

HETA-ECVET Guidebook



CENTRAL BALTIC
INTERREG IV A
PROGRAMME
2007-2013



European Union

This book is published in the framework of
INTERREG IV A Central Baltic programme.

Edited and compiled by team of the project HETA-ECVET.

www.heta-ecvet.fi

Contents

Introduction	5
1. HETA-ECVET project	7
1.1 HETA-ECVET background	7
1.2. Aims and methods	9
1.3. Partners	14
2. General Terms	18
European Qualification Framework (EQF) and National Qualification Framework (NQF)	18
European Credit System for Vocational Education and Training (ECVET)	21
Learning outcomes and description /methodology	21
Documentation	23
3. Finnish and Estonian educational systems	25
3.1. Finnish educations system	25
3.2. Estonian education system	36
3.3. Comparison of the Finnish and Estonian educational systems	44
4. HETA-ECVET fields	49
4.1. General description of project work	49
4.2. Business	50
4.3. Catering	58
4.4. Social and Healthcare	65

4.5. Vehicle technology	69
4.6. Construction.	79
4.7. Hotel and tourism.	81
4.8. Cleaning.	83
5. Results and recommendations.	91
6. Modifications and ideas for development	99

INTRODUCTION

This Guidebook describes the work process and experiences of the HETA-ECVET project (2009–2012). The European Regional Development Fund (ERDF) under the INTERREG IVA Central Baltic programme funded the project. The target group of the HETA-ECVET guidebook is VET teachers and students, work placement instructors and other VET stakeholders.

The HETA-ECVET project aimed at enhancing the comparability, transparency and recognition of vocational qualifications in Estonia and Finland. There were seven different fields in the project: vehicle technology, business and commerce, catering, hotel and tourism, cleaning services, construction, social and health care. The pilot fields were chosen from a wide range of vocational qualifications in Finland and Estonia. The HETA-ECVET project used the European Qualification Framework (EQF) and the European Credit System for Vocational Education and Training (ECVET) as methods and tools for describing and comparing learning outcomes in the chosen fields.

The Guidebook overviews the project background, aims and methods (Section 1). The terms used in the project are defined in Section 2. A comparison of Finnish and Estonian VET based on descriptions of the Finnish and Estonian education systems is presented in Section 3. The project process and progress are discussed by seven working groups. Section 4 includes the experiences of teachers, employment representatives and students about working using ECVET tools and testing project outcomes. Results and modifications to the project experiences as well as training material is analysed in the last two sections. Documents created and tested during the project process are attached at the end of the Guidebook.

All the materials and outcomes of the project are available on the project website www.heta-ecvet.fi and free for use. The outcomes include

the website, the Guidebook and the ECVET vocabulary, descriptions of Learning Outcomes and the new international UNITs in the seven fields. During the project period networks were deepened and extended – both between Finnish and Estonian institutions and education administrations as well as vocational qualification associations and units and employers. Student and expert exchange between Estonia and Finland increased. As a result of this project, knowledge about the neighbouring country's vocational education and training system as well as the needs of working life deepened. The results, recommendations and implementation ideas presented in this Guidebook are based on feedback, working group analyses and presentations made at dissemination seminars.

“It was very useful to see how vocational education is organised elsewhere. Now I understand much better how diverse possibilities Estonia offers for students’ on-the-job learning and I can tell my colleagues and our students about them.”

Teacher of hotel and tourism, Omnia

The cross-border network gave much larger additional benefit by way of language practice and cultural understanding. Many experts and students described working abroad with international partners as a great opportunity to practice and develop (English) language skills, and to deepen knowledge and understanding about (working) culture and working life. Cooperation between partner colleges and labour market participants will continue in various mobility and innovation transfer projects.

Continuing the work based on HETA-ECVET is very important. The created materials (UNITs and assessment forms) constitute the concrete positive outcomes and benefits of the project.

Dissemination of the outcomes to other countries – e.g. Sweden, the United Kingdom, Germany, Ireland, Latvia and Lithuania – would be of great importance in the implementation of the ECVET process in the EU.

1. HETA-ECVET project

1.1 HETA-ECVET background

Southern Finland and Estonia form an intertwined area of employment as a result of their geographic, linguistic and cultural closeness to each other. These are the reasons why free movement of residents and labour force is an important issue. There are many competent people who work or would like to continue their studies in the neighbour country. However, there are significant differences in the Finnish and Estonian vocational education and training as well as examination systems. The same principles, comparability and recognition of competences and qualifications will improve transparency, free movement and the image of vocational education and training as well as the balance of qualified labour force. A specific problem is a lack of communication and understanding between Finnish and Estonian VET providers and labour market participants. Transparency and mutual recognition of vocational qualifications will support education and training of (many Estonian and Russian speaking) immigrants in Finland as well as ethnic (Russian speaking) minorities.

Finnish and Estonian stakeholders and vocational education and training (VET) providers launched their first consistently cooperative project HETA in 2007. There was some networking between Finland and Estonian VET, but more knowledge about the education and training systems and increased cooperation was needed. During the 21st century the Finnish and Estonian regions became closer and more labour moved between the Helsinki and Tallinn area. This was a reason to learn more about the VET and qualification systems of the neighbouring countries. The project name HETA is an abbreviation of “Helsinki” and “Tallinn.” HETA was funded from the INTERREG IIIA programme.

The first description of the Finnish and Estonian vocational education and training systems was compiled in the HETA project. Partners started a comparison of curricula in four pilot fields (catering, business and

administration, vehicle, craftsmanship). The results of the HETA project, the descriptions and comparison of the Estonian and Finnish VET were published – both in Estonian and Finnish language – along with a small Estonian-Finnish and Finnish-Estonian VET glossary (www.heta-ecvet.fi).

The second step, three-year project HETA-ECVET started in September 2009. The European Regional Development Fund (ERDF) under the INTERREG IVA Central Baltic programme funded this project. The project was built on cooperation under the foregoing HETA project. The new project network consisted of a geographically larger group of VET providers and also included stakeholders: seven VET provider organisations, three from Finland and four from Estonia. All three Finnish partners are multisectoral vocational colleges and the four Estonian partners were chosen on the basis of their expertise in vocational fields – for instance Tallinn Construction School. The lead partner in HETA-ECVET was Omnia, the Joint Authority of Education in Espoo Region.

The HETA-ECVET project aimed at enhancing the comparability, transparency and recognition of vocational qualifications in Estonia and Finland. The main idea was to promote the free movement of labour and population, continuing to intensify the cooperation which started in the HETA project and then integrating the HETA-ECVET comparisons and cooperation in the EQF and NQFs. Increased labour mobility between Finland and Estonia has created the need to better understand the qualifications of the neighbouring country and to bring them closer to each other. Finnish enterprises employ more and more Estonians both in Finland and Estonia. The project was focused on industries in which the mobility is the highest.

There were seven different fields in the project: vehicle technology, business and commerce, catering, hotel and tourism, cleaning service, construction, social and health care. The pilot fields were chosen from a wide range of vocational qualifications in Finland and Estonia.

The cross-border network gives more security for employees in their jobs abroad, due to their updated ECVET-based vocational studies and skills. In line with the principles of the Lisbon and Gothenburg agendas, HETA-ECVET supported equal opportunities both in education and work opportunities for all of the students in vocational education. Long-term network and planning of qualifications impact the balance of competent labour force.

1.2. Aims and methods

In general HETA-ECVET project network started building understanding and mutual trust between Finnish and Estonian working life. During the three years of the project, a multifield network was developed between VET stakeholders, VET providers and working life/placement companies. The project aimed at enhancing the comparability, transparency and recognition of vocational qualifications and learning outcomes in Estonia and Finland.

The overall idea of the HETA-ECVET project was to promote the free movement of labour and residents and support employment by recognition and transfer of learning outcomes and qualifications. The project aimed at increasing the knowledge of working life needs in both countries and comparing these needs to vocational education and training curricula, describing the learning outcomes of the seven chosen fields, comparing learning outcomes and assessment principles and criteria, and developing qualifications and curricula for Finland and Estonia. The project studied how to achieve a balance of skilled labour between Finland and Estonia, how to facilitate student mobility and how to recognise prior study and work experience.

The HETA-ECVET project used the European Qualification Framework (EQF) and the European Credit System for Vocational Education and Training (ECVET) as methods and tools for describing and comparing learning outcomes in the chosen fields. Finland and Estonia have

made a commitment to observe the recommendation of the European Parliament and of the Council in the EQF and ECVET process. EQF was launched by the 2008 Recommendation as a reference tool for the comparison of qualification levels in national qualification systems. ECVET uses EQF as the reference level for qualifications. Both Finland and Estonia defined the connections between the Finnish educational system and EQF by 2010 and will start using ECVET in 2013.

One of the main aims was to organise international seminars and training events for the dissemination of the EQF, NQF and ECVET ideas and tools both in Finland and Estonia. The goal was to create a new transparent international Finnish–Estonian UNIT for each of the seven fields by using ECVET working tools.

The main activities were: dissemination of the EQF and ECVET principles, a deeper comparison of Finnish and Estonian qualifications, a comparison of competences, skills and knowledge in the pilot sectors, keeping up to date with the education and training sector, developing and testing materials and equal units in working groups of the pilot areas, and increasing cooperation and mobility for employers and individuals.

In each pilot working group the first task was getting to know the working life and education and training system of the neighbouring countries. Working group members visited placement companies and interviewed work placement representatives in order to learn the needs of working life as well as the new skills and competences that are needed. The second step was reviewing the curricula, the professions and the standards. Working group members chose the most similar curricula of the given occupational sector and described learning outcomes (LO) on the basis of the ECVET principle (knowledge, skills and competences). Next, the relevant parts from LO were chosen: mostly working groups chose similar parts of the Finnish and Estonian curricula and created a new international UNIT. Working groups analysed assessment methods used in Finland and Estonia, decided on the assessment criteria for the new UNIT and created an assessment form.

“The thing of greatest interest was finding out more about the guidance and evaluation methods of different work placements for students’ on-the-job periods. Evaluation practices differed most in Finland. It is not common in Estonia to have students self-assess themselves and to organise actual evaluation discussions involving the student, the workplace instructor and the teacher. Guidance practices were different between workplaces and it is unusual to organise any training for workplace instructors.”

Teacher of business and administration, Luksia

All the materials and outcomes created during the project were analysed by the Steering Committee of the HETA-ECVET project. The Steering Committee consisted of representatives of VET stakeholders and providers as well as representatives of the labour market. The Steering Committee accepted and signed a Memorandum of Understanding (MoU) between project partners. A Learning Agreement (LA) was created for the project and the participants decided to test all the documents (MoU, LA; EUROPASS and EUROPASS Mobility Passport) during mobility periods (see Annexes).

Learning outcomes of the new UNITs were tested in the pilot sectors to see how the identification of the units works during the mobility period. There were three support projects of Leonardo da Vinci (SUVI and SUVI Expert in Finland and Points to Reality in Estonia) which granted mobility tests for the created material. During testing, the ECVET ideas and the materials created during HETA-ECVET project were disseminated to placement companies (instructors) and a larger group of teachers (teachers from partner colleges and new mobility partners from Estonian colleges). A final evaluation was made of the created ECVET principles and units. The workplace instructors, teachers and students carried out the evaluation process together and collected feedback from the three parties for improving the ECVET units and the HETA-ECVET project work. The given feedback was analysed and used for improving the materials related to processes and curricula.

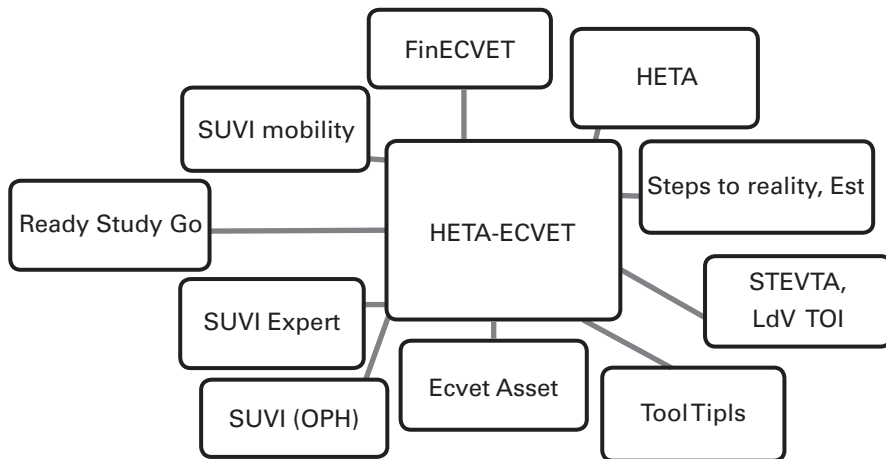


Figure 1. Projects connected to HETA-ECVET

The HETA-ECVET project outcomes are:

- Descriptions and comparison of knowledge, skills and competence in seven fields of vocational education and training;
- Conformity of teaching and training, development of training material, creation of learning outcomes units for seven qualifications;
- Testing of learning outcomes units, assessment and recognition of learning outcomes;
- Increased student and expert exchange between Estonia and Finland;
- Better comparability of the Finnish and Estonian qualifications;
- Network between Finnish and Estonian institutions and education administrations as well as vocational qualification associations and units and employers;
- www.heta-ecvet.fi website;
- ECVET glossary (English-Finnish-Estonian) and the Guidebook.

Table 1: Outcomes of the HETA-ECVET project

Outcomes	Description
Description of Learning Outcomes (by curricula)	7 (curricula) in Finnish 7 (curricula) in Estonian
International new UNITs in 7 fields	7 UNITs (in English, Finnish and Estonian)
Assessment forms (and criteria)	7 forms (in English, Finnish and Estonian)
Additional material	Guidelines for the catering on-the-job learning abroad Task for the on-the-job learning in the cleaning sector Cleaning Sector Card
Memorandum of Understanding, Learning Agreement	Documents in English
Vocabulary	In a brochure and on the project website, English-Finnish-Estonian
Guidebook	In a brochure and on the project website, English
www.heta-ecvet.fi	English-Finnish-Estonian
Dissemination material	Postcard, flyer, pen, calendar
First seminar and conference	Finland, Helsinki
Second seminar and conference	Estonia, Kuressaare
Third dissemination seminar	Finland, Lohja Nummela, 78 participants
Fourth dissemination seminar	Estonia, Tallinn

1.3. Partners

Omnia - Joint Authority of Education in Espoo Region

Omnia, the Joint Authority of Education in Espoo Region, is a multi-sector joint authority of education offering vocational training at nine locations around Espoo area. Omnia's affiliated municipalities comprise Espoo, Kirkkonummi and Kauniainen. Omnia offers vocational training to young people and adults who have completed comprehensive school or have passed the matriculation examination. The range includes twenty vocational qualifications, dozens of vocational and special vocational qualifications, extension and career training, apprenticeship training and youth workshops. Omnia was the lead partner in this project and participated in six working groups with a total of 16 experts as active members and six teachers and 20 students as testers.

Intermunicipal Federation of Vocational Education in Western Uusimaa, Luksia

Luksia offers vocational qualifications and tailored personnel training to meet the needs of individuals, private companies and public institutions. Each year approximately 7,000 certificate and adult students with a staff of over 400 are catered for. Luksia operates in two main units in Lohja (60 km from Helsinki) and in Nummela (40 km from Helsinki), and belongs to 10 member municipalities in the Western Uusimaa region. Luksia covers different VET needs, including initial, further and specialist vocational education, apprenticeship programs, employment office training programs as well as courses designed to meet individual requirements. Learners develop a broad range of competences, knowledge and skills, the main focus being on practice and on-the-job learning. Luksia participated in three working groups with a total eight persons. Three teachers and 10 students participated in testing.

Vantaa Vocational College Varia

Varia provides second-degree vocational education to teens and adults. The objective of Varia is that students learn the basic knowledge and skills required for employment in their chosen field. Vantaa Vocational

College Varia provides second-degree vocational education in six areas of study: culture; transportation; hotel, restaurant and catering; health and social welfare; and electrical engineering and technology. Varia participated in three working groups with a total of eight persons. Two experts and four students participated in testing.

Kuressaare Regional Training Centre

Kuressaare Regional Training Centre (RTC) is an educational institute that provides initial and further vocational training and retraining in a wide range of specialities. As tourism is an important industry in the region, training specialists in catering, cooking, tourism management and hotel service is of great importance. Construction and related fields like carpentry also have quite a number of students. Located on the island of Saaremaa, which has strong seafaring traditions and small shipyards, Kuressaare RTC is the only vocational school in Estonia training ship builders. Other specialities are car repairing, business management, social work, information technology, handicraft and design. To better serve the needs of the regional economy, RTC has strong ties with many local companies and the Saaremaa labour market office. KRTC participated in six working groups with a total of 11 persons. Thirteen students participated in testing.

