

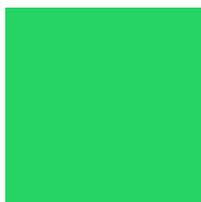
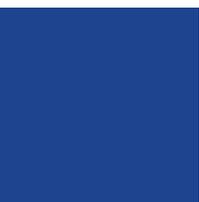
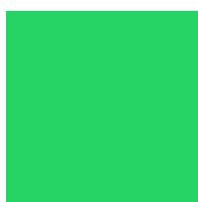
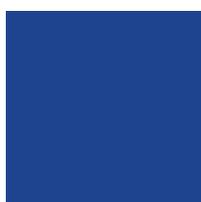
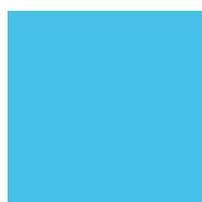
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# TEACHERS AND TRAINERS IN A CHANGING WORLD

Building up competences for  
inclusive, green and digitalised  
vocational education and training

# FINLAND

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# **Teachers and trainers in a changing world**

## **Finland**

Building up competences for inclusive, green and digitalised vocational education and training (VET)

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Authors: Linda Juntunen, Siru Korkala, Aapo Koukku, Paula Paronen, Sari Turunen-Zwinger, Anne Liimatainen and Minna Balint

Contributors: Tomi Ahokas, Tuula Sumkin, Minna Taivassalo, Minna Vasenius and Kaisa Rätty

Edited by Cedefop:

Irene Psifidou, expert; Ralph Hippe, expert; Anthie Kyriakopoulou, assistant

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# Table of contents

<b>TABLE OF CONTENTS .....</b>	<b>3</b>
<b>CHAPTER 1. INTRODUCTION .....</b>	<b>6</b>
<b>CHAPTER 2. TYPES OF TEACHING AND TRAINING PROFESSIONALS ..</b>	<b>10</b>
2.1. Main types .....	10
2.2. VET schools .....	10
2.3. Teaching and training professionals by type of VET school.....	11
<b>CHAPTER 3. TEACHING AND TRAINING PROFESSIONALS IN SCHOOL- BASED SETTINGS .....</b>	<b>13</b>
3.1. Legislation .....	13
3.2. Qualification and competence requirements .....	13
3.3. Initial training programmes .....	14
3.4. Requirements for continuous professional development.....	14
3.5. Data on teachers and trainers in school-based settings.....	15
<b>CHAPTER 4. TRAINING PROFESSIONALS IN WORK-BASED SETTINGS</b>	<b>17</b>
4.1. Definitions.....	17
4.2. Legislation .....	17
4.3. Provisions for continuous professional development .....	18
4.4. Data on trainers in work-based settings .....	19
<b>CHAPTER 5. PARTNERSHIPS BETWEEN SCHOOLS AND COMPANIES .</b>	<b>20</b>
5.1. Examples of practice .....	20
5.2. Cooperation between VET schools and companies.....	20
5.3. Hybrid teachers and trainers .....	21
5.4. Data on cooperation and hybrid teachers.....	21
<b>CHAPTER 6. NATIONAL AND EU-FUNDED PROJECTS AND INITIATIVES</b>	<b>22</b>
6.1. Digital skills for remote and blended teaching .....	22
6.1.1. Digital competence badges for basic digital skills (nationwide open badge constellation).....	22
6.1.2. The Library of Open Educational Resources .....	22
6.1.3. Strengthening AI competence.....	23
6.1.4. Using digitalisation in guidance and support services .....	23

6.1.5. Using digitalisation in distance learning and in the development and acquisition of learning .....	23
6.1.6. Using digitalisation in the demonstration of knowledge and skills (planning, implementation and assessment of demonstrations).....	24
6.2. Green skills for sustainability .....	24
6.3. Preventing early leaving from VET .....	26
<b>CHAPTER 7. NATIONAL SURVEYS OF TEACHING AND TRAINING POPULATIONS .....</b>	<b>28</b>
<b>CHAPTER 8. CONCLUSIONS .....</b>	<b>30</b>
<b>LIST OF ABBREVIATIONS.....</b>	<b>31</b>
<b>REFERENCES .....</b>	<b>32</b>
<b>ANNEX 1. PARTICIPATION IN CPD.....</b>	<b>34</b>

# List of tables

## Tables

Table 1	Participation in CPD or expert exchanges according to type of position among teachers in vocational upper secondary education in 2018 (%).....	34
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## CHAPTER 1. Introduction

In Finland vocational education and training (VET) is intended for young people who have recently completed basic education, others who do not have a qualification with a vocational orientation and adults who are already working. VET is organised at vocational institutions. The VET provider makes the decisions on the content and implementation of the education and training according to the qualification requirements and the requirements for education and training. VET legislation is drafted by the Ministry of Education and Culture, which oversees this sector. The authorisations to provide vocational qualifications and VET are also issued by the Ministry.

In Finland, the profession of VET teacher is socially respected, and representatives of the profession are required to have both pedagogical competence and subject matter knowledge in their own field. All VET teachers must have at least three years' work experience in a sector corresponding to the teaching position before they are admitted to complete teacher's pedagogical studies. The development of the profession of VET teacher in Finland is affected by the outlined policies, legislation, funding, the policies of education providers, the pedagogical operating culture and the changes taking place in working life. The role of VET teachers has faced many challenges in the past few years during which VET has undergone a vocational education and training reform, a comprehensive reform of vocational upper secondary education that entered effect on 1 January 2018.

VET teachers play an important role serving as a link between students completing the qualification and workplaces. Both need the teaching staff to provide guidance and information on both vocational matters, especially the skills requirements, assessment and guidance, and on special support. Such wide-ranging cooperation and the different changes taking place both in the education and training and in the world of work require teachers to constantly develop their competence <sup>(1)</sup>.

