: BIBB, p. 35. <https://www.bibb.de/dokumente/pdf/bibb-datenreport-2021.pdf>
- [43] BIBB (2021). Datenreport zum Berufsbildungsbericht 2021 [VET data report 2021]. Bonn: BIBB, p. 23. <https://www.bibb.de/dokumente/pdf/bibb-datenreport-2021.pdf>
- [44] BIBB (2021). Datenreport zum Berufsbildungsbericht 2021 [VET data report 2021]. Bonn: BIBB, p. 119. <https://www.bibb.de/dokumente/pdf/bibb-datenreport-2021.pdf>
- [45] BIBB (2021). Datenreport zum Berufsbildungsbericht 2021 [VET data report 2021]. Bonn: BIBB, p. 286. <https://www.bibb.de/dokumente/pdf/bibb-datenreport-2021.pdf>
- [49] BIBB (2018). Datenreport zum Berufsbildungsbericht 2018 [VET data report 2018]. Bonn: BIBB. <https://www.bibb.de/datenreport/de/index.php>
- [51] Bundesministerium für Bildung und Forschung (Federal ministry of education and research)
- [52] BIBB (2021). Datenreport zum Berufsbildungsbericht 2021 [VET data report 2021]. Bonn: BIBB. [https://www.bibb.de/datenreport/de/datenreport\\_2021.php](https://www.bibb.de/datenreport/de/datenreport_2021.php)

- [60] BIBB (2021). Datenreport zum Berufsbildungsbericht 2021 [VET data report 2021]. Bonn: BIBB. p. 225. <https://www.bibb.de/dokumente/pdf/bibb-datenreport-2021.pdf>
- [62] Pfeifer, H., Wenzelmann, F. et al. (2020). Kosten und Nutzen der betrieblichen Ausbildung 2017/18 [Costs and benefits of in-company training 2017/18]. Bonn. BIBB. p. 19. [https://www.bibb.de/tools/dapro/data/documents/pdf/eb\\_21316.pdf](https://www.bibb.de/tools/dapro/data/documents/pdf/eb_21316.pdf)
- [63] BIBB (2021). Datenreport zum Berufsbildungsbericht 2021 [VET data report 2021]. Bonn: BIBB, p. 232. <https://www.bibb.de/dokumente/pdf/bibb-datenreport-2021.pdf>
- [66] Bundesministerium für Bildung und Forschung (BMBF)
- [67] BIBB (2021). Datenreport zum Berufsbildungsbericht 2021 [VET data report 2021]. Bonn: BIBB. p. 239. <https://www.bibb.de/dokumente/pdf/bibb-datenreport-2021.pdf>
- [68] BIBB (2021). Datenreport zum Berufsbildungsbericht 2021 [VET data report 2021]. Bonn: BIBB. p. 239. <https://www.bibb.de/dokumente/pdf/bibb-datenreport-2021.pdf>
- [70] BIBB (2021). Datenreport zum Berufsbildungsbericht 2021 [VET data report 2021]. Bonn: BIBB. p. 238. <https://www.bibb.de/dokumente/pdf/bibb-datenreport-2021.pdf>
- [71] Bundesagentur für Arbeit (BA)
- [72] assistierte Ausbildung (AsA)
- [73] BMAS (2021). Bericht der Bundesregierung über die Förderung der beruflichen Weiterbildung im Rahmen der aktiven Arbeitsförderung und die entsprechenden Ausgaben [Report of the Federal Government on the promotion of continuing vocational training within the framework of active labour promotion and the corresponding expenditure]. BMAS. Berlin. [https://www.bmas.de/SharedDocs/Downloads/DE/Aus-Weiterbildung/bericht-foerderung-berufliche-weiterbildung.pdf;jsessionid=90572B9411AFADB80713BB3DA44555E5.delivery1-master?\\_\\_blob=publicationFile&v=2](https://www.bmas.de/SharedDocs/Downloads/DE/Aus-Weiterbildung/bericht-foerderung-berufliche-weiterbildung.pdf;jsessionid=90572B9411AFADB80713BB3DA44555E5.delivery1-master?__blob=publicationFile&v=2)
- [75] BIBB (2021). Datenreport zum Berufsbildungsbericht 2021 [VET data report 2021]. Bonn: BIBB. p. 352. <https://www.bibb.de/dokumente/pdf/bibb-datenreport-2021.pdf>
- [76] Bundesagentur für Arbeit (BA)
- [77] Gesetz zur Stärkung der Chancen für Qualifizierung und für mehr Schutz in der Arbeitslosenversicherung (Qualifizierungschancengesetz) 2019: [https://beck-online.beck.de/Dokument?vpath=bibdata%5Cges%5Cbrd\\_001\\_2018\\_2651%5Ccont%5Cbrd\\_001\\_2018\\_2651.htm](https://beck-online.beck.de/Dokument?vpath=bibdata%5Cges%5Cbrd_001_2018_2651%5Ccont%5Cbrd_001_2018_2651.htm)
- [78] BIBB (2021). Datenreport zum Berufsbildungsbericht 2021 [VET data report 2021]. Bonn: BIBB. p. 352. <https://www.bibb.de/dokumente/pdf/bibb-datenreport-2021.pdf>
- [79] Seyda, S., Placke, B. (2020). IW-Weiterbildungserhebung 2020: Weiterbildung auf Wachstumskurs [IW Continuing Education Survey 2020: Continuing Education on a Growth Path]. IW. Köln. p. 105. <https://www.iwkoeln.de/studien/susanne-seyda-beate-placke-weiterbildung-auf-wachstumskurs-493427.html>
- [80] Müller, N., Wenzelmann, F. (2018). Berufliche Weiterbildung: Aufwand und Nutzen für Individuen [Continuing vocational development: Cost and benefit for individuals]. BIBB. Bonn. p. 4. <https://www.bibb.de/dienst/veroeffentlichungen/de/publication/show/8931>
- [91] BMBF (2013). Qualifizierungsmöglichkeiten für Ausbilderinnen und Ausbilder: Geprüfte/-r Aus- und Weiterbildungspädagoge/-in. Geprüfte/-r Berufspädagoge/-in [Qualification possibilities for trainers: certified education and training educator and certified vocational trainer]. Bonn: BMBF. <https://lit.bibb.de/vufind/Record/61379>
- [95] Bundesinstitut für Berufsbildung (BIBB)
- [98] Gesellschaft für wirtschaftliche Strukturforchung (GWS)
- [99] <https://www.bibb.de/de/11727.php> [accessed 22.9.2021]

