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Stocktaking Report Part 4 Analysis of ECVET Projects on their Accordance to the ECVET Recommendation

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1. Executive summary

1.1. Background

The approach to introduce a system for the "Validation of Non-formal and Informal Learning" by the European Union¹ is aiming at the creation of comparable and transparent qualifications in order to foster mobility and economic growth in Europe.

To achieve this, all legislative and relevant executive organs of the EU and the member states have started a process to implement validation instruments and systems such as the EQF, ECVET, EUROPASS, NQFs and others.

Since 2007 more than 100 ECVET pilot projects were funded in the framework of the Lifelong Learning project and its follow-up programme ERASMUS+.

1.2. Minimum standards and joint agreements

In order to achieve the aforementioned goals of transparency and comparability and to enable the member states and the professionals in the field to set up operational instruments and procedures, certain European minimum standards are required.

On 20 December 2012, the Council of the European Union issued a "Recommendation on the validation of non-formal and informal learning" which was updated and substantiated in the CEDFOP recommendations in 2016. These recommendations related to the *validation procedure* of the four validation steps Identification, Documentation, Assessment and Certification.

The paper on hand related to a second "recommendation" from 2009 that described the *structural and* content related criteria related to the implementation of ECVET.

Both recommendations are cornerstones of the concept of VINFL because they form the conceptual, structural and procedural basis of the whole approach.

The report on hand has been compiled by a team of experts from educational science and practice in the framework of the IMPACT project. IMPACT has been aiming at the introduction of digital technologies to support the process of VINFL.

Due to the sheer quantity of data collected, analysed and administered validation is not imaginable without the use of information technologies.

However, also the feasibility to use information technologies to facilitate the validation of learning outcomes and the realisation of a joint European approach for the implementation of ECVET thoroughly depends on the common standards.

1.3. Stocktaking in IMPACT

Therefore, the IMPACT report analysed 75 European ECVET projects that could be identified in the main European databases on ECVET projects and which referred to the recommendation of the European Parliament on ECVET (2009).

The IMPACT report made a profound analysis of the EU-funded ECVET projects and researched how the projects dealt with the challenges to set up ECVET related systems for qualification related to their professions, qualifications and continuing professional development offers.

¹ presented by the Commission, the Council and the Parliament in its recommendations from 2002, 2009, 2012 and lately by the CEDEFOP recommendation 2016



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IMPACT has been aiming to convert usable approaches into a first prototype approach for a comparable and transparent IT based system and to feed those ECVET projects into this system that stick to the official ECVET specifications.

This prototype was constructed in order to facilitate the transfer of:

- Qualifications (e.g. from one member state VET system to another)
- Units of learning outcomes (e.g. to re-use them while transferring them from one qualification to another (e.g. in case of similar units in different qualifications²)
- Learning outcome descriptions (from similar units to others)

The prototype was also established to design the conceptual basis for a multilingual transfer of the relevant descriptors as well as for an efficient IT-supported management of users (learners, authors, assessors), qualifications and validation services (to support validation structures that should be set up in the member states.

1.4. Results

The report showed that approximately 50% of the 75 researched projects could be taken into further analysis since they met the minimum requirements related to the main standards.

From these 33 projects a group of 10 projects was selected to be implanted in the prototype after a profound analysis, using the official specifications as quality criteria. The selected projects were introduced in a software prototype to process their data in accordance to ECVET, EQF and other relevant official European validation requirements.

The funded ECVET projects covered a period from 2008 to 2015. They can be seen as pathfinder projects that explored the general feasibility of the ECVET approach in general and some of its components.

Against this background one can explain the high percentage of projects that did not keep to the recommendations.

However, to gain the full benefit of the whole VINFL concept the authors like to emphasise that after this pathfinder phase international projects that seek for comparable qualifications have to respect minimum criteria and stick to a joint structure that corresponds with the qualification frameworks and the ECVET related recommendations.