As the emphasis in VET is increasingly on workplaces, the problem is often that neither the objectives of guidance and instruction of students nor those of pedagogy are sufficiently achieved at workplaces. Because the resources vary between different sectors and workplaces, the reality is that all workplaces do not

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(<sup>1</sup>) Key figures on vocational education and training in Finland.  
<https://www.oph.fi/en/statistics-and-publications/publications/key-figures-vocational-education-and-training-finland>

have sufficient time and resources for guiding the students. The scarce guidance and instruction resources of the workplace are a problem especially for those young people who need additional support at workplaces. The guidance and instruction at the workplaces therefore have a considerable impact on how the training is implemented at workplaces.

Because of the COVID-19 pandemic, VET changed over to distance learning almost entirely in some areas during the academic year 2020/2021. The challenges in teaching and guidance are emphasised in the implementation of distance learning. The opportunities for contact teaching are uncertain and limited, which leads to accumulating stress and an increasing workload when teachers have to implement both contact teaching and distance learning. Fear and concerns about their own health security during contact teaching has also been stressful to the teaching and guidance staff. On the other hand, a positive side has been that distance learning has led to the development of new teaching methods and improved teachers' digital skills.

From the point of view of teachers' work, the most important change after 2015 has been the vocational education and training reform, a comprehensive reform of vocational upper secondary education that entered into effect on 1 January 2018. The reform was aimed at renewing the funding, guidance, operating processes, qualification system and provider structure in VET. In the reform, the legislation on vocational upper secondary education and VET for adults was merged into one legislation. The starting point was to increase the competence-based and client-oriented approach in VET. In addition, the reform aimed to increase work-based learning and individual study pathways and reduce regulation. This requires close cooperation between the teacher and the workplace and stronger guidance and instruction skills of workplace instructors. In addition, a wish was expressed that teachers should be present at the workplaces more than before, and that the main emphasis of teachers' work should not be merely on teaching but also on guiding the students.

As a result of the two previous government terms, the amount of teaching hours decreased and students have to do their studies more independently <sup>(2)</sup>. While the number of teaching hours has decreased, the number of students has increased, which has also partly led to teaching being provided in larger groups. The work of VET teachers currently includes less teaching and more planning of teaching. The planning work has been increased by the continuous application process, which means that students can apply for education and training flexibly

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(<sup>2</sup>) A reform without resources. A report on teachers' experiences after the reform of vocational education and training.

<https://www.oaj.fi/ajankohtaista/julkaisut/2019/uudistus-ilman-resurssija/>

throughout the year. The constantly arriving new students are at different stages in their studies, which increases the planning work carried out by teachers. On the other hand, personal guidance of students has increased as a result of the reform.

Other reforms that have entered effect during the past five years and have affected teachers' work are:

- (a) Reform of the qualification structure: as part of the 2018 reform the Ministry of Education confirmed in February 2017 the restructuring of vocational qualifications as of January 2019. The qualifications structure in vocational education and training (VET) has three levels. There are three types of qualifications: vocational upper secondary qualification, further vocational qualification, specialist vocational qualification. Vocational qualifications consist of vocational units and common units. Further and specialist qualifications comprise only vocational units and the necessity for common units is assessed when preparing the personal competence development plan. The number of vocational qualifications has decreased from 351 to 161 (43 vocational qualifications, 65 further vocational qualifications and 56 specialist vocational qualifications) <sup>(3)</sup>;
- (b) Programme to develop quality and equality in vocational education and training: The programme developing quality and equality in vocational education and training supports the preparation of the Government's key objectives, such as the extension of compulsory education, the reform of continuous learning and the development measures supporting immigrant integration, and comprehensively brings together the different parties developing VET:
- (c) Programme to develop guidance counselling: The programme improves the implementation, practices, cooperation, systematic nature and continuum of guidance counselling, especially from comprehensive schools to upper secondary education, and to further studies or working life. The programme to develop guidance counselling was implemented in close contact with the preparations for extending compulsory education:
- (d) Reform of qualification requirements (competence points): The most drastic change was the shift from time-bound credit points to 'competence points', which show the relative importance of the unit of learning outcomes to the overall qualification (e.g., based on relevance for the labour market, and social integration as well as complexity, scope and volume of the unit of learning outcomes):

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<sup>(3)</sup> Qualifications and studies in vocational education and training.  
[https://minedu.fi/en/qualifications-and-studies\\_vet](https://minedu.fi/en/qualifications-and-studies_vet)

- (e) Quality strategy for vocational education and training: The legislation on VET, which entered effect in 2018, requires education providers to have an effective quality management system and to conduct quality management at all levels:
- (f) New training agreement: A new training agreement approach was set up in 2018. It foresees that practical training is included into all VET qualifications and without limitations. Training at workplaces in connection with the practical work tasks can be apprenticeship training or training based on a training agreement:
- (g) Extended compulsory education entered into effect in Finland at the beginning of 2021. It means that compulsory education continues until the age of 18. Guidance counselling will be developed and efforts will be made to reduce group sizes as part of extending compulsory education. This will require additional resources, which means that especially the number of guidance counsellors will have to be increased.

## CHAPTER 2. Types of teaching and training professionals

### 2.1. Main types

There are two major types of teachers at VET institutions. Teachers of vocational subjects work as teachers in field-specific studies. They are also involved in assessing students' competence demonstrations which take place in authentic work environments. The professional qualifications required of teachers vary according to the subject taught. A teacher who teaches vocational subjects is required to have both experience in the field of teaching and strong theoretical knowledge in the subject.

Teachers of common studies are required to have eligibility to work as a subject teacher in the subject taught <sup>(4)</sup>. Teachers of common subjects work as teachers of common units such as languages, mathematics, science, physical education and arts. In addition to these teacher groups, there are special needs education teachers and guidance counsellors. One important type of teaching are the training professionals in work-based settings.

