
Finland

VET in Europe – Country report

2013

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CHAPTER 1.

External factors influencing VET

1.1. Demographic development

In Finland the proportion of young age groups within the population has remained slightly above the EU27 average during the early 21st century due to immigration and a small increase in the birth rate. Nevertheless, Finland's demographic development has followed the general European trend, that is, the proportions of child and adolescent age groups within the total population have decreased, while the proportion of senior citizens has increased.

For some years now Finland has been in a situation where the number of young people entering the labour market falls below the number of people retiring from the labour market due to old age. The national objective is to raise the average retirement age. In 2012 the expected effective retirement age in the earnings-related pension scheme was 60.9 years, that is, 0.4 years higher than in the previous year. The expected retirement for 50-year-olds also increased 0.3 years from the previous year. In 2012, it was 62.7 years. The expected retirement for both 25-year-olds and 50-year-olds has now increased by almost two years from the level preceding the 2005 reform of the earnings-related pension acts. In the last few years before the reform, changes to the effective retirement age were comparatively small.

Table 1. Population by age group in Finland and EU 27(28) (2000–2012)

Age group	2000		2005		2012	
	EU27	Finland	EU27	Finland	EU28	Finland
0–14	17.2	18.2	16.2	17.5	15.6	16.5
15–24	13.2	12.8	12.8	12.4	11.7	12.2
25–49	36.7	35.5	36.5	33.5	35.3	31.9
50–64	17.2	18.7	18.0	20.7	19.5	21.3
65–79	12.3	11.5	12.6	12.0	12.9	13.3
80–	3.3	3.3	4.0	3.9	4.9	4.9

Source: Eurostat.

According to Eurostat statistics, annual immigration into Finland increased from 16 900 in 2000 to over 29 500 in 2011. During the same period, the number of emigrants remained between 12 000 and 14 000, standing at its lowest at 11 900 in 2010. In 2011 the number of emigrants was 12 700. Consequently, the number of Finland's immigrant population increased from 87 700 to 181 700 between 2000 and 2012.

According to population forecasts the proportion of those aged over 65 is increasing faster than the EU average. This is mostly due to the ‘baby-boomer’ generations, born after the Second World War, reaching pensionable age. Over 100 000 children were born every year between 1945 and 1949, whereas the annual number of births during the 21st century has even fallen short of 60 000 at its lowest. Forecasts suggest that the ratio of over 65-year-olds to those aged 15 to 64 will increase in Finland at a higher rate than the EU average up until the 2030s.

The coming years will see problems with access to labour force owing to demographic changes, changes in competence requirements and challenges in terms of the sustainability of the national economy. For society, the availability of labour will be a problem in at least two respects. The shortage of labour will complicate the operations of growth business and undermine the availability of welfare services in particular.

For some time now Finland has based its competitiveness on high-standard knowledge and skills – on higher education and on strong professional competence – on the innovativeness thus created and on rapid utilisation of innovations in production. The problem with the availability of labour may evolve into a bottleneck in the competence-driven competition strategy. The worst-case scenario would be that businesses encountering difficulties accessing workforce also increasingly outsource their planning and design abroad.

The availability problem also involves Finland’s capacity for providing extensive welfare services. Even if the social and health care sector could improve its productivity and develop new, less labour-intensive care methods, the demand for labour in the field will grow substantially in the future. According to the Government Institute for Economic Research, the number of personnel involved in health care and social welfare services in 2025 will be around 1.24 times what it was in 2005. Counted in terms of labour, the sector would be clearly larger than the manufacturing industry, even if the ambitious aims set for productivity were realised. According to a foresight study conducted by the Finnish National Board of Education, demand for new employees in health care and social services will be nearly 80 000 in the period from 2008 to 2025.

Table 2. **Projected old-age dependency ratio (2010–2040)**

	2010	2015	2020	2025	2030	2035	2040
EU (27)	25.9	28.5	31.4	34.6	38.3	42.3	45.5
Finland	25.6	31.4	36.2	39.8	42.7	44.3	43.5

NB: The projected number of persons aged 65 and over expressed as a percentage of the projected number of persons aged between 15 and 64

Source: Eurostat.

Due to the changing population structure, the aim is to accelerate completion of education and training and prevent drop-outs. According to the Development Plan for Education and Research 2011–2016, adopted by the Government (OPM, 2011), the aim is for 94 per cent of 30-year-olds to have completed a post-compulsory qualification in 2020. The current figure is 86 per cent.

1.2. Employment

The employment rate among Finns is slightly above the EU28 average regardless of the level of education. In 2012 over 84 per cent of tertiary degree-holders (ISCED 5–6) were employed, while the figures for holders of upper secondary certificates (ISCED 3–4) and those who had only completed compulsory education (ISCED 0–2) were 73 per cent and 54 per cent, respectively.

In 2012 unemployment in Finland was below the EU27 average at all levels of education. The unemployment rate among tertiary degree-holders stood at 3.9 per cent, while the figures for holders of upper secondary certificates and those with compulsory schooling stood at 7.1 per cent and 11.6 per cent, respectively. The corresponding EU28 figures were 5.6 per cent, 8.2 per cent and 16.8 per cent, respectively. Finnish youth unemployment has also remained below the EU28 average in recent years. The seasonally adjusted unemployment rate among those aged 15 to 24 was 23.3 per cent in the EU28 in August 2013, whereas the figure for Finland was 19.7 per cent (Eurostat).

According to Statistics Finland more than half of those completing a curriculum-based upper secondary vocational qualification (mostly in school-based programmes) find employment immediately: 61 per cent of those who completed a vocational qualification in 2010 were gainfully employed at the end of 2011, while unemployed people accounted for 12 per cent. Another 7 per cent were full-time students, 10 per cent employed students and 9 per cent fell within the group ‘Others’ (those doing their military or non-military service, home-makers or pensioners). Conversely, the employment rate among those who had completed an upper secondary vocational qualification as a competence-based qualification was clearly higher one year after graduation: 74 per cent of those who completed a competence-based qualification in 2010 were gainfully employed at the end of 2011, while 10 per cent were unemployed (Statistics Finland, 2013).

Young and adult Finns are avid learners: 42 per cent of Finns aged 20 to 29 and 16 per cent of those aged 30 to 39 participate in education (OECD, 2013). Both figures were the highest in the OECD in 2011. This reflects Finns’ aspiration

to gain a good education and the strong adult education system in Finland. On the other hand, it also says something about the inefficiency of the education system. The overall duration of education and training is influenced by delays in transition points and the overall time spent on each programme. These appear to take longer in Finland than elsewhere in the world.

1.3. Gross domestic product

During the economic upswing of the late 1990s and the early 2000s, economic growth in Finland was among the fastest in the EU. In particular, the technology industry developed positively. The annual growth in GDP was over 6 per cent in 1997 and it remained at over 4 per cent in 2007. The global recession also meant a decrease in GDP for Finland. In 2009 the decrease in GDP exceeded any annual decrease during the 1990s recession. Although GDP increased in 2010 and 2011, it took another downward turn in 2012. According to preliminary data of Statistics Finland for April to June of 2013, the volume of Finland's gross domestic product has increased by 0.2 per cent from the previous quarter.

1.4. Industrial structure

Finland's industrial structure is strongly service-intensive, with almost three quarters (73 per cent) of the labour force working in the services industry. The manufacturing industry accounts for 22 per cent, while the figure for agriculture and forestry stands at below 4 per cent. In 2000 services accounted for two thirds of the labour force, while manufacturing still accounted for over a quarter. In other words, the service-intensification of the economic structure has been a strong trend throughout the early 21st century.

Small or medium-sized enterprises, that is, enterprises with personnel fewer than 250 people, represented 99.8 per cent of all enterprises. They employed 65 per cent of all personnel and accounted for 51 per cent of total turnover. There has been no noteworthy change in these shares in recent years. The number of medium-size enterprises that employ 50-249 people, as well as their number of personnel, grew more than average. The number of such enterprises increased by seven per cent and their number of personnel rose by six per cent, while the corresponding figures for SMEs were one per cent and 3.5 per cent, and for all enterprises one and three per cent. Large enterprises that employ over 250 people represented 0.2 per cent of all enterprises and they employed 35 per cent of all personnel, and accounted for 49 per cent of total turnover.

Finns leave the 11th largest ecological footprint in the world. This means that Finns consume natural resources three times more than the Earth can produce. In other words, Finland is not yet a leading country in terms of the green economy. The Government has therefore presented a clean energy programme as part of the energy and climate strategy update. The programme aims at balancing Finland's current account by investing in production of clean domestic energy and reducing imports of energy by one third.