The ongoing discussion on European level (for instance at the large scale conference in Mechelen 2013) and on national levels (e.g. highlighted in the long processes related to the German DQR or the current large scale Delphi study on suitable organisational validation structures in Germany) shows that there is still a long way to go to achieve the aim to provide instruments and structures that are fit for purpose.

The IMPACT project and the IMPACT report was designed and developed to contribute to the implementation of VINFL on the practical and operational level.

The report on hand firstly presents in its summary major shortcomings and substantial issues related to the European practice projects on ECVET and lists and describes the relevant 33 ECVET pilot projects that were subject of a thorough investigation based on the 2009 recommendation by the Council and the Parliament.

Content and Terminology

One of the major issues that hampered a consistent and comparable ECVET procedure was related to terms and terminology of the "ECVET components". The ECVET recommendation defined (top-down) "qualification", "units of learning outcomes" and "learning outcomes". The terminology used by the pilot projects for these "components" largely differs. To give some examples: Instead of "qualification" the terms

² For instance in different units in the framework of professions in the retail business



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"core curriculum", "module" or "field of action" have been used and for "Units" the terms "module" or "certification unit". Already at this, very basic stage, it is obvious that without a joint terminology the aim of transparent and comparable qualifications cannot be reached.

Without a clear and mandatory naming of the (ECVET) components any discussion about the ECVET implementations and/or re-use of components (e.g. units of learning outcomes) in other contexts is quite difficult.

Insofar the stakeholders involved in validation have to speak a European "Lingua Franca" and use the same terms and terminologies in order to talk about the same things and to be able to exchange knowledge, tools and instruments to gain reasonable benefits from VINFL.

Qualification

According to the ECVET recommendation a "Qualification" is a formal outcome of an assessment and validation process which is obtained when a competent institution determines that an individual has achieved learning outcomes to a given standard. It consists of several units of learning outcomes.

As a matter of fact a "Qualification" should have a name and, where appropriate, a description. To enable international cooperation and exchange and to introduce validation on operational level it should be possible to translate "Title" and "Description" in different languages. Often these basic requirements were not achieved – hence there is some space for improvement for some projects.

Other pilot projects³ describe cross sectional learning outcomes as part of the qualification. For the first draft of the technical specification (implemented in IMPACT) we interpreted these cross sectional learning outcomes as additional field (as described below for the unit of learning outcomes), but it might be a good task for later versions of the specification to have another look on them.

Unit of Learning Outcomes

According to the ECVET recommendation a "Unit of Learning Outcomes" is a component of a qualification, consisting of a coherent set of "Knowledge, Skills and Competence" that can be assessed and validated with a number of associated ECVET points.

The Unit should hold a generic title, the title of the Qualification(s) to which it is related, a reference to the EQF level (of the qualification) and, where appropriate, to the national qualification framework (NQF) level. It should also include the ECVET points associated with it, the Learning Outcomes contained in the Unit, the procedures and criteria for the assessment of these learning outcomes.

Some pilot projects⁴ used additional fields to describe the work task (or an example work task), the content of the unit (according to the used curriculum), prerequisites and others. Therefore it should be possible to add additional fields to units of learning outcomes by giving a name and a content field to the description⁵.

A number of projects⁶ use subdivisions of units of learning outcomes. Therefore the technical specification should allow such subdivisions.

As mentioned above it should be possible to give the name, description etc. in different languages but this will be left for a later version.

- 3 CHEMLAB2, SME MASTER Plus
- 4 CHEMLAB2, euriac, EASYMETAL, 2GET1CARE and others
- 5 If some of these additional fields are commonly used it might be a good idea to describe them explicitly in the specification but that is a task for a later draft
- 6 Aire, PROPER CHANCE, NETINVET, etc.





Learning outcomes

According to the ECVET recommendation learning outcomes are statements of what a learner knows, understands and is able to do on completion of a learning process and which are defined in terms of knowledge, skills and competence.

Concerning the learning outcomes there are quite different approaches in the pilot projects:

A number of projects (ESTO, ett edu,) described them *as* Knowledge, Skills and Competence(s), others (ECO QUALIFY, ICARE, etc.) describe them *together with* the necessary knowledge, skills and competence.