The most typical qualification for teachers of vocational subjects is an appropriate higher education qualification, and for teachers of common subjects a master's level qualification in the subject taught or in technology. Both qualifications must include a minimum of 60 ECTS of pedagogical studies. Special needs teachers are required to have either of the qualifications mentioned above and studies for special needs teachers. Vocational teacher education is organised by five universities of applied sciences. Vocational teacher education in Swedish is organised by Åbo Akademi University <sup>(5)</sup>.

### 2.2. VET schools

Vocational colleges, which are responsible for organising vocational qualifications and VET, are the backbone of the VET provider network. The Ministry may grant the authorisation to provide education to a municipality, joint municipal authority,

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(4) Key figures on vocational education and training in Finland.  
[https://www.oph.fi/sites/default/files/documents/key\\_figures\\_on\\_vocational\\_education\\_and\\_training\\_in\\_finland.pdf](https://www.oph.fi/sites/default/files/documents/key_figures_on_vocational_education_and_training_in_finland.pdf)

(5) Education in Finland.  
[https://www.oph.fi/sites/default/files/documents/education-in-finland-2020\\_1.pdf](https://www.oph.fi/sites/default/files/documents/education-in-finland-2020_1.pdf)

registered organisation or foundation. VET can also be provided at educational institutions run by the central government.

The most common type of VET providers are vocational institutions, owned by municipalities, industry and the service sector <sup>(6)</sup>. They provide education and training to more than 75% of initial VET learners. Specialised (usually owned by one private company or association, such as a car manufacturer) and special needs (usually owned by municipalities and associations, e.g. Organisation for Respiratory Health) vocational institutions, fire and security service institutions (national), and folk high schools, sports institutions, music schools and colleges (local) account for less than 10% of learners in initial VET. Vocational adult education centres (public and regional) provide mostly further and specialist VET <sup>(7)</sup>.

A VET provider is an authority that organises education and training in accordance with the Act on vocational education and training. Education and training organised at the workplace means that the student acquires competence by carrying out work tasks at a workplace outside the education provider. Acquisition of competence that takes place in the education provider's own learning environments does not constitute education organised at the workplace. Within the limits of their authorisations, VET providers are responsible for delivering vocational education and training as indicated by the competence and training needs in their operating areas. The providers make independent decisions on their staff and on what kind of educational institutions or units they maintain. There was a total of 150 VET providers at the beginning of 2021 <sup>(8)</sup>.

### 2.3. Teaching and training professionals by type of VET school

In 2019, there were approximately 11,000 VET teachers in Finland, 93 per cent of whom were formally qualified. The overall qualification rate of VET teachers has increased, for example, from 2016, when it was 90 per cent. Among special needs teachers, guidance counsellors, lecturers and assistant lecturers, the rate was even higher in 2019, 97 per cent. More than one half of the teachers work in the

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<sup>(6)</sup> Some VET providers are foundations or limited companies; they are categorised as 'private' but municipalities usually have shares in such companies/foundations.

<sup>(7)</sup> Vocational education and training in Finland: short description.  
<http://data.europa.eu/doi/10.2801/841614>

<sup>(8)</sup> Vocational education and training in Finland.  
<https://minedu.fi/en/vocational-education-and-training>

technical, health and welfare, or service sector. More than 60 per cent of VET teachers are aged 50 or over, and women dominate the profession (57%) <sup>(9)</sup>.

The qualifications of teachers and training professionals do not vary between the types of VET schools they work in. The qualifications of VET teachers are defined in the Act of vocational education and training.

In conjunction with the changes made to legislation on VET, common units became compulsory for all young students and those adults who have deficiencies in basic skills such as reading and writing. Common units were previously compulsory only for students completing a vocational upper secondary qualification for young people. Generally speaking, it can be said that the work of teachers of common studies has changed or is about to change with the reform of vocational education and training when a part of the content of common units will be integrated into vocational subjects.

Extended compulsory education entered into effect in Finland at the beginning of 2021. It means that compulsory education continues until the age of 18. Therefore, the role of guidance and counselling has increased. The multiprofessional cooperation between teachers and other experts in preventing dropouts is crucial. It would also improve the accessibility of education and training if educational institutions acted more like service centres, where school dropouts would get information and support for finding a place to study. Educational institutions need more support for providing guidance for such students. There are major differences in the need for support as well as the amount and quality of support needed between various regions.

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<sup>(9)</sup> Key figures on vocational education and training in Finland.  
[https://www.oph.fi/sites/default/files/documents/key\\_figures\\_on\\_vocational\\_education\\_and\\_training\\_in\\_finland.pdf](https://www.oph.fi/sites/default/files/documents/key_figures_on_vocational_education_and_training_in_finland.pdf)

## CHAPTER 3.

# Teaching and training professionals in school-based settings

### 3.1. Legislation

Provisions on the professional qualifications of VET teachers and principals are laid down in the Decree on qualification requirements for teaching staff (986/1998). The Ministry of Education and Culture prepares VET legislation and steers and supervises the sector. The Ministry also grants the education providers' permits to provide VET. VET is developed, delivered and assessed in close cooperation with the working life <sup>(10)</sup>.

Teachers of vocational units take teacher's pedagogical studies at one of five vocational teacher education institutions (universities of applied sciences) while teachers of common units (such as languages and mathematics) generally complete them at universities.

### 3.2. Qualification and competence requirements

In Finland, there is no accreditation for the teaching profession. Consequently, those who have the education and work experience required of teachers at vocational institutions are qualified VET teachers. Education for teachers at vocational institutions partly differs from the training of teachers at general educational institutions. Teachers have first acquired vocational education in their own subject field, which has later been complemented by teacher education.