As part of the programme, a pioneering market for clean energy will be established in Finland. Finland will be the first country in Europe to abandon the use of coal almost completely by 2025 and to reduce the use of natural gas and oil by 10 per cent and 20 per cent, respectively. Promotion of wood- and waste-based bioenergy, wind power and solar power plays a key role in the development of domestic energy production. Additional investments will be made to enhance the energy efficiency of industry, transport and housing and in generating new export-oriented business.

Cleantech is one of the strongest growth businesses in Finland (Cleantech, 2013). In 2012 combined turnover grew by 15 %. Finland's share of the global cleantech market is over 1 %. Finland's share of the global GDP is approximately 0.4 %.

Core areas of cleantech technology in Finland include clean production of renewable energy and enhancing energy efficiency. The aim is to create 40 000 new cleantech jobs in Finland by 2020. Energy efficiency is the world's fastest growing cleantech sector and Finland's strength lies in combining ICT with energy expertise. In 2012 the Finnish Government allocated some 400 million euros of funding to the cleantech sector. From the beginning of 2013, public funding will focus increasingly on energy efficiency and clean energy.

1.5. Professional regulation

In Finland relatively few professions require a specific type of education. Educational requirements mainly exist in certain health care, teaching and rescue and security professions. Furthermore, the Finnish Evangelical-Lutheran Church requires its employees to have education in the field. The professions requiring a specific educational qualification usually require a higher education degree, such as teaching, medical and nursing professions. Still fewer occupations require a specific vocational qualification. These include practical nurses, prison and security guards, divers (working in underwater construction) and chimneysweeps.

Licences to practise health care professions are granted by the National Supervisory Authority for Welfare and Health (Valvira). Valvira is a nationwide

authority which guides municipalities and Regional State Administrative Agencies on legislation associated with Valvira's jurisdiction. Valvira is the national licensing authority for social welfare and health care in Finland and licensing forms the basis of Valvira's proactive supervision. All businesses subject to licence and individuals practising a profession must apply for a licence or report their activity to Valvira to register. In addition, there are other authorities granting licences to practise certain professions within their respective administrative sectors.

There are also jobs where independent self-employment is not possible solely on the basis of vocational education and training. For instance, the Decision on Electrical Work sets out minimum requirements based on training and work experience, determining when a person can be considered to be sufficiently skilled to carry out electrical work independently.

1.6. Level of education in Finland

In recent years Finnish education policy has paid plenty of attention to transition points between levels of education. Practically almost all young people apply to upper secondary level after finishing their basic education. In principle, all young people finishing compulsory basic education have access to either general upper secondary education or upper secondary vocational education and training. However, not all young people are admitted to the field of their choice, which means that only 91 per cent of those finishing basic education start their upper secondary studies immediately after comprehensive school.

There is also some delay in the transition from upper secondary to tertiary level. The average age of Finnish entrants to higher education is over 20 years. This also means that Finns graduate later than the EU average.

Prolonged periods in education are reflected in the development of the level of education among the youth population. In 2010 the proportion of post-compulsory certificate-holders in the 20 to 24 age group fell 4.5 percentage points below the proportion for 2000. The proportion of 20-to-24-year-olds still in education in Finland is clearly higher than the EU average. Faster completion rates of both upper secondary and tertiary studies constitute one of the objectives of national education policy.

Table 3. **Persons aged 20 to 24 who have completed at least upper secondary education (2000–2012, %)**

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
EU28	76.8	77.2	77.4	77.6	78.1	78.3	78.6	78.8	79.2	79.6	80.3
Finland	85.8	85.3	84.5	83.4	84.7	86.5	86.2	85.1	84.2	85.4	86.3

Source: Eurostat.

The level of education among Finns aged 25 to 64 has increased significantly during the early 21st century – and at a slightly faster rate than the EU average. This is mostly due to the fact that, of the post-World War II baby-boomer generations, only those born between 1948 and 1950 are still aged under 65. Back in these days, Finland was not able to provide enough student places for baby boomers, leaving many without a qualification. It was only in the 1990s that expansion of adult education and training and creation of the competence-based qualifications system offered many of them an opportunity to complete a vocational qualification.

In 2012 the proportion of those 25-64 –year-olds who had completed at least an upper secondary qualification was almost 85 per cent in Finland, which is over ten percentage points above the EU28 average. Finland's percentage share was the ninth highest in the EU28.

Table 4. **Population aged 25 to 64 having completed at least upper secondary education (2000–2011, %)**

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
EU28	65.9	67.2	68.3	69.4	70.0	70.7	71.4	72.0	72.7	73.4	74.2
Finland	75.0	76.0	77.6	78.8	79.6	80.5	81.1	82.0	83.0	83.7	84.8

Source: Eurostat.

About a tenth of young Finns are at risk of exclusion. The proportion is below the EU28, but the gap has narrowed throughout the early 21st century. The proportion has remained quite steady at around 9–10 per cent in Finland, whereas it has decreased by more than four percentage points in other EU countries between 2000 and 2012.

Prevention of exclusion from education has been one of the key objectives of Finnish education policy for quite some time now. The current Government Programme includes a social guarantee for young people, which came into force at the beginning of 2013. It ensures that each young person under 25 and every new qualification-holder under 30 is offered a job, a student place, or some other form of activity within three months of becoming unemployed (see Chapter 4). One concrete measure relating to the social guarantee is giving priority to basic education leavers in upper secondary level application procedures. The aim is to offer the entire age group immediate further study opportunities. Other measures have also been put forward in relation to the social guarantee. The regional

Employment and Economic Development Offices promote integration of young people and new graduates into the labour market. Young people's guidance and counselling services are being consolidated. The Ministry of Education and Culture allocates additional funding to activities such as outreach youth work. Outreach youth work aims to identify young people being excluded from education or employment after basic education as early as possible and to refer them to services matching their individual circumstances.

Table 5. **Early school leavers (2000–2012, %)**

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
EU28	16.9	16.4	16.0	15.7	15.4	14.9	14.7	14.2	13.9	13.4	12.7
Finland	9.7	10.1	10.0	10.3	9.7	9.1	9.8	9.9	10.3	9.8	8.9

NB: Population aged 18 to 24 with the highest level of education or training attained being ISCED 0, 1, 2 or 3C short and declared not to have received any education or training in the four weeks preceding the survey.

Source: Eurostat, Labour Force Survey

Adults' participation in education and training has traditionally been at a high level in Finland. In an EU labour force survey conducted in 2012, almost a quarter of the population reported that they had participated in education or training in the month preceding the survey, whereas the corresponding proportion in the EU28 remained below 10 per cent.

Table 6. **Participation in lifelong learning (2000-2012, %)**

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
EU28	7.1	8.4	9.1	9.5	9.4	9.3	9.3	9.2	9.1	8.8	9.0
Finland	17.3	22.4	22.8	22.5	23.1	23.4	23.1	22.1	23.0	23.8	24.5

NB: Persons aged 25 to 64 who stated that they received education or training in the four weeks preceding the survey (LFS).

Source: Eurostat.

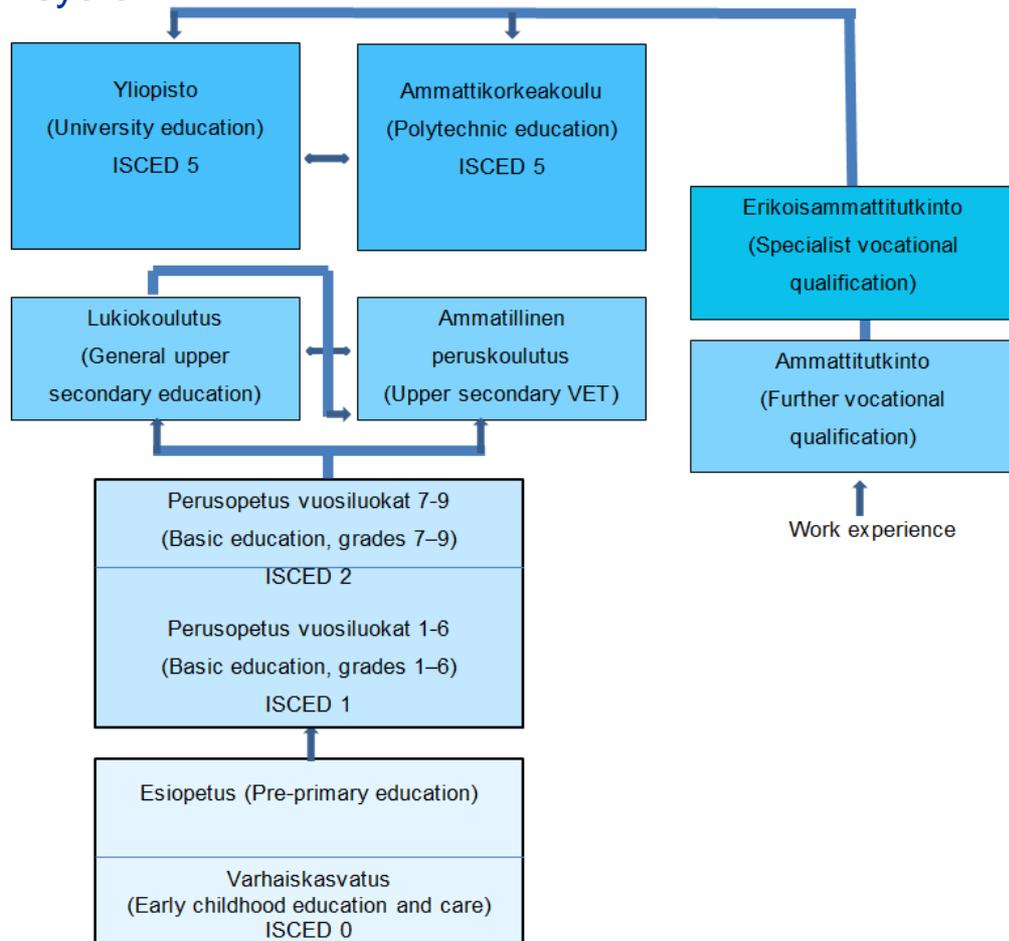
In 2011 ca 16 100 Finns completed upper secondary vocational qualifications as competence-based qualifications (see chapter 2 and 3), while 14 200 and 4 900 people took further qualifications and specialist qualifications, respectively. In practical terms, all qualification-holders had acquired some type of preparatory training for their qualification.