- [103]Bundesministerium für Bildung und Forschung (BMBF)
- [104]<https://www.bibb.de/en/12138.php>
- [105]Deutsches Institut für Erwachsenenbildung (DIE)
- [106]<https://www.bibb.de/en/2160.php>
- [114]This section is based on: Hippach-Schneider, U.; Huismann, A. (2019). Vocational education and training in Europe: Germany. Cedefop ReferNet VET in Europe reports 2018. [https://www.refernet.de/dokumente/pdf/2018\\_CR\\_DE.pdf](https://www.refernet.de/dokumente/pdf/2018_CR_DE.pdf)
- [118]Berufsbildungsgesetz (BBiG)
- [119]BIBB (2017a). Training regulations and how they come about. Bonn: BIBB. <https://www.bibb.de/veroeffentlichungen/en/publication/show/8277>
- [122]BIBB (2017). Training regulations and how they come about. Bonn: BIBB. <https://www.bibb.de/veroeffentlichungen/en/publication/show/8277>
- [123]BIBB (2017). Training regulations and how they come about. Bonn: BIBB. <https://www.bibb.de/veroeffentlichungen/en/publication/show/8277>
- [126]BIBB (2017). Training regulations and how they come about. Bonn: BIBB. <https://www.bibb.de/veroeffentlichungen/en/publication/show/8277>
- [128]BIBB (2021). Datenreport zum Berufsbildungsbericht 2021 [Data report of the vocational education and training report 2021]. Bonn: BIBB. p. 64. <https://www.bibb.de/dokumente/pdf/bibb-datenreport-2021.pdf>
- [129]Standardberufsbildpositionen: <https://www.bibb.de/en/134898.php>
- [131]BIBB (2017). Quality assurance of company-based training in the dual system in Germany: an overview for practitioners and VET experts. <https://www.bibb.de/veroeffentlichungen/en/publication/show/8548>, p. 7.
- [135]BIBB (2017). Quality assurance of company-based training in the dual system in Germany. Bonn: BIBB. <https://www.bibb.de/dienst/veroeffentlichungen/en/publication/show/8548>
- [144]Cedefop (2020). Vocational education and training in Germany: short description. Luxembourg: Publications Office of the European Union. <http://data.europa.eu/doi/10.2801/121008>
- [160]BMBF (2021). Berufsbildungsbericht 2021 [Report on vocational education and training 2021]. Bonn: p. 107 [https://www.bmbf.de/bmbf/shareddocs/downloads/files/21-04-28-bbb-2021.pdf?\\_\\_blob=publicationFile&v=1](https://www.bmbf.de/bmbf/shareddocs/downloads/files/21-04-28-bbb-2021.pdf?__blob=publicationFile&v=1)
- [168]BMBF (2021). Berufsbildungsbericht 2021[VET data report 2021]. Bonn: BMBF, p. 108.
- [179]BIBB (2021). Datenreport zum Berufsbildungsbericht 2021 [VET data report 2021]. Bonn: BIBB, p. 346.. <https://www.bibb.de/datenreport/>
- [181]BIBB (2021). Datenreport zum Berufsbildungsbericht 2021 [VET data report 2021]. Bonn: BIBB, p. 348. <https://www.bibb.de/datenreport/>
- [184]Huismann, A. (2018). Guidance and outreach for inactive and unemployed – Germany. Cedefop ReferNet thematic perspectives series. [http://libserver.cedefop.europa.eu/vetelib/2018/guidance\\_outreach\\_Germany\\_Cedefop\\_Refe](http://libserver.cedefop.europa.eu/vetelib/2018/guidance_outreach_Germany_Cedefop_Refe)
- [198]BMBF (2021). Berufsbildungsbericht 2021. Bonn: BMBF, p. 106. [https://www.bmbf.de/bmbf/shareddocs/downloads/files/21-04-28-bbb-2021.pdf?\\_\\_blob=publicationFile&v=1](https://www.bmbf.de/bmbf/shareddocs/downloads/files/21-04-28-bbb-2021.pdf?__blob=publicationFile&v=1)
- [202]BMBF (2021). Berufsbildungsbericht 2021 [VET data report 2021]. Bonn: BMBF, p. 120.
- [208]Huismann, A. (2018). Guidance and outreach for inactive and unemployed – Germany. Cedefop ReferNet thematic perspectives series. [http://libserver.cedefop.europa.eu/vetelib/2018/guidance\\_outreach\\_Germany\\_Cedefop\\_Refe](http://libserver.cedefop.europa.eu/vetelib/2018/guidance_outreach_Germany_Cedefop_Refe)
- [2] Based on Cedefop (2021). Spotlight on VET – 2020 compilation: vocational education and

training systems in Europe. Luxembourg: Publications Office. For ISCED 354 programmes.  
<http://data.europa.eu/10.2801/10.2801/667443>

- [14] Cedefop (2018). The changing nature and role of vocational education and training in Europe. Volume 3: the responsiveness of European VET systems to external change (1995-2015). Case study focusing in Estonia. Cedefop research paper; No 67.  
[https://www.cedefop.europa.eu/files/estonia\\_cedefop\\_changing\\_nature\\_of\\_vet\\_-\\_case\\_study.pdf](https://www.cedefop.europa.eu/files/estonia_cedefop_changing_nature_of_vet_-_case_study.pdf)
- [17] Parliament (2013). Vocational Educational Institutions Act (Kutseõppeasutuse seadus). Riigi Teataja [State Gazette], RT I, 30.12.2015, 25. <https://www.riigiteataja.ee/en/eli/ee/514012019002/consolide/current>
- [18] Parliament (2015). Adult Education Act (Täiskasvanute koolituse seadus). Riigi Teataja [State Gazette], RT I, 23.3.2015, 5.  
<https://www.riigiteataja.ee/en/eli/529062015007/consolide>
- [19] Government (2013). Standard of vocational education. (Kutseharidusstandard). Riigi Teataja [State Gazette], RT I 2013, 13, 130.  
<https://www.riigiteataja.ee/en/eli/515012020003/consolide>
- [20] Cedefop (2017). Estonia: European inventory on NQF 2016.  
<http://www.cedefop.europa.eu/en/publications-and-resources/country-reports/estonia-european-inventory-nqf-2016>
- [25] [https://www.hm.ee/sites/default/files/haridusvaldkonna\\_arengukava\\_2035\\_kinnitaud\\_vv\\_en](https://www.hm.ee/sites/default/files/haridusvaldkonna_arengukava_2035_kinnitaud_vv_en)
- [26] Government (2013). Standard of vocational education. (Kutseharidusstandard). Riigi Teataja [State Gazette], RT I 2013, 13, 130.  
<https://www.riigiteataja.ee/en/eli/515012020003/consolide>
- [31] Parliament (2013). Vocational Educational Institutions Act (Kutseõppeasutuse seadus). Riigi Teataja [State Gazette], RT I, 30.12.2015, 25.  
<https://www.riigiteataja.ee/en/eli/ee/514012019002/consolide/current>
- [32] Parliament (2013). Vocational Educational Institutions Act (Kutseõppeasutuse seadus). Riigi Teataja [State Gazette], RT I, 30.12.2015, 25.  
<https://www.riigiteataja.ee/en/eli/ee/514012019002/consolide/current>
- [34] Parliament (2013). Vocational Educational Institutions Act (Kutseõppeasutuse seadus). Riigi Teataja [State Gazette], RT I, 30.12.2015, 25.  
<https://www.riigiteataja.ee/en/eli/ee/514012019002/consolide/current>
- [39] Parliament (2013). Vocational Educational Institutions Act (Kutseõppeasutuse seadus). Riigi Teataja [State Gazette], RT I, 30.12.2015, 25.  
<https://www.riigiteataja.ee/en/eli/ee/514012019002/consolide/current>
- [43] MoEC (2020). Tööjõuvajaduse ja -pakkumise prognoos aastani 2029 [Forecast of labour force 2019-27]. <https://oska.kutsekoda.ee/en/estonian-labour-market/estonian-labour-market-today-tomorrow/>.
- [48] Government (2013). Standard of vocational education. (Kutseharidusstandard). Riigi Teataja [State Gazette], RT I 2013, 13, 130.  
<https://www.riigiteataja.ee/en/eli/515012020003/consolide>
- [49] Cedefop ReferNet Estonia (2014). Estonia: VET in Europe: country report. Cedefop ReferNet VET in Europe reports.  
[http://libserver.cedefop.europa.eu/vetelib/2014/2014\\_CR\\_EE.pdf](http://libserver.cedefop.europa.eu/vetelib/2014/2014_CR_EE.pdf)
- [50] Cedefop ReferNet Estonia (2014). Estonia: VET in Europe: country report. Cedefop ReferNet VET in Europe reports.  
[http://libserver.cedefop.europa.eu/vetelib/2014/2014\\_CR\\_EE.pdf](http://libserver.cedefop.europa.eu/vetelib/2014/2014_CR_EE.pdf)
- [53] MoER; SICI (2016). The inspectorate of education of Estonia. Tartu: SICI, Standing International Conference of Inspectorates.