Teachers of vocational units must have a higher education degree in their own vocational sector. If such a degree does not exist, it can be supplemented by the highest possible other qualification in the sector, e.g. specialist vocational qualification. They must also have pedagogical teacher training, at a level of 60 ECTS credit points, and relevant minimum of three years work experience in their own field.

Teachers of common subjects, such as languages, mathematics, science, physical education and arts, must have a master's level qualification in the subject

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<sup>(10)</sup> Vocational education and training in Finland.  
<https://minedu.fi/en/vocational-education-and-training>

taught or in technology. The qualification must include a minimum of 60 ECTS of pedagogical studies.

The admission requirements for vocational special needs teacher education include qualifications required of vocational institution teachers, special needs teacher in VET studies and at least one year of teaching experience at a vocational institution.

Guidance counsellor must have a qualification of VET or common subject teacher and 60 ECTS guidance counsellor studies.

### 3.3. Initial training programmes

There are no specific initial training programmes to prepare teachers of general subjects to teach in VET institutions (see 3.2).

### 3.4. Requirements for continuous professional development

There is no special needs analysis for requirements for CDP of VET teachers. This means that the responsibility for providing CPD of teachers rests lies with teachers' employers, usually municipalities. This would be education based on the collective agreement for teachers, organised by the employer as in-service personnel training. The minimum scope of this in-service training is three working days outside of school hours per school year. This volunteer training is free of charge for teachers. The employer decides on the method of implementation and the content of the training; All competences that are needed are covered.

In-service training on focus areas of education policy is organised using Government budget funds. Management and teachers in general, vocational and adult education institutions can participate in this training. Management and teachers in general, vocational and adult education institutions can participate in this training and 70 % of VET teachers do so <sup>(11)</sup>. The focus areas in the content of the training are decided yearly by the Ministry of Education and Culture. The training is free of charge to the participants.

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(<sup>11</sup>) Teachers and principals in Finland 2019. Participation of teachers in in-service training.

[https://www.oph.fi/sites/default/files/documents/opettajat\\_ja\\_rehtrit\\_suomessa\\_2019\\_opettajien\\_osallistuminen\\_jatko\\_ja\\_taydennyskoulutukseen\\_asiantuntijavaihto\\_on\\_seka\\_tyoelamajaksoille.pdf](https://www.oph.fi/sites/default/files/documents/opettajat_ja_rehtrit_suomessa_2019_opettajien_osallistuminen_jatko_ja_taydennyskoulutukseen_asiantuntijavaihto_on_seka_tyoelamajaksoille.pdf)

The employer is in charge and decides whether an individual teacher can participate in the training during working hours and receive full pay and compensation for the possible travel and accommodation expenses. The employer also decides on how substitution is arranged during the training period.

The Finnish National Agency for Education allocates the funds for, monitors and develops this state-funded CPD. The aim of this training is to promote the effectiveness of the education system and the quality of education as well as to support the implementation of educational policy reforms.

In 2021, topical focus areas of education policy have been highlighted as themes for the CPD defined by the Ministry of Education and Culture. CPD projects:

- (a) support the extension of compulsory education;
- (b) strengthen continuous learning and the identification and recognition of prior learning;
- (c) promote equality and equity, so that equality in the increasingly digitalised society will increase;
- (d) promote inclusion, wellbeing and safety and prevent bullying;
- (e) renew support for learning and individual learning paths;
- (f) develop guidance counselling;
- (g) strengthen the competence related to student assessment and the quality of education and training;
- (h) strengthen linguistic and cultural competence;
- (i) strengthen a more sustainable way of living;
- (j) strengthen leadership skills and community-based development.

In addition to contact teaching, participation in the training takes place in different digital learning environments. The participant's workplace is also often used as a learning environment.

### 3.5. Data on teachers and trainers in school-based settings

Statistics on teachers' professional qualifications and participation in CPD is available in the Vipunen - Education Statistics Finland, service of the Finnish National Agency for Education <sup>(12)</sup>. Almost 70% of VET teachers participated in CPD or expert exchanges in 2018. Principals and directors (86.8%) and lecturers (67.9%) were the most active (Table 1).

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<sup>(12)</sup> Vipunen - Education Statistics Finland.

<https://vipunen.fi/en-gb/vocational/Pages/Henkil%C3%B6st%C3%B6.aspx>

About 20% of VET teachers had completed a professional development placement during 2018. When comparing the different fields of VET, the participation rate was highest in the field of natural sciences (31.3%) and the lowest in the field of information and communication technologies (10.9%). Compared with the results of the information collection of 2015, the overall rate of teachers' activity to complete professional development placements increased by approximately three percentage points.

Compared with the previous Teachers and principals in Finland information collection in 2016 <sup>(13)</sup>, the number of personal education and development plans drawn up was lower. The decrease in VET was considerable, more than 17 percentage points. In VET, the new legislation that brought a large number of changes when it entered into effect in 2018 may have contributed to the decrease. It is possible that less attention has been given to the preparation of the education and development plans in the middle of these changes.

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(<sup>13</sup>) Teachers and principals in Finland 2016.  
[https://www.oph.fi/sites/default/files/documents/opettajat\\_ja\\_rehtorit\\_suomessa\\_2016\\_0.pdf](https://www.oph.fi/sites/default/files/documents/opettajat_ja_rehtorit_suomessa_2016_0.pdf)

## CHAPTER 4. Training professionals in work-based settings

### 4.1. Definitions

VET in Finland is working-life oriented and learning takes place in authentic situations at work at workplaces and in the institution's own learning environments. This chapter deals with persons who guide and train students at workplaces.