Some pilot projects (ECVET_BUD, ICARE, etc.) used different amounts of "columns" (e.g. only Knowledge and Skills, no Competence, or 'skills and knowledge' in one category or 'personal and social competences') or they described learning outcomes without any relation to the three columns Knowledge, Skills and Competence.

A technical specification (or probably EQF manuals) might help to clarify these inconsistencies.

Note: There may be good reasons to neglect the order and the taxonomy set up by the European Commission. However, if we agree to achieve a high transparency we need certain common denominators. Here, already at EQF level (which is the highest "Meta" level of national qualification frameworks) there are national discrepancies that will be rather difficult to bridge. Therefore, even if we disagree to the "trinity of knowledge, skills and competences" the authors recommend to stick to these three columns – otherwise the idea of a European wide validation cannot be successful.

ECVET points

According to the recommendations ECVET points are a numerical representation of the overall weight of learning outcomes in a qualification and of the relative weight of units in relation to the qualification.

In most of the pilot projects no concrete ECVET points have been specified for the units of learning outcomes, but most of them indicate the possibility to specify ECVET points or at least a relative weight to the units. In at least one (ICARE) ECVET points are even specified for single learning outcomes.

As even the ECVET recommendation is slightly ambiguous at this point the first draft of the technical specification will allow to assign ECVET points to both learning outcomes and units of learning (the same will be true for the assessment criteria, method, etc.).

Model case pilot projects

To conclude: From a total of more than 100 ECVET projects funded since 2007 an amount of 75 projects was pre-selected that at least basically referred to the RECOMMENDATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL.

Out of these 75 pilot projects the following projects have been selected as model cases for the integration into the software based on their level of accordance and feasibility related to the Recommendation:

- 1. 2get1care
- 2. CHEMLAB2
- 3. COLOR
- 4. CREATE
- 5. EASY METAL

⁷ For an IT based repository it might be an option to offer, in addition to the "columns" Knowledge, Skills and Competence the possibility to select the values "NONE" and/or "ALL". As far as social and personal competences and key competences are concerned, that do not directly relate to qualifications the authors proposed to set up a parallel system like LEVEL5 that facilitate a highly contextualised but nevertheless valid validation software (LEVEL5)





- 6. EREIVET
- 7. ESTO
- 8. Learn with clay
- 9. Proper chance
- 10.SME MASTER Plus





2. Project descriptions

2.1. Introduction:

For this desk research the pilot projects listed on the web portals <u>www.ecvet-info.de</u> and <u>www.ecvet-projects.eu</u> were analysed on their level of accordance to the ECVET specifications⁸.

The following criteria were applied based on the Recommendation of the European Parliament and of the Council of 18 June 2009 on the establishment of a European Credit System for Vocational Education and Training (ECVET)⁹:

- Structural criteria (accordance to the structure and properties of "qualification", "units" and "learning outcomes")
- Content and Terminological criteria (in how far did the projects relate to the terms set up in the recommendations
- organisational criteria (like European collaboration)

In a first pre-selection, only those pilot projects that showed similarities with the recommendation (the exact terminology was not an exclusion criterion at that stage) were listed in the document on hand. The implementation of these 75 projects was compared with the ECVET recommendation. For the comparison we decided to stick to the "core" components of the ECVET recommendations mentioned above (the qualifications, units of learning outcomes and learning outcomes) since information about other components (like Memoranda of Understanding, learning agreements) are even less available in most pilot projects.

Each project analysed project was listed along:

- Title
- Summary
- Duration
- Partners
- ECVET implementation
- Comparison with the ECVET recommendation

An overview table is attached as Annex 1 and can be retrieved on the my-VITA learning space of the IMPACT CPD.

⁹ http://eur-lex.europa.eu/legal-content/DE/TXT/HTML/?uri=CELEX:32009H0708(02)&from=EN



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⁸ for an overview have a look at the file ECVET Pilot project_final list.xls in the IMPACT open learning space.