CHAPTER 2.

Providing VET in a lifelong learning perspective

One of the basic principles of Finnish education is that all people must have equal access to education and training. Consequently, compulsory education is provided within a single structure. The education system is also highly permeable. There are no dead ends preventing progression to higher levels of education. Vocational education and training is available as school-based programmes, apprenticeship training (*oppisopimuskoulutus*) and competence-based qualifications (*näyttötutkinnot*).

2.1. Diagram of the Finnish education and training system



Source: FNBE.

2.2. Government-regulated VET provision

In Finland, almost all VET provision is government-regulated. Most of the funding comes from the State and from local authorities. The qualification requirements for the different professions are also decided at a national level.

Vocational education and training starts at upper secondary level. Students who have successfully completed compulsory education are eligible for general and vocational upper secondary education and training (*lukiokoulutus ja ammatillinen peruskoulutus*). Student selection is mainly based on the students' grades on their basic education certificate. The selection criteria used by vocational institutions may contain work experience and other comparable factors, including entrance and aptitude tests.

More than 40 per cent of the relevant age group starts vocational upper secondary studies immediately after basic education. The biggest fields are Technology, Communications and Transport and Social Services, Health and Sports (Table 7).

Table 7. **New students in upper secondary VET according to field of study, gender and type of education (2010 and 2011)**

Field of VET	2010	2011	Women 2011 (%)	Apprentices hip training 2011 (%)
Humanities and Education	1 333	1 416	78.3	24.4
Culture	4 350	4 126	66.5	2.2
Social Sciences, Business and Administration	8 587	9 939	64.4	27.1
Natural Sciences	2 165	2 058	18.9	4.5
Technology, Communications and Transport	29 018	29 803	19.1	7.5
Natural Resources and the Environment	4 113	3 940	54.9	6.3
Social Services, Health and Sports	15 397	15 732	87.0	12.9
Tourism, Catering and Domestic Services	8 313	8 245	72.5	5.4
Other education (*)	493	433	20.6	-
Total	73 769	75 792	50.4	10.9

NB: *: Fire and rescue services, police services and correctional services.

Source: Statistics Finland.

As can be seen in Table 7, half of the students are female. The proportion, however, varies greatly from field to field. Technology and natural sciences are still very male-dominated areas while health care and social services as well as tourism and catering are very female-dominated.

2.2.1. Upper secondary VET, apprenticeship training and competence-based qualifications

In Finland, vocational qualifications can be completed in upper secondary VET, as apprenticeship training or as competence-based qualifications. Upper secondary VET is usually “school-based”, that is, the qualification is acquired in a VET institution. The majority of young learners complete their upper secondary vocational qualifications at vocational institutions (Table 8).

Vocational qualifications may also be completed as apprenticeship training. In apprenticeship training most of the training takes place in an enterprise. Some courses are arranged at vocational institutions. In Finland, most apprentices are adults.

Furthermore, upper secondary vocational qualifications may be obtained as competence-based qualifications. In these the main method is to demonstrate the required skills through competence tests, independent of how the vocational skills have been acquired. Competence-based qualifications are usually completed by adults.

Table 8. **Number of VET students according to type of education (2010 and 2011)**

		2010 (*)	2011 (*)	Proportion of all VET students (2011, %)
Upper secondary VET	Upper secondary vocational qualification	133 690	134 262	50.4
Competence- based qualifications	Upper secondary vocational qualification	36 931	38 876	14.6
	Further vocational qualification	31 664	31 397	11.8
	Specialist vocational qualification	6 541	6 343	2.4
Apprenticeship training	Upper secondary vocational qualification	22 797	22 523	8.5
	Further vocational qualification	19 633	16 445	6.1
	Specialist vocational qualification	16 461	16 343	6.1
Total		267 717	266 189	100.0

NB: (*): women: 50.6 % in 2010 and 51.0 % in 2011

(*): mother tongue other than FI or SE: 5.0% in 2010 and 5.3% in 2011

Source: Statistics Finland.

Upper secondary VET qualifications have a scope of 120 credits, corresponding to three years of full-time study. All qualifications include on-the-job learning. On-the-job learning is focused, supervised and assessed study carried out in service or production capacities at the workplace. The objective is to familiarise students with real working life in order to enhance their employment opportunities. There are no final examinations, instead, one of the main pillars in the final assessment are the vocational skills demonstrations. These were introduced as a means of assessment in August 2006 and they mostly take place during on-the-job learning periods (see also Chapter 3).

Vocational special education institutions provide facilities and services for students with severe disabilities or chronic illnesses. Instruction is given in small groups and the main emphasis is on practice rather than theory. Students are also offered individual guidance and support for their studies and everyday lives.

2.2.2. Flexibility and permeability of the education system is high on the national agenda

Equal opportunities and the permeability of the education system are the cornerstones of Finnish education policy. In the 1970s and 1980s, basic education was reformed so that pupils' choices could not prevent or restrict their studies at upper secondary level. Permeability and equal opportunities for further studies also constituted one of the underlying principles adopted when the vocational education and training system was reformed in the 1990s and 2000s. Today, there are no dead ends within the education system. In the late 1990s, upper secondary vocational education and training was placed on an equal footing with general upper secondary education in that the vocational track also provided eligibility for higher education.

Efforts are being made to improve horizontal co-operation between institutions as well as vertical co-operation between different levels of education. Co-operation within upper secondary education and training – between vocational institutions and general upper secondary schools – has been encouraged for several years. Legislation obligates providers of general and vocational upper secondary education and training to co-operate regionally. In addition, the current Government programme urges upper secondary providers to increase co-operation and networking among themselves.

The benefits of co-operation include better individualisation opportunities for students. Students can, for example, complete several qualifications concurrently. Students also have better opportunities to take studies at other recognised institutions. Co-operation between institutions further ensures efficient

use of resources and is seen as being a way of improving the quality of education and training.

Flexibility and individualisation are also seen as ways of reducing dropout rates and enhancing completion rates of qualifications. Students may receive certificates for completion of individual modules. This makes it easier to continue studies after an interruption.

Prevention of dropouts from education and exclusion from society are a policy priority in Finland. Although the dropout rate from VET programmes is not high in European terms, the reasoning is that every individual who drops out from education and the labour market is seen as being both a personal tragedy and a significant cost to society. Dropout from vocational education and training is far more common than from general upper secondary education.

A programme was set up in 2012 to develop anticipatory and individualised procedures in guidance and counselling and to create pedagogical solutions and practices supporting completion of studies as well as work-centred learning environments and opportunities. There is also an emphasis on creating practices to recognise prior learning more effectively. An additional 4 million euros have been allocated to this programme.

Recognition of prior learning is also the ideology behind competence-based qualifications. Thus, these qualifications increase horizontal and vertical permeability. A learner, usually an adult learner, can access formal qualifications by demonstrating that he or she possesses the required skills. These skills may have been acquired within the formal education system or non-formally and informally. The competence-based qualifications also provide eligibility for higher education.

2.2.3. Adult education and training available at all levels

Finland has a long history of participation and promotion of adult education and training. Adult education and training is very popular and the participation rate is also high in international terms.