- (a) A teacher or other trainer working in a company appointed by the education provider
  - (i) plans the personal goals and acquisition of competence at the workplace together with the student and the workplace;
  - (ii) ensures that the workplace has the capability to act as a learning environment;
  - (iii) monitors the development of the student's competence;
  - (iv) assesses the student's competence at workplaces;
- (b) A workplace instructor <sup>(14)</sup>
  - (i) participates in the planning of the student's acquisition of competence at the workplace with the teacher and the student;
  - (ii) guides and trains the student at the workplace;
  - (iii) monitors the development of the student's competence and reports on it to the education provider;
  - (iv) assesses the student's competence at the workplace;
- (c) Workplace representative
  - (i) at the workplace, agrees on learning based on an apprenticeship agreement or training agreement together with the education provider on behalf of the employer.

### 4.2. Legislation

Provisions on work-based learning are laid down in the Act on vocational education and training. The competence-based nature of the Finnish system of VET is apparent in legislation in that the provisions mainly address the identification and recognition of prior learning and the assessment of competence. There are very

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<sup>(14)</sup> The workplace appoints a responsible workplace instructor who is responsible for the implementation of the actions listed above. In practice, one or several workplace instructors may guide the student at the workplace.

few provisions on the guidance of work-based learning or the professional qualifications of workplace instructors.

There are no formal qualifications requirements to be a work-based trainer in Finland. Trainers are generally experienced and skilled workers. They frequently have a vocational or professional qualification but hold no pedagogical qualifications. It is the responsibility of VET providers to train trainers.

The following provisions are laid down on the assessors of competence at the workplace:

- (a) the student's competence and skills shall be assessed by two assessors, one of whom is a working life representative. The working life representative is usually the workplace instructor;
- (b) the assessor shall have sufficient
  - (i) professional competence and skills in the work task assessed;
  - (ii) command of assessment;
  - (iii) command of the national qualification requirements for the qualification.

#### 4.3. Provisions for continuous professional development

The methods and content of workplace instructors' competence development vary by region and education provider. There are no formal requirements or requirements linked to the vocational qualification in question for the professional qualifications of workplace instructors in Finland.

Currently, there are no national analyses available of the competence needs of workplace instructors or their training. Education providers have the obligation to assess and ensure that the workplace instructors are qualified and, if necessary, familiarise the workplace instructors with the assessment of competence and the qualification in question.

Workplace instructors are trained in various ways. Brief courses are organised in educational institutions, training has been brought to workplaces, and different web-based training is also offered. Websites such as [Ohjaan.fi](http://Ohjaan.fi) have been drawn up to support independent learning and workplace tutoring.

Some qualification requirements in VET include a unit that strengthens the capabilities to act as a workplace instructor. These units include practical matters related to work-based learning (technical) and matters related to guidance and assessment (pedagogical).

Education providers take care of training workplace instructors within the funding system for VET. In addition, training for workplace instructors is organised

with discretionary government transfers and with funding from Erasmus+ and the ESF.

Other parties, such as vocational teacher education colleges, companies and different organisations in the world of work also offer training aimed at workplace instructors.

#### 4.4. **Data on trainers in work-based settings**

There is no data available.

## CHAPTER 5. Partnerships between schools and companies

### 5.1. Examples of practice

Teachers' professional development placements in enterprises and other workplaces are an important part of VET teachers' continuing education. The main objective is that the teachers have the opportunity to update their vocational skills and improve their working life competences by working in companies or work communities in their own field. The schools have an obligation to keep in contact with the companies in their area. The Ministry of Education and Culture and the Finnish National Agency for Education encourage schools to maintain relationships with companies, but the schools decide on the practices of doing it independently.

The teachers familiarise themselves with the processes, working practices, equipment and material used in the workplace. A key method of completing such work-based learning period is to do it as part of the 25 ECTS credits of continuing education in teacher's working life competences.

### 5.2. Cooperation between VET schools and companies

Teachers' work placement periods have formed an important part of the cooperation between vocational education and training and working life since 2000. Work placement periods have also been outlined at national level as a tool for developing teachers' competences and on-the-job learning, vocational skills demonstrations and contacts with working life, among other things. Practical experience and studies indicate that teachers' work placement periods turn out beneficial in several ways for VET providers, teachers and students and workplaces: teachers receive up-to-date knowledge and skills from the real world of work and it strengthens the cooperation between VET institutions and the world of work.

Work-based learning is part of vocational education and training. It is a mode of arranging vocational education and training, in which qualification objectives are achieved at a workplace. Work-based learning is objective oriented, guided and assessed training that takes place in a genuine working environment. Good opportunities to develop cooperation with the world of work are teachers'

instruction visits to the workplace during the students' work-based learning periods <sup>(15)</sup>.

The details of on-the-job learning are agreed in an apprenticeship agreement or training agreement that includes certain obligations regarding guidance and instruction, for example. In other respects, on-the-job learning is based on voluntary activity, an agreement between the school and the company. If the training is based on an agreement, the responsibility to provide guidance and instruction lies with a representative of the workplace. However, the VET teacher in the school and the instructor who are employees in the company where the training takes place almost always agree on the guidance and instruction of the student together. Support material has been developed for this purpose and it is available at [Ohjaan.fi](http://Ohjaan.fi) . The VET teacher often conducts monitoring visits to the workplace, thus supporting the instructor.

### 5.3. Hybrid teachers and trainers

There is not this kind of hybrid teacher model in Finland.

### 5.4. Data on cooperation and hybrid teachers

There is no data available.

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<sup>(15)</sup> Teachers and principals in Finland 2016. [https://www.oph.fi/sites/default/files/documents/opettajat\\_ja\\_rehitorit\\_suomessa\\_2016\\_0.pdf](https://www.oph.fi/sites/default/files/documents/opettajat_ja_rehitorit_suomessa_2016_0.pdf)

## CHAPTER 6. National and EU-funded projects and initiatives

### 6.1. Digital skills for remote and blended teaching

Digitalisation in VET and the development of the digital competence of teachers and workplace instructors has been promoted in many different ways.