<http://www.siciinspectores.eu/getattachment/21147d5b-bc8d-49c8-8fc0-864d2d31cc01>

- [55] MoER (2015b). Pädevad ja motiveeritud õpetajad ning haridusasutuste juhid [Lifelong learning strategy competent and motivated teachers and school leadership programme]. <https://www.hm.ee/et/tegevused/arengukavad>
- [56] Cedefop (2016). 2016 update to the European inventory on validation of non-formal and informal learning: country report Estonia. [https://cumulus.cedefop.europa.eu/files/vetelib/2016/2016\\_validate\\_EE.pdf](https://cumulus.cedefop.europa.eu/files/vetelib/2016/2016_validate_EE.pdf)
- [57] Parliament (2013). Vocational Educational Institutions Act (Kutseõppeasutuse seadus). Riigi Teataja [State Gazette], RT I, 30.12.2015, 25. <https://www.riigiteataja.ee/en/eli/ee/514012019002/consolide/current>
- [58] Government (2013). Standard of vocational education. (Kutseharidusstandard). Riigi Teataja [State Gazette], RT I 2013, 13, 130. <https://www.riigiteataja.ee/en/eli/515012020003/consolide>
- [59] Cedefop (2016). 2016 update to the European inventory on validation of non-formal and informal learning: country report Estonia. [https://cumulus.cedefop.europa.eu/files/vetelib/2016/2016\\_validate\\_EE.pdf](https://cumulus.cedefop.europa.eu/files/vetelib/2016/2016_validate_EE.pdf)
- [63] Parliament (2013). Vocational Educational Institutions Act (Kutseõppeasutuse seadus). Riigi Teataja [State Gazette], RT I, 30.12.2015, 25. <https://www.riigiteataja.ee/en/eli/515012016003/consolide>
- [65] Parliament (1999). Income Tax Act (Tulumaksuseadus). Riigi Teataja [State Gazette], RT I 1999, 101, 903. <https://www.riigiteataja.ee/en/eli/ee/505042019004/consolide/current>
- [66] Parliament (2015). Adult Education Act (Täiskasvanute koolituse seadus). Riigi Teataja [State Gazette], RT I, 23.3.2015, 5. <https://www.riigiteataja.ee/en/eli/529062015007/consolide>
- [68] Parliament (2005). Labour Market Services and Benefits Act (Tööturuteenuste ja -toetuste seadus). Riigi Teataja [State Gazette], RT I 2005, 54, 430. <https://www.riigiteataja.ee/en/eli/ee/511012017005/consolide/current>
- [69] Parliament (2009). Employment Contracts Act (Töölepingu seadus). Riigi Teataja [State Gazette], RT I 2009, 5, 35. <https://www.riigiteataja.ee/en/eli/ee/520032019008/consolide/current>
- [70] Parliament (2003b). Value Added Tax Act (Käibemaksuseadus). Riigi Teataja [State Gazette], RT I 2003, 82, 554. <https://www.riigiteataja.ee/en/eli/ee/504012017001/consolide/current>
- [71] Parliament (1999). Income Tax Act (Tulumaksuseadus). Riigi Teataja [State Gazette], RT I 1999, 101, 903. <https://www.riigiteataja.ee/en/eli/ee/516012017002/consolide/current>
- [8] Eurostat, sbs\_sc\_sca\_r2, [extracted 2.9.2021]
- [9] European Commission (2018). Annual report on European SMEs 2017/2018: SMEs growing beyond borders. Contract EASME/COSME/2017/031. <https://publications.europa.eu/en/publication-detail/-/publication/a435b6ed-e888-11e8-b690-01aa75ed71a1/language-en>
- [10] WTTTC (2021). Croatia 2021 annual research: key highlights [database]. <https://www.wtttc.org/economic-impact/country-analysis/country-data/>
- [11] European Commission (2019). Country report Croatia 2019. COM(2019) 150 final. [https://ec.europa.eu/info/sites/info/files/file\\_import/2019-european-semester-country-report-croatia\\_en.pdf](https://ec.europa.eu/info/sites/info/files/file_import/2019-european-semester-country-report-croatia_en.pdf)
- [12] <https://mrosp.gov.hr/UserDocsImages/dokumenti/Uprava%20za%20tr%C5%BEi%C5%A1te>
- [3] Cedefop; ReferNet (2021). VET REF: developments in vocational education and training policy database. [Unpublished].