The main objectives of adult education policy are to ensure the availability and competence of the labour force, provide educational opportunities for the entire adult population and strengthen social cohesion and equity. The objectives should support efforts to extend working lives, raise the employment rate, improve productivity, implement conditions for lifelong learning and enhance multiculturalism.

Educational institutions organise education and training intended for adults at all levels of education. Efforts have been made to ensure that provision is as flexible as possible in order to enable adults to study while working.

Adult education and training comprises programmes leading to a qualification or certificate, liberal adult education and continuous professional development, other training provided or purchased by employers, as well as labour market training, which is mainly targeted at unemployed people. The purpose of liberal adult education is to promote coherence, equality and active citizenship by promoting versatile personal development and well-being.

In both general and vocational education, there are also separate educational institutions for adults. In the VET sector, competence-based qualifications are specifically intended for adults. In higher education, adults can study on separate adult education programmes offered by polytechnics.

2.2.4. Individualisation and modularisation of VET qualifications

Vocational education and training covers eight fields of education and more than fifty vocational qualifications including over a hundred different study programmes. The scope of vocational qualifications is three years of study and each qualification includes at least half a year of on-the-job learning in workplaces.

The National Core Curricula for Upper Secondary Vocational Qualifications and the Requirements of Competence-based Qualifications (FNBE, 2013a) are the same for young and adult students. The scope of the qualifications is 120 credits. One year of full-time study corresponds to 40 credits.

The curricula include vocational studies and on-the-job learning, which vary according to the qualification, as well as core subjects common to all qualifications (Box 1).

Studies in upper secondary VET are based on individual study plans, comprising both compulsory and optional study modules. The modularisation allows for a degree of individualisation of qualifications. Students can integrate relevant modules into their qualifications from specialist and further vocational qualifications (see also Chapter 3), as well as modules from polytechnic degrees.

Box 1. Example of a vocational qualification in upper secondary VET

Vocational Qualification in Forestry, Study Programme in Forest-based Energy Production, upper secondary qualification, 120 credits	
Vocational modules, 90 credits	
Compulsory modules for all, 20 cr.	The modules include a minimum of 20 credits (cr) of on-the-job-learning, a minimum of 5 credits of entrepreneurship and a final project (2 credits). Silviculture and timber harvesting, 20 cr.
Study Programme in Forest-based Energy Production, Forest-based Energy Producer, 70 credits	Harvesting and use of forest-based energy materials, 20 cr. and Harvesting of energy wood, 30 cr., or Peat production and storage, 30 cr. In addition, a minimum of 20 credits from other modules are to be selected, e.g.: Mechanised timber harvesting, 10 cr. Further processing of energy wood, 10 cr. Operation, maintenance and servicing of a heating plant, 10 cr. Peat production, 10 cr. Short-rotation cultivation, 10 cr. Module from a further vocational qualification Module from a specialist vocational qualification
Core subjects, 20 credits	
Compulsory modules for all	Incl. mother tongue, foreign languages, mathematics, social studies, health education, arts and culture
Optional modules	Incl. environmental studies, ethics, ICT, psychology
Free-choice modules, 10 credits	
Free-choice modules can be vocational studies in one's own or other vocational fields, or core subjects, general upper secondary studies or studies preparing for the matriculation examination or further studies, work experience or guided interests, which support the general and vocational objectives of education and training and the growth of the student's personality.	

Source: FNBE, National qualification requirement in forestry.

2.2.5. Vocational education and training in cooperation with the world of work

Vocational qualification requirements are developed in broad-based co-operation with stakeholders. The national qualification requirements have been based on a learning-outcomes approach since the early 1990's. Consequently, close co-operation with the world of work has been essential.

Co-operation with the world of work and other key stakeholders is carried out in order to ensure that qualifications support flexible and efficient transition to the labour market as well as occupational development and career change. In addition to the needs of the world of work, development of vocational education and training and qualifications takes into account consolidation of lifelong learning skills as well as the individuals' needs and opportunities to complete qualifications flexibly to suit their own circumstances. For more information on development of vocational education and training, see Chapter 3.

2.2.6. Most education and training providers are public entities

The majority of vocational institutions are maintained by local authorities, joint municipal authorities and the State. Nearly 40 per cent are maintained by private organisations, but only 20 per cent of students are enrolled in institutions maintained by private organisations. Funding criteria are uniform irrespective of ownership.

The Ministry of Education and Culture (*Opetus- ja kulttuuriministeriö*) grants authorisations to VET providers, determining the fields of education in which they are allowed to provide education and training and their total student numbers. VET providers determine which vocational qualifications and which study programmes within the specified fields of education will be organised at their vocational institutions.

The strategy for vocational institutions, implemented since 2008, aims at strengthening the network of VET providers. To enhance the service capacity of VET providers, providers have been encouraged to merge into regional or otherwise strong entities. These vocational institutions cover all VET services and development activities. Thus, vocational institutions offer initial and continuing training both for young people and adult learners. Vocational institutions work in close co-operation with the labour market. Their role is to develop their own provision in co-operation with the labour market, on the one hand, and to support competence development within small and medium-sized enterprises, on the other.

The strategy for vocational institutions has been seen as being a necessary means to ensure and increase the flexibility of education and training. Consequently, larger entities can offer enough vocational modules to ensure that learners can individualise their qualifications and choose studies that match changing learning needs.

Vocational institutions can organise their operations freely, according to the requirements of their fields or their regions, and decide on their institutional networks and other services. The State has supported mergers among VET providers since 2007 by 5 to 11 million euros per year. The number of education providers has decreased considerably since 2006. While there were 212 VET providers in 2007, their number had dropped to 173 by the beginning of 2011.

2.2.7. Teachers and trainers

In Finland, there is a clear distinction between teachers and trainers or workplace instructors. In addition to different qualification requirements, their working contexts differ. In other words, teachers work at vocational institutions while trainers and workplace instructors work within enterprises. Trainers supervise

students during their on-the-job learning periods or apprenticeship training within enterprises.

Even if there is a clear difference in status, the roles of teachers and trainers show more similarities today than before. This is partly due to the introduction of the on-the-job learning and vocational skills demonstrations into vocational qualifications. The reform meant that these became vital elements in the assessment of the students. Thus, trainers' activities today also encompass guiding and assessing students as well as co-operation between the institution and the enterprise.

Teachers and trainers are very autonomous in their work. Thus, decisions on learning methods and materials are generally made either by individual teachers and trainers or in collaboration with other teachers or trainers.

2.2.8. Training is an attractive career option

A career as a VET teacher is generally considered to be attractive. This is also reflected in the number of applicants to vocational teacher training programmes, which invariably exceeds intake numbers. In spring 2012, about 31 per cent of all applicants and 41 per cent of those formally eligible were admitted to training. With regard to salaries and terms and conditions of employment, there are no remarkable differences from those of teachers in general education.

Although there is no official data for trainers and workplace instructors on the attractiveness of their profession, the general impression is that trainers are generally satisfied with their training tasks. Their responsibilities are considered to be positive, in many cases as a recognition or promotion, and time spent with young students away from normal routines is considered to be rewarding. The status of trainers and workplace instructors is also on the increase with new vocational skills demonstrations that involve workplace instructors in student assessment. This assessment plays a significant role on students' final qualification certificates.

2.2.9. Teaching and training qualifications

Vocational teacher training was reformed in the mid-1990s. The core of this reform was that VET teachers in upper secondary VET are required to hold either a Master's or a Bachelor's degree in their field as well as pedagogical training with a scope of 60 ECTS credits. In fields where no such degrees exist, it has been possible to be formally qualified with the highest existing qualification in that field.

One specific challenge has been to find qualified teachers in some fields. Another challenge is related to the sometimes limited shop-floor experience of teachers with a university degree. In some fields, it is therefore now possible to

acquire teaching qualifications by completing a specialist vocational qualification (ISCED 4) or some other qualification or training that provides solid competence in the field concerned.

In the case of VET school principals, it has also been proposed to make entry to the profession more flexible. As a result, teacher training required today could be completed within three years of being nominated a principal.

The content of teacher training is updated continuously by vocational teacher education colleges. Teacher education colleges enjoy wide autonomy in deciding on their curricula and training arrangements. Legislation steers the qualification requirements, but only at a very general level.

There is also plenty of autonomy regarding continuing training for VET teachers. The continuing training obligation of teaching staff is defined partly in legislation and partly in the collective agreement negotiated between the Trade Union of Education in Finland (*Opetusalan ammattijärjestö – OAJ*) and the employers' organisation.

Most continuing training is provided free of charge and teachers enjoy full salary benefits during their participation. Funding responsibility rests with teachers' employers, mainly local authorities. Training content is decided by individual employers and the teachers themselves.