The Finnish National Agency for Education supports the development of the digital skills of teaching staff with discretionary government transfers. In addition, discretionary government transfers are used to support the development of new learning environments and digital learning solutions.

#### 6.1.1. Digital competence badges for basic digital skills (nationwide open badge constellation)

The Competitive Skills project <sup>(16)</sup> has developed and piloted a national digital open badge constellation based on the policies of the PIAAC study for the digital skills required in working life and studying. In particular, these skills include 1) use and management of devices, 2) copyrights and data security, and 3) digital services and agreements. The target group is the teaching and guidance staff as well as students aged between 16 and 65 in VET, VET for adults and liberal adult education.

The process and structures of the national open badge constellation will be described in research publications and the model will be published in the Finnish Information Society Development Centre's (TIEKE) service, where the system will also be centrally updated in the future. The Competitive Skills project website will also contain requirement framework of competence (determining the composition of objectives, core contents and assessment criteria) for securing IT-related problem-solving skills in non-degree-based training. This will allow an equal, egalitarian and transparent way of ensuring future IT skills in different type of training and by different organisations. The model will be published with a Creative Commons license and will be freely available to various training providers for non-commercial purposes.

#### 6.1.2. The Library of Open Educational Resources

The service has been operating for slightly over one year and currently contains learning material for more than 820 VET qualifications.

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<sup>(16)</sup> The Competitive Skills project. <https://tieke.fi/en/projects/competitive-skills/>

In the Library of Open Educational Resources, you can search for and share open educational resources (OER) from all levels of education. The service and its OERs are available for use by teachers, learners and everyone else at the Finna search service <sup>(17)</sup>, which gathers materials from museums, libraries and archives under one roof. The Library of Open Educational Resources is being developed by the Ministry of Education and Culture and the Finnish National Agency for Education, and its development is coordinated by CSC – IT Center for Science <sup>(18)</sup>.

### **6.1.3. Strengthening AI competence**

eOppiva <sup>(19)</sup> is an online learning platform run by the Central government of Finland that offers courses free of charge in Finnish, Swedish and English. eOppiva has now published an open series of webinars on artificial intelligence as part of the national AuroraAI programme on artificial intelligence. The national AuroraAI programme is developing an operating model in which public administration is directed to take advantage of artificial intelligence in its services more than before <sup>(20)</sup>.

### **6.1.4. Using digitalisation in guidance and support services**

The Oikeus osata programme (Right to competence and skills) implemented with a discretionary government transfer develops, for example, low-threshold ways of supporting students' wellbeing by taking advantage of the opportunities provided by digitalisation. The programme also enhances the guidance counselling taking place in transition stages and during studies by taking advantage of digitalisation and different online platforms. Furthermore, the programme develops online training and training material aimed at workplace instructors. These will be stored in the Library for Open Educational Resources, where they can be used by everyone interested.

### **6.1.5. Using digitalisation in distance learning and in the development and acquisition of learning**

The Finnish National Agency for Education has produced support material for the provision of VET and for cooperation with workplaces in emergency conditions. In

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<sup>(17)</sup> The Library of Open Educational Resources. <https://finna.fi/?lng=en-gb>

<sup>(18)</sup> More information can be found online at the [Library of Open Educational Resources](#) .

<sup>(19)</sup> [eOppiva website](#)

<sup>(20)</sup> More information about the AuroraAI operating model can be found online: <https://vm.fi/en/auroraai-operating-model> and <https://vm.fi/en/auroraai-network>

addition, it has compiled support material on different ways of implementing distance learning and on the developer networks and communities in VET.

The Finnish National Agency for Education has implemented the report on the situation picture of distance learning during the COVID-19 pandemic in 2020 <sup>(21)</sup>. The report examines international and Finnish studies and reports related to distance learning organised by schools and educational institutions in basic and upper secondary education during the coronavirus pandemic. The report focuses on examining the development of digitalisation in education. Basic and upper secondary education in Finland succeeded in changing over to teaching organised via remote connections during the exceptional teaching arrangements of spring 2020. Finland was able to use the digital infrastructure that already existed before the coronavirus pandemic as well as digital tools and learning environments reasonably well. On the face of it, schools and educational institutions seem to generally have had the equipment and competence required to make the change from contact learning to teaching organised via remote connections on a broad national scale. However, a great deal of challenges emerged.

In addition, a survey on the digital capability of VET providers was implemented in cooperation between the Ministry of Education, CSC <sup>(22)</sup> and the Finnish National Agency for Education in spring 2021. The aim is to use the results of the survey to define future development activities.

#### **6.1.6. Using digitalisation in the demonstration of knowledge and skills (planning, implementation and assessment of demonstrations)**

The Finnish National Agency for Education has compiled case studies on its website <sup>(23)</sup> and organised a series of webinars on how to use digitalisation in the demonstration of knowledge and skills, attracting a total of 600 participants.

## **6.2. Green skills for sustainability**

The special feature of sustainable development education in VET is its vocational nature. Both the students and the teachers are oriented specifically towards the competence, skills and concrete practices of their vocational field. The Finnish National Agency for Education has a guide on sustainable development. The

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<sup>(21)</sup> <https://www.oph.fi/fi/tilastot-ja-julkaisut/julkaisut/etaopetuksen-tilannekuva-koronapandemiassa-vuonna-2020>

<sup>(22)</sup> <https://www.csc.fi/en/csc>

<sup>(23)</sup> <https://www.oph.fi/fi/koulutus-ja-tutkinnot/digitaalisuuden-hyodyntaminen-naytoissa>

purpose of the guide is to provide support and information on the different dimensions of sustainability and their achievement to experts and professionals in the field of education and training from early childhood education and care to upper secondary education and liberal adult education. In addition to the content explaining sustainable development, the guide also contains advice, material and case examples that can be used in one's own education and training work. The perspectives can also be used as a basis for discussions on values in the work and learner community, for other constructive dialogues and to provoke thoughts <sup>(24)</sup>.