- [18] Icelandic Government (2021). Regulation on workplace learning no 189. <https://www.reglugerd.is/reglugerdir/eftir-raduneytum/mennta--og-meningarmalaraduneyti/nr/0189-2021>
- [22] Cedefop; ReferNet (2021). VET REF: developments in vocational education and training policy database. [Unpublished].
- [36] Icelandic Government (2020). The Icelandic student loan fund Act no 60. <https://www.althingi.is/lagas/151c/2020060.html>
- [1] Cedefop (2021). Spotlight on VET – 2020 compilation: vocational education and training systems in Europe. Luxembourg: Publications Office. <http://data.europa.eu/doi/10.2801/667443>
- [2] Cedefop (2021). Spotlight on VET – 2020 compilation: vocational education and training systems in Europe. Luxembourg: Publications Office. <http://data.europa.eu/doi/10.2801/667443>
- [3] Cedefop (2021). Spotlight on VET – 2020 compilation: vocational education and training systems in Europe. Luxembourg: Publications Office. <http://data.europa.eu/doi/10.2801/667443>
- [6] Istat (2018). Italian Statistical Yearbook, Rome (Reference year: 2016, most recent data available). Annuario Statistico Italiano, Roma (Anno di riferimento: 2016, dato più recente disponibile). Istat (2018).
- [11] Cedefop (2018). The changing nature and role of vocational education and training in Europe. Volume 3: the responsiveness of European VET systems to external change (1995-2015). Case study focusing on Italy. Cedefop research paper; No 67. [https://www.cedefop.europa.eu/files/italy\\_cedefop\\_changing\\_nature\\_of\\_vet\\_-\\_case\\_study.pdf](https://www.cedefop.europa.eu/files/italy_cedefop_changing_nature_of_vet_-_case_study.pdf)
- [12] Cedefop (2019). The changing nature and role of vocational education and training in Europe. Volume 6: vocationally oriented education and training at higher education level. Expansion and diversification in European countries. Case study focusing on Italy. Cedefop research paper; No 70. [https://www.cedefop.europa.eu/files/italy\\_cedefop\\_changing\\_nature\\_of\\_vet\\_-\\_case\\_study\\_0.pdf](https://www.cedefop.europa.eu/files/italy_cedefop_changing_nature_of_vet_-_case_study_0.pdf)
- [13] INAPP (Unpublished). OFP Survey 2020 reference year.
- [14] INAPP (Unpublished). OFP Survey 2020 reference year.
- [21] INAPP (Unpublished). OFP Survey reference year 2020.
- [24] Ministry of Labour, Directorial decree No 2 of 23 April 2021 for the distribution between regions and autonomous provinces of the resources relating to the year 2020 for the financing of training courses in the dual system (Ministero del Lavoro, Decreto direttoriale No 2 del 23 aprile 2021 di ripartizione tra regioni e province autonome delle risorse relative all'annualità 2020 per il finanziamento dei percorsi formativi nel Sistema duale). <https://www.lavoro.gov.it/documenti-e-norme/normative/Documents/2021/DD-2-del-23042021-duale-2020.pdf>
- [25] Law 205/2017 State budget for the financial year 2018 and multi-year budget for the three-year period 2018-2020, art. 1 paragraph 110 (Legge 205/2017 Bilancio di previsione dello Stato per l'anno finanziario 2018 e bilancio pluriennale per il triennio 2018-2020 art. 1 comma 110). <https://www.normattiva.it/uri-res/N2Ls?urn:nir:stato:legge:2017-12-27;205>
- [29] Legislative Decree No 34 dated 19 May 2020
- [30] Cedefop; ReferNet (2021). VET REF: developments in vocational education and training policy database. [Unpublished]
- [36] Inter-ministerial Decree of 8 January 2018, Establishment of the national framework of qualifications issued as part of the National Skills Certification System referred to in

Legislative Decree 16 January 2013, No 13 (Ministero del lavoro, Decreto 8 gennaio 2018, Istituzione del Quadro nazionale delle qualificazioni rilasciate nell'ambito del Sistema nazionale di certificazione delle competenze di cui al decreto legislativo 16 gennaio 2013, No 13). <https://www.gazzettaufficiale.it/eli/id/2018/01/25/18A00411/sg>

- [49] Cedefop; ReferNet (2021). VET REF: developments in vocational education and training policy database. [Unpublished].
- [50] Legislative Decree 16 January 2013, No 13, Definition of the general rules and essential levels of performance for the identification and validation of non-formal and informal learning and of the minimum service standards of the national skills certification system, pursuant to article 4, paragraphs 58 and 68 , of the law 28 June 2012, No 92 (Decreto Legislativo 16 gennaio 2013, No 13, Definizione delle norme generali e dei livelli essenziali delle prestazioni per l'individuazione e validazione degli apprendimenti non formali e informali e degli standard minimi di servizio del sistema nazionale di certificazione delle competenze, a norma dell'articolo 4, commi 58 e 68, della legge 28 giugno 2012, No 92). <https://www.gazzettaufficiale.it/eli/id/2013/02/15/13G00043/sg>
- [51] Inter-ministerial Decree of 30 June 2015, Definition of an operational framework for the national recognition of regional qualifications and related competences, within the National directory of education and training qualifications and professional qualifications referred to in Article 8 of the decree legislative 16 January 2013, No 13 (Decreto Interministeriale 30 giugno 2015, Definizione di un quadro operativo per il riconoscimento a livello nazionale delle qualificazioni regionali e delle relative competenze, nell'ambito del Repertorio nazionale dei titoli di istruzione e formazione e delle qualificazioni professionali di cui all'articolo 8 del decreto legislativo 16 gennaio 2013, No 13). <https://www.gazzettaufficiale.it/eli/id/2015/07/20/15A05469/sg>
- [61] Ministry of Education, University and Research (2018). Pathways for transversal skills and guidance. Guidelines (Ministero dell'Istruzione, dell'Università e della Ricerca, Percorsi per le competenze trasversali e per l'orientamento. Linee guida). [www.miur.gov.it/documents/20182/1306025/Linee+guida+PCTO+con+allegati.pdf/3e6b551c5e4-71de-8103-30250f17134a?version=1.0&t=1570548388496](http://www.miur.gov.it/documents/20182/1306025/Linee+guida+PCTO+con+allegati.pdf/3e6b551c5e4-71de-8103-30250f17134a?version=1.0&t=1570548388496)
- [62] Cedefop; ReferNet (2021). VET REF: developments in vocational education and training policy database. [Unpublished].
- [63] Bonacci, M. (2018). Guidance and outreach for inactive and unemployed – Italy. Cedefop ReferNet thematic perspectives series. [https://cumulus.cedefop.europa.eu/files/vetelib/2018/guidance\\_outreach\\_Italy\\_Cedefop\\_Ref](https://cumulus.cedefop.europa.eu/files/vetelib/2018/guidance_outreach_Italy_Cedefop_Ref)
- [15] <https://men.public.lu/fr/publications/rapports-activite-ministere/rapports-ministere/rapport-activites-2020.html>
- [16] MENJE (2021). Jeunes décrocheurs et jeunes inactifs au Luxembourg [School dropper and young outside the labour force in Luxembourg]. Luxembourg: MENJE. <http://www.men.public.lu/fr/actualites/publications/secondaire/statistiques-analyses/daccrochage-scolaire/daccrochage-14-15/index.html>
- [17] Registrations beginning of the school year (excluding adult apprentices) in public secondary schools and private secondary schools applying the national programmes
- [20] [www.bts.lu](http://www.bts.lu)
- [22] Conditions defined according to the Grand-Ducal Regulation of 3 August 2010 <http://data.legilux.public.lu/eli/etat/leg/rgd/2010/08/03/n5/jo>
- [23] Law of 12 July 2019 amending 1- Labour code, 2- amended law of 31 July 2006 introducing labour code, 3- amended law of 19 December 2008 reforming vocational education and training <http://data.legilux.public.lu/eli/etat/leg/loi/2019/07/12/a497/jo>
- [27] SCL (2008). Loi du 19 décembre 2008 portant réforme de la formation professionnelle.