There are no formal qualifications requirements for trainers in Finland. Their continuing professional development is also left completely up to them and their employers. Training programmes are available for in-company trainers that follow national guidelines. Trainers are generally experienced foremen and skilled workers. They frequently have a vocational or professional qualification, but hold no pedagogical qualifications. According to a regional study, 75 per cent of trainers or instructors had more than 10 years' experience in their own field.

Trainers who supervise students during on-the-job learning periods within enterprises are not obliged to participate in in-service training. Their training activities depend on themselves, their employers and the training on offer.

2.2.10. Funding

In Finland, education is publicly funded. The public education system and education primarily provided through public tax revenue at all levels have been perceived in Finland as being a means to guarantee equal opportunities for education for the entire population irrespective of social or ethnic background, gender and domicile.

Private expenditure only accounts for 2.6 per cent of all expenditure on the education system. The proportion of private funding is slightly higher in upper

secondary vocational education and training and in higher education, but it still remains below 5 per cent.

Education and training is mainly financed by the State and local authorities. State funding accounts for approximately 40 per cent of the total funding. VET providers decide on the use of all funds granted under the statutory government transfer system, as funding coming from the State is not earmarked in any way. In upper secondary VET, operating costs per student varied between 6,259 euros in apprenticeship training to 32,839 euros in special needs VET in 2012 (Table 9).

Table 9. **Operating costs euros/student in upper secondary VET by field (2008, 2010, 2012)**

VET field		2008	2010	2012
School-based VET	Humanities and Education	9 917	10 189	10 503
	Culture	11 187	11 520	11 649
	Social Sciences, Business and Administration	7 510	7 890	8 142
	Natural Sciences	7 560	8 204	8 608
	Technology, Communications and Transport	10 652	11 263	11 448
	Natural Resources and the Environment	15 628	15 880	16 215
	Social Services, Health and Sports	8 755	8 964	9 178
	Tourism, Catering and Domestic Services	11 069	10 909	11 073
	Rehabilitative instruction and guidance for the disabled at special institutions	-	31 021	31 835
	Rehabilitative instruction and guidance for the disabled in mainstream education	-	13 277	14 436
	Pre-vocational preparatory education for immigrants	-	8 984	9 179
	Preparatory education for VET	-	9 245	9 002
Apprenticeship training		5 745	5 766	6 179

Source: Finnish national board of education.

Statutory State funding is based on a unit price calculated per student, assigned to each VET provider. The unit price is based on the specific fields and, in some cases, on the qualifications included in the field. The amounts of funding are influenced by each provider's student numbers in different fields and in different types of provision, such as school-based programmes, apprenticeship training and special needs VET.

A certain proportion of funding is based on the provider's performance. Funding allocated on the basis of performance accounts for 3 per cent of the total amount of government funding. To determine the share of performance-based funding, a performance index is calculated for each provider on the basis of the

following indicators: graduate employment rate, transition to further studies in higher education, reduction in drop-out rates, VET completion rate, qualifications of teaching staff and human resources development.

2.3. Other forms of training

Very little training is provided outside the government-regulated sector in Finland. Private vocational institutions operating under the Vocational Education and Training Act are supervised by the Ministry of Education and Culture, receive government subsidies and have the right to award official qualification certificates.

There are 26 national specialised vocational institutions, which are generally maintained by manufacturing and service sector enterprises. These institutions provide training for their own needs outside the national qualifications structure and mainly focus on continuing training for their staff. The national specialised vocational institutions have been authorised by the Ministry of Education and Culture to provide education and training. Although these institutions receive state funding, most of the costs are covered by the owner enterprises themselves.

There are also a number of private educational institutions in Finland, offering training for a fee, for example in the service sector. These institutions do not have the right to award qualification certificates. They do not receive public funding even though they fall under the supervision of the consumer authorities. The students participating in this type of training also do not receive public student financial aid.

CHAPTER 3.

Shaping VET qualifications

3.1. **Methods used to anticipate labour market needs**

Anticipation of educational needs is one of the permanent tasks of the Finnish National Board of Education (FNBE), a national agency subordinate to the Ministry of Education and Culture. The FNBE anticipates national long-term demand for labour and educational needs (quantitative foresight) and develops anticipation of skills needs (qualitative foresight). Foresight efforts are backed up by an extensive co-operation network composed of different ministries, research institutes, regional authorities and labour market organisations. The Ministry of Education and Culture makes use of the results when defining the targets for education and training provision. Target numbers for the whole country for student intake within different levels and fields of education for 2016 were published in the Development Plan for Education and Research for 2011–2016 (OPM, 2011).

3.1.1. **Quantitative foresight**

The Ministry is responsible for defining the quantitative targets of education and training provision at national level. The FNBE produces national anticipation data on demand for labour and educational needs in support of decision-making. In addition, the FNBE supports regional anticipation efforts carried out under the supervision of regional councils. It obtains statistics and produces tools required for anticipation as well as estimates of labour demand and educational needs for regional councils in co-operation with these councils, the Ministry of Employment and the Economy and the Government Institute for Economic Research (VATT).

The FNBE is also responsible for anticipation of Swedish-language education and training and for providing support and guidance for regional foresight. In addition to carrying out anticipation, the FNBE maintains and develops the online foresight knowledge service (ENSTI), which caters for users and producers of anticipation data.

Objectives concerning education and training provision are set in the Development Plans for Education and Research adopted every four years by the Government, which specify the key qualitative, quantitative and structural policies for different educational sectors. According to the Decree issued on the

Development Plans (987/1998) (Finnish Parliament, 1998), the Development Plans include, among other things, quantitative development targets for education and training. The Government adopted the most recent Development Plan for Education and Research for 2011–2016 in late 2011 (OPM, 2011). Preparatory work in support of decision-making was carried out under the leadership of the Ministry of Education and Culture.

The responsibility of education providers for anticipating and responding to changes in the world of work has increased, as operational targeting and steering powers have been devolved on universities, polytechnics and VET providers since the 1990s. Providers are required to play an active role in considering the competence needs of the world of work and participate in regional development. Education and training provision is also steered by means of performance-based financing systems, which will be developed for all the aforementioned forms of education.

In addition to national anticipation of educational and skills needs, a wide variety of other national and regional EU-funded anticipation and foresight projects are carried out in Finland by bodies such as research institutes, labour market and business and industry organisations, VET providers, universities and polytechnics. In particular, regional anticipation activities have developed rapidly in recent years. Key players in regional anticipation efforts include regional councils, Centres for Economic Development, Transport and the Environment, VET providers and higher education institutions. At the same time, the number of national and regional anticipation portals has increased considerably over the last few years. EU-funded projects have also resulted in creation of new enterprises offering expert services in anticipation and foresight for both businesses and public-sector organisations.

In 2011 the FNBE published a report anticipating demand for labour by means of occupational structure forecasts by industry for 2025 (FNBE, 2011a). In addition, the report anticipates reduction in the labour force over the 2008–2025 period for reasons such as retirement. The work reflects views of experts representing different fields as well as industry forecasts by the Government Institute for Economic Research (VATT). The report includes two alternative scenarios.

3.1.2. Qualitative foresight

Qualitative foresight analyses the impact of changes in work content on curricula and qualification structures. Responsibility for the qualitative anticipation of educational contents rests with the Finnish National Board of Education, higher education institutions and education providers. The system of National Education

and Training Committees functions as the expert organisation in qualitative foresight of education, consisting of a steering group, the National Education and Training Committees and fixed-term expert groups (Finnish Parliament, 2010). The National Education and Training Committees are tripartite advisory bodies appointed by the Ministry of Education and Culture to ensure effective contacts between the VET sector and the world of work at a national level. Committees participate in development and anticipation of vocational education and training as advisory bodies. The education providers anticipate changes in competence needs at the training programme level and respond to them rapidly. The National Education and Training Committees undertake long term foresight relating to fields of education. The FNBE develops qualitative foresight of competence needs and supports the National Education and Training Committees in qualitative foresight.

The Finnish National Board of Education carried out an anticipation project on future competences and skills needs from June 2008 until May 2012 (FNBE, 2013b). The aim of the VOSE project was to create procedures which would facilitate anticipation of competences and skills needs for the future for post-compulsory education and in all vocational and professional fields.

The procedures include methods for anticipating competences and skills needs, anticipation processes, as well as networking between the institutions involved. VOSE was a co-operation project engaging several stakeholders, including the state administration, social partners, VET providers, polytechnics, universities, local authorities, research institutes, and student organisations.

The knowledge produced through the model serves different levels of education, including vocational, polytechnic and university education, education for both youth and adults. Anticipatory knowledge may be utilised for purposes such as the national core curricula, qualification requirements and development of education and training.