Many organisations provide training on sustainability to teachers. For example, SYKLI Environmental School of Finland implements in-service training for teaching staff. It is funded by government subsidy awarded by the Finnish National Agency for Education and thus the training is free of charge for the participants. The Finnish National Agency for Education has also supported an open learning environment for development of environmental expertise, produced for professionals, SMEs and educational institutions by SYKLI Environmental School of Finland and four vocational institutions <sup>(25)</sup>.

Finnish VET providers, higher education institutes and business representatives are co-operating as partners in following ongoing Centres of Vocational Excellence, which support VET teachers and trainers to develop green and sustainable skills:

- (a) 'GREENOVET - European VET Excellence Platform for Green Innovation': Four Centres of Excellence in Austria, Finland, Portugal and North Macedonia will foster environmental, social and economic development in Europe, through green and sustainable innovation processes enabled by VET excellence. Within the scope of the project, the CoVEs will develop capacities through trainings and study visits. More than 100 teachers in the four participating countries and areas will be trained to provide excellence in teaching of both vocational and key competences and more than 16 regional and 2 international projects with companies will be implemented.

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<sup>(24)</sup> <https://www.oph.fi/fi/kestava-tulevaisuus>

<sup>(25)</sup> <https://www.ymparistoosaava.fi/>

(b) 'European Platform for Urban Greening':

The European Platform for Urban Greening aims to increase the knowledge and skills required to address biodiversity, climate adaptation and well-being in the urban, green living environment, and to broaden the expertise among professionals in Europe. The educational institutions from Denmark, Finland, Romania, Spain, the Czech Republic and the Netherlands work closely with business partners and governments in order to match the educational offer with regional needs.

### 6.3. Preventing early leaving from VET

In Finland, educational institutions have a strict responsibility to guide and supervise those in compulsory education and, if necessary, it is the educational institution's duty to take care of the students and direct them to substance rehabilitation or mental health services etc. Extended compulsory education now poses a new challenge, as the students in upper secondary education are also subject to compulsory education and the guidance and supervision responsibility also extends to them. In practice, if the teacher becomes concerned about a student's wellbeing, they will contact the student welfare staff. A multiprofessional group will take care of supporting the student. The Student welfare act and the student's right to special support obligate educational institutions.

In spring 2020, a total of three questionnaires concerning the impacts of coronavirus on activities in VET were sent to the leadership in VET by the Finnish Association for the Development of Vocational Education and Training (AMKE). According to the survey conducted by AMKE, the continuation of the studies of students requiring special support could mainly be ensured both in spring and summer 2020 and in autumn 2020. However, in their responses in the autumn, the education providers estimated that the staff's coping was at a slightly weaker level as a result of the COVID-19 crisis. The teachers felt, for example, that students' inequality increased with regard to the amount and availability of teaching and guidance during the spring (Vuorio, Ranta et al., 2021).

In spring 2020, work-based learning came to an almost complete standstill and the demonstrations of knowledge and skills were partly carried out at educational institutions. The teachers who responded to the questionnaire were of the view that specifically the teaching of students requiring special support had suffered most from the situation. Even though different models and solutions have been sought and tried out, it has not been possible to avoid inequality (Vuorio, Ranta et al., 2021).

Investments at the national level have been made in the guidance of students requiring more support. In 2020, the Finnish Ministry of Education and Culture launched an extensive development programme to support and strengthen guidance counselling in basic education, general upper secondary education and VET. The development programme is part of the extension of compulsory education.

As a result of the programme, the quality of the guidance received by students in VET will improve and the amount of guidance will increase. The objective is to provide each student in VET with the guidance and support they need in a timely manner in all learning environments, so that fewer students will interrupt their studies and learning outcomes will improve. First and foremost, the programme will strengthen the guidance received by those most needing support and guidance, such as young students with learning difficulties, other challenges with learning or psychological symptoms, and young students with an immigrant background or speaking a foreign language.

Projects that support the competence of teachers are supported with funds from the Erasmus+ programme:

- (a) 'Overcoming Student Challenges & Aiding Retention' Erasmus+ Strategic partnership KA202 project (2019-22):

The project aims to identify best practice in how organisations across the EU tackle the issue of student dropout through having mental health challenges. It also aims to take a wider view through the approach of identifying ways of enhancing positive well-being, as well as improving systems in mental health challenges. The best practice approach will arise from research and the synthesis of ideas into a trainer's toolkit that will be developed based on a common set of standards but customised by each partner for their own territory.

- (b) 'Dropping the Baggage - Investing in the future' Erasmus+ Strategic partnership KA202 project (2020-23):

Teachers, teacher's assistants, job coaches, study coaches (= teachers) who are open-minded and non-judgemental can challenge students in a positive way and help them 'drop their baggage'. Dropping the baggage is a project that will focus on developing tools that will help teachers encourage students to drop their negative baggage, take ownership of their learning and develop hidden strengths that will help them succeed in working life and in life in general. The project aims to change existing mindsets, ways of educating and teaching and making teachers facilitators of learning in a way that encourages students to open their minds to the way they look at their own role in the learning process.

## CHAPTER 7. National surveys of teaching and training populations

Recently, national reports have mainly been carried out on how the COVID-19 pandemic has affected studying and teaching in upper secondary education <sup>(26)</sup>. 'The situation picture of distance learning during the COVID-19 pandemic in 2020' <sup>(27)</sup> report shows how upper secondary education in Finland succeeded in changing over to teaching organised via remote connections during the exceptional teaching arrangements of spring 2020, although challenges emerged (see 6.1.5).