Kehtna Economy and Technology School

The history of vocational education at Kehtna goes back to 1925 and the facility has been a contemporary technical school since 1966. At present, Kehtna Economy and Technology School is a modern educational establishment with about 500 students, about 35 teachers and 24 staff. Guest lecturers, the best specialists in their field, deliver some of the lectures. At present the school provides education in the field of technology and services. At the same time, refresher courses are offered for adults, and consulting services for entrepreneurs. Kehtna participated in three working groups with a total of nine persons. Ten students participated in testing.

Tallinn School of Service

Tallinn School of Service offers vocational qualifications in catering, cleaning services, hotel services, and selling. The number of students in vocational education is 970 and the staff amounts to 159 persons. The school is a known and recognised educational institution in Estonia for providing quality and professional education. The school has produced top catering specialists in Estonia. Tallinn School of Service participated in three working groups with a total of 10 persons. Seven students participated in testing.

Tallinn Construction School

Tallinn Construction School (TCS), founded in 1947, is a state-budget financed vocational study institution in Tallinn administered by the Estonian Ministry of Education and Research.

Since 2002 the training has been carried out in the Estonian and Russian languages according to the education policy decision to unite the Estonian-language Tallinn Construction School and the Russian-language Tallinn Kopli Construction School. The studies at the school are based on curricula corresponding to national professional standards in three spheres: construction and civil facilities: building of stone and concrete structures, construction finishing, construction carpenter, restorer of wood and stone buildings; energy and electrical engineering: electrician; materials industry (wood): carpenter, furniture restorer. TCS participated in one working group with a total of three persons. Two students participated in testing.

Support partners at the stakeholder level were the Finnish National Board of Education, the Estonian Ministry of Education and Research, the Estonian Qualifications Authority and INNOVE.

Social partners participated in the Steering Committee (Villa Tapiola, Siivoussektori OY, EAS) or in testing and commenting activities. There were a total 27 different placement companies from Finland and 28 from Estonia.

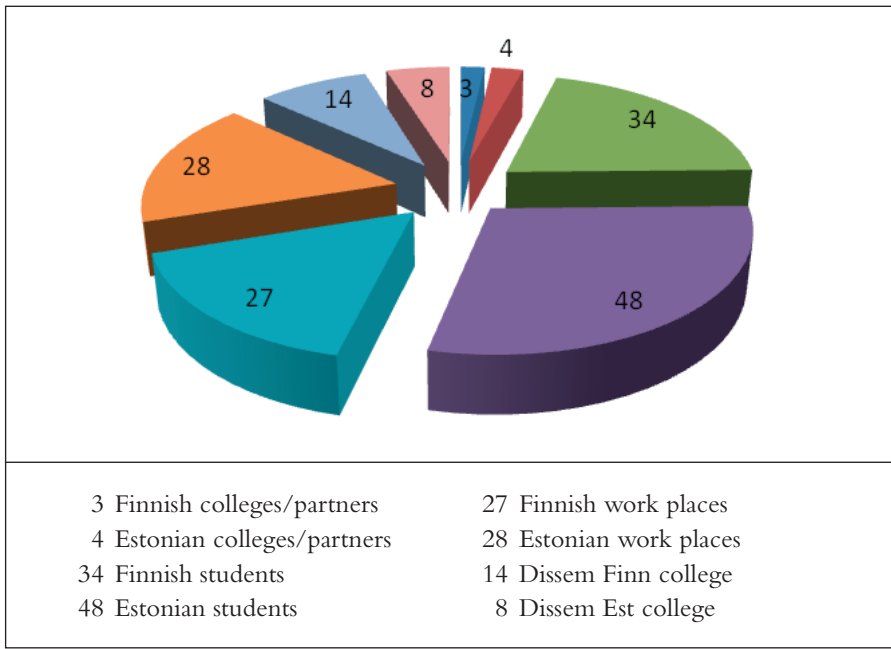


Figure 2. Participants in HETA-ECVET project

Three colleges from Finland and four colleges from Estonia yielded 70 experts who participated actively in project work. During testing, 34 Finnish students tested project outcomes in 28 Estonian work placement companies and 48 Estonian students tested outcomes in 27 Finnish work placement companies. Four seminars and conferences were organised and project outcomes were disseminated to 14 Finnish and eight Estonian colleges and other VET bodies (Figure 2).

2. General Terms

European Qualification Framework (EQF) and National Qualification Framework (NQF)

The European Qualification Framework (EQF) is a reference framework linking together the qualifications systems of EU countries and as a result, making qualifications more understandable and comparable. An important aim is also to facilitate the recognition of non-formal and informal learning. To achieve these goals, the development of **National Qualification Frameworks (NQF)** is recommended. Although this is not obligatory, most of the EU member states, including Estonia, are developing their NQFs in accordance with the EQF system.

EQF was introduced across Europe in 2008. The aim is to carry a reference to an appropriate EQF level. The schedule for EQF has been changed; however, the EQF system was adopted in Finland and Estonia during 2012.

Table 2. Descriptors defining levels in the EQF

Level	Knowledge	Skills	Competence
LEVEL 1	basic general knowledge	basic skills required to carry out simple tasks	work or study under direct supervision in a structured context
LEVEL 2	basic factual knowledge of a field of work or study	basic cognitive and practical skills required to use relevant information in order to carry out tasks and to solve routine problems using simple rules and tools	work or study under supervision with some autonomy
LEVEL 3	knowledge of facts, principles, processes and general concepts, in a field of work or study	a range of cognitive and practical skills required to accomplish tasks and solve problems by selecting and applying basic methods, tools, materials and information	take responsibility for completion of tasks in work or study adapt own behaviour to circumstances in solving problems

Level	Knowledge	Skills	Competence
LEVEL 4	factual and theoretical knowledge in broad contexts within a field of work or study	a range of cognitive and practical skills required to generate solutions to specific problems in a field of work or study	exercise self-management within the guidelines of work or study contexts that are usually predictable, but are subject to change supervise the routine work of others, taking some responsibility for the evaluation and improvement of work or study activities
LEVEL 5	comprehensive, specialised, factual and theoretical knowledge within a field of work or study and an awareness of the boundaries of that knowledge	a comprehensive range of cognitive and practical skills required to develop creative solutions to abstract problems	exercise management and supervision in contexts of work or study activities where there is unpredictable change review and develop performance of self and others
LEVEL 6	advanced knowledge of a field of work or study, involving a critical understanding of theories and principles	advanced skills, demonstrating mastery and innovation, required to solve complex and unpredictable problems in a specialised field of work or study	manage complex technical or professional activities or projects, taking responsibility for decision-making in unpredictable work or study contexts take responsibility for managing professional development of individuals and groups

Level	Knowledge	Skills	Competence
LEVEL 7	highly specialised knowledge, some of which is at the forefront of knowledge in a field of work or study, as the basis for original thinking and/or research critical awareness of knowledge issues in a field and at the interface between different fields	specialised problem-solving skills required in research and/or innovation in order to develop new knowledge and procedures and to integrate knowledge from different fields	manage and transform work or study contexts that are complex, unpredictable and require new strategic approaches take responsibility for contributing to professional knowledge and practice and/or for reviewing the strategic performance of teams
LEVEL 8	knowledge at the most advanced frontier of a field of work or study and at the interface between fields	the most advanced and specialised skills and techniques, including synthesis and evaluation, required to solve critical problems in research and/or innovation and to extend and redefine existing knowledge or professional practice	demonstrate substantial authority, innovation, autonomy, scholarly and professional integrity and sustained commitment to the development of new ideas or processes at the forefront of work or study context including research

European Credit System for Vocational Education and Training (ECVET)

ECVET, the European Credit System for Vocational Education and Training, is based on the recognition of learning outcomes with statements of knowledge, skills and competence independent of the learning context. ECVET supports the flexibility of programmes and personal pathways to achieving qualifications, enhancing the opportunities for lifelong learning. ECVET makes it easier to recognise the learning achievements that students have gained in other contexts (countries, institutions or systems, as well as initial or continued training and formal, non-formal or informal learning).

The purpose of ECVET is to create qualification units that can be recognised as a part of the learning process even if one goes to study abroad. Credits can be transferred to other contexts and accumulated to obtain a vocational qualification. ECVET is based on learning outcomes, units, ECVET points, credits, and mutual trust and partnership (Memorandum of Understanding and Learning Agreement).

Learning outcomes and description /methodology

Learning outcomes (LO) specify what learners know or are able to do as a result of a learning activity. Outcomes are expressed as knowledge, skills and competences. ECVET uses EQF as the reference for levels. LO can be used as a descriptor of the qualification framework, for defining qualifications, for designing curricula, or for assessment. The outcomes depend on the qualification system (EQF or the NQF) used. In ECVET it is essential to ensure that LO for the qualifications are identified and described well to enable mutual understanding of the qualifications. In HETA, the focus is on LO of the units. It is necessary to describe the qualifications with learning outcomes, because the outcomes are used as a basis for credit transfer and they are not dependent on the learning progress or the context in which they are achieved.

Formal education refers to participation in education provided by the regular education system with the aim of completing a qualification (comprehensive schools, upper secondary schools, vocational schools and colleges, polytechnics and universities as well as apprenticeship training and in folk high schools and sports institutes).

Non-formal education refers to participation in course-based learning, other than education and training, leading to a qualification according to the regular education system. (Examples include in-service training arranged and sponsored by the employer, hobby and language courses at adult education centres, vocational further education courses, driving school, and dance school.)

Informal learning is an activity practised for the purpose of learning, which is less organised and structured than other education. It is not the responsibility of any organisation. There are no student-teacher arrangements, timetables or entrance requirements. It can take place almost anywhere irrespective of place: among family or friends, **at the workplace** or **in everyday life**. Informal learning can be self-managed or take place under the guidance of family or in some other social context.

ECVET can be gradually applied to vocational education and training qualifications at **all levels of EQF**, and used for the purpose of the **transfer, recognition and accumulation of individuals' learning outcomes** achieved in formal, non-formal and informal contexts.

Assessment and validation of learning outcomes is the process of confirming that certain assessed learning outcomes achieved by a learner correspond to specific outcomes which may be required for a unit or qualification.

Certification/recognition of learning outcomes is the process of attesting officially achieved learning outcomes through the awarding of units or qualifications.

Unit is a smaller component of a qualification, designed at national level by competent bodies and consisting of a coherent set of knowledge, skills and competence, which can be assessed and validated.

Credit – ECVET credit points indicate the relative weight of units.

Competence is described in terms of responsibility and autonomy; the mastering of work processes and lifelong learning key competencies common to all qualifications.

Skills can be either cognitive (involving the use of logical, intuitive and creative thinking) or practical (involving manual dexterity and the use of methods, materials, tools and instruments).

Knowledge is theoretical and/or factual knowledge that forms a foundation for work.

Learning pathway is focused on individuals in a borderless and lifelong learning perspective. ECVET allows individual learning paths to be created. Everybody can complete their own studies by using parts of a qualification (Unit) both on the cross-disciplinary and cross-border level. Qualification is independent of how the vocational skills and competences have been acquired, and does not depend on learning time.

Documentation

As stated in the ECVET Recommendation, there are some documents recommended for use in the ECVET process. These are the Memorandum of Understanding (MoU), Learning Agreement (LA) and EUROPASS.

Several documents were used in the HETA-ECVET project. The project partners prepared and signed the **Memorandum of Under-**

standing (see Annex I). The MoU is an agreement between competent institutions (in this case, seven VET providers from Finland and Estonia) which sets out the framework for credit transfer. It formalises the ECVET partnership by stating the mutual acceptance of the status and procedures of competent institutions involved and establishes the partnership's procedures for cooperation.

The Learning Agreement is an individualised documentary agreement between the student, the educator and the employer. It sets out the conditions for a specific mobility period and specifies, for the particular learner, which learning outcomes and units should be achieved together with the associated ECVET points. The LA aims to ensure the learning outcomes at workplaces and describes the requirements for assessment (see Annex II).

European tools: EUROPASS Mobility Passport to prove the mobility period (see Annex III) and EUROPASS CV (see Annex IV) were sent beforehand to the employers.

3. FINNISH AND ESTONIAN EDUCATION SYSTEMS

3.1. Finnish education system

Finland is a country with an open and free education system. The basic right to education is recorded in the Constitution of Finland: legislation provides for compulsory education and the right to free pre-primary and basic education. The legislation governing primary and secondary level education, as well as part of the legislation governing adult education, was reformed on 1 January 1999. The education system has remained unchanged, but the new legislation has substantially increased the independent decision-making powers of local authorities, other education providers and schools.

The Finnish education system mandates nine-year basic education (preceded by one year of voluntary pre-primary education), which confers general eligibility for general upper secondary schools and vocational upper secondary qualifications. A three-year vocational upper secondary qualification confers general eligibility for higher education in universities and universities of applied sciences. The Finnish educational system is an open lifelong learning system and there are no closed pathways. People can study as many different qualifications as they like. Adult education is available at all levels (Figure 3).

The success of the Finnish education system is based on equal access to education, free availability of education, competence and quality, flexibility and mutual trust. The equal access to education and the free availability of education guarantee equal access for everybody between seven and 16 years of age to a basic nine-year education, irrespective of domicile, sex, economic situation or linguistic and cultural background. Teachers and schools are committed and enjoy a large autonomy. Master's degree is a requirement for teachers, and teacher education includes teaching practice. As support, learners and students are offered personal guidance, counselling and tutoring, early intervention, individual sup-

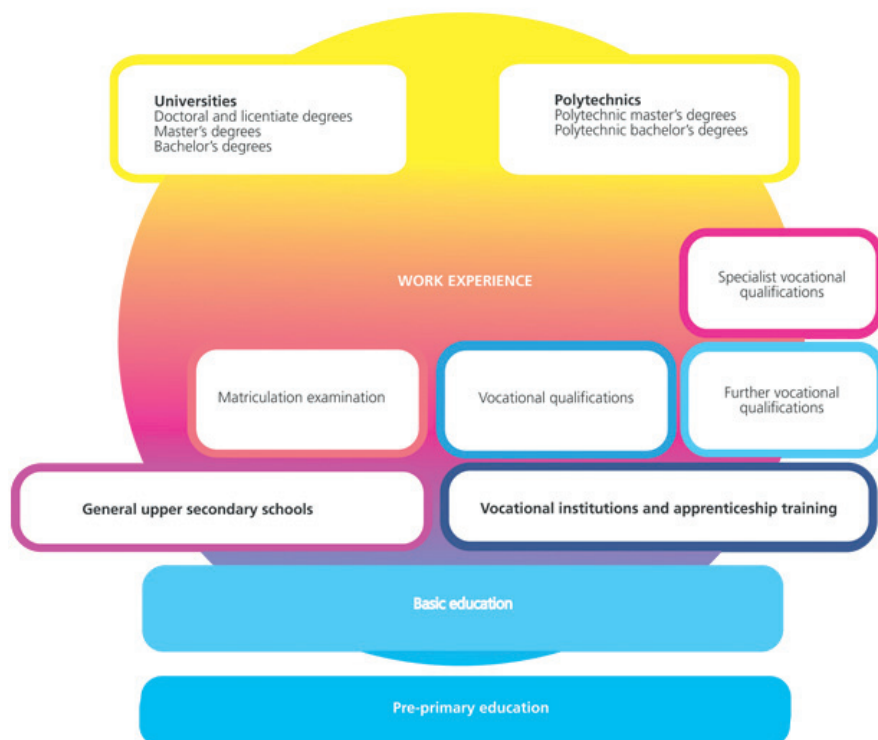


Figure 3. The Finnish education system

port for learning and welfare. Special needs education is integrated into regular education as far as possible.

The Finnish education system is flexible and based on a student-oriented active concept of learning. The Finnish education system is also based on the empowerment of municipalities. Municipalities are responsible for the provision and implementation of education. The self-assessment skills of the learners are developed from the crèche level on. The evaluation of education and learning outcomes is supportive. National testing, school ranking lists and inspection/supervision systems do not exist.