Mémorial A, 220, 3273-3288.

<http://www.legilux.public.lu/leg/a/archives/2008/0220/a220.pdf#page=2>

- [33] SCL (1924). Loi du 4 avril 1924 portant création de chambres professionnelles à base élective. Mémorial A, A(2).  
[http://www.legilux.public.lu/leg/textescoordonnes/compilation/code\\_administratif/VOL\\_1/CH/](http://www.legilux.public.lu/leg/textescoordonnes/compilation/code_administratif/VOL_1/CH/)
- [34] SCL (1964). Loi du 12 février 1964 ayant pour objet de compléter la loi du 4 avril 1924, portant création de chambres professionnelles à base élective par la création d'une chambre des fonctionnaires et employés publics. Mémorial A, 13, 230.  
<http://www.legilux.public.lu/rgl/1964/A/0230/1.pdf>
- [35] SCL (2008a). Loi du 19 décembre 2008 portant réforme de la formation professionnelle. Mémorial A, 220, 3273-3288.  
<http://www.legilux.public.lu/leg/a/archives/2008/0220/a220.pdf#page=2> and SCL (2008b). Loi du 19 décembre 2008 portant révision du régime applicable à certains. Mémorial A, 207, 3135-3138.
- [36] Law of 12 July 2019 amending 1- Labour code, 2- amended law of 31 July 2006 introducing labour code, 3- amended law of 19 December 2008 reforming vocational education and training <http://data.legilux.public.lu/eli/etat/leg/loi/2019/07/12/a497/jo>
- [41] OECD (2015). OECD - Table C1.5: Total expenditure on educational institutions per full-time equivalent student, by type of institutions [accessed 05.10.2021].
- [42] MENJE (2021). Rapport d'activités 2020 [Activity report 2020]. Luxembourg: MENJE.  
<https://men.public.lu/fr/publications/rapports-activite-ministere/rapports-ministere/rapport-activites-2020.html>
- [44] SCL (2010). Loi du 26 juillet 2010 concernant l'aide financière de l'état pour études supérieures. Mémorial A 118, 2039 - 2043.  
<http://www.legilux.public.lu/leg/a/archives/2010/0118/a118.pdf#page=2>
- [45] SCL (2015). Collection of laws concerning the Training Institute of National Education. Mémorial A, 166. <http://www.legilux.public.lu/leg/a/archives/2015/0166/a166>
- [46] SCL (2010) Règlement grand-ducal du 3 août 2010 fixant les modalités pour accorder et retirer le droit de former un apprenti.  
<http://data.legilux.public.lu/eli/etat/leg/rgd/2010/08/03/n5/jo>
- [49] <https://www.fedil.lu/fr/publications/les-qualifications-de-demain-dans-lindustrie-2019/>
- [53] SCL (2011). Règlement grand-ducal du 30 juillet 2011 portant institution et organisation des équipes curriculaires, des commissions nationales de formation et des commissions nationales de l'enseignement général pour la formation professionnelle de l'enseignement secondaire technique. Mémorial A 173.  
<http://legilux.public.lu/eli/etat/leg/rgd/2011/07/30/n3/jo>
- [54] Enterprises or public administration offering an apprenticeship or a training.
- [55] The framework programmes are made of:
- the occupational profile that determines the tasks and activities that professionals perform in the trade or profession.
  - the training profile that determines the set of competences for each taught domain.
  - the master programme that determines, for each programme, the timetable, the credit units and the descriptions of the modules (Education code chap. VIII art.31)
- [56] SCL (2017). Loi du 14 mars 2017 portant modification de la loi modifiée du 7 octobre 1993 ayant pour objet: (1) la création d'un Service de Coordination de la Recherche et de l'Innovation pédagogiques et technologiques; (2) la création d'un Centre de Gestion Informatique de l'Éducation; (3) l'institution d'un Conseil scientifique. Mémorial A 439.  
<http://memorial.lu/eli/etat/leg/loi/2017/03/14/a439/jo>