2.2. 2Get1Care

Project description

"2get1care" is a pilot project for testing the European Credit System ECVET in vocational education and training of health care professions in Germany within a European partnership to develop an approach to interprofessional and transnational transferability of qualification and training components.

This approach aims at promoting interprofessionalism, transnational mobility and personal learning mobility of qualified employees who were so far limited by a high degree of differentiation and specialization as well as divergence of qualification structures in the occupational area of health care in the EU.

(from www.2get1care.de)

Duration

2011 - 2013 ?

Partners

Berufsfortbildungswerk des DGB GmbH

Fachhochschule Osnabrueck (University of applied sciences), Germany

Fachhochschule Bielefeld (University of applied sciences), Germany

ibw - Institut fuer Bildungsforschung der Wirtschaft (Institute for Research on Qualifications and Training of the Austrian Economy , Austria

KTP – Spolecnost pro kvalifikaci na trhu prace (Association for Qualification at the Labour Market, Czech Republic

GYEMSZI - Gyógyszerészeti és Egészségügyi Minoség- és Szervezetfejlesztési Intézet (National Institute for Quality - and Organizational Development in Healthcare and Medicines, Hungary

Professional field

Health care

Website

www.2get1care.de





	im Netzwerk Gesundheit und Soziales
	1.3 (Interdisciplinary) Communication and Interaction in a Team
Hours/learning unit of EARL	20 Physiotherapy (4.9) and (1.10); Occupational therapy (1.14); Speech therapy (1.2), (1.22) and 1.1); Geriatric care (1.5.2)
Learning outcomes	
Knowledge	The student knows different forms of (interdisciplinary) professional communication (e.g. team meetings, case reviews). He/she recognises the importance of interdisciplinary work for the patient/client. He/she knows and respects the scope of responsibilities and competences of other professional groups.
Skills	The student observes his/her own behaviour in interdisciplinary settings. He/she develops the ability to plan, execute and reflect upon (interdisciplinary) team meetings.
Competences	The student reflects upon his/her own work and achievements, presents them in interdisciplinary settings in a manner that matches the demands of the target group and can professionally defend his/her point of view and objectives. He/she considers the possibilities and limitations of interdisciplinary work. He/she recognises role and cooperation conflicts and critically responds to them.
Content	The learning unit includes, but is not limited to Causes for (interdisciplinary) communication, e.g. case reviews, team meetings Professional groups of the German Social and Health Sector, their focus of training, their main aims and scope of competences Interdisciplinary work Handling conflicts at work Techniques of interaction and communication such as conversation techniques, feedback rules, facilitation, Techniques of exchanging information with other professional groups

 ot (from

Auszug_Kerncurriculum_Uebersetzung_en.pdf, p.21)

Comparison with ECVET recommendation:

The described core curriculum is an interprofessional one and therefore not part of a specific qualification. It is divided in four parts (Core Tasks of Therapy and Geriatric Care, Target Groups and Framework Conditions of Work in Therapy and Geriatric Care, Training and Occupational Situation in Physiotherapy, Occupational Therapy, Speech Therapy and Geriatric Care, and Pathology) which are divided in subunits. These subunits seem to be their units of learning outcomes.

The learning outcomes are described for Knowledge, Skills and Competences.

No ECVET points are assigned, no reference to the EQF or NQF level, no criteria for the assessment of the learning outcomes are mentioned (at least in the documents we could access).

In addition to the ECVET recommendation a field for the content of the learning unit is added. Also, a field for the number of hours and a reference to "recommended training regulations" (EARL, Empfehlende Ausbildungsrichtlinien) is added.

2.3. Aire

Project description

In the EU the following binding targets for 2020 were defined: to reduce greenhouse gas emissions by 20% and ensure 20% of renewable energy sources in the EU energy mix; a plan to reduce EU global primary energy use by 20% by 2020.