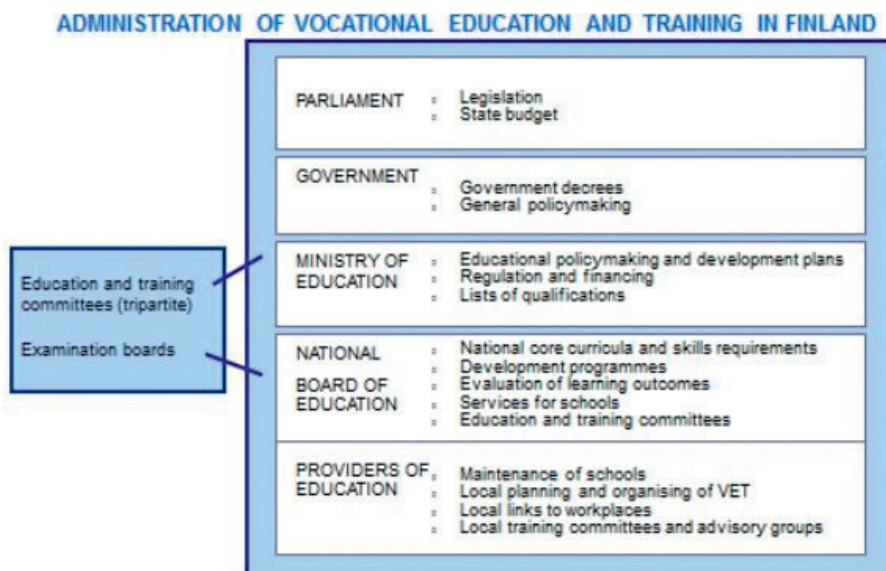


Figure 4. Administration of the Finnish education system

The Parliament and the Government define the education policy. In addition to education related legislation, these policy definitions are specified in various development documents and the state budget. A central development document in the educational sector is the “Development Plan for Education within the Administrative Field of the Ministry of Education and Culture” (KESU), which the Government approves every four years for the year of its approval and for the following five calendar years.

The Ministry of Education and Culture is the highest authority and responsible for the strategic and normative steering of VET and all publicly funded education in Finland (Figure 4). The Ministry is responsible to the Government for preparing education related legislation, making all the necessary decisions and ensuring its share of the state budget. For the purposes of organising education and training, the Ministry grants

authorisations to education providers for the provision of education and training, determining the fields of education in which they are allowed to organise education and their total number of students. Education providers determine which vocational qualifications and which study programs within each field of education will be organised at their vocational institutions.

There are several expert bodies supporting the work of the Ministry. Social partners are usually represented in these bodies.

The Finnish National Board of Education (FNBE) is a governmental agency and functions under the Ministry of Education and Culture (Figure 4). The FNBE is a planning and expert body responsible for primary and secondary education as well as for adult education and training (not for institutions of higher education, however). The FNBE designs the core curricula and sets the requirements for competence-based qualifications, which describe the aims and key content of the qualifications.

Vocational education and training

Vocational upper secondary education and training is governed by the Vocational Education and Training Act (630/1998) and Regulation (811/1998). The Act concerns initial vocational education and training for both young and adult students and the available qualifications. A special Act on the Financing of the Provision of Education and Culture (635/ 1998) covers all funding for all levels of education except universities. Vocational upper secondary education and training is based on the regulations concerning vocational qualifications, national qualification requirements and assessment criteria established by the National Board of Education.

Vocational upper secondary education and training is based on the basic education syllabus. The scope of upper secondary level vocational qualifications taken after basic education is 3 years (120 credits, EQF level 4). The duration of studies is up to 40 credits shorter for

those who have completed the general upper secondary school syllabus, as some of their studies are accredited. Students in vocational upper secondary education and training are mainly aged 16–25 years. The school-based education studies mostly take place in educational institutions, and all qualifications include at least 20 credits (approx. six months) of instruction at the workplace (on-the-job learning). Students demonstrate their skills in a demonstration of skills in real work processes and employers' representatives participate in the assessment. The results are graded on a three-point scale: excellent (3), good (2) and satisfactory (1). In institutional vocational education and training students are awarded a qualification certificate upon the completion of all the studies required for the qualification. The certificates are awarded by the education provider/vocational institution. A three-year vocational upper secondary qualification provides general eligibility for higher education in both polytechnics and universities.

Competence-based qualification system (vocational upper secondary education and training for adult learners) is based on the same national qualification requirements and assessment criteria. Competence-based qualification is independent of age and educational background of the student. Learning outcomes can be acquired in different ways and are not dependent on the learning progress or the context in which they are achieved. Although taking part in competence tests does not require formal preparation, about 95% of candidates attend some training, in which they are provided with individual learning programmes. Individualisation takes place in the enrolment phase in accrediting skills and prior learning, in planning and realisation of competence tests, in acquiring vocational skills, in preparatory training and in on-the-job learning. If necessary, personal plans are prepared for each in regards to competence tests, places and schedules for tests, preparatory training and on-the-job learning. In order to obtain a vocational qualification, the student takes her/his competence test in real working life situations. The competence test is assessed by tripartite evaluators: representatives of employers, employees and educators. Competence-based qualifications are offered by institutions which have concluded a contract with

a qualification committee on organising qualifications. Qualification committees monitor the process and issue a certificate.

Further vocational qualification and specialist vocational qualification are available to adult learners and organised as competence-based qualifications. Learning outcomes can be achieved in different ways and these are not dependent on the learning progress or the context in which they are achieved. These qualifications do not require formal preparation, but mostly some training is necessary and useful. Both further and specialist qualifications consists of 40 credits (60 ECVET credits) and offer more skills and competencies in the occupational field after some (3–5 years) work experience. Further qualification guarantees skilled workers and specialists the competence required for the most demanding tasks in the relevant occupational field. The qualification provides general eligibility for higher education in the same field at polytechnics.

Apprenticeship training is a form of arranging vocational education and training. Providers of apprenticeship training (local authorities, joint municipal authorities, registered associations or foundations) are also responsible for managing apprenticeship training and supervising apprenticeship contracts.

Apprenticeship training is based on an employment contract, and the practical training periods (80% from whole studies) take place at the workplace in connection with ordinary work assignments. This is complemented by theoretical studies (20%), which may be arranged at institutions providing vocational education and training, at vocational adult education centres, or at other educational institutions. 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.

In apprenticeship training, the employer pays the student a wage for the apprenticeship period. The theoretical studies of apprenticeship train-

ing are free of student fees and for the time they spend in theoretical studies, students may receive a daily allowance and a family allowance as well as financial support for travel and accommodation expenses. The state is responsible for all these costs.

Qualification structure

Vocational education and training providers are mostly vocational institutes, vocational schools and colleges, “folk high schools”, music and sports institutes, vocational adult education centres and vocational special education institutions.

Vocational upper secondary qualifications and study programmes are defined in a directive of the Ministry of Education. The **fields of education** are as follows:

- Humanities and education;
- Culture;
- Social science, business and administration;
- Natural sciences;
- Technology, communication and transport;
- Natural resources and the environment;
- Social services, health and sport;
- Tourism, catering and domestic services.

There are a total of 371 qualifications in Finland: 52 vocational qualifications divided into 113 study programmes, 188 further vocational qualifications and 131 specialist vocational qualifications.

The national core curricula are drawn up by the FNBE in cooperation with employers’ organisations and trade unions. The Training Committees are tripartite bodies established for each occupational field by the Ministry of Education for a term of three years at a time for the purpose of planning and developing vocational education and training. Local tripartite bodies as well as other representatives of the labour market take part in the development of curricula as advisers and consultants. The boards of education providers approve the local curricula.

All the vocational qualifications have been reformed during 2008–2010. The national core curricula for upper secondary vocational qualifications and the requirements for competence-based qualifications are common to education and training for young and adult students. The scope of the qualifications is 120 credits (40 credits per year; 1 credit is equivalent to 40 hours of study).

A curriculum includes:

- Vocational studies and on-the-job learning, which vary according to the qualification (90 credits; min 20 credits on-the job);
- Core subjects, common to all qualifications (20 credits, out of which 16 are compulsory and 4 are optional). The core subjects are:
 1. The native language (can be either Finnish or Swedish);
 2. The second official language;
 3. Foreign language;
 4. Mathematics;
 5. Physics and chemistry;
 6. Social, business and labour market subjects;
 7. Health education; physical education;
 8. Arts and culture; environmental studies;
 9. ICT; ethics, other cultures;
 10. Psychology and entrepreneurship;
 11. Elective studies, which vary (10 credits).

These studies include at least 1.5 credits of student counselling and a final project that provides at least 2 credits.

Lifelong learning key skills:

1. Learning and problem solving
2. Interaction and co-operation
3. Professional ethics
4. Health, safety and proactiveness
5. Initiative and entrepreneurship
6. Sustainable development
7. Aesthetics
8. Communication and media skills

9. Mathematics and natural sciences
10. Technology and information technology
11. Civil sector and cultural understanding

All qualifications include a period of on-the-job learning with a minimum of 20 credits. Vocational skills demonstrations were introduced as a way of assessment in August 2006 and they mostly take place during the periods of on-the-job learning.

That encourages countries to relate their national qualifications systems to EQF so that all new qualifications issued from 2012 carry a reference to an appropriate EQF level. According to the Finnish NQF, all vocational upper secondary qualifications and further vocational qualifications are referenced with EQF level 4, and specialist vocational qualifications with level 5. The current credit system (120 credits) will be changed to 180 ECVET credits in 2014.

Table 3. Finnish NQF

Level 1	
Level 2	
Level 3	• Completion of basic education curriculum
Level 4	• Matriculation examination, completion of upper secondary curriculum • Vocational upper secondary qualifications • Further vocational qualifications • Qualifications from other administrative sectors corresponding to requirements of vocational upper secondary or further vocational qualifications
Level 5	• Specialist vocational qualifications • Qualifications from other administrative sectors corresponding to requirements of specialist vocational qualifications
Level 6	• University and polytechnic Bachelor's degrees

Level 7	• University and polytechnic Master's degrees
Level 8	• Scientific and artistic post-graduate degrees, such as licentiate and doctoral degrees

Assessments

Practical skills and their operation in the work environment should be highlighted in assessing the skills. Skills or know-how should be assessed mainly on the basis of the respective work duties.

The key skills, and possession of the relevant theoretical information, working methods, tools, materials, work methods and processes should be further highlighted.

Certificate and related content

The final certificate should contain the following information:

- Student's name and social security number;
- Qualification title and volume 120 credits/3 years;
- Curriculum title;
- Qualification as set out in the respective regulation of the Ministry of Education and Culture;
- Completed modules according to vocational studies (90 credits), special vocational studies (20 credits) and optional studies (10 credits) together with the respective volumes and marks;
- Volume and title of demonstration;
- Work placement;
- Date and signatures;
- Stamp (of education provider or college).

Certificate of the skills demonstration should contain the following information:

- Student's name and social security number;
- Qualification title and volume 120 credits/3 years;
- Curriculum title;
- Qualification title;
- The required skill demonstration modules (module title and vol-

ume, a short description of the provided demonstration of skills, location, mark received, or a short written description of the student's demonstrated skills and vocational skills for special needs students);

- Date and signature (committee chairperson);
- Impression of seal (of education provider or college).

Also, the following should be included on the certificate:

- Contact information of the education provider or the college issuing the certificate;
- Name of the education provider or college, unless these are provided above;
- Licence of the education provider;
- Reference to the respective act and paragraph on the basis of which the education is being provided;
- Reference to the fact that education is being provided in accordance with the qualification principles set out by the Finnish National Board of Education (date of approval and reference to the records);
- Reference to the respective approval of the Ministry of Culture and Education (the date and the number of the respective regulation valid at the time the studies were commenced);
- Basic qualification requirements and the position of the qualification in the national context;
- Reference to eligibility to further studies in the same field;
- Definitions for study volume, year and credit;
- Marks;
- Special requirements regarding practising of certain vocational qualifications.

3.2 Estonian education system

In Estonia the education system is centrally managed by the Ministry of Education and Research. The principal objective of Estonia's educational system (Figure 5) is to develop the Estonian society into an open learning society where every person is a lifelong learner. In Estonia the provision of general education at all levels of education is carried out on the basis of common national curricula irrespective of the language of instruction. Schools prepare their curricula on the basis of these national curricula.

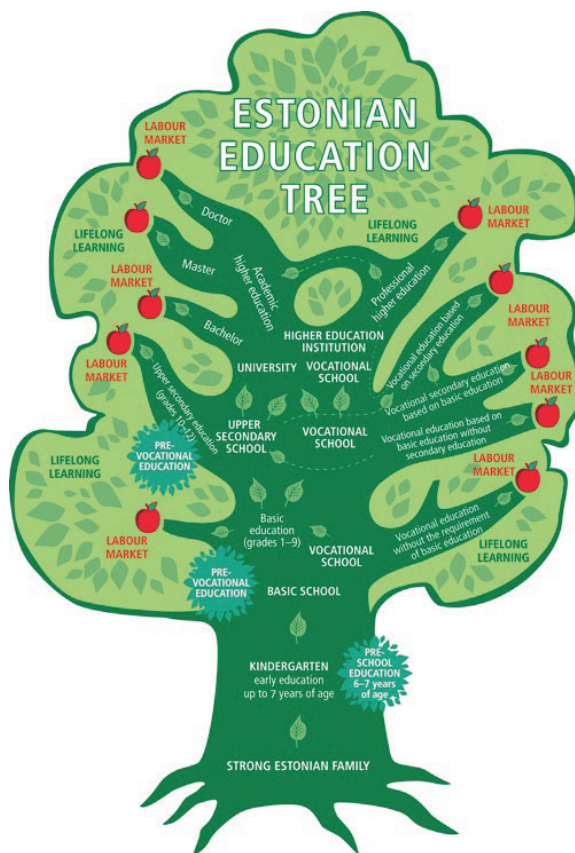


Figure 5. Estonian education system.

Local governments have established catchment areas for municipal school grades 1–9. Schools must admit all the children under the minimum school-leaving age who live in their catchment areas. There are several options for continuing one's education after graduating from basic school: it is possible to acquire a general secondary education in an upper secondary school, a secondary vocational education or simply a vocation in a vocational educational institution. (Figure 5.)

Children must attend education from the age of seven. Students are obligated to finish the basic school (the first nine years of training) or attend basic school until the age of 17.

At the end of compulsory schooling, one can choose between several options. If the student wants to go to a university, he/she can choose the general upper secondary school (*gümnaasium*) (ISCED 3A). In order to graduate, one has to pass state exams and successful graduates will receive a certificate. Another option is upper secondary vocational education.

Vocational education, which can be acquired through several options on the basis of both basic and secondary education, provides both professional knowledge and skills.

Legislative Framework

The legal basis for VET was created in the late 1990s. The main legislation related to vocational education, the Vocational Education Institutions Act (*Kutseõppeasutuse seadus*, 1998), regulates the provision of VET at upper and post-secondary (non-tertiary) levels, as well as the foundation and operation of VET institutions. It was amended considerably in 2006. The changes stipulated the involvement of social partners in VET, providing new and flexible ways to enter VET and continue to general higher education, etc. The next amendment was initiated in 2010 and the main principle is output-based approach in VET.

The Vocational Education Standard (*Kutseharidusstandard*, 2006) is a set of uniform requirements for vocational and professional training at the level of basic and secondary education. It applies to all vocational education institutions which organise vocational training. In 2009, RPEL principles were added.

The Procedure for Implementing Workplace Based Training (*Tööko-hapõhise õppe rakendamise kord*, 2007) regulates the provision of apprenticeship training.

The Private Schools Act (*Erakooliseadus*, 1998) regulates the provision of training longer than 120 hours organised by legal persons in private law as well as the foundation and operation of private educational institutions.

The Professional Higher Education Institutions Act (*Rakenduskõrgkooli seadus*, 1998) regulates the foundation and operation of professional higher education institutions (tertiary education); provision of applied higher education, including that in VET institutions.

The Adult Education Act (*Täiskasvanute koolituse seadus*, 1993) regulates education and training provisions for adults. The preparation work for amendments started in 2010.

Conditions and Procedure for Organising Professional Training for Working Adults in VET Institutions (*Täiskasvanute tööalase koolituse kutseõppeasutuses korraldamise tingimused ja kord*, 2007) regulates the provision of IVET, CVET and retraining in VET institutions.

The Professions Act (*Kutseseadus*, 2000) regulates the work of the vocational councils and the qualifications system. The act is the basis for developing vocational qualification requirements and the conditions and procedure for attestation and awarding professions as well as the organisation of work of professional councils. The new Professions Act – intended to make the qualifications system more compatible with EQF – was adopted by the parliament in May 2008.

The Foreign Professional Qualifications Act (*Välisriigis omandatud kutsequalifikatsiooni tunnustamise seadus*, 2000) applies to regulated professions and takes European Union directives into account.

Institutional Framework

The VET and Adult Learning Department of the Ministry of Education and Research coordinates the preparation and implementation of education policies through local governments and other relevant Ministries. The role of the Ministry of Education and Research is to establish, reorganise and close public educational institutions (except universities and applied higher education institutions); to direct and organise the preparation of curricula, study programmes, textbooks and teaching/study aids (except for universities); and to administer public assets allocated to the education system. The implementing arm of the Ministry is Foundation INNOVE, whose main objective is to implement the national education and language policy in the field of primary, basic and secondary education as well as in vocational and adult education.