- [60] SCL (2016). A-N° 263 du 21 décembre 2016.  
<http://legilux.public.lu/eli/etat/leg/loi/2016/12/15/n1/jo>
- [61] SCL (2016). A-N° 263 21 décembre. <http://legilux.public.lu/eli/etat/leg/loi/2016/12/15/n1/jo>
- [64] SCL (2017). Loi du 14 mars 2017 portant modification de la loi modifiée du 7 octobre 1993 ayant pour objet: (1) la création d'un Service de Coordination de la Recherche et de l'Innovation pédagogiques et technologiques; (2) la création d'un Centre de Gestion Informatique de l'Éducation; (3) l'institution d'un Conseil scientifique. Mémorial A 439.  
<http://memorial.lu/eli/etat/leg/loi/2017/03/14/a439/jo>
- [66] The secondary school conference brings together teaching staff and non-teaching staff from a secondary school.
- [68] Observatoire national de la qualité scolaire (2021). Rapport d'activités 2020 (Activity report 2020)
- [70] SCL (2010). Règlement ministériel du 15 mars 2010 portant sur l'accréditation des programmes de formation menant au brevet de technicien supérieur. Mémorial A 65.  
<http://legilux.public.lu/eli/etat/leg/rmin/2010/03/15/n1/jo>
- [73] Anefore (2012). Livre blanc - Stratégie nationale du lifelong learning [White book on the national lifelong learning strategy]. <http://www.men.public.lu/catalogue-publications/adultes/informations-generales-offre-cours/livre-blanc-lifelong-learning/131025-s3l-livreblanc.pdf> See also [www.S3l.lu](http://www.S3l.lu)
- [74] SCL (2000). Règlement grand-ducal du 31 mars 2000 ayant pour objet: (1) de fixer les modalités des contrats conventionnant des cours pour adultes et les conditions d'obtention d'un label de qualité et d'une subvention; (2) de créer une Commission Consultative à l'Éducation. Mémorial A 34, 846-848.  
<http://data.legilux.public.lu/eli/etat/leg/rgd/2000/03/31/n2/jo>
- [77] SCL (2008). Loi du 19 décembre 2008 portant réforme de la formation professionnelle. Mémorial A 220, 3273-3288.  
<http://www.legilux.public.lu/leg/a/archives/2008/0220/a220.pdf#page=2>
- [78] SCL (2010). Règlement grand-ducal du 11 janvier 2010 portant organisation de la validation des acquis de l'expérience pour la délivrance des brevets, diplômes et certificats prévue au chapitre V de la loi du 19 décembre 2008 portant réforme de la formation professionnelle. Mémorial A 6.  
<http://legilux.public.lu/eli/etat/leg/rgd/2010/01/11/n1/jo>
- [79] SCL (2016). Loi du 24 août 2016 modifiant la loi modifiée du 19 décembre 2008 portant réforme de la formation professionnelle. Mémorial A 175.  
<http://legilux.public.lu/eli/etat/leg/loi/2016/08/24/n1/jo>
- [80] Law of 19 June 2009 on the organisation of higher education.
- [81] [https://www.en.uni.lu/students/application\\_for\\_admission/recognition\\_of\\_prior\\_experience](https://www.en.uni.lu/students/application_for_admission/recognition_of_prior_experience)
- [83] SCL (2006). Règlement grand-ducal du 30 mars 2006 portant déclaration d'obligation générale d'un accord en matière de dialogue social interprofessionnel relatif à l'accès individuel à la formation professionnelle continue conclu entre les syndicats OGB-L et LCGB d'une part et l'Union des Entreprises Luxembourgeoises, d'une autre. Mémorial A 85. <http://legilux.public.lu/eli/etat/leg/rgd/2006/03/30/n2/jo>
- [84] SCL (2018a). Loi du 13 mars 2018 portant création d'un Observatoire national de la qualité scolaire. Mémorial A 183. <http://legilux.public.lu/eli/etat/leg/loi/2018/03/13/a183/jo>
- [87] SCL (2012). Règlement grand-ducal du 31 octobre 2012 fixant les conditions et modalités des aides et primes de promotion de l'apprentissage. Mémorial A 239, 3153-3154.  
<http://www.legilux.public.lu/leg/a/archives/2012/0239/a239.pdf#page=5>
- [89] MENJE (2017a). Cadre de référence pour l'orientation scolaire et professionnelle [Reference framework for school and professional guidance]. Luxembourg: MENJE.

- [90] Service de la scolarisation des enfants étrangers
- [91] Agence pour la transition vers une vie autonome
- [92] Service de la Formation des adultes
- [1] Cedefop (2021). Spotlight on VET – 2020 compilation: vocational education and training systems in Europe. Luxembourg: Publications Office.  
<http://data.europa.eu/doi/10.2801/667443>
- [2] Arts, culture and sports programmes (referred to as 'vocationally oriented education programmes' nationally) are implemented concurrently with basic and secondary general education, but do not lead to a vocational qualification.
- [11] Saeima (1999). Profesionālās izglītības likums [Vocational education law]. Last amended 22.6.2017. <http://likumi.lv/doc.php?id=20244>
- [12] Saeima (1999). Profesionālās izglītības likums [Vocational education Law]. Last amended 22.6.2017. <http://likumi.lv/doc.php?id=20244>
- [13] Cabinet of Ministers (2011). Profesionālās kvalifikācijas eksāmenu norises kārtība akreditētās profesionālās izglītības programmās [Procedure of professional qualification examinations in accredited vocational education programmes]. Regulation No 662 (last amended 18.12.2012, No 918). <http://likumi.lv/doc.php?id=235206>
- [14] Cabinet of Ministers (2005b). Kārtība, kādā izsniedzami profesionālās pilnveides un profesionālās ievirzes izglītību apliecinājoši dokumenti [Procedures by which documents certifying professional development and professionally oriented education are issued]. Regulation No 902. Last amended 13.12.2016, No 777. <https://likumi.lv/doc.php?mode=DOC&id=122686>
- [22] Saeima (1999). Profesionālās izglītības likums [Vocational education law]. Last amended 22.06.2017. <http://likumi.lv/doc.php?id=20244>
- [23] Saeima (2020). Par valsts budžetu 2021.gadam [Law on State budget for 2021]. <https://likumi.lv/ta/id/319405-par-valsts-budzetu-2021-nbsp-gadam>
- [24] Saeima (1998). Izglītības likums [Education law]. Last amended 20. 4.2021. <http://likumi.lv/doc.php?id=50759>; Saeima (1999). Profesionālās izglītības likums [Vocational Education Law]. Last amended 22.06.2017. <http://likumi.lv/doc.php?id=20244>
- [25] Cabinet of Ministers (2007). Noteikumi par profesionālās izglītības programmu īstenošanas izmaksu minimumu uz vienu izglītojamo [Regulations on expenditures minimum per one student for implementing vocational education programmes]. Regulation No 655 (last amended 30.10.2018,). <http://likumi.lv/doc.php?id=164266>
- [30] Ministry of Economics (2020). Darba tirgus ziņojums [Report labour market ]. <https://www.em.gov.lv/lv/darba-tirgus-zinojums>
- [35] Cedefop (2018). Latvia: sectoral qualifications frameworks support vocational education development. <http://www.cedefop.europa.eu/en/news-and-press/news/latvia-sectoral-qualifications-frameworks-support-vocational-education-development> [accessed 11.10.2021].
- [36] Cabinet of Ministers (2020). Noteikumi par valsts profesionālās vidējās izglītības standartu un valsts arodizglītības standartu [Regulations on the State vocational secondary education standard and the State vocational education standard]. Regulation No 332 2.6.2020. <https://likumi.lv/ta/id/315146-noteikumi-par-valsts-profesionalas-videjas-izglitibas-standartu-un-valsts-arodizglitibas-standartu>
- [37] Cabinet of Ministers (2016). Profesijas standarta, profesionālās kvalifikācijas prasību (ja profesijai neapstiprina profesijas standartu) un nozares kvalifikāciju struktūras izstrādes

kārtība [Procedure for the development of occupational standard, professional qualification requirements (if occupational standard is not approved for an occupation) and sectoral qualifications framework]. Regulation No 633. <http://likumi.lv/doc.php?id=285032>