In order to realize these objectives the EU is in need of well trained technical staff. Since 2002 there has been the training for "Assistant for regenerative energy and energy management". This is a full time school vocational training which is recognized by the KMK (Standing Conference of the Ministers of Education and Cultural Affairs of the Länder in the Federal Republic) officially all over Germany. It contains many elements which are also part of the training to become an electrician, but there are of course also very special elements which lead towards future.

In view of the development on the labour market also European partners are interested in introducing a comparable vocational training and would like to have Europe wide recognition. Although all systems of vocational training are different, there are comparable requirements for technical staff. All project partners train in the field of electricity and can develop the AIRE training on these grounds.





As a basis for a European/international vocational training we develop standards which are easily transferable and which can be recognized everywhere due to transparent assessment methods. Through the implementation of the transparency instruments of the EU the comparability will be easier and this is a good starting point for mobility and cooperation.

The ideal objective is to define a common European AIRE standard which can be applied all over Europe, similar to the European computer driving license, the European entrepreneurship license or EuCoCo. (from www.egegrup.com)

Duration

2009 - 2011

Partners

Senatsverwaltung fürBildung, Wissenschaft und Forschung Berlin, Germany

Berliner Arbeitsgemeinschaft Berufsbildung für nachhaltige Entwicklung (BABNE), Germany

Energie für Bildung e.V., Germany

Izmir Chamber of Heating System and Sanitary Facilities, Turkey

Picture Power BV Consultancy and production VET media

Professional field

Regenerative energy and energy management

Website

http://www.egegrup.com/aire/

http://www.aireweb.eu/

Partners' information for AIRE units

Unit no. 1.1 Photovoltaics

	General contents	Knowledge	Skills	Competences
			Insertion, care and maintenance of work equipment and tools, Identifying, storing, handling and disposing of agents	
1. Energy generation	Specific terms	The candidates are familiar with specific terms	They can use these terms actively in communication	They can explain the concepts behind them to their fellows and to laymen
	Setup and functioning of the photovoltaic cell	They know the theoretical background		They can name the different components and know what they are made of
certi	Different types of photovoltaic panels	- PV cell - mono crystalline - poly crystalline - amorphous	onal ti	They can explain the concepts behind them to their fellows and to laymen
	Different components which are necessary for a photovoltaic installation	- PV panels - Wiring - Battery - Controller - Inverter - Tracker	- Describe an PV electric circuit	They can explain the setup of the - PV cell - The different types of panels - Different necessary

ECVET implementation

(from Unit 1.1 level 3.pdf, p.2)

Comparison to ECVET recommendation:





The units of learning outcomes are divided in subunits (in case of the unit 1.1 Photovoltaics in Energy generation, Construction, Control, Efficiency, Maintenance+Repair, Energy storage, Feeding the grid, Recycling and repowering and Safety).

The learning outcomes are described for Knowledge, Skills and Competences.

No ECVET points are assigned, no reference to the EQF or NQF level, no criteria for the assessment of the learning outcomes are mentioned (at least in the documents we could access).

2.4. CHEMLAB2 – European apprenticeship for chemical laboratory

technician

Project description

The CHEMLAB Transfer-of-Innovation project aims at providing and fostering a "European Quality Standard in Analytical Vocational Education" for young apprentices in non-academic chemical training on-the-job. To that effect, an innovative VET-concept was developed, based on a combined integrative approach of theoretical education and market-orientated training close to practice on analytical strategies and up-to-date methods of handling instrumental-technical, industrial or RTD challenges with special regard to chromatography and mass spectrometry. As to the fields of application, the envisaged VET programme particularly was focused on chemical, pharmaceutical, food, cosmetical and environmental industry requirements. For this purpose, a Central Laboratory for Instrumental Analysis (called AsiA, i.e. 'Ausbildungsstätte für instrumentelle Analytik') was installed at the Technische Universität München (Germany) to coach non-academic, in-firm trainees both in theoretical and practical chemical analytical techniques. Similar institutions are available in the partner countries Georgia (Tbilisii), Greece (Thessaloniki), Poland (Poznan) and Turkey (Gebze). This multinational approach started with a partnership of institutions from the five EU member states and associated countries and was realized in close reference to the dual VET-system in Germany as a paradigm suitable to be adapted beyond.