The Estonian Qualifications Authority was established in 2001 in order to continue developing the professional qualifications system launched by the Estonian Chamber of Commerce and Industry in 1997. Their aim is to facilitate the establishment and development of an integrated and organised professional qualifications system, and to establish prerequisites for achieving the comparability of qualifications of Estonian employees as well as the acknowledgement of the qualifications of other countries.

At the local level, county and local governments have an administrative role to play in VET. County governments and their education departments prepare and implement education development plans for their administrative county. They provide supervision of pre-primary institutions and organise vocational guidance and counselling of children and young people. Local governments plan and implement educational programmes on the local level, and coordinate and organise the activities of municipal educational institutions.

Vocational education and training

Initial Vocational Education Training (IVET) exists at three different levels within the Estonian education system:

- basic education, basic school, the duration of studies is 9 years;
- upper secondary education, (*gümnaasium* or vocational institutions) the duration of studies is 3 years, or 1–2 years VET training without general education;
- Professional higher education (universities for Bachelor's or Master's degrees) duration of studies 1–2 years, 3–4 or 5–6 years depending on the particular area of studies.

Table 4. Types of the Estonian VET

Type of training	Description	Duration	Diploma/ certificate
vocational education pre-training	basic introduction of vocational education in basic and secondary school curricula		
vocational education	in basic and secondary schools, courses do not require a curriculum. Their focus is on career guidance and they are offered as elective courses not funded separately by the state, but solely from the general school budget.	15–40 study weeks	ISCED 2A and 3A The graduates receive a basic school diploma and a certificate of the VET school, which certifies the course taken.
vocational education for persons without basic education	for over 17-year-olds who are no longer subject to compulsory school attendance, allows drop-outs to re-continue their education, school-based practical work and practical training in enterprises constitute at least 50%	20–100 study weeks	ISCED 2C Persons can continue their general education studies with the aim of obtaining a basic education.

Finnish and Estonian educational systems

vocational education after basic education	only the general education subjects related to the profession are taught in addition to the profession, 25% of VET is dedicated to school-based practical work and 25% is taken up by practical training in enterprises.	40-100 study weeks by curriculum	ISCED 3B In order to graduate, students are required to sit a vocational final examination or a professional examination. A graduation certificate together with a results report in proof of concluding secondary vocational education
secondary vocational education	subject to study in the acquisition of basic education. Vocational education is 50% of curricula	at least 120 study weeks, including 40 study weeks of general education subjects	state examinations
vocational education after secondary education	VET without upper secondary general education suits students who have difficulties with acquiring general upper-secondary education. Subject to study in the acquisition of secondary education.	20-100 study weeks	(ISCED 3C) In order to graduate, students are required to sit a vocational final examination or a professional examination.

In the 2011/2012 academic year, there were 42 vocational educational institutions in Estonia, 30 of which were state vocational schools, three were municipal and nine were private schools.

The number of students in VET has decreased in recent years. In the 2008/2009 academic years, the total number of vocational education students came to 27,239, and in 2011/2012 the number is 27,046.

Alternance training

The Development Plan for Estonian Adult Education is valid for 2009–2013. The development plan aims to create possibilities for lifelong learning for the adult population and help raise the competitiveness of the Estonian society and enterprises. Courses for adult population are provided by all vocational schools.

In March 2007, the Ministry of Education and Research issued a regulation concerning the procedure of workplace based training (apprenticeship training). Apprentices can study at all levels and in all programmes in the Estonian VET system. The only exception is 3C, where the apprentices can enter directly; while other students have to enter the 3B programme first and show that they have difficulties with the general education part of the curriculum. There is no age limit in the apprenticeship programme. Based on the school curriculum, the school works out an individualised curriculum for the apprentice.

The general characteristics of an apprenticeship programme are:

- The study duration of at least 40 weeks (dependent on the curriculum) for students with lower secondary education and at least 20 study weeks for students with upper secondary education;
- 1/3 of the curriculum is delivered through theoretical instruction and 2/3 through practical training in an enterprise;
- Apprentices sign a study and employment contract and have a four-month probation period;
- Apprentices receive a wage during workplace training and study allowance during theoretical studies in school;
- Study groups are small (up to eight apprentices);
- The structure of study is based on an agreement between the school and the enterprise;
- Studies are complete after passing a professional or final examination.

The school has to evaluate the workplace before sending an apprentice there to make sure the workplace is ready to meet the objectives of the

curriculum and ensure the safety and health of the apprentice. The result of the assessment is an expert opinion, which will be appended to the tripartite contracts between the school, the apprentice and the workplace.

Estonian qualification framework and referencing to European Qualification Framework

Estonia is developing their NQFs. In Estonia the Estonian Qualifications Authority (Kutsekoda) has been officially named the National Coordination Point, NCP. According to the Professions Act, the Estonian qualifications framework (EKR) has eight levels. Descriptions of the qualifications levels in EKR are identical to the EQF level descriptions. The aim of establishing EKR is to develop a framework encompassing all qualifications in formal education (general, vocational, higher and adult education) as well as vocational and professional qualifications. At the moment no educational or professional qualifications have been included in EKR. Four types of qualifications in higher education and three types of qualifications in VET have been assigned an EKR level. Assignment of the EKR levels to professional qualifications framework levels has not yet been formalised.

The Estonian professional qualification system consists of:

16 professional councils;

86 awarding bodies;

690 professional standards in 340 occupational areas.

3.3. Comparison of the Finnish and Estonian educational systems

The difference between Estonia and Finland lies at the tertiary level. In Estonia, only 78.8% of the funds for the tertiary education come from public sources. In Finland, this figure is 95.4%.

The problem has been the concept of the vocational skills demonstration and its Estonian meaning. In Finland adults have competence tests and young people have vocational skills demonstrations. In Estonia there is only "*kompetentsipõhine kutseksam*", which means the Finnish competence test. The concepts should be expressed more clearly to ensure mutual understanding.

Features of the educational system:

- Both countries have nine-year basic education and the same school ages; from 7 to 17 years;
- Nearly all of the students graduate from the basic education even though there are more dropouts in Estonia;
- In Estonia 90% of students continue studying at the secondary level and in Finland the percentage is 95%;
- Finnish students choose vocational education (68% of students) more often than upper secondary level education (32% of students). In Estonia more students choose upper secondary level education (72.5%) and 27.5% choose vocational education;
- In both countries it is possible to study both degrees – the vocational qualification and the state examination. In Estonia students can choose more general education studies for 35 study weeks after the vocational qualification. The extra study weeks prepare the student for national tests, which are similar to the matriculation examination;
- In Estonia vocational studies can be part of the basic education, but these do not confer any qualifications. In Finland it is possible to pursue additional education and voluntary basic education to increase one's readiness to study at the upper secondary level.

Vocational education systems:

- School-based education in both countries;
- Upper secondary vocational education is similar three-year education with both general and vocational subjects, on-the-job learning and practical training;
- Finnish upper secondary vocational education system is unified, while in Estonia different methods are employed, for instance:
 - ◆ Vocational education which does not include general studies;
 - ◆ Vocational additional education for those who have not graduated from basic education;
 - ◆ Upper secondary level based vocational education.
- Apprenticeship based education has a long history in Finland. In Estonia apprenticeship training was included in vocational training in 2006. Most of the apprenticeship training is for adults in both countries;
- Three-year vocational training confers eligibility for entering college studies in Finland. In Estonia students take upper secondary education level test, which is based on matriculation examination. However, in Estonia universities and technical colleges can establish their own requirements for the needed examinations;
- It is possible to study vocational studies as competence-based qualification as well as normal classroom education;
- There are eight levels in Estonian competence-based qualifications. The three upper
- levels are higher education (university or polytechnics). In Finland there are three
- different kinds of competence-based qualifications: basic education qualification, vocational qualification and specialist vocational qualification. The Finnish education authority hasn't specified competence-based education by levels;
- There is a separate competence-based qualification system in Estonia, but since 2004 changes have been made in level I qualifications. The qualifications have been integrated so that students can take the final exam as well as the vocational qualification test.

Higher education

- Both countries have the so-called Bologna process system in higher-level education;
- Dual system is used in both countries; universities and polytechnics.

Administration and regulations

- The regulatory system is similar in both countries. Ministry of Education has the essential guiding role in vocational education;
- The Finnish National Board of Education is in charge of the competence-based qualification and national curricula in cooperation with employees and education committees. In Estonia there are two organisations: the Foundation Innove (former National Examinations and Qualifications Centre (*Riiklik Eksami- ja Kvalifikatsioonikeskus* or REKK) and the Estonian Qualifications Authority (*Sihtasutus Kutsekoda*). Innove is in charge of the national curriculum and the Estonian Qualifications Authority defines the vocational qualifications and competence-based qualifications for adults;
- In Finland joint municipal authorities, municipal governments or private corporations or organisations and sometimes also the government organise education. In Estonia the government owns vocational colleges, but there are also private colleges available;
- In Finland the same organisations arrange both youth and adult education. In Estonia adult education is very rare, but it has been increased and developed during the years;
- Vocational education is mostly school-based in both countries. On-the-job learning and cooperation with employees have increased and are the main focus in regard to development of education.

Educational systems and qualification structure

- Differences in the classification of vocational fields: in Finland the Ministry of Education and Culture defines the national curriculum and qualification requirements whereas in Estonia the Ministry of Education classifies only five of the qualifications. The situation in

Estonia is in progress and will be finalised in couple of years; Kutsekoda is in charge of the qualification standards for vocational education. Estonian organisations can form the national qualifications by themselves under the guidance of the Estonian Qualifications Authority or the Foundation Innove.

- The structure is quite similar with regard to both countries having additional studies, flexible methods of studying, on-the-job learning periods and classroom-based studies. Estonian qualifications include one year of basic studies of around 40 credit units, whereas in Finland the basic study load is only 20 credit units.

Qualifications and competence

- In Finland students get their qualification certificate after they have finished all the studies and taken the vocational competence test, which is not the same as the Estonian final exam – those who complete the latter receive a vocational upper secondary certificate. In Finland the vocational competence tests are part of the education and evaluation and the certificate is valid as proof of qualification and competence. In Estonia students graduate after they have passed the final exams and completed all their studies. Students can also participate in national competence tests, which are arranged by the Estonian Qualifications Authority. Students get two certificates; the vocational upper secondary certificate and vocational competence certificate. After 2004 there has been a possibility to combine the mentioned two; vocational qualification can replace the vocational upper secondary certificate;
- In Finnish adult training the competence is shown at competence-based qualifications, which are monitored and organised by qualification committee;
- In Finland the assessment scale is from 1 to 5; in Estonia, 1 and 2 mean failure. In competence-based qualifications the assessment is pass-fail in both countries.

Vocational qualification levels and contexts

- 3-year upper secondary vocational qualifications in both countries are on ISCED level 3;
- Estonian vocational upper secondary education that is based on upper secondary level education is the equivalent of ISCED level 4 B and the vocational education for those who have not completed basic education, ISCED level 2. Finnish education system does not have these kinds of education;
- Finnish competence-based qualifications are on ISCED-level 3 and specialist vocational qualifications are on ISCED level 4 C. Estonian competence-based qualifications are not in the ISCED system;
- Finnish government issued a framework for the development of education in 2007, which means that all vocational education should be competence-based and compliant with the new NQF by the end of 2012. In Estonia the system complies directly with EQF.

4. HETA-ECVET fields

4.1. General description of project work

The HETA-ECVET project work began in autumn 2007 in seven fields: vehicle technology, construction, catering, cleaning services, social and healthcare, hotel and tourism and business. Working groups were created. There were Finnish and Estonian experts (teachers and/or work life representatives) in each working group. Working groups were of different sizes: from very small (one Finnish and one Estonian college, 2 + 2 members) to large (three Finnish and three Estonian colleges, 11 members).

The working groups had general pre-defined questions for the first analysis and getting to know their field. Working groups had enough freedom in planning own work. Each working group visited partner colleges and work placement companies in their field. After three years of work, each working group had the same questions for writing the final analysis of the whole project work. The questions concerned the following:

- all the qualifications in the field;
- the qualifications they were compared to and results of comparing;
- the chosen part for the new UNIT and reasons for the choosing;
- a description of cooperation in the international working group and networking with labour market participants;
- testing and feedback;
- results, analyses and modifications to the UNIT/assessment form.

Each working group answered in their own way and the Guidebook describes the real work skills and analyses of different working groups.

At their meeting, the working groups developed a common unit and assessment for each field. They had a general timetable and method and two training events were organised about using of the ECVET tools and KSC describing methods. Working groups had a free hand in creating the new international UNIT: each could define the content, the

capacity (ECVET points) and the principle of building the new UNIT: by similarities or enrichment of two different elements. Mostly the working groups preferred content, for which there were similar ways of testing in both countries. The working groups started by comparing the qualifications in their field, curricula and vocational competences. After comparing, similarities were identified and used for determining common unit. The common unit was based on similarities in both countries' curricula in the relevant fields and the working groups had freedom to choose how many credits the unit was going to be awarded. After that the unit was assigned ECVET points, e.g. the sales unit was 12 ECVET points and construction 6 ECVET points (the specific module was masonry). The working group created the unit so that it was easy to test in both countries and the demands were decided together.

Working groups used the Moodle environment for documents and to save on the amount of work. Moodle has its own categories for each field and each step on the way. Most of the time the working groups worked at face-to-face meetings and in Skype meetings, but also separately in their own organisations. The coordinators and the Steering Committee guided the work.

The mobility and testing periods were funded with Leonardo da Vinci grants. Both experts and students had their mobility periods in Finland and Estonia. Experts observed the work and gathered results and feedback for one week and students worked abroad for four weeks. The testing periods were verified with official documents such as Learning and Training Agreements and Europasses, and the cooperation was agreed in a Memorandum of Understanding (see Annexes I to III).

4.2 Business

The business working group consisted of two schools in Finland and Estonia. The working group compared the Finnish vocational qualification in business and commerce and the Estonian national curriculum

for shop assistants. Estonian qualification is narrower (Sales) than the Finnish one (Business and commerce). The working group described the learning outcomes of the joint study unit “Sales”. The Estonian curriculum was ‘shop assistant’ and the Finnish one was the service and sales module under business and administration.

The HETA-ECVET study unit is a combination of knowledge, skills and competence and it constitutes a part of the qualification.

Table 5. Business qualifications

Finnish curricula	Estonian curricula
Vocational qualification in business and commerce: 120 credits, min 20 weeks on-the-job-learning included • On-the-job learning is focused, supervised and assessed study; • Each education provider is responsible for arranging on-the-job learning places together with individual students	A national curriculum has been drawn for the following disciplines: – shop assistant (basic education or secondary education); – sales arrangement (secondary education); – sales representative (secondary education); – sales consultant (based on secondary education, vocational training completion is required); According to ISCED 97 shop assistant belongs under the social sciences, business and law curriculum for the wholesale and retail group; According to the Estonian professional qualification system, shop assistant belongs to the commerce area, where national curricula have been established for such disciplines as sales arrangement, salesman and sales consultant. Professional standards have been established for the following fields: shop assistant I, II, III, sales consultant, III, sales assistant III, sales manager IV. New professional standards are being prepared.