3.2. The process of designing qualifications

The Qualification Requirements for different qualifications are reformed on the average every 5 to 10 years, but they can be renewed when necessary, either partially or completely. The cycle of reform is influenced by changes to the qualifications structure and legislation, changes in the relevant occupations and changing needs in the world of work.

The starting points for launching a reform process may be changes in the skills needs in the labour market. These changes can lead to a reform of the qualification requirements or even the qualification structure of upper secondary,

further and specialist vocational qualifications. Changes to the qualification structure require that qualification requirements are also renewed. The process of preparing a qualification requirements document usually takes 1 to 2 years.

The Ministry of Education and Culture determined the principles and policies in support of reform of upper secondary vocational qualifications. Based on these the Finnish National Board of Education has developed the qualification requirements for vocational qualifications in 2008–2010 (FNBE, 2013a). The Decision of the Ministry of Education and Culture covers the requirements for upper secondary vocational qualifications laid down in legislation, the guidelines set out in the Development Plan for Education and Research adopted for the 2007–2012 period (OPM, 2011) and the priorities and objectives for development of vocational education and training specified in the performance agreement between the Ministry and the FNBE. The EU recommendations have also been included in the Decision.

The legislation on the National Qualifications Framework (NQF) is yet to be finalised, as it is still being discussed in Parliament. The FNBE has, however, placed upper secondary vocational qualifications and further vocational qualifications at EQF level 4 and specialist vocational qualifications at level 5 according to the Government proposal when preparing the Qualification Requirements. According to the Development Plan for Education and Research for 2011–2016 (OPM, 2012), the ECVET system will be put into practice in Finland in 2014.

The key competences for lifelong learning have been fully taken into account in the Qualification Requirements in keeping with the Recommendation of the European Parliament and of the Council. Further key competences have been added to the requirements from the Finnish perspective.

The qualification requirements are drawn up under FNBE leadership in tripartite co-operation between employers, employees and the educational sector. Independent self-employed people are also represented in the preparation of qualification requirements in fields where self-employment is prevalent to a significant extent. The qualification requirements determine the modules included in the qualification, any possible specialisations made up of different modules, the composition of the qualification, the vocational skills required for each qualification module, the guidelines for assessment (targets and criteria of assessment) and the ways of demonstrating vocational skills.

The qualification requirements and the vocational competences form the basis for identifying the types of occupational work processes in which vocational skills for a specific qualification can be demonstrated and assessed.

When qualification reform is initiated, the FNBE sets up a qualification project, inviting experts representing employees, employers and teachers in the field to participate. The National Education and Training Committee for the field may also appoint an expert to the working group. In the course of its work, the expert group must also consult other experts in the world of work. Once the expert group has completed a draft version of the new Qualification Requirements, the document will be sent out for a broad consultation process to representatives of unions, organisations, the world of work and VET providers. Following the consultation process, the FNBE adopts the qualification requirements as a nationally binding regulation.

The FNBE determines the Qualification Committee under which the specific qualification will fall or establishes a new Qualification Committee for the new qualification.

Vocational qualifications are modular. These modules comprise units of work or activities found in the world of work. Each vocational qualification module constitutes a specific occupational area which can be isolated into an independent and assessable component. The vocational skills requirements determined for each qualification module focus on the core functions of the occupation, mastery of operating processes and the occupational practices of the field in question. These also include skills generally required in working life, such as social skills and key competences for lifelong learning. All qualification requirements share a common structure.

The targets of assessment defined in the qualification requirements indicate those areas of competence on which special attention is focused during assessment. The criteria for assessment have been derived from the vocational skills requirements. The assessment criteria determine the grades awarded for modules in upper secondary vocational qualifications and the standard of an acceptable performance in further and specialist qualifications. The section entitled 'Ways of demonstrating vocational skills' describes how candidates are to demonstrate their vocational skills in vocational skills demonstrations or in competence tests.

The Qualifications Requirements adopted by the Finnish National Board of Education are published in electronic form on the FNBE website and in print.

3.2.1. Involvement of the world of work in developing qualification requirements and quality in VET

The representatives of the world of work are involved in setting the national objectives in the Government programme and the Development Plan for Education and Research (OPM, 2011). In addition, they participate in the

anticipation of skills and education needs both nationally and regionally, for example through Training and Qualification Committees, advisory committees and through consultation processes. The representatives of the world of work are closely involved in defining the vocational competence requirements of qualifications. They also participate in drawing up the qualification requirements at national level.

At regional level the representatives from enterprises participate in the work on local curricula, in organising and planning training and skills demonstrations, regional committees as well as assessment of both skills demonstrations in upper secondary qualifications and competence tests in competence-based qualifications. This allows continuous feedback from the world of work.

3.2.2. Local curricula

Each VET provider is required to approve a curriculum for the studies it provides. The provider prepares and approves a curriculum for vocational qualifications to be completed in upper secondary vocational education and training, which includes a common section for all qualifications and qualification-specific sections. The curriculum is based on the national qualification requirements. It is drawn up in cooperation with the local enterprises so that the training provided corresponds to the local needs. It is particularly important that the representatives from the enterprises participate in the planning of on-the-job learning and vocational skills demonstrations as well as the modules offered locally.

The provider's curriculum regulates and guides the education and training implemented by the provider and other activities closely linked to education. The curriculum also functions as the basis for internal and external evaluation, offering the possibility to evaluate the effectiveness of the education and training implemented by the provider.

3.2.3. Reform of VET qualifications 2014

The Government has submitted a legislative proposal on the revision of the legislation covering vocational education and training and vocational adult education. According to the proposal the scope of the vocational upper secondary qualifications will, according to the ECVET recommendation, be 180 credits. One year of full-time study corresponds to 60 credits. The structure of a vocational qualification will be as follows:

- vocational studies 135 credits;
- core subjects 35 credits;
- free-choice modules 10 credits.

The core subjects will be regrouped into four larger entities: competence of communication and interaction, mathematical and scientific competences, competences needed in the society and world of work and social and cultural competences.

Compared to the current situation information and communication technology and occupational well-being would be new obligatory core subjects. Additionally, the government proposal lists a range of minor changes related to assessment of preparatory training, certification procedures etc. The revised legislation should go into effect in 2015.

3.2.4. Quality assurance of the process and follow-up

The Finnish National Board of Education follows the situation of implementation of the reformed qualification requirements through annual questionnaire surveys covering years 2011, 2012 and 2013. Each survey has a common section for all qualifications as well as a sample-based qualification-specific section. The 2011 survey was carried out in the spring of 2012. The surveys will be supplemented by a sample-based document analysis in 2013. The follow-up is being carried out nationally, covering provision of both Finnish- and Swedish-language programmes and qualifications. Surveys focus on VET providers and organisers of competence-based qualifications and, through them, on representatives of the world of work as well as on students and candidates. Surveys are also targeted at Qualification Committees. The follow-up of implementation of the qualification requirements is being carried out commissioned by the Ministry of Education and Culture, in compliance with a follow-up plan approved by the Ministry.

The follow-up of implementation of qualification requirements aims to acquire information about the status of implementation in national terms, the extent to which VET providers and qualification organisers have implemented the reformed qualification requirements in terms of schedule and content, the stage at which different providers/organisers and their individual units are in the implementation process and to what extent the objectives set for reform have been achieved. In relation to the above-mentioned broader areas, the FNBE will look more specifically into the status of approval of providers' own curricula, orientation for workplace instructors and assessors of vocational skills demonstrations, individual study plans prepared for students and teachers' participation in work placement periods, etc.

As a result of the follow-up of implementation of the qualification requirements, it will be possible to make decisions, where required, on further development of statutes and qualification requirements and their preparation

process, support for VET providers' curriculum development work and support for preparation of plans for arranging competence tests.

To support implementation of follow-up, a steering group has been set up with representatives of employers' and employees' organisations, VET providers and qualification organisers, Qualification Committees, teachers, students, the Finnish Education Evaluation Council and the educational administration.

The implementation and progress of reformed documents was also investigated as part of the previous reform of the national core curricula (1999–2001).

3.3. Validation of non-formal and informal learning (initial VET)

3.3.1. Recognition and validation of a student's prior learning

The Decree on Vocational Education and Training (Finnish Parliament, 2005) provides that a student's prior learning must be accredited. The education provider must inform the student on the supporting documents to be presented for recognition of prior learning and details of when the student must apply for recognition of prior learning.

3.3.1.1. *Recognition and validation of prior learning*

According to the Decree, a student's competence must be assessed as early as at the beginning of the studies. The student's competence and its level must be investigated for identification of his/her strengths and for recognition of prior learning. Recognition of prior learning forms the basis for setting the student's personal objectives, but it is also used to determine the amount of guidance and support that each student needs.

Recognition of prior learning calls for an assessment discussion between the student and the teacher or teachers. To promote recognition of prior learning, different facilitating assessment methods must be developed.