Another current topic have been the impacts of the latest reform of vocational education and training. According to the report on 'Teachers' experiences after the reform of vocational education and training' <sup>(28)</sup>, the workload of teachers has increased as the group sizes have gotten bigger. This makes it also difficult to implement individual study paths especially as the need for special support has increased. In another study, 'Views of VET teachers on the impact of the reform of vocational education and training' <sup>(29)</sup> teachers were deeply concerned about the decrease in the appreciation of the vocational education. According to the teachers the quality of the education has remained secondary to the other objectives of the reform. On the other hand, a study conducted by Owal Group 'A report on the implementation of the reform of vocational education and training' <sup>(30)</sup>, indicates that the new legislation has enhanced the implementation of VET and it enables better the individual study paths and schedules.

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<sup>(26)</sup> The impacts of the COVID-19 epidemic on upper secondary education.

[https://owalgroup.com/wp-content/uploads/2021/03/Koronan-vaikutukset-toisen-asteen-koulutukseen\\_1603.pdf](https://owalgroup.com/wp-content/uploads/2021/03/Koronan-vaikutukset-toisen-asteen-koulutukseen_1603.pdf)

<sup>(27)</sup> 'The situation picture of distance learning during the COVID-19 pandemic in 2020.

[https://www.oph.fi/sites/default/files/documents/31605670%20OPH%20Et%C3%A4opetuksen%20tilannekuva%20koronapandemiassa%20vuonna%202020%20verkojulkaisu\\_21\\_03\\_30\\_0.pdf](https://www.oph.fi/sites/default/files/documents/31605670%20OPH%20Et%C3%A4opetuksen%20tilannekuva%20koronapandemiassa%20vuonna%202020%20verkojulkaisu_21_03_30_0.pdf)

<sup>(28)</sup> A reform without resources. A report on teachers' experiences after the reform of vocational education and training.

<https://www.oaj.fi/ajankohtaista/julkaisut/2019/uudistus-ilman-resursseja/>

<sup>(29)</sup> Views of VET teachers on the impact of the reform of vocational education and training on the education of young people.

<https://trepo.tuni.fi/bitstream/handle/10024/120466/TuomilehtoMatti-Pekka.pdf?sequence=2>

<sup>(30)</sup> A report on the implementation of the reform of vocational education and training.

[https://owalgroup.com/wp-content/uploads/2021/03/Reformin-toimeenpanon-tilanne\\_1603.pdf](https://owalgroup.com/wp-content/uploads/2021/03/Reformin-toimeenpanon-tilanne_1603.pdf)

The Trade Union of Education OAJ conducted a survey on distance learning during the Covid-19 <sup>(31)</sup>. The survey shows that VET teachers did not find distance education as appealing and sufficient as other teachers. The study conducted by Finnish Education Evaluation Centre 'The impact of the emergency conditions on equal and equitable conditions for learning' <sup>(32)</sup>, shows that the biggest challenges in VET are among WBL and competence demonstration as well as supporting distance learning and special support.

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<sup>(31)</sup> A survey on distance learning during the Covid-19.

<https://www.oaj.fi/ajankohtaista/uutiset-ja-tiedotteet/2020/koronavirus-kysely/>

<sup>(32)</sup> The impact of the emergency conditions on equal and equitable conditions for learning.

<https://karvi.fi/publication/poikkeuksellisten-opetusjarjestelyjen-vaikutukset-tasa-arvon-ja-yhdenvertaisuuden-toteutumiseen/>

## CHAPTER 8. Conclusions

Finnish vocational education and training has recently undergone the most extensive reform in almost 20 years. The objective of the 2018 reform was to create a more efficient and flexible, competence-based and customer-oriented VET system, improve its efficiency and better match qualifications to labour market needs. This is done mainly through reducing regulation and introducing more autonomy and responsibility for VET providers.

Increasing the share of work-based learning is one of the objectives of the reform. Further developing pedagogical thinking and practices, improving learning environments, and cooperation between workplaces and VET providers is required to achieve this objective.

The competence-based approach significantly changes the work and job descriptions of teaching staff, which is greatly challenging the development of their competence and capacities. Teachers' tasks include more guidance: individual study pathways and online admission system have increased the importance of the guidance and support provided for learners. Teachers must assume a guiding and coaching approach in their work and cooperate even more actively with the labour market than before.

At the same time as the reform of VET was being prepared, the Government made cuts to the funding for VET. As a result, the educational institutions had to reduce contact teaching. Between 2019 and 2020, funding has gradually been increased for fixed terms of one year at a time. However, vocational institutions and teachers would like the funding to be brought back to a sufficient level, so that the predictability of the activities would improve.

Compared to the time before coronavirus, teachers' work has become more stressful. In addition to the additional work caused by the planning of distance learning, the workload in the field of teaching has been increased for example, as a result of having to determine and reduce the learning backlog of students who fell behind because of distance learning. Students' need for support has multiplied because of coronavirus.

With competent teachers, digital tools and learning environments, VET was, by international and national standards, able to successfully change over to teaching based on remote connections during the exceptional teaching arrangements of spring 2020 caused by Covid-19.

## List of abbreviations

AMKE	Finnish Association for the Development of Vocational Education and Training
CPD	Continuous Professional Development
IVET	Initial vocational education and training
OAJ	Trade Union of Education
OER	Open educational resources
TIEKE	The Finnish Information Society Development Centre
VET	Vocational education and training

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## Annex 1. Participation in CPD

**Table 1 Participation in CPD or expert exchanges according to type of position among teachers in vocational upper secondary education in 2018 (%)**

<b>Teachers in vocational upper secondary education</b>	<b>Has participated in CPD or expert exchanges (%)</b>	<b>Has not participated in CPD or expert exchanges (%)</b>
Vocational upper secondary education in total	68.5	31.5
Principals, directors	86.8	13.2
Lecturers	67.9	32.1
Full-time teachers	67.4	32.6
Part-time teachers	44.2	55.8