Finnish curricula	Estonian curricula
Customer service (20 credits); professional skills criteria Student or person taking the exam handles a service situation, when he or she: • Prepares for service situation; • Takes care of the working environment; • Services an external and an internal customer; • Makes use of his/her language skills in customer service; • Takes care of the actions needed after the service situation; • Takes care of office tasks connected to customer service; • Is involved in calculating margins and profitability. Student assessment and evaluation • Evaluation area (focus): 1. Mastering of work process; 2. Mastering of work methods, tools and materials; 3. Mastering of knowledge forming basis of the work (theoretical knowledge); 4. Lifelong learning key skills. Assessment scale 1 – 3 (1 = Satisfactory, 2 = Good and 3 = Excellent) • 8 weeks (differs at different schools), first year; Shop, bank office, insurance company office, infopoint, warehouse etc; • During the on-the-job learning period the student gives a professional skills demonstration in customer service in real life situation	<u>Management of the exam of shop assistant I</u> The purpose of shop assistant I is to find out the applicant's skills, knowledge and attitudes in professional qualifications according to the shop assistant I, II, III and the sales consultant III levels. The shop assistant I professional examination consists of two parts: a test of knowledge (theory) and a test of skills, in which the applicant is engaged in practical challenges in the role of a shop assistant. <u>I Knowledge test</u> The applicants must pass the theory test, which gives the right to participate in the skills test. The theory test: 30 multiple-choice questions, each question has three options, of which one is correct. The test questions relate to the following areas: trade legislation in the area, food and grocery product knowledge, sales management (preparation of goods for sale, the goods display policy, the accounting of goods). <u>II Skills test</u> In the sales process the applicant is in the professional role of a shop assistant and, depending on the examination place, the buyer is usually a specially trained commercial employee, a vocational school student of the same field or a vocational teacher. The sales process consists of three parts: 1. Customer service (intermediate); 2. Knowledge of commodities for food and basic commodities in accordance with the instructions in this chapter (elementary);

Finnish curricula	Estonian curricula
	3. Settlement in cash (elementary) or manually writing out a receipt. <u>III Clothes and tools</u> The applicant must come to the exam in personal working clothes. All the required tools are available at the exam. Commodity groups list: the skills exam involves 5 to 10 goods groups, each of which contains up to 10 common types of goods articles sold by major retail traders. The applicant will have time to acquaint him/herself with the goods up to 5 minutes before the exam. <u>Grading in shop assistant I exams</u> 1. In the framework of the examination, the knowledge and skills results and theory test results are assessed separately. 2. The theory test provides the maximum of 30 points. 3. The skills test provides the maximum of 80 points. 4. To get to the skills exam, passing the theory test with results of at least 65% (19 points) is necessary. 5 The skills test is passed if the results are at least 65% (52 points). <u>Management of the exam of Shop Assistant II</u> Exam content: the shop assistant II professional examination consists of three parts: a theoretical knowledge test, resolving two problem-situations and a skills test, in which the applicant is engaged in practical challenges in the role of a shop assistant.

Finnish curricula	Estonian curricula
	<u>I Knowledge test</u> The theory test consists of 30 multiple choice questions, each question has three options, of which one is correct. The theory test questions concern the following areas: 1. Trade legislation in the area (beginner); 2. Knowledge of commodities (intermediate); - Food selection, quality, chemical composition, nutritional value, flavour characteristics, uses, and the conservation of the food, the labelling of goods, etc. - Industrial range of goods, composition, quality, warranty, terms of use and possibilities for conservation of goods, the labelling of goods, etc. 3. Sales organisation (intermediate). In addition, two problem-situations must be solved. The knowledge test provides the maximum of 40 points. The knowledge test is passed, if the results are at least 75% or 30 points; the theory test provides 22.5 points. Passing the knowledge test allows the applicant to participate in the professional skills test. <u>II Skills test</u> In the sales process the applicant is in the professional role of a shop assistant and, depending on the examination place, the buyer is usually a specially trained commercial employee, a vocational school student of the same field or a vocational teacher. The sales process consists of three parts: 1. Customer service (advanced); 2. Knowledge of commodities for food and industrial goods (intermediate);

Finnish curricula	Estonian curricula
	3. Billing (intermediate) or issuing a handwritten receipt. The skills test is passed if the results are at least 60 points or 75%. Shop assistant II qualification is awarded if the applicant achieves at least 75% in both the knowledge test and the skills test. • Qualification examination is not compulsory or linked to finishing the school. However, according to the curriculum the final school exam may be replaced by the professional examination in order to finish the school. Choosing and performing the exam is also important in order to enhance the commercial sector. Competences included: - Workplace organisation; - Job preparation; - Maintenance work; - Safety and security; - Compliance with hygiene requirements; - Use of commercial equipment.

Learning outcomes are based on the key skills in the profession of a sales person. There is not yet a credit transfer system for vocational education in either country. The working group decided to implement a guideline that upon crediting studies the full academic year is about 40 weeks, which means 60 credits. In addition, four weeks of practice provide six credits. The working group decided that the joint unit “Sales” provides 12 credits. Six credits are given for knowing the theory from school. Another six credits are given for practice. Participating partners can accept the study unit and it can be transferred from one country to another.

Each student’s learning is constantly assessed during the education and studies. The objective of the learning assessment is that the student

knows what he or she still needs to learn. Learning assessment is a tool for teachers to support the student in meeting vocational skills requirements and targets. Numerical grading is not necessary. At the workplace, the student learns in accordance with the qualification criteria and gets more practice in skills already learnt. Skills are assessed primarily at the vocational skills demonstration in real work situations at the workplace, so that the assessment with a demonstration is more important than other assessment. At the skills demonstration, the student demonstrates his/her competence by working with real work assignments.

The tasks of the students were listed in the assessment form. Student assessment was done during the last week of practice/work placement. The working group decided that each receiving partner/workplace instructor will assess the student's practice and the sending partner will accept the assessment.

Practice assessment is done as follows:

- Workplace instructor evaluates the student (assessment form);
- Student evaluates him/herself (assessment form);
- Teacher from the hosting institution leads the evaluation discussion;
- Teacher from the sending institution can join and monitor the final assessment session, if possible;
- Student presents his/her daily diary at the assessment session.

The practice/work placement is validated if the goals have been achieved.

The testing and piloting of the HETA-ECVET WG business unit "Sales" were done with Leonardo da Vinci Mobility grants. Altogether, 12 students (10 from Finland and two from Estonia) were involved in testing and piloting. Before work placement, the sending institution prepared the students in regards to language and cultural differences. The EUROPASS CVs of the students were sent to the receiving school at the latest a month before the exchange. Each student was given a workplace instructor to guide and assess him/her at the workplace.

Students kept a daily diary during the work placement period. The workplace instructor performed everyday monitoring at the workplace. A teacher from the sending institution kept contact with the students during the placement period by e-mail. Students had to inform the tutor from the hosting institution and the teacher from the sending institution about illness or other problems during the practice. After the assessment session, students filled out a feedback questionnaire, and afterwards the exchange students also had a face-to-face discussion about the placement period with the tutor/teacher from the sending institution.

Placement institutions were: K-Citymarket Lohja, Mustamäe Prisma Tallinn, Prisma Peremarket Tartu, Rimi and the Kaubamaja department store.

Feedback from the HETA-ECVET “Sales” unit pilot was gathered from all the project parties: students, workplace instructors and teachers. The feedback was gathered by means of questionnaires, interviews and discussions. The working group did not get feedback forms from students who carried out their practice in Tartu. Their workplace instructors also did not fill in the feedback forms. The main pilot/testing feedback as follows:

Feedback from piloting students:

- The main challenge raised in student feedback was common language: it would be important for the workplace instructor to be able to communicate fluently with the student (either in the native language or English);
- Another challenge was the duration of the placement period: four (4) weeks is a short period for learning the features of a product or service and to be able to sell it to local customers. The main tasks during the work placement were mainly to prepare goods for sale and put them on display. During four weeks, it is easier to adopt and learn customer service-oriented tasks than sales tasks;
- The students would appreciate more active relations with local teachers and students in order to learn, share ideas and experiences and build a life-long international network;

- The study unit was well described and assessment criteria were clear.

Feedback from workplace instructors in Tallinn Prisma and Lohja City-market:

- According to the workplace instructors, the joint unit HETA-ECVET principles function well in daily business operations;
- The assessment form and criteria were found to be straightforward, yet some of the evaluation criteria were considered as slightly demanding;
- The work placement duration of four (4) weeks was considered sufficient yet there is much learning to be accomplished in such a short period of time;
- Workplace instructors identified language-related challenges; some tasks would benefit from at least elementary local language skills;
- The workplace instructors in Finland gave special thanks to the Estonian students who were perceived as being very friendly and having good language skills;
- Workplace instructors concluded that the most important thing is that the student/trainee is active, positive, motivated and has self-initiative; everything else can be learnt on the job.

In conclusion, all the parties were satisfied with the testing period. The new “Sales” study unit and principles have met the requirements of students, workplace instructors and teachers. With minor adjustments, the study unit will be very good and applicable.

4.3 Catering

The catering working group consisted of teachers of three Estonian and three Finnish colleges.

The comparison between Estonian and Finnish cook/catering curricula was carried out. An analysis of the curricula comparing results and the vocational skills qualification assessment guide was developed as teamwork.

Table 6

Finland		Estonia		
Qualifications	Professions and work placements	Expected knowledge, skills and competences in working life	Qualifications	Professions and work placements
Catering kitchen chef 1 year 8 weeks home area of student vocational assessment	It will be determined at the school when it is the responsibility of the student, school/ teacher and work place Content of the agreement, meanings of all the document, visiting the workplace with the teacher	Very simple helping tasks: dishwashing, helping at the buffet and so on to see how the kitchen is functioning, writing a dairy	Sous-Chef	All jobs related to food preparation
				Expected knowledge, skills and competences in working life
				Performing various preparatory works and auxiliary procedures: Preparing and serving dishes based on simpler technology; Skills of using the technical tools needed in work; Self-control skills, Reliability, sense of duty, ability to take responsibility, cleanliness, ability to withstand stress.

Finland	Estonia	
2 year 8 weeks home area of student vocational assessment	Completing and follow- ing the same documents and under- standing the contents, visiting the workplace alone	Completing and following the same doc- uments and understanding the contents, visiting the workplace alone
	Completing and follow- ing the same documents and under- standing the contents, visiting the workplace alone	Completing and following the same doc- uments and understanding the contents, visiting the workplace alone
	Catering chef	
	Catering under- takings operating at educational in- stitutions, hospitals and other medical institutions, enter- prises providing welfare services, hotels and other accommodation facilities, spas, ships etc.	Knowledge about the work of a catering kitchen chef, ability to prepare catering kitchen menus and technological cards, work organisa- tion skills, preparing and serving the main catering kitchen dishes. Self- control skills. Teamwork skills. Ability to apply customer service principles. Open, positive, reliable, able to take responsibility, problem solving skills, correctness. Theoretical knowledge and practi- cal skills related to the preparation of food in a restaurant kitchen. Ability to prepare menus. Work planning skills. Product develop- ment skills. Ability to work eco- nomically and sustainably. Ability to apply customer service principles. Self-control skills. Correctness, teamwork skills, prob- lem solving skills, food preparation experience. Work requires communication abil- ity and skills, integrity, accuracy, a sense of responsibility.
	Independently operating under- takings producing semi-finished, cu- linary and bakery products, enter- prises providing ready-made meals and party services. Besides the posi- tion of catering kitchen chef position, may also work at restau- rants, cafés, hotels, bistros	

Finland	Estonia	
3 year 8 weeks home are of student vocational assessment	Taking part in daily food preparation and food preparation for special occasions, responsible for some tasks, writing a dairy	Chef I, vocational training and basic education Chef II, vocational training, basic education and 2 years of consecutive employment as a chef Chef III vocational and managerial further training, secondary education and 8 years of employment as a chef, of which the last 2 years consecutively, including experience in instructing an employee and/or student
		A well-developed aesthetic sense as well as a good sense of colour, taste and smell is important. Requires good physical health and endurance and the ability to withstand tension and stress. Universal chef and service employee. Must be proficient in all the skills of an ordinary chef, plus customer service skills with work tasks varying according to need. Work requires communication ability and skills, integrity, accuracy, a sense of responsibility. Requires good physical health and endurance and the ability to withstand tension and stress.

Finland	Estonia	
	Catering service employee	At various positions in undertakings providing various catering and accommodation services
	Catering service organisation, applied higher education curriculum	At various positions in undertakings providing various catering and accommodation services, but mostly as a mid-level manager or catering entrepreneur.

The working group decided that the Finnish curriculum *Ä LA CARTE-RUOANVALMISTUS* (four study weeks, the total of 120 study credits) and the Estonian curriculum *TOIDUVALMISTAMINE RESTORANIKÕÖGIS* (four study weeks, the total of 120 study credits) have the most similarities. Both modules have practical and similar outcomes to assess. Due to this these two modules were chosen for continuing the work.

- ◆ A table was created showing the learning outcomes using the knowledge, skills and competences;
- ◆ The module from the Finnish curricula was used as the basis and then the common parts with the Estonian curriculum were determined. The assessed learning outcomes were converted to ECVET points;
- ◆ The speciality based (professional skills) outcomes were rated with “higher” ECVET points;
- ◆ Managing the working process – 2;
- ◆ Working methods and tools administration – 2;
- ◆ Information administration that is necessary for work – 1;
- ◆ Key skills in life-long training – 1.

The working group suggested that the unit should have a total capacity of 6 ECVET points. The time spent for studies is not so relevant. The practical outcomes, skills and competences acquired are important.

The Finnish curriculum was used as the basis for developing the assessment form and assessment criteria. A unified form was created that includes the instructor’s assessment and the student’s self- assessment. Each criterion was discussed and it was decided which ones will be kept for further work. An effort was made to define all the terms so that all the parties understand them in the same way. In the first phase of the work the Estonian and Finnish languages were used equally (all the terms and descriptions). The tables include a space for comments in order to allow further analysis (for the instructor as well for the student). The assessment guide is included in the assessment form and clarifies the point division system.

The aim of the Estonian part of the project was providing a first-level vocational student with a four-week study practice in Finland, in the course of which the HETA-ECVET module developed in cooperation between experts from the two countries was tested. It was based on the commonly targeted practice aims, attention was focussed on preparation for the work placement abroad and placement guidance, and the developed assessment principles and documentation procedures were tested. From Estonia, nine students were sent. From Finland to Estonia, 5 student mobility periods were carried out.

Placement institutions were: Laulasmaa SPA, Radisson Blu Olümpia, Swisshotel Mustio manor house / restaurant, Siuntio SPA, Stockmann restaurant, Radisson SAS Pääkonttori, Casa Largo.

To analyse the testing results and to get general feedback about the students' vocational skills and attitude, several meetings were held (with students and with tutors and managers of the placement companies). Conclusions were that the compiled practice guide is suitable for use. The guide is clear and unambiguous. The employer praised the specificity and the clearness of the guide, as in the process of work there is not much time to get acquainted with long guides; assessment also does not take a lot of time. It is positive that the student can assess him/herself and compare this assessment with the assessment received from the manager. The vocational teacher, placement instructor and the student carried out the final assessment together, and the analysis and discussion took place with the help of the assessment guide. The assessment guide was equally easy to understand and clear to the students. Both the placement instructors and the students recommended the use of the assessment guide compiled in this way. The compiled guide can be used as a basis for assessment of other similar work placements.

The time limit set for the work placement periods was respected and the practice was carried out on time. The positive side was that the documentation was in Estonian and Finnish, so there were no problems with understanding. The assessment form should have been filled in by

all the parties together (teacher, student, workplace instructor) to also allow for further discussions about development. Otherwise it can be difficult for the student to monitor growth and development during the process. Oral feedback was given but the space for comments on the assessment sheet was not used.

The working group listed some tasks for the future: planning of the mobility period should start sufficiently early (min 2 months), with the students' CVs sent first; both the teachers and the work placement instructors need more information about the EUROPASS documentation.

The materials prepared and tested during the HETA-ECVET project – the UNIT, the assessment form and the assessment guide are suitable for use.

4.4. Social and Healthcare

The social and healthcare working group consisted of two colleges, one from Finland and one from Estonia, and they had support and comments of a Finnish private home for the elderly.

At beginning of the process the first task was to find similarities and differences in curricula and job descriptions. One theme or sub-module from social care (elderly work) was chosen. To get more information for job descriptions, the working group interviewed both Finnish and Estonian social workers. The prepared questions for specialists and teachers concerning personal qualities, the needed skills, knowledge and attitudes of social care workers provided the needed information, e.g. differences between expectations and working methods. For instance: in Finnish institutions the pace of working with customers was not as important as in Estonian institutions, and in Finland all the workers were more involved in the planning of personal care activities.

FINNISH	ESTONIAN
1. Social and healthcare field • Qualifications: practical nurse • Client groups: children, children with disabilities, young people, families, adults, elderly – all the people who need social or/and healthcare services. Depends on the specialisation part of the curriculum. Possibility to work in hospitals. • The needed educational level prior to study: basic, straight after basic school 3 years, with working experience 2 years (90 weeks).	1. Social work and guidance field • Qualifications: care worker (for the elderly, for adults with mental disabilities, for children); • Client groups: the elderly, adults with physical disabilities, children's welfare; • Prerequisite educational level prior to study: secondary, 2 years (80 weeks) or 1 year (40 weeks).
2. Competency Large, 7 different study programs	Currently very general, no specialisation in various target groups. There is no information about what exactly the new professional standard will contain.
3. Curriculum completion Finnish National Board of Education with VET teachers and representatives of working life	The professional competence of a care worker is certified on the basis of documents (training + professional work) via the Tallinn Social Work Centre (the organisation awarding qualifications). May generally work with all the target groups, but in some areas special requirements have been established (clients with special needs) Further studies at vocational high-schools, universities
4. Practice/work placement Minimum 20 study weeks.	Practical work placement 20 weeks during the entire period of studies. Organised differently at different schools. The practice is divided into 4 five-week cycles and takes place in parallel with school studies. At the end of the placement period, the student defends the placement. The placement student fulfils the tasks given by both the enterprise and the school (tasks include observations and practical activities as well as continually taking notes for later analysis).