The partnership, characterized by a wide range of natural sciences educational levels, still gains experience as to the demands, pre-conditions and chances of providing a flexible, transferable and innovative high quality VET concept for technical specialists in the relevant industry sectors throughout Europe.

(from project website)

Duration

2011-2013

Partners

Chair of Urban Water Systems Engineering, Technische Universität München, Germany

Tbilisi State University (TSU), Georgia

İstanbul İl Milli Eğitim Müdürlüğü (İstanbul MEM), Turkey

Marmara University, Turkey

Chamber of Industry and Commerce for Munich and Upper Bavaria (CIC), Germany

Polish Chemical Society (PCS), Poland

Aristotle University of Thessaloniki (AUT), Greece

Städtische Berufsschule für Zahntechnik, Chemie-, Biologie- und Drogerieberufe (Berufschule), Germany

Bavarian Research Alliance, Germany

Adam Mickiewicz University (AMU), Poland





Association of Greek Chemists (AGC), Greece

Professional field

chemical, pharmaceutical, food, cosmetical and environmental industry

WEBSITE

Www.eu-chemlab.eu

ECVET implementation

Title of the field of action	Food An	alysis	
EQF Level			7
Total ECVET points			7
	U1	Sampling and prepara	tion of food samples
	U2	Extraction of different food contents, extraction methods	
Units of Learning outcomes	U3	Chromatographic separation of food contents	
	U4	Identification of comp	ounds
	U5	Quantification of com	pounds
	U6	Calculation, evaluation	n and presentation of data
Cross sectional Learning Outcomes	To acquire the learning outcomes following quailfications are essential He/she is able to apply and adopt different analysis methods use and control different analysis apparatus apply different kinds of software for data acquisition and evaluation		ethods

Competence		Skills	Knowledge
Competence Level A	He/she is able to: Separate phenolic compounds by RP-HPLC	He/she is able to: Apply RP-HPLC methods to separate food contents	He/she knows about: Assembly and function of chromatographic devices
Competence Level B	He/she is able to: Choose the appropriate separation method depending on the target analytes Recognize and work out typical problems regarding chromatographic methods	Separate diverse food contents by different separation methods Choose the appropriate separation methods depending on the target analytes	Chromatographic parameters Different stationary phases and their fields of use Characteristics of different eluting solvents Gradient and isocratic elution Retention/separation behaviour of different food contents
Work task			Competence Level
Prepare extracted samples for HPLC analysis (dissolve, filtrate)			A
Separate phenolics compounds by RP-HPLC			Α
Choose and develop a suitable method for separation of other food contents			В
Separate other food contents by the developed method			В

ChemlabII_ECVETbook.pdf)





Comparison with ECVET recommendation:

The project describes modules (or fields of action) which can be identified as their equivalent of a qualification. The EQF level and the total ECVET points are mentioned for the modules but no values are given. The units of learning outcomes are listed. In addition to the recommendation some cross sectional learning outcomes are given.

For each unit the learning outcomes are described for Knowledge, Skills and Competence. The learning outcomes for Skills and Competence are always given for two "Competence Level" whereas the learning outcomes for Knowledge are the same for both "Competence Level". No ECVET points are assigned, no reference to the EQF or NQF level are given for the units, no criteria and/or methods for the assessment of the learning outcomes are mentioned.

In addition to the recommendation some work tasks are given for each unit and "Competence Level".



2.5. COACH@WORK

Project description

The COACH@WORK project is supporting the inclusion of the Supported employment approach in Austria and Spain, but also in new countries such as Bulgaria and Turkey where this will be done for the first time by developing <u>EQAVET</u> system for recognition, validation and accreditation of their knowledge, skills and competencies.

The VET training programme is consisting of predefined learning outcomes which are connected with the dedicated unique <u>ECVET</u> training programme for SE providers and consisting of the following