The purpose of recognition of prior learning is to prevent overlapping studies and shorten study time. If the recognition process shows that the objectives set for the module in question, or part of these, have been reached, such prior learning is validated. Validation of prior learning is recorded in the student's individual study plan.

Validation of prior learning is part of student assessment and it is subject to the same statutes as other forms of assessment. Studies included in the qualification to be completed can be substituted or accredited by validation of

prior learning. The modules substituted by the validation of prior learning are marked on the qualification certificate. The teacher or teachers in charge of the studies in question decide on validation of prior learning. No general time limit can be set for expiration of any previously acquired competence, but the validity of such competence may be verified. If necessary, the student must demonstrate the correspondence of his/her competence with the skills requirements and objectives of the qualification concerned.

The grades for qualification modules which are substituted through recognition and validation can be improved during training. Students wishing to improve their grades after completing their training may do so as private students.

3.3.1.2. *Validation of non-formal and informal learning in the competence-based qualifications system*

In adult education the competence-based qualifications (CBQ) system offers an opportunity for adults to obtain upper secondary, further and specialist vocational qualifications based on the principle that full and partial competence-based qualifications can be awarded regardless of how and where the competences and knowledge have been acquired. Recognition of prior learning is at the very core of this system and, in principle, candidates can obtain such qualifications without any formal training at all. This means that there are no requirements to complete a certain amount of studies and the requirements are described in terms of learning outcomes. The competence-based qualifications system also offers by law and in practice each and every candidate an individualisation plan at the following three stages: application for competence-based qualifications and for preparatory training, acquisition of the required vocational skills, and completion of qualifications. The plan takes into account the candidates' personal circumstances, including relevant learning acquired through informal and non-formal means, such as through work or interests. Training providers are responsible for guiding candidates through this process. The validation of informal and non-formal learning is more commonly used in the context of the competence-based qualifications system than in other types of education. This is because the CBQ system has been built around the concept of validation and many learners are adults with relevant work experience.

CHAPTER 4.

Promoting participation in VET

4.1. Promoting access to VET

4.1.1. Social guarantee for young people

The current Government is committed to implementing a social guarantee for young people. It means that each young person under 25 and every new qualification-holder under 30 is offered a job, on-the-job training, a student place, or a period in a workshop or in rehabilitation within three months of becoming unemployed. With a view to realising the social guarantee, measures are taken to ensure flexible education paths and flexible combination of education and work and to make full use of the capacity and expertise of liberal adult education institutions. The realisation of the guarantee entails several measures taken by different administrative sectors towards the same end. The social guarantee came into effect from the beginning of 2013.

The educational guarantee forms part of the social guarantee. Every school-leaver is guaranteed a place at general upper secondary school, in vocational education and training, in apprenticeship training, in a youth workshop, in rehabilitation or by other means (TEM - Ministry of Employment and the Economy, 2013b).

Although the supply of education and training at upper secondary level exceeds the size of the school-leaving age group, there are problems with regard to the transition to further studies. One challenge is the marked difference in the regional accessibility of VET. Another challenge is related to the fact that there is more than one age group competing for the same student places. Many places are taken by those who already have a qualification, while many school-leavers and other unqualified people remain outside education and training. Consequently, the educational guarantee is taken into account in regional targeting of student intake number as well as in the revision of student admission principles.

Student admission to vocational upper secondary education and training has been revised as from 2013 to give priority to school-leavers and unqualified people. At the same time, separate admission quotas will be approved for students changing educational institutions, while people with qualifications will primarily be guided to study tracks intended for adults, such as competence-based qualifications. The local authorities are expected to monitor young

people's transition to further studies and provide information, advice and guidance for those who are left without a student place.

Other measures include development of basic education and guidance counselling, promotion of flexible study paths and combination of education and work, as well as making full use of the capacity of liberal adult education.

4.1.2. Guidance and counselling

Guidance and counselling is provided at all levels of education. The guidance and counselling provided within the education system is complemented by guidance services available from public employment offices.

Themes covered by guidance and counselling include different education and training options, occupations and the world of work. Guidance counsellors in Finnish schools are highly educated. They have Master's level teacher training, including or supplemented by studies in guidance and counselling.

In vocational upper secondary education and training, even if guidance counsellors play a key role in coordinating, planning and implementing of guidance and counselling, guidance is also an integral part of the work of all teachers. A teacher's task is to guide and motivate the students to complete their qualifications, to support them in the planning of their studies, to help them to find their strengths and to develop their learning skills. In the workplace, guidance is coordinated by a qualified workplace instructor.

4.1.3. Targeted measures during basic education that contribute to participation in VET

4.1.3.1. Periods of work experience

Work experience periods have been part of basic education since the creation of the comprehensive school in the mid-1970s. The purpose is to familiarise pupils with the world of work, thus supporting them in their choices concerning their future studies and careers. Another aim is to increase the appreciation for working life.

4.1.3.2. Additional basic education

Young people who have completed their nine-year basic education can opt to take one extra year. This voluntary additional education, the so-called 10th grade, is intended to help and encourage young people to continue their studies at upper secondary level.

Pupils enrolled in additional basic education may supplement their knowledge and improve their marks on their school-leaving certificates so as to

improve their opportunities to apply for further studies. There is a strong emphasis on guidance and counselling. Students must have an opportunity to get an introduction to different occupations and working life in general. The curriculum may also include vocational studies.

4.1.3.3. *Flexible basic education*

Flexible Basic Education (JOPO) was originally a project launched by the Ministry of Education and Culture in 2006. Its purpose was to reduce drop-out and school failure by developing new teaching methods and procedures. Flexibility and strong focus on individual needs were essential in selecting methods such as activity-based learning, small group teaching, on-the-job learning and different learning environments. Multidisciplinary co-operation, early intervention and intensified home/school co-operation also played a crucial role.

According to an impact analysis published in 2008 (Manninen, Luukannel, 2008), JOPO activities were effective: nearly 90 per cent of the pupils had experienced an improvement from the baseline situation. JOPO's greatest effects were in ensuring that pupils were awarded their school-leaving certificates, in reducing absenteeism and in improving study motivation. The most common reasons for enrolment in a JOPO group were problems with motivation, a need to study in a small group and low school achievement.

Flexible basic education became an established component of basic education in 2010. It is designed for pupils who need a more flexible curriculum but not necessarily special needs education. It has stronger connections with the world of work than regular basic education, including more work experience periods.

4.1.4. **A national joint application system**

In the last spring term of basic education, pupils are expected to apply for further studies through the national joint application system administered by the Finnish National Board of Education. They can apply to the institutions of their choice regardless of their domicile. The web-based joint application service provides comprehensive information on various education and training opportunities and makes it possible to apply online. Guidance counsellors are responsible for monitoring that all pupils find a student place or a work experience placement (generally a workshop). Approximately 95 per cent of school leavers find a place to study immediately after basic education. Joint applications to upper secondary level education and training take place twice a year.

School leavers who cannot find a place at upper secondary level can participate in additional basic education or preparatory training for VET (described in 4.1.3 and 4.1.5).

4.1.5. Preparatory instruction and guidance for VET

Preparatory instruction (FNBE, 2011c) has been developed to lower the threshold to education and training and to reduce drop-out. The aim of this instruction is to improve students' capacities to obtain a place in vocational upper secondary education and training and to get acquainted with a wide range of various fields of education, occupations and jobs. Students can improve their capacities for studying and build the knowledge base needed in the studies. The instruction helps students with their career choices and plans.

Instruction takes place between basic education and upper secondary vocational education and training, lasting from six months to a year. The essential principles of instruction are individuality, flexibility, practical and activity-based studies and vocational orientation. This provision started as an experiment but was made a permanent part of the education system as from August 2010.

Other forms of preparatory instruction and guidance are home economics instruction, pre-vocational preparatory education for immigrants and rehabilitative instruction and guidance for the disabled.

Home economics instruction aims to improve students' practical skills in managing their everyday lives and personal well-being and improve their opportunities for further studies, particularly in the fields of tourism and catering, as well as social services and health care. Pre-vocational preparatory instruction for immigrants aims to improve their language and other skills needed for moving on to vocational upper secondary studies. Provision for disabled people aims to help them build up their capacities for vocational upper secondary education and training, working life and independent living and to help them clarify their future plans. It also supports re-training for adult students who have become ill or disabled and promotes their return to working life or education.

4.1.6. Youth workshops

Youth workshops offer training and work experience placements to unemployed young people under 29 years of age. They offer a place for young people to learn life skills, grow into adulthood and get hands-on work experience, encouraging and helping them to seek further training. Youth workshops are co-financed by the Ministry of Education and Culture and the Ministry of Employment and the

Economy. These workshops are generally organised by local educational authorities.