5. Qualification standards Presented as separate files	Presented as separate files
6. Certificate: after 3 years of study secondary education + vocational, after 2 years of study secondary education (possibility to go to polytechnics) + vocational education	8. Certificate: vocational education based on secondary education Final school certificate from a vocational education institution Qualification certificate from an organisation awarding qualifications (Estonian Qualifications Authority)

At first, curriculum descriptions were prepared in three different tables to see the differences and similarities between Estonian and Finnish eldercare. The tables showed the similarities, which were combined into one new eldercare unit that described the learning outcomes as knowledge, skills and competences. Originally the Finnish curriculum was more step-by-step competence based, as the Estonian one was lifespan and subject based. The theory behind the module is based on 12 activities of living (*elamistoimingud/elämiseen toiminnot*) and the final eldercare unit consists of the following sub-modules: communication, professional ethics, working in a multicultural environment, gerontology and ageing history, elderly health and welfare services, activating, and safe working environment. After that the working group calculated the ECVET points and decided how many of these should be awarded for practice. The established six points meant that three sub-modules were tested: Working in a multicultural environment, Activating, Gerontology and ageing history.

Table 7. Social and health care, degree components

Estonian	õn	Finnish	ov
Suhtlemine ja klienditeeninduse alused	1	Kasvun tukeminen ja ohjaus	15
Kutse-eesitika	1	Hoito ja huolenpito	20
Erialased võõrkeeled	2	Kuntoutumisen tukeminen	15
Majanduse alused	1	Valinnaiset tutkinnot	10
Arvutiõpetus ja asjaajamise alused	2	Muut valinnaiset tutkinnon osat	0–10
Töökeskond	2	Yrittäjyys	10
Arengupsühholoogia	2	Työpaikkaohjaajaksi valmentautuminen	2
Sotsiaalpoliitika ja inimõigused	1	Amm.taitoa syventävät ja laajentavat tutk.osat,	5–10
Rahvatervise, terviseedenduse ja sotsiaalintervishoiu alused	1	Ammattitaitoa täydentävät tutkinnon osat	0–10
Suhtlemispsühholoogia ja pedagoogika alused	3	Lukio-opinnot	0–10
Hoolduse alused, tervishoiu- ja sotsiaalhoolekande teenused	5	Amm.taitoa täydentävät (yhteiset opinnot)	20
Anatoomia, füsioloogia ja patoloogia	2	Vanhustyön koulutusohjelma:	30
Inimese elukulg	2	vanhustyön eettisten periaatteet,	
Laste hoolekanne	2	vanhusten asema ja oikeuksia	
Gerontoloogia ja eaka hooldus	3	Vanhuskäsitys ja elämänhistoria	
Erivajadustega inimeste hooldus	2	Fyysisiä ja psykososiaalisia vanhenemismuutoksia	
Hooldus erinevate haiguste korral	10	Vanhusten hoito ja palvelu	
Hooldusabivahendid	1	Ammatillinen vuorovaikutus	
Ergonoomika	1	Suunnitelmallinen työskentely ja kuntouttavaa työtä	
Toitumisõpetuse alused	1	Toimintakyvyn tukeminen	
Ravimiõpetuse alused	1	Arjen mielekkyyden edistäminen	
Aktiviseerivad tegevused	2	Terveiden edistäminen	
Kodumajandus ja korrastustööd	2	Lääkehoidon toteuttaminen	
Surija hooldus	1	Sosiaalisissa ongelmissa tukeminen	
Praktika	20	Kuoleman kohtaaminen	
Aktiviseerivad tegevused	2	Kielitaito asiakaspalvelussa	
Massaaži alused	1	Oman osaamisensa tuoteistaminen	
Tööõigus	1	Palautteen vastaanottaminen	
Meeskonnatöö alused	1	Yhteistyö muiden toimijoiden ja verkostojen kanssa	
Eakate toitlustamine	1	Työhyvinvoinnin ja työturvallisuuden edistäminen	
Erialane võõrkeel	1	Työnhakuasiakirjat	
		Yrittäjyys	
	81		120

Placement institutions were: Kogula Eakatekodu, SA Kuressaare Hoolekannepäevakeskus, SA Kuressaare Haigla Hooldekodu, in Finland Palvelukoti Sofia, Hoitokoti Iltatähti, Villa Tapiola, Palvelutalo Suopursu, Diakooniasäätiön Palvelukeskus Foibe.

The assessment form was written in Finnish and Estonian and the theory behind the assessment was based on the theory of activities of living by Roper, Logan and Tierney (2000). For assessment, students had to fill in a day-by-day diary and fulfil care and activating tasks that could be performed individually or in pairs. The final assessment at the end of the placement period was a group interview based on the 360 model by R. Lepsinger. Students and the tutor/placement instructor filled in feedback questionnaires about the unit; they assessed not only the students' practice and preparation, but also the unit and the suitability of the tasks.

Feedback from students and placement instructors and the teachers of the hosting and sending institutions showed that the unit worked well and gave an opportunity to be flexible and student-centred. The number of tasks during the practice period depends on the student's abilities and the aim of the practice.

4.5. Vehicle technology

The vehicle technology working group consisted of four experts from one vocational school in Finland and one in Estonia. Some of them started networking in 2007 and the general comparison was made during the first HETA project. The vehicle working group identified many similarities in the vehicle technology field and the Estonian curriculum was in many parts based on the Finnish one.

The vehicle technology field provides a qualification in the field of technology and traffic in Finland.

Examples of other vehicle related qualifications:

- ◆ Special vocational qualification in car sales;
- ◆ Standard vocational qualification in vehicle repairs;
- ◆ Special vocational qualification in vehicle repair management;
- ◆ Standard vocational qualification in vehicle body repairs;
- ◆ Special vocational qualification in vehicle body repairs;
- ◆ Special vocational qualification in vehicle painting;
- ◆ Standard vocational qualification in vehicle painting;
- ◆ Special vocational qualification in vehicle mechanics;
- ◆ Standard vocational qualification in car sales;
- ◆ Standard vocational qualification in car electronics;
- ◆ Standard vocational qualification in motor vehicle mechanics.

The most general qualification in this field is the standard vocational qualification in vehicle mechanics, and it is possible to acquire this qualification in almost any area in Finland.

The Finnish National Board of Education regulates education provided in this field. The standard qualification in vehicle repairs represents a level 4 qualification in the EQF system, and the special vocational qualifications all represent level 5 qualifications in the same system.

A person with a standard vocational qualification in vehicle mechanics is able to carry out the duties of a car mechanic. They are able to service the clients' vehicles, carrying out the necessary repairs, and they know how to serve customers. Polytechnics and special qualifications in the same field are typical options for further education.

This qualification may be acquired either through study in accordance with the respective curriculum, via apprenticeship training, or via a demonstration of vocational skills. The studies consist of:

Mandatory modules:

- ◆ Service of cars or motorcycles – 30 credits;
- ◆ Car repairs – 30 credits.

Optional subjects (of which each student chooses subjects worth 30 credits):

- ◆ Measurement and repair of electronic parts – 10 credits;
- ◆ Tyre work – 10 credits;
- ◆ Repair of truck chassis and control equipment – 10 credits;
- ◆ Service and repair of motors and transmission – 10 credits;
- ◆ Repair of hydraulic and pneumatic systems – 10 credits;
- ◆ Testing and repair of pneumatic breaks – 10 credits;
- ◆ Required pre-treatments for painting – 10 credits;
- ◆ Vehicle safety equipment related work – 10 credits;
- ◆ Vehicle accessory works – 10 credits;
- ◆ Spare parts and stock control – 10 credits.

The vocational qualifications for each module have been further specified with regard to the required learning outcomes (acquired skills, theoretical skills/qualifications). The assessed skills are further described as mastery of the essential working methods and use of tools and materials and the know-how required for work, as well as possession of the key skills required for life-long learning.

The on-the-job learning in work placement consists of at least 20 credits, and provides a means of organising education in this field, in the course of which some of the required vocational skills are acquired while working. The work placement constitutes goal-oriented, supervised and assessed study in a real work environment.

The education provider is responsible for organising the work placement. Planning of the work placement activities, assessment and guidance provided to the students form a part of the process. Furthermore, the educator is responsible for ensuring that teachers possess suitable experience of actual work life, and the education provider is also responsible for the training of the teachers as well as the work placement supervisors. Special attention is paid to the supervision of students as well as to the provision of necessary feedback at the respective workplace. Car mechanics working in the respective company carry out their duties under the guidance of their work placement instructors, and the

possibility to participate in the respective training is highlighted to the instructors.

There are no restrictions regarding the way in which the obtained required skills are applied in the demonstration of vocational skills. Skills acquired via training, working or hobby activity are considered equal provided that it is possible to utilise such skills in demonstrating the required vocational skills.

Criteria

A type of qualification that meets the needs of the vocational qualification concerned is applied in the descriptions. The required key skills and wide-scale professional methods are highlighted in describing the respective criteria, which also cover the necessary social skills and language skills required in everyday work life.

Issuing qualifications

Qualification committees are made up of delegates appointed by the Finnish National Board of Education and representatives of employers, employees, teachers and self-employed persons whose main task is to organise the demonstrations of vocational skills for adult students, and issue the respective qualifications.

The meetings related to the project included visits to various companies and vocational schools: Silberauto AS (importer of Mercedes-Benz), Scania Eesti AS, Volvo Estonia and Rakvere Vocational School in Estonia and the sales, maintenance and repair facilities of MB trucks and vans and BMW and Volkswagen passenger cars, Espoo Audi Center and the vehicle technology specialisation department of Luksia Vocational School in Finland.

After visiting the above companies and vocational schools and talking to the personnel in that area, the interviewers developed quite a good KATTAVA overview of the companies' expectations concerning the skills young people should have when graduating from a vocational

school and entering the labour market. While the Finnish labour market is generally satisfied with the work skills of the young people coming from vocational schools, Estonian companies are not pleased with the quality of the work force coming from vocational schools. Differences in the skill levels of Estonian young people are also greater.

Working out description of curricula

In the first stage of launching the HETA-ECVET project, the Finnish and Estonian curricula for specialisation in vehicle technology were compared. In both countries the curricula have been changed recently: in 2007 in Estonia and in 2009 in Finland. That was rather difficult in the first stage of the project, as the curriculum had only just entered into force in Finland. As a result of discussions, greater focus was placed on finding the common parts of the curricula.

In Finland, the duration of vehicle technology specialisation studies is 84 study weeks (336 h), of which 14 study weeks are made up of a general study course and seven study weeks are made up of subjects freely selected by the student. It should be noted that in Finland there is no focus on bringing students to the secondary education level in vocational studies.

In the Estonian secondary vocational education, the total duration of car technician studies is 140 study weeks (3.5 years), of which the proportion of general education subjects is 40 study weeks (of which eight study weeks are integrated with specialisation subjects), basic general and specialisation studies form 93 study weeks (including 35 study weeks of work placement in a company) and selective subjects form seven study weeks (selected by the school).

A comparison of the content of study units showed that the differences are rather large. In places the volume of the car mechanic study unit in Finland is greater than that of the module used in the Estonian vehicle technology specialisation curriculum, while in other study units the volume is smaller.

Creating a unit

After comparison, the study unit used in Finnish vehicle technology specialisation studies was chosen to carry out testing in the course of the project. The condition was established that the car mechanic specialisation students of both countries must complete the content of that unit in the early stage of their study period, e.g. at least in the second academic year.

The unit was named “Starting and charging systems”.

The curricula of both countries prefer ProDiags, which is a virtual study environment, used both for theoretical studies and for performing exercises in solving practical tasks. Through this Internet-based study environment, teachers can monitor the activities of students and grade the works of every student individually.

It was the ProDiags web environment that led to the choice of the study unit “Starting and charging systems”. The objective was to make it possible for the students of both schools to familiarise themselves with the content of the studies prior to their placement in a company.

An assessment manual was developed, which is more novel to the Estonian car technician studies, as it is based on the skills demonstrations used in the vehicle technology studies in Finland. However, it should be noted that the volume of the unit is not large, but requires multiple repetitions, because the specifics of possible faults and the identification of faults on the basis of a fault code or symptoms may vary to a great degree.

Assessment, assessment form and assessment criteria

The placement work assessment form is based on the distinction of technicians in the vehicle technology specialisations in Finland. The Finnish vocational education system is friendly in terms of calculating credit points (after successfully completing 84 weeks of study it is possible to get 120 European Vocational Education Credit Points (CP)). In

Finland the placement period assessment process involves the vocational teacher of the school, the instructor at the company and the student. In Estonian vocational education only the first steps are being made in involving students in the assessment process.

In Estonia, the process of preparing a new national curriculum for the vocational studies of car technicians has been launched, but the professional standard has not yet been finally approved. The teachers of Kehtna Economy and Technology School are rather actively participating in the preparation of the curriculum. Expectations to the improvement of the currently developed curriculum are great, and the intention is to use and transpose the best part of the Finnish curriculum, which is the most appropriate considering our conditions and traditions.

Testing of Units, student mobility

Before work placement abroad, students prepared their CVs. Those documents were sent via the school to the placement companies. The CVs show the placement students' acquired skills, abilities, qualification and experience (competence) in the relevant specialisation. It is common for placement students not to have car mechanic skills prior to the placement period. However, some students do have previous work experience (obtained at school or elsewhere).

The second course students chosen as the target group generally did not have previous practical experience obtained at school (the term used in Finland – on-the-job study experience), not to mention practical experience in a foreign country. That posed quite a serious challenge to the students – in addition to demonstrating their professional skills, they had to cope in a foreign language in a different cultural environment with different traditions. Those additional requirements make the successful performance of young students considerably more complicated.

Placements

In Finland, two students were placed at Audi Center, VV-Autotalot Oy in Espoo. The company has very good previous knowledge and expe-

rience in hosting placement students. Two young men from Kehtna Economy and Technology School worked at the company for four weeks in spring 2012. The students and the company instructors and co-workers communicated in English, but the youngsters obtained primary skills in expressing themselves in Finnish. Audi Center's student instructor was very satisfied with the work of the Estonian placement students.

In Estonia, Kehtna Economy and Technology Schools proposed placements at Silberauto AS (representative of Mercedes-Benz passenger cars and vans), Scania Eesti AS (representative of Scania trucks and buses), Saksa Auto AS (representative of Volkswagen passenger cars and vans), Fakto Auto AS (representative of Nissan passenger cars and vans). In late autumn 2011, both Silberauto AS and Scania Eesti AS hosted students from Luksia Vocational School in Finland. The working languages were English and Finnish, but the young men also learnt Estonian. The instructors at Silberauto AS were very satisfied with their placement students.

In spring 2012, two students from Varia Vocational School in Finland were placed at Saksa Auto AS and Fakto Auto AS and one student from Omnia Vocational School at Silberauto AS. The latter was sent on placement from the adults' studies of the vocational school. The company was very satisfied with his skills. The students from Varia Vocational School were younger, but they also managed to successfully perform the tasks they were assigned.

Four students from Omnia also tested the outcomes of the project; three of them were in Tartu and one in Tallinn.

Documentation

All the materials related to the project have been uploaded to the Moodle web environment. The most important document is the Unit. The uploaded documents include a description of the study unit, the assessment form and the assessment guidelines. Moodle also contains the national curricula used in both countries. A comparison of the curricula

was performed in the first stage of the HETA ECVET project. The programmes of working group meetings and the minutes of the meetings are available on the Moodle panel. All the useful links related to the topics have also been posted there.

Teachers' mobility, monitoring the testing

All the student placements also involved the students' tutors from the school, who accompanied the students to the partner country and made sure that the students' accommodation conditions met the agreed requirements and that the students understand the logistics related to going to work and the requirements established by the company instructors. At the same time the teachers of the schools of the partner countries also met with each other and discussed the related issues.

The progress of the placements was monitored by the instructors of both partner countries: the school tutors monitored the activities of their students on the basis of information received from the students either by telephone or e-mail and the teachers of the hosting school monitored the activities via contacts with the students and the company instructors. For that purpose the teachers kept in contact by telephone or by visiting the placement company. The described monitoring process functioned very well.

Prior to the end of the four-week placement period, the placement instructors of the relevant company and the hosting school tested the placement students. All the students participating in the project passed the test successfully, with some achieving very good results. In addition to testing the knowledge and skills of the curriculum unit used, the school instructors gave their students the task to keep a placement diary about the work performed during the placement period. Although the said study method is more commonly used in Estonian vocational schools, the students of the Finnish vocational schools adjusted very well to that task.