- [38] Cedefop (2013). Latvia – modularisation of VET and work-based learning. <http://www.cedefop.europa.eu/en/news-and-press/news/latvia-modularisation-vet-and-work-based-learning>
- [39] Saeima (1999). Profesionālās izglītības likums [Vocational education law]. Last amended 22.6.2017. <http://likumi.lv/doc.php?id=20244>
- [40] Cabinet of Ministers (2020). Noteikumi par valsts profesionālās vidējās izglītības standartu un valsts arodizglītības standartu [Regulations on the State vocational secondary education standard and the State vocational education standard]. Regulation No 332 2.6.2020. <https://likumi.lv/ta/id/315146-noteikumi-par-valsts-profesionalas-videjas-izglitibas-standartu-un-valsts-arodizglitibas-standartu>
- [41] Cabinet of Ministers (2011c). Profesionālās kvalifikācijas eksāmenu norises kārtība akreditētās profesionālās izglītības programmās [Procedure of professional qualification examinations in accredited vocational education programmes]. Regulation No 662 (last amended 18.12.2012, No 918). <http://likumi.lv/doc.php?id=235206>
- [42] Cabinet of Ministers (2020). Noteikumi Nr. 618 'Izglītības iestāžu, eksaminācijas centru, citu izglītības likumā noteiktu institūciju un izglītības programmu akreditācijas un izglītības iestāžu vadītāju profesionālās darbības novērtēšanas kārtība t [Procedure for accrediting education institutions and examination centres, accrediting general and vocational education programmes, and evaluating professional work of heads of public education institutions]. Regulation No 618 06.10.2020. <https://likumi.lv/ta/id/317820-izglitibas-iestazu-eksaminacijas-centru-citu-izglitibas-likuma-noteiktu-instituciju-un-izglitibas-programmu-akreditacijas>
- [51] Saeima (1999). Profesionālās izglītības likums [Vocational education law]. Last amended 22.6.2017. <http://likumi.lv/doc.php?id=20244>
- [53] Cabinet of Ministers (2011). Kārtība, kādā novērtē ārpus formālās izglītības sistēmas apgūto profesionālo kompetenci [Procedure how professional competences obtained outside formal education system are assessed]. Regulation No 146 (last amended 30.08.2011, No 663). <http://likumi.lv/doc.php?id=226788>
- [54] Cabinet of Ministers (2011). Profesionālās kvalifikācijas eksāmenu norises kārtība akreditētās profesionālās izglītības programmās [Procedure of professional qualification examinations in accredited vocational education programmes]. Regulation No 662 (last amended 18.12.2012, No 918). <http://likumi.lv/doc.php?id=235206>
- [55] Saeima (1995). Augstskolu likums [Law on higher education institutions ]. Last amended 13.11.2021. <http://likumi.lv/doc.php?id=37967>
- [56] Cabinet of Ministers (2018a). Ārpus formālās izglītības apgūto vai profesionālajā pieredzē iegūto kompetenču un iepriekšējā izglītībā sasniegtu studiju rezultātu atzīšanas noteikumi [Regulations for validation of competences acquired outside formal education or during professional experience and for recognising learning outcomes acquired in previous education]. Regulations No 505. <https://likumi.lv/ta/id/301013-arpus-formalas-izglitibas-apguto-vai-profesionalaja-pieredze-ieguto-kompetencu-un-iekpriekseja-izglitiba-sasniegtu>
- [57] Saeima (2014). Saeimas paziņojums 2014.gada 22.maijā: par Izglītības attīstības pamatnostādņu 2014.-20.gadam apstiprināšanu [Education development guidelines for 2014-20]. <http://likumi.lv/doc.php?id=266406>
- [58] Cabinet of Ministers (2004). Noteikumi par stipendijām [Regulations on scholarships]. Regulation No 740 (last amended 05.12.2017, No706). <http://likumi.lv/doc.php?id=93004>

- [59] Saeima (1993). Par iedzīvotāju ienākuma nodokli [Law on personal income tax]. Last amended 9.2.2021. <http://likumi.lv/doc.php?id=56880>
- [61] Saeima (1993). Par iedzīvotāju ienākuma nodokli [Law on personal income tax]. Last amended 9.2.2021. <http://likumi.lv/doc.php?id=56880>
- [62] Saeima (1995). Augstskolu likums [Law on higher education institutions]. Last amended 13.11.2021 <https://likumi.lv/ta/id/37967-augstskolu-likums>
- [63] Saeima (1998). Izglītības likums [Education law]. Last amended 15.4.2021. <https://likumi.lv/ta/id/50759-izglitibas-likums>
- [64] Saeima (1999a). Profesionālās izglītības likums [Vocational education law]. Last amended 22.06.2017. <http://likumi.lv/doc.php?id=20244>
- [65] Cabinet of Ministers (2006a). Par Konceptiju Karjeras attīstības atbalsta sistēmas pilnveidošana [White paper on improvement of the career guidance system]. Cabinet Order No 214. <http://likumi.lv/doc.php?id=132990>
- [66] Cabinet of Ministers (2020). Noteikumi Nr. 618 'Izglītības iestāžu, eksaminācijas centru, citu Izglītības likumā noteiktu institūciju un izglītības programmu akreditācijas un izglītības iestāžu vadītāju profesionālās darbības novērtēšanas kārtība t [Procedure for accrediting education institutions and examination centres, accrediting general and vocational education programmes, and evaluating professional work of heads of public education institutions]. Regulation No 618 6.10.2020. <https://likumi.lv/ta/id/317820-izglitibas-iestazu-eksaminacijas-centru-citu-izglitibas-likuma-noteiktu-instituciju-un-izglitibas-programmu-akreditacijas>
- [67] Cabinet of Ministers (2013a). Profesionālās izglītības kompetences centra statusa piešķiršanas un anulēšanas kārtība [Procedure for allocation and nullification of vocational education competence centre status]. Regulation No 144. Last amended 25.8.2015. <http://likumi.lv/doc.php?id=255589>
- [71] Saeima (1995). Augstskolu likums [Law on institutions of higher education]. Last amended 13.11.2021..6.2018. <http://likumi.lv/doc.php?id=37967>
- [75] <https://www.cedefop.europa.eu/en/publications-and-resources/country-reports/inventory-lifelong-guidance-systems-and-practices>
- [5] Ministry for Education and Employment (2014). Framework for the Education Strategy for Malta 2014 -24. <https://education.gov.mt/en/strategy/Documents/BOOKLET%20ESM%202014-2024%20ENG%2019-02.pdf>
- [6] Government of Malta (2021). Further and Higher Education Act, Chp. 607 of the Laws of Malta. <https://legislation.mt/eli/cap/607/eng>
- [9] Ministry for Education (2021). Early leaving from education and training policy – the way forward 2020-30. [https://meae.gov.mt/en/Public\\_Consultations/MEDE/Documents/ELET%20POLICY%20Docum](https://meae.gov.mt/en/Public_Consultations/MEDE/Documents/ELET%20POLICY%20Docum)
- [10] Ministry for Education (2021). National strategy for lifelong learning 2021-30. [https://meae.gov.mt/en/Public\\_Consultations/MEDE/Documents/LLL%20POLICY%20Documer](https://meae.gov.mt/en/Public_Consultations/MEDE/Documents/LLL%20POLICY%20Documer)
- [15] Grech, A.G. (2018). SMEs' contribution to the Maltese economy and future prospects. Central Bank of Malta policy note, October 2018. <https://www.centralbankmalta.org/file.aspx?f=72222>
- [20] National Statistics Office (2021). Labour Force Survey revisions in education: 2010-20. NSO news release, No 168, pp 1-8. [https://nso.gov.mt/en/News\\_Releases/Documents/2021/09/News2021\\_168.pdf](https://nso.gov.mt/en/News_Releases/Documents/2021/09/News2021_168.pdf)
- [22] European Commission (2020). Education and Training Monitor – Malta . <https://op.europa.eu/en/publication-detail/-/publication/3fe77671-2496-11eb-9d7e->