Youth workshop activities are multidisciplinary in nature. They combine activities within four sectors of administration (youth, education, employment and social) into concurrent and complementary schemes in young people's social empowerment. Participation lasts six months on average. There are around 260 youth workshops, with around 21,000 participants every year.

4.1.7. Learner's web service

Electronic information, guidance and counselling services are developed as part of the learner's web services included in the SADe programme (Programme expediting electronic transactions and democracy). The aim is to ensure that individuals find all adult education and training options available in Finland via the electronic education centre and that it is possible to apply for education through the online service.

New online application service to education programmes has been launched in September 2013. The online service named Opintopolku – Study Info (Opintopolku, 2013) will be a national portal replacing all previous application services. In the first stage, the service covers vocational upper secondary programmes. In 2014, the service will also offer online application to post-compulsory preparatory and rehabilitative programmes, general upper secondary and higher education as well as adult education programmes.

The aim is to offer a single entry point for prospective students of all ages. The portal will offer information on study opportunities, tools for applying as well as services that support career planning. The portal offers education providers with tools to facilitate their student admission processes as well as support curriculum development and individualisation of studies.

4.1.8. Study leave

Finland has a study leave system (TEM - Ministry of Employment and the Economy, 2013a) based on legislation. The aim is to improve employees' opportunities for training and study. Study leave is intended for those who have been working for the same employer for at least one year. It covers publicly funded education and training in Finland or abroad, or training organised by a trade union. Study leave may be taken for a maximum period of two years over a period of five years, and over one or more periods of time. Study leave is unpaid, unless otherwise specifically agreed with the employer.

4.1.9. Exempting adults without qualifications from fees relating to competence-based qualifications

The Government has decided to exempt adults without vocational qualifications from the fees charged for training leading to competence-based qualifications. The aim is to lower the threshold to participation in adult education and training.

4.2. Flexible study paths responding to the needs of individuals and the world of work

The threshold to participation in vocational education and training has been lowered by creating different pathways leading to a vocational qualification. The main form for completing a vocational qualification is school-based education and training, including at least 20 credits (about six months) of on-the-job learning. Vocational qualifications may also be completed as apprenticeship training, which also contains courses arranged at vocational institutions. Furthermore, upper secondary vocational qualifications may be obtained through competence tests independent of how the vocational skills have been acquired.

In order to respond to the changing requirements of the world of work, the flexibility of vocational qualifications has been further increased by, for example, diversifying opportunities to include modules from other vocational qualifications (incl. further vocational qualifications and specialist vocational qualifications) or polytechnic degrees. The goal is more flexibility – this will allow students to create individual learning paths and to increase students' motivation for completing their studies. Furthermore, it is meant to give education providers an opportunity to meet the demands of the regional and local world of work more effectively.

4.2.1. Apprenticeship training

Apprenticeship training is a work-based form of VET provision. It is based on a written fixed-term employment contract (apprenticeship contract) between an employer and an apprentice, who must be at least 15 years old.

Apprenticeship training is based on a National Core Curriculum or the requirements for the relevant competence-based qualification, according to which the student's individual learning programme is formed. It is drawn up so as to allow for the needs and prerequisites of the workplace and the student. The student's previous education and work experience must be taken into account and recognised as part of the learning programme.

Approximately 70–80 per cent of the time used for learning takes place in the training workplace, where the student's training is entrusted to the responsible on-the-job instructor(s). Theoretical education is mainly provided by a vocational institution or vocational adult education centre.

The employer pays the apprentice's wages according to the relevant collective agreement for the period of workplace training. For the period of theoretical studies, the student receives social benefits, such as a daily allowance and allowances for accommodation and travel expenses. The employer receives training compensation to cover the costs of training provided in the workplace.

4.2.2. Competence-based qualifications

In Finland, vocational adult education and training is very much based on the system of competence-based qualifications. A specific benefit of this system is that it makes it possible to recognise an individual's vocational competencies regardless of whether they were acquired through work experience, studies or other activities. Recognition of prior learning is a way to promote participation and completion of qualifications in vocational education and training. See also Chapters 2.2 and 3.3.

4.2.3. Personal training accounts in adult education and training

Reviewers appointed by the Ministry of Education and Culture will prepare proposals for adoption of personal training accounts by the end of 2012. The aim of the training accounts is to develop the system of adult education and training to be less supply-based and to respond to demand for education and training and to the individual needs of learners more effectively.

4.3. Financial support for VET students

Equality of opportunities is a long-standing fundamental principle of Finnish education policy. The background of the individual, including his or her financial circumstances should not be a barrier to participation in education. The practical implications of this principle are seen in the Finnish education system where most educational provision is publicly funded and free for students from pre-primary to higher education levels. Another concrete manifestation is the availability of different forms of financial support for learners of all ages.

4.3.1. Student financial aid is available for full-time studies

Financial aid is available for full-time studies at a vocational institution (KELA, 2012). The main forms of support are study grants, housing supplements and government guarantees for student loans. The first two of these are government-financed monthly benefits, while student loans are granted by banks.

Study grant is available as soon as eligibility for child benefit finishes at the age of 17. The monthly amount before tax varies between €38 and €246 depending on the student's age, marital status and type of accommodation. The housing supplement covers 80 per cent of the rent, but may not exceed €201.60 per month.

In addition, school transport subsidy is available when the distance between home and school exceeds 10 km and the monthly costs of travel are at least €54.

4.3.2. The Education Fund grants support for adult students

The Education Fund (Koulutusrahaston, 2013) is a fund administered by the social partners of the Finnish labour market. Its purpose is to support employees' vocational studies by granting them financial assistance (Adult Education Allowance) and to support development of the vocational qualifications system by granting scholarships for competence-based qualifications (Scholarship for Qualified Employee). The Fund also provides information and advice on benefits and makes proposals for development of legislation within its field. In 2011, the Education Fund paid out a total of €78.7 million in benefits, of which adult education allowances and scholarships for qualified employees accounted for €70 million and €8.8 million, respectively.

4.3.2.1. Adult education allowance

In Finland, an adult education allowance is available to employees and self-employed people who wish to go on study leave for at least two months. The allowance can be granted to an applicant who has a working history of at least 8 years (or at least five years by 31st July 2010), and who has been working for the same employer for at least one year. To qualify for the allowance, the applicant must participate in studies leading to a qualification or in further vocational training organised by a Finnish educational institution under public supervision. The duration of the allowance is determined on the basis of the applicant's working history and ranges from 2 to 18 months. Since 1st August 2010, the amount of the allowance has been equal to the amount of the earnings-related unemployment allowance, without increments. For example, on the basis of a

monthly salary of €1,600, a student will receive an education allowance of €1,062.

4.3.2.2. *Scholarships for qualified employees*

A scholarship is available for those who have passed the competence tests included in a competence-based qualification. The amount of the scholarship is €365 and it is tax-free. The scholarship must be applied for within a year after passing the tests.

4.4. The funding system and financial incentives for VET providers

Upper secondary vocational education and training is mainly co-financed by central and local governments. In addition, VET providers receive funding for vocational further and continuing training, which does not involve local governments. Providers receive funding for VET provision from the Ministry of Education and Culture based on certain calculation criteria. VET providers are free to decide on the use and allocation of funds granted for VET provision. Each VET provider is assigned a unit price calculated per student, the amount of which is based on the specific fields and, in some cases, on the qualifications included in its provision. The amounts of funding are influenced by each provider's student numbers in different fields and in different types of provision, such as school-based programmes, apprenticeship training and special needs VET.

A proportion of funding is based on the provider's operational performance. Performance-based funding is based on indicators such as reduction in drop-out rates and VET completion rate.

4.4.1. Training compensation for employing apprentices

An employer who takes on an apprentice receives training compensation to cover the costs of training provided at the workplace. The amount of compensation to be paid to the employer is agreed separately as part of each apprenticeship contract. The compensation is paid either by the local apprenticeship centre or the institution providing apprenticeship training.

List of abbreviations

CBQ	Competence-based qualifications
ECVET	European credit transfer system for vocational education and training
ENSTI	Ennakoinnin tietopalvelu [online foresight knowledge service]
FNBE	Finnish national board of education
GDP	Gross Domestic Product
ISCED	International Standard Classification of Education
OPM	Ministry of education and culture [Opetus- ja kulttuuriministeriö]
SME	Small and medium-sized enterprises
TEM	Työ- ja elinkeinoministeriö [Ministry of Employment and Economy]
VATT	Valtion taloudellinen tutkimuskeskus [Government Institute for Economic Research]
VET	Vocational education and training
VOSE	Valtakunnallinen ammatillisten osaamistarpeiden ennakointi (VOSE) -projekti [anticipation project on future competences and skills needs]

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