Analysing the testing

The selected study unit “Starting and charging systems” was tested throughout the entire period of the student exchange programme. As described above in section 3 “Creating a unit”, all the students had already obtained the content of the unit at school, i.e. all the students already had at least the basic knowledge on the basis of the said unit (‘module’ for Estonian students). The students performed the test very well. The test was based on the tasks included in the ProDiags program in the web environment and in connection with that the students were able to previously learn the performance of the necessary diagnostics procedures.

Modifying HETA-ECVET experiences, ideas for developing

The experience obtained in the framework of the HETA ECVET programme was necessary in order to further develop the launched initiative in the future.

Great importance was placed on making the curricula of the partner countries more compatible and similar, particularly also because it is very necessary for harmonising the skill levels of the work force in the entire European Union.

The student exchange project is a very welcome initiative and should definitely be continued.

ECVET cooperation: good practices, challenges and suggestions for ECVET work in the future

4.6. Construction

The working group consisted of one Finnish and three Estonian colleges and was based more on Estonian interests. Practically it would be more effective to have more balanced working groups.

In Estonia the basic qualification in the construction field includes many different professions: mason, concrete worker, carpenter, tiler etc. Most of the students start as an assistant to a more experienced craftsman. In Finland the construction field is more universal and therefore the Construction School's speciality in the construction field gave the opportunity to create a more versatile unit for HETA-ECVET. The working group chose the masonry sub-module for the content of the new international unit. In this case the masonry unit was very difficult to test because of a lack of special testing places. It was hard to find places where the students could complete the six-credit masonry unit.

In general the graduates work in their professional field, but many of them go on to complete their compulsory military service or start learning a different profession. The biggest companies like NCC, YIT and SKANSKA take construction workers, but not in the specified areas. Some students do their practice at school because of a shortage of work placement companies. During the recession in the home construction sector, some students have gone into other fields – for instance, working at a hardware store. During the project, the problem was clearly seen: it was hard to find workplaces in Finland for the Estonian students and some of them completed their training in the school's practicum areas – both outdoors and indoors.

• Materials used in masonry and their properties; • Taking into account the properties of materials and suitability of materials, as well as fire and quality standards; • Quality requirements for masonry; • Taking into account work cooperation, fire protection materials and quality standards; • Opportunities for laying masonry in different conditions; • Planning their work with drawings and /or construction specifications, and preparing materials and cost calculations; • Variety of walls (masonry) and bricklaying specifications, and different technologies. Brickwork plan based requirements for installing hydro-insulation; • Standard construction rules for brickwork plans; • Familiarity with masonry technologies and ability to build walls and follow safe practices; • Organising one's work in compliance with regulations, persistency, accuracy and diligence.	• Properly arranging the place of work; • Making the workplace connected from beginning to the end; • Handling and maintaining masonry tools and equipment; • The quality requirements of flat walls with unfinished joints; • Ability to build walls according to the project; • Preparing different mortar mixes; • Operating the necessary equipment (rock cutting bench, power cutter etc.); • The use of ordinary tools required in masonry work; • Performing hydro-insulation works; • Using measurement instruments; • Developing a sustainable work environment (incl. for oneself); • Using personal protective equipment, having regard to the health and safety concerns and maintaining work ability; • Sorting waste and recycled materials.
--	--

4.7. Hotel and tourism

The work group consisted of three Finnish and two Estonian colleges. The main task of the work group was to describe and compare the curricula for accommodation and hotel service persons in Estonia and a part (accommodation services) of the vocational qualification for travel counselor in Finland. The aim was to find the common elements of the modules of the curricula. The more specific goal was to agree upon common, appropriate criteria for a unit and to achieve understanding for acknowledgement of practical training abroad.

While visiting the hotels and determining them as potential work placements a set of questions was used. The work group used the given answers to develop the unit into more work life related direction.

When asked about the kind of knowledge, skills and competencies that are required from a student who is going to have her/his training in hotels abroad the most common answers were language skills, basic computer skills, communication skills, service-minded attitude, awareness of the hotel business. Concerning the languages that students should understand and speak, the respondents specified Finnish, Swedish, Estonian, English and Russian – there should also be ability to use them in telephone conversations. The length of an efficient practice period according to all respondents in reception is in minimum 8 weeks, in other areas also 4 weeks might be appropriate.

The work group analysed and compared the official state level curricula. The curricula for hotel service person and the accommodation service person in Estonia as well as the curriculum for the vocational qualification for tourism industry, travel counsellor in Finland were chosen. As the curricula are different, we agreed upon one module of the curricula – the service module where there are most common elements. The reason for choosing a completely different vocation in Finland was that the chosen curriculum is in use in all of the participating institutions, whereas the curriculum for hotel, restaurant and catering

services, which would have been a better counterpart for the Estonian curricula, is in use only in one of the three institutions. The work group chose the parts of the curricula which could be compared. The customer service module of the curricula was the most common.

Placement institutions were Radisson Blu Hotel Olümpia, Tallinn; Hotel Kuninkaantie, Espoo; Scandic Hotel Grand Marina, Helsinki and Hotel Långvik, Kirkkonummi.

According to the feedback from the students, workplace instructors and teachers during the testing period, the following results emerged. The main concern was that the four week period used for testing is too short to show good results. In several occasions it was mentioned that the minimum length for a practice period should be eight weeks. The assessment criteria for the unit proved to be generic enough so that the testing was possible not just in reception but also in other areas of hotel customer service. The basis for vocational education in Estonia and Finland is quite similar. Also the broadness of curriculum makes it possible to work in different professions.

One of the most important messages from the testing was that it is essential that the students when doing practice training abroad have more than basic knowledge of the language of the specific country and of English especially if they are going to work in reception. There seems to be no actual demand for the national languages especially in the international hotels. It is always the attitude that is most important.

"The whole experience was great and I would do it again anytime. I especially liked using many different languages at work: mostly English, but also some Swedish, German and Estonian. This was like a short language course for me because I had to use English every day all the time. Now speaking English does not feel difficult at all."

Student of hotel and tourism from Luksia.

4.8. Cleaning

The cleaning service qualifications provided by the vocational schools of Kuressaare and Omnia were introduced to the participants at the beginning of the project.

In Finland, cleaning services at the following facilities and businesses were introduced: Jorvi hospital, Puolarmetsä hospital, Kaivomestari public swimming pool (Sodexo), City of Espoo/ public library of Laajalahti. In Estonia, the respective facilities and companies were Kuressaare Hospital, cleaning services at an electronics company and an office building (SOL Palvelut Oy), Saaremaa Shopping Centre, Saaren Vesta Oy (cleaning services provider), spas and hotels: Hotel Saaremaa, Hotel Arensburg, Hotel Rüütli, Hotel Georg Ots, Villa Driver and Kipi-Koovi Holiday Village.

The compared qualifications were housekeeping and cleaning services basic qualifications (*Kotityö- ja puhdistuspalvelujen perustutkinnon, KPPT*) and the housekeeping services qualification module (*Kerroshoitopalvelut – tutkinnon osa*) in Finland, and the accommodation service qualification in Estonia.

Compiling of curricula

The data and the skills and competences regarding the following qualifications and qualification modules were mapped out for the Finnish housekeeping and cleaning service basic qualifications (KPPT), upkeep and cleaning and housekeeping service qualification modules, and the Estonian accommodation service qualifications. The required professional skills related to these qualifications and the respective modules were considered to be comparable. Both qualifications are aimed at persons with basic education. The study period is up to three years.

In Finland, the students study mandatory subjects such as, for instance, catering and coffee serving services, upkeep cleaning, basic cleaning

and cleaning services for institutional and industrial premises during the first and second year. During the third year optional modules are studied such as, for instance, housekeeping services. In Finland, at least 20 credits worth of work placement is included in the qualifications. Vocational skills demonstrations are organised during the work placement period. This demonstration is assessed by the workplace instructor. Additionally, students provide self-assessments. The mark received for the demonstration determines largely the mark given for this qualification module.

In Estonia, hotel cleaning is studied in the first year, table waiting is studied during the second year, and hotel reception services are studied in the third year. A work placement period of eight weeks per year is included in the studies. A mark is provided for the work placement by the respective workplace instructor, in which the student's vocational skills are emphasised (accounting for 60% of the mark). Additionally, the teacher's evaluation of the written report, and the student's ability to convey his/her ideas and express oneself (20%) as well as the marks provided by other students on the ability to express one's views and convey one's ideas (20%) are considered.

The Finnish KPPT cleaning services qualification was chosen as the comparison module since the vocational qualifications related to this module compare fully to those applied in the Estonian accommodation services qualifications.

Also, the fact that tourism provides an important means of income both in Saaremaa and in Helsinki and the surrounding area was considered. This is also why hotel cleaning is further emphasised in the vocational education programme. Several hotels were visited in Kuressaare where the working environment, working methods and means are fully compatible with those applied in hotels in Finland.

The working group utilised the assessment form of the respective Finnish basic qualification, which has been compiled in cooperation with the partners of Omnia. The assessment form includes the respective

qualification requirements, the assessed skills and the criteria. The assessment criteria are as follows: Satisfactory T1, Good H2 and Excellent K3. Additionally, the assessors may provide comments (Annex 1). According to the feedback received from the work placement facilities, the form is easy to use. However, Estonian students found it difficult to understand the content of the assessment form despite the fact that it had been translated into Estonian.

Testing of modules, student mobility

Students' work placement was planned in May 2010 when the work placement introductory card was compiled, and the assessment procedures and the work placement tasks were agreed upon. Estonian teachers observed the vocational skills demonstration exams for adult students in Espoo. The Finnish way of organising such exams and/or demonstrations at the workplace was introduced to Estonian teachers.

The working methods at the work placement business/facility, occupational safety, operations at the work placement business/facility and their customers and the respective duties: introduction, equipment, supervision of learning, guidance and assessment are all introduced in the work placement introductory card. The work placement instructors found the card both necessary and useful.

The assignments applied at Kuressaare Vocational College are used as work placement tasks. According to the assignments, students are expected to familiarise themselves with the operations carried out at the work placement location (general description of the place of work, safety, sustainable development, hotel products, customer service, hotel room, bed linen, communication with clients), keep a placement diary and assess their own performance.

Work placement exchange was carried out in September 2012 in Estonia, and in December 2012 in Finland. Omnia students Ms Tiina Jäntti ja Ms Jenni Haikonen participated in the work placement programme

at Hotel Mardi in Kuressaare. The placement period was two weeks. An Omnia teacher accompanied the students to the placement facility in Estonia, and simultaneously the assessment procedures were introduced to the local assessors. The workplace instructor introduced the tasks to the students. The students had the same co-workers throughout the entire work placement period. Additionally, the hotel management provided assistance when needed. Omnia's teacher collected the students at the end of the work placement period, and also monitored the assessment. According to the feedback provided by the students, the two-week work placement period was considered too short, and four weeks would have been more appropriate. Also, the lack of a common language was considered a weakness. In later conversations between the students and their teachers, it became evident that the students had gained confidence and were more able to use their acquired skills and communicate in a foreign language.

The Finnish students carried out their vocational skills demonstration for adult students at the end of the work placement period. Permission for organising the demonstration was applied for in advance from the cleaning services examination committee in Finland. The examination committee approved both the exam environment and the assessors. Additionally, the examination committee required that assessment be carried out in Finnish, and that a final report on the expenses of the exam be forwarded afterwards.

Four third-year students at Kuressaare Vocational College carried out their work placement period in Helsinki (Hotel Seurahuone and Radisson SAS Bluhotel). The students travelled to Finland unaccompanied. A teacher from Omnia took the students to their work placement locations the following day. The teacher introduced the workplace instructors and the students to their tasks for the work placement period with the help of the assessment form. The workplace instructors introduced the location and the respective tasks to the students. The students were provided with a curriculum which included the work placement programme with the respective addresses and contact information,

and visits to Omnia Vocational School and the cleaning department of Kaivomestari public swimming pool were organised. Omnia's teacher visited the locations for the second time at the beginning of the work placement period, and the workplace instructors and the students were familiarised with the aims and assessment criteria of the work placement period. Halfway through the work placement period, Omnia's teacher visited the locations for intermediate assessment and gave verbal feedback to the students. Omnia's teacher and the teachers from Kuresaare participated in the final assessment together with the workplace supervisors.

According to the feedback received, it was evident that it was difficult to find Estonian students willing to participate in the exchange programme since they were unsure about the new environment and how to manage speaking Finnish. On the other hand, the students were motivated by the exchange since the work placement period was approved as a part of their qualifications in Estonia. The teachers noticed that the students had grown accustomed to the working methods prevailing at the place of work, and forgot the working methods they had learned at school. It should be emphasised to the workplace instructors and the students that working methods are in principle *practised* during work placement, and that the students are not required to work as efficiently as professionals do.

In Finland, a teacher both took the students to their place of work for the first time and also collected them at the end of the work placement period. The teacher introduced the assessment procedures to the workplace instructor and the local teacher in Estonia, and also participated in the assessment of the vocational skills demonstration. The Estonian teacher visited the students at the workplace, monitored their work providing intermediate feedback, and carried out the work placement assessment at the end of the work placement period.

In Finland, the international affairs department of Omnia introduced the work placement period programme to the students by means of

the curriculum. The teacher took the students to their respective work placement locations, visited them to monitor their work, provided intermediate feedback, and carried out the work placement assessment at the end of the work placement period. The Estonian teacher was present at the assessment of the Estonian students in Finland.

Analysing tests

Strengths

- ◆ Promoting the sector (articles in media);
- ◆ EUROPASS;
- ◆ Improved language skills;
- ◆ Experienced instructor at the workplace;
- ◆ Learning agreement;
- ◆ Increased mutual sense of trust between the parties;
- ◆ Several instructors at the workplace;
- ◆ Work placement is included in the studies;
- ◆ Using Skype in communication with teachers;
- ◆ September is not a high season at hotels à enough time for acquiring new skills at work;
- ◆ Familiar work placement locations;
- ◆ Experienced housekeeping professionals as workplace instructors;
- ◆ Instruction at the workplace, feedback from students and teachers;
- ◆ Close cooperation between the working group members;
- ◆ Introduction card for work placement, daily curriculum;
- ◆ Work placement students adhere to the same work schedules as other students;

- ◆ Time of year has no effect on the work placement schedule in Finland;
- ◆ Shared assessment forms and work placement assignments.

Possibilities

- ◆ Development of professional skills;
- ◆ Independently operating and coping at work;
- ◆ Becoming more independent and gaining a greater sense of responsibility;
- ◆ Extending the teachers' scope of work;
- ◆ Creating long-term cooperation;
- ◆ Getting acquainted with different cultures;
- ◆ Work experience, summer jobs, permanent positions;
- ◆ Mobility of workforce;
- ◆ A common language for the working group (Finnish);
- ◆ Making friends;
- ◆ Learning a new language and communicating in a foreign language;
- ◆ Little cooperation between various working groups.

Weaknesses

- ◆ Independently operating and coping at location;
- ◆ Opening all assessment levels included in the learning agreement to all the parties;
- ◆ Too little to do, high season was over (in Estonia);
- ◆ Too much to do, various instructors, lack of common language, co-workers representing various different cultures (in Finland);
- ◆ Teacher does not have enough time to spare;
- ◆ International cooperation not highly valued in the teachers' working environment;
- ◆ Students did not receive enough vocational instruction at the place of work;

- ◆ Students face difficulties in comprehending the assessment forms (new to them, and assessments are verbal);
- ◆ Lack of daily curriculum;
- ◆ Health certificates vary by country;
- ◆ Instructions on how to use the feedback forms were sent too late to the workplace instructors;
- ◆ Only two schools participating in the working group. It would have been better if there had been three or four schools;
- ◆ Work life not represented in the working group (both in Finland and in Estonia).
- ◆ Carrying out and utilising work placement assignments during the work placement period:
- ◆ No references;
- ◆ Official forms (EUROPASS, learning agreement) must be signed before the work placement commences.

Threats

- ◆ Independent living;
- ◆ Cultural differences;
- ◆ Students' expectations and aims;
- ◆ Working methods used at work differ from those learnt at school.

5. Results and recommendations

The HETA-ECVET project spanned three years. During these years two conferences and dissemination seminars were organised both for the project members and open audience.

Conferences

1. The first conference: *Aloitusseminaari* in Helsinki Hotel Helka 21.-23.10.2009
2. The second conference in Kuressaare 23.-25.8.2010

Dissemination seminars

3. Dissemination seminar at Luksia Nummela 23.8.2012
4. Dissemination seminar at Tallinn Hotel Olympia 28.8.2012

Project results and experiences were shared during these conferences and seminars. Feedback was gathered by means of questionnaires, interviews, and discussions from teachers, students and work life representatives. Working group member analysed all the feedback and prepared a report. Results, recommendations and implementation ideas presented in this Guidebook are based on feedback, working groups' analyses and presentations made at dissemination seminars.