[01aa75ed71a1](#)

- [23] National Statistics Office (2021). Labour force survey revisions in education: 2010-20. NSO News release, no 168, pp 1-8.  
[https://nso.gov.mt/en/News\\_Releases/Documents/2021/09/News2021\\_168.pdf](https://nso.gov.mt/en/News_Releases/Documents/2021/09/News2021_168.pdf)
- [33] National Commission for Further and Higher Education (2014). Comm No.: 23/2014 Communication to licensed further and higher education institutions. [https://mfhea.mt/wp-content/uploads/2021/07/Comm\\_23\\_2014-Qualification-Level-for-Tutors.pdf](https://mfhea.mt/wp-content/uploads/2021/07/Comm_23_2014-Qualification-Level-for-Tutors.pdf)
- [34] National Commission for Further and Higher Education (2015). Internal and external quality assurance framework in further and higher education. <https://mfhea.mt/wp-content/uploads/2021/03/Internal-and-External-Quality-Assurance-in-Further-and-Higher-Education-1.pdf>
- [37] MCAST (2021). MCAST Research Framework. [https://www.mcast.edu.mt/wp-content/uploads/Reg\\_Oper\\_Frame\\_-A\\_R\\_Sanctioned\\_BoG\\_2021\\_V6.pdf](https://www.mcast.edu.mt/wp-content/uploads/Reg_Oper_Frame_-A_R_Sanctioned_BoG_2021_V6.pdf)
- [48] Cedefop; ReferNet (2021). VET REF: developments in vocational education and training policy database. [Unpublished].
- [49] Malta Further and Higher Education Authority (2021). Malta Qualifications Database (MQD). <http://qualifications.ncfhe.gov.mt/#/dashboard>
- [51] Malta Further and Higher Education Authority (2021). Malta Qualifications Framework (MQF) Impact Review Final Report. [https://mfhea.mt/wp-content/uploads/2021/05/FinalReport\\_Feb2021.pdf](https://mfhea.mt/wp-content/uploads/2021/05/FinalReport_Feb2021.pdf)
- [52] National Commission for Further and Higher Education (2015). The national quality assurance framework for further and higher education. <https://mfhea.mt/wp-content/uploads/2021/03/National-Quality-Assurance-Framework-for-Further-and-Higher-Education-General-Public-1.pdf>
- [53] Malta Further and Higher Education Authority & Scottish Credit and Qualifications Framework Partnership (2021). Recognition of Prior Learning (RPL) – Definitions, Principles and Guidelines. <https://mfhea.mt/wp-content/uploads/2021/07/Recognition-of-Prior-Learning-Guidelines-4.pdf>
- [56] Malta Further and Higher Education Authority (2021). Annual Report 2020. <https://mfhea.mt/wp-content/uploads/2021/06/The-Annual-Report-2020-MFHEA-V1-T10-Single-Pages-Screen-Version-Hyper-Links-Active.pdf>
- [61] Parliament of Malta (2018). The Work-Based Learning and Apprenticeship Act: <http://www.justiceservices.gov.mt/DownloadDocument.aspx?app=lom&itemid=12801&l=1>
- [69] Debono, M. et al. (2007). Career guidance policy and strategy for compulsory schooling in Malta. Floriana, Malta: Ministry of Education, Youth and Employment.  
<http://education.gov.mt/en/resources/documents/policy%20documents/career%20guidance>.
- [71] Directorate for Research, Lifelong Learning and Employability (2021). National Strategy for Lifelong Learning 2021-30.  
[https://meae.gov.mt/en/Public\\_Consultations/MEDE/Documents/LLL%20POLICY%20Documer](https://meae.gov.mt/en/Public_Consultations/MEDE/Documents/LLL%20POLICY%20Documer)
- [20] Cedefop (2018). The changing nature and role of vocational education and training in Europe. Volume 3: the responsiveness of European VET systems to external change (1995-2015). Case study focusing on Norway. Cedefop research paper; No 67.  
[https://www.cedefop.europa.eu/files/norway\\_cedefop\\_changing\\_nature\\_of\\_vet\\_-\\_case\\_study.pdf](https://www.cedefop.europa.eu/files/norway_cedefop_changing_nature_of_vet_-_case_study.pdf)
- [21] Cedefop (2019). The changing nature and role of vocational education and training in Europe. Volume 6: vocationally oriented education and training at higher education level. Expansion and diversification in European countries. Case study focusing on Norway. Cedefop research paper; No

70. [https://www.cedefop.europa.eu/files/norway\\_cedefop\\_changing\\_nature\\_of\\_vet\\_-\\_case\\_study\\_0.pdf](https://www.cedefop.europa.eu/files/norway_cedefop_changing_nature_of_vet_-_case_study_0.pdf)

- [27] Haukås, M.; Skjervheim, K. (2018). Vocational education and training in Europe – Norway. Cedefop ReferNet VET in Europe reports. [http://libserver.cedefop.europa.eu/vetelib/2019/Vocational\\_Education\\_Training\\_Europe\\_Norv](http://libserver.cedefop.europa.eu/vetelib/2019/Vocational_Education_Training_Europe_Norv)
- [29] Cedefop (2019). Spotlight on VET – 2018 compilation: vocational education and training systems in Europe, p. 54. Luxembourg: Publications Office. <http://www.cedefop.europa.eu/en/publications-and-resources/publications/4168>
- [41] Cedefop. <http://www.cedefop.europa.eu/events-and-projects/networks/refernet/thematic-perspectives/guidance-outreach>
- [42] Cedefop. <https://www.cedefop.europa.eu/en/publications-and-resources/country-reports/inventory-lifelong-guidance-systems-and-practices>