All the seven working groups worked until the end of the project and mostly finalised the accepted results (UNITs, assessment form, answers to the general questions, testing, and final analysis). A concrete benefit of the project was creating a multi-fold network between Finnish and Estonian teachers both on the national and international level. During the project period connections between VET colleges and labour market deepened. Work placement companies in Estonia are willing to take students for the on-the-job period.

Estonia is moving toward outcome-based curricula and the HETA-ECVET project has been a good preparation for that process. The HE-

TA-ECVET project offered a possibility to get information about the EQF and ECVET processes and was a basis for describing the seven fields. Teachers who have now participated in real ECVET processes can support departments and teachers/instructors in the introduction of the ECVET system.

The HETA-ECVET project has increased VET knowledge and international work in vocational organisations. Cross-border working groups familiarised themselves with the VET system, curricula and teaching methods of the partner country. As a result of the networking, it was found that the bases for vocational education in Estonia and Finland are quite similar. According to the experiences gained from testing, there are no major differences between the level of competence of Finnish and Estonian students and between the methods of teaching used by Finnish and Estonian teachers. There is common trust that the other party's teaching and assessment corresponds to the quality standards applied in each country.

The structure of the Finnish and Estonian curricula varies. Finnish curriculum is based on learning outcomes, while the Estonian one is mostly subject based. Furthermore, the broadness of the curriculum makes it possible to work in different professions. For many Finnish teachers, the project offered a real taste of Estonian education, training and working life. Real networking brought out prejudices and built trust. The prejudices were proved wrong and cooperation has been good.

General challenges include communication, language and cultural skills. The members of working groups determined that:

- the project period seemed too long;
- the project period seemed too short;
- the project demanded too much personal time;
- the periods between meetings were too long, more meetings are needed;
- the information flow and the sharing of responsibilities between different parties was weak.

It seems that the biggest challenge was understanding the ECVET idea, and the freedom to plan one's own work. Creativity, freedom to create new UNIT without a pre-defined framework was confusing. Communication and information flow depended on language and social media skills. Misunderstandings arose mostly from cultural differences in communication and working. One problem can be silence, not answering. Building up mutual trust takes time, and will be followed by possible discussions about differences without being afraid of misunderstandings and hurt feelings. Trust can facilitate the acceptance of different methods in different cultures. The main challenges during the project were that it took some time for the working groups to understand what should be accomplished, what the actual project scope was etc. In the future, extended efforts should be made in the project set-up phase. Joint clarification of project targets and commitment to common operating principles and schedules is of great importance.

In terms of project communication, the main recommendation is that individual working group leaders have regular joint meetings to ensure the flow of information. The project's common virtual learning platform "Moodle" was not exploited to the desired extent. To maximise project transparency and ensure timely communication and the members' preparedness for meetings, all members should be active users of the common tool.

Feedback from all working groups shows that one of the best experiences gained from the project was testing the project outcomes during mobility periods abroad. Mobility periods have been useful for cooperation and understanding each other's culture. Assessment methods were interesting to discuss and Estonian work place instructors gave special thanks to the teachers who visited work placements and participated in the final assessment discussion.

Feedback from the piloting of HETA-ECVET was gathered from all the project parties: students, workplace instructors and teachers. The students found that the study unit was well described and that the as-

assessment criteria were clear. Also according to the workplace instructors, the unit functions well in daily business operations. The assessment form and criteria were found to be straightforward yet some of the evaluation criteria were considered as slightly demanding. The workplace instructors in Finland gave special thanks to the Estonian students who were perceived as being very friendly and having good language skills. In conclusion, all the parties were satisfied with the testing period. The new study unit and principles have met the requirements of students, workplace instructors and teachers. With minor adjustments, the study unit will be very good and applicable.

The following was learnt and achieved during cooperation and the work of the international working group:

- ◆ Assessment experience;
- ◆ Breaking down boundaries;
- ◆ Cooperation between various countries is possible, there are common qualification modules; no need for completely corresponding qualifications;
- ◆ International operations provide possibilities for both students and teachers;
- ◆ Credits earned via international student exchange equivalent/transferrable for the students;
- ◆ Developing mutual trust takes time;
- ◆ Possibility to get to know a new culture (trips, family accommodation, courses);
- ◆ Completing one's vocational skills demonstration abroad;
- ◆ Expanding students' and teachers' views on vocational education;
- ◆ Utilising the project in one's own organisation (e.g. Finnish hotel reception employees/work placement – international exchange programmes for cleaning services);
- ◆ Using Skype;
- ◆ Work placement abroad is a great opportunity;
- ◆ Networking between various schools, sectors and countries;
- ◆ Networking between various project participants (in their own group, with other groups and places of work);

- ◆ Peer networking;
- ◆ Creating common instructions, assignments and aims.

Recommendations:

- ◆ The sending and the hosting institutions – especially those vocational colleges that were not involved in the HETA-ECVET project – need a clearer definition of practices, tasks and responsibilities;
- ◆ Ensuring a match between the student's skills, the unit (aims, content and length) and the workplace;
- ◆ Students would appreciate more active relations with local teachers and students in order to learn, share ideas and experiences and build a life-long international network;
- ◆ Workplace instructors concluded that the most important thing is that the student/trainee is active, positive, motivated and has self-initiative; everything else can be learnt on the job;
- ◆ It would be better to start the practice on the day after the arrival, not on the day of the arrival;
- ◆ One day in a week could be school based work/study, getting to know the school and the local students, culture and so on;
- ◆ Final assessment should have been always carried out with all the parties together (teacher, student, workplace instructor) to also allow for further discussions about the student's development;
- ◆ It is important to prepare students properly in regards to culture and language. They should know at least 10 common sentences in the local language (communication with clients) and have dictionaries with them;
- ◆ Workplace instructors find a letter of motivation made by the student helpful;
- ◆ Documentation should be in local languages (Estonian and Finnish);
- ◆ Students need to have a detailed schedule with meeting points and contact details for the first 3–5 days;
- ◆ Hosting teacher could meet the student one day before the start of the work placement;

- ◆ It is useful to have Finnish and Estonian students working in pairs at the same work placement facility;
- ◆ A feedback day should be held after the first practice week. The hosting teacher could then answer the student's questions and explain in greater detail the local social and health care system in the country;
- ◆ The group interview method is preferred for assessment;
- ◆ Students need a tutor or a contact person for the training period;
- ◆ It is essential that the students have more than a basic knowledge of the language of the specific country and of English, especially if they are going to work at reception – but the student's attitude is the most important;
- ◆ The participants need to be briefed on the assessment form and the unit;
- ◆ The mobility schedule has to be designed so that the students have enough to do during the period;
- ◆ Students need thorough familiarisation for the tasks and mobility period, a specific daily schedule and more support during the period;
- ◆ There should be two experts/employers from Finland and two from Estonia in a working group. There was only two schools in involved in the working group;
- ◆ Students need to have a work transcript from the period;
- ◆ The timing of the placement periods should be carefully chosen due to the seasonal changes in hotels as well as the amount of students applying for practical training. The best times might be in August–September and February–April.

“Shelving stuff and pressing cardboard in the compressor: in my opinion my work tasks did not correspond to my learning objectives, at least not mine. Despite the lack of common language, cooperation went well with other employees and responsible people at the workplace.”

Student of business and administration, Luksia

Challenges:

- ◆ Students raised the lack of common language as a major challenge: it would be important that the workplace instructor be able to communicate fluently with the student (either in the native language or English);
- ◆ Workplace instructors also identified language-related challenges; some tasks would benefit from at least elementary local language skills;
- ◆ According to the students, the duration of four (4) weeks for the practice period was too short to learn the features of a product or service and to be able to sell it to local customers. The main tasks during the practice were mainly to prepare goods for sale and put them on display. During four weeks, it is easier to adopt and learn customer service-oriented tasks than sales tasks;
- ◆ Estonian curricula used to be very teacher-centred, but nowa-days it is more working life-orientated;
- ◆ Working life might see social and health care work focusing on everyday activities, whereas the vocational education also includes theoretical aspects;
- ◆ It was difficult to find work placements in the reception area for Estonian students in Finland if their Finnish language skills were not sufficient;
- ◆ The four (4) week period used for testing is too short to show good results. The minimum length for a placement period should be eight weeks, especially in reception;
- ◆ Estonian students were not excited to do the mobility period in Finland because of a lack of language skills and they were afraid of a new and strange work environment;
- ◆ Finnish students worked only two weeks in Estonia. They thought it was too short a period – four weeks would have been better;
- ◆ Lack of common language was a challenge;
- ◆ Methods used at work and at school don't always coincide. The meaning of the learning of new skills needs to be clarified for both of parties. Students do not necessarily need to work as fast as professional workers;

- ♦ Teachers didn't have enough time to provide guidance to students;
- ♦ Health certificates varied, with different requirements.

"It was very useful to see how vocational education is organised elsewhere. Now I understand much better what diverse possibilities Estonia offers for students' on-the-job learning and I can tell my colleagues and our students about them."

Teacher of hotel and tourism, Omnia

Competence-based qualifications are not in use in every country and it was a bit difficult to arrange this abroad. Only one Finnish student took the competence test in Estonia. Permission for the competence test from the Finnish qualification committee was a prerequisite. The qualification committee required that the assessment be done in Finnish and it also chose and approved the persons who assessed the test. There also had to be a final report regarding the assessment.

6. Modifications and ideas for development

Continuing the work based on HETA-ECVET is very important. The created materials (UNITs and assessment forms) constitute the concrete outcomes and benefits of the project.

The best solution would probably be to arrange the training with different funding sources such as the Leonardo da Vinci mobility grants. Including other countries would be of great importance. Disseminating the results achieved to e.g. Sweden, the United Kingdom, Germany, Ireland, Latvia and Lithuania would also help the implementation of the ECVET process in the European Union.

Taking part in the project provided good experience and a possibility to compare the differences in vocational training between the two countries. Finland and Estonia make up a common employment area where free movement of workforce takes place, facilitated by the favourable geographical position of Estonia and Finland. Estonia is currently in the process of transferring to the outcome-based curricula and this project was a good preparation for that process. It was important to take part in the process of developing common practice guidelines. The school partners/members can share the received experience to other teachers from both their own school and the whole country. It is recommended to put the guidelines to use, as they were tested in cooperation by the two countries' vocational teachers and employers.

During the project seven new international UNITs were chosen and created. The number of UNITs can be increased with different opportunities given to students for creating their own individual learning pathway, choosing UNITs abroad and enriching their own studies at the professional and linguistic/cultural level. The labour market has new needs for key competences of lifelong learning such as language and cultural skills, social media using skills, problem solving skills, learning and communication skills, creativity, innovation and risk-taking, as well as the ability to plan and manage projects in order to achieve objectives.

How to break the reluctance of the employers to assign foreign students to work at reception when their language skills are not very high? What is the attitude of the employers and how does it affect the students? It is very important that the workplace instructors have the right attitude (they have to be education and guidance oriented). These questions are not easily answered, but some progress could still be perceived.

Useful experiences during the project:

- ♦ Finding similarities in different curricula: the content of modules, not only the name, must be considered;
- ♦ Learning how to create a unit, which is very clear/concrete/understandable for different readers. This kind of unit helps prevent cultural problems and is easily understandable for workplace instructors;
- ♦ It is very useful to continue this work and create more common units: for instance in childcare, adults/children with learning disabilities. At the present time, Estonian partners are involved in another similar project (Procaring – www.procaring.fi). Three partners from different countries are developing and testing a child care unit, and also retesting a variation of the eldercare unit;
- ♦ Good experiences in how to work together with employers, when a curriculum or special units are created. Moving curricula from teacher-centred to cooperation with employers; employers are more orientated towards everyday work, not so much towards training and theoretical knowledge (it can be sometimes hard to pick out skills, knowledge, competences and attitudes);
- ♦ Not concentrating on the current situation, but planning development in view of future;
- ♦ Good modules and units are only one-school-based in both partner countries. However, they must also reach authorities that decide the development of vocational education;
- ♦ There are no big differences between the level of competence of Estonian and Finnish students and between the methods of teaching used by Estonian and Finnish teachers. The parties can trust each other's quality of work.

The Estonian partners felt that the HETA-ECVET project provided good experience in international cooperation in curriculum development; the new Finnish curriculum of business administration is an excellent example of a contemporary curriculum. In addition, it was very interesting to hear and see how Finnish partners organise their learning and practice processes at schools and workplaces. As the Estonians felt they are still steps behind in new curricula development, the project was very useful for them.

The project also experienced some language and terminology related challenges as no English translation is available in some fields. The project team was forced to invest time and effort into discussing and defining the relevant terminology to be used for the new study unit. The English-Finnish-Estonian ECVET vocabulary, collected during project process, is suggested for adoption.

Furthermore, the fact that a competency-based study assessment practice is in use in Finland but not yet in Estonia caused additional work for Estonian project members, as it was not clear how the local study development process was to proceed. The present assessment culture slightly differs between Finland and Estonia, as in Estonia the workplace instructor individually assesses the student's performance and in Finland the assessment is a joint effort between the workplace instructor, teacher and student.

The experiences and materials can be modified in further education and re-education, and updating of competences will support labour force needs and help reduce unemployment during a difficult economic period. There are many Estonian and Russian speaking immigrants or workers in Finland who have partial qualifications or who work without qualification in the service sector, construction and logistics.

The main challenge raised in the students' feedback was common language: it would be important that the workplace instructor be able to

communicate fluently with the student (either in the native language or English). Another challenge was the duration of the placement period: four (4) weeks is too short a period to learn to know the features of a product or service and to be able to sell it to local customers. As a result of this, the students' work was more oriented towards customer service and support work (price tags etc). This suggests that parts of the study unit may have been designed to be too demanding. Some targets were met more easily (e.g. putting goods on display, fastening price tags), while direct sales-oriented targets were not so easily covered. Viable alternatives are, for instance, to lengthen the practice period or to re-define the approach from sales to customer service. Students would also welcome a more thorough briefing on the study unit's contents and assessment criteria.

In case of the on-the-job learning periods conducted in Tartu, Estonia, more efficient briefing and definition of assessment principles and roles could have improved the gathering of testing feedback. The student, teacher and workplace instructor should have met together, face to face, to perform the assessment. The HETA-ECVET idea is that assessment is a joint open discussion in which the learning period is analysed according to pre-defined criteria.

In a nutshell, the best practices and development ideas are as follows:

- ◆ Finding new vocation-related possibilities;
- ◆ Growing as a person;
- ◆ Improved language skills;
- ◆ Increasing international exchange for work placement;
- ◆ Information dissemination via media and networking → increased visibility for the sector;
- ◆ Increased international exchange for teachers;
- ◆ Less apprehensive utilisation of the new possibilities provided by information technology;
- ◆ Increased mobility of workforce;
- ◆ Plausible marketing of work placement abroad for new students and teachers;

- ◆ Investing more time and effort in project set-up and ensuring the project members' commitment;
- ◆ Use of a common virtual project support tool should be mandatory;
- ◆ Facilitating more active networking between the international student and local school and students.

International cooperation between colleagues is useful for both sides because it always gives new viewpoints and ideas for developing one's own. It is important to involve people who are working in the same field and level. The development of curricula is an ongoing process and it never ends. Therefore, there are also possibilities for future cooperation.

Improvement ideas

- ◆ Employers' representatives present in all the HETA ECVET working groups;
- ◆ Marketing housekeeping training to hotel employees in Finland;
- ◆ Quality management handbook for international work placement programme, including work placement exchange programme related materials;
- ◆ Learning and dissemination seminars for adult and young students in which brochures with photos etc are utilised;
- ◆ Teachers' supplementary training/students' work placements carried out at the same time;
- ◆ Educational videos on housekeeping at hotels;
- ◆ Work placement diaries in the form of blogs (photos of work days);
- ◆ e-Course for workplace instructors on the basics of cleaning;
- ◆ The aim of work placement should be made clear to all the parties (students, workplace instructors, teachers) instead of introducing the assignments during the assessment at the hotel;
- ◆ Work placement period should be at least four weeks;
- ◆ Coherent video and image materials and terminology in various languages;

- ♦ Intermediate feedback form to communicate development needs to students (with pictures);
- ♦ Common platform, e.g. Wikipedia with videos, for instance on cleaning various different types of hotel rooms;
- ♦ Common educational material on hotel housekeeping services for use in Finland and Estonia.

The three-year HETA-ECVET project created a basis for lifelong co-operation in seven different fields. The ECVET ideology created in HETA can be used in all cases of European cooperation between vocational educational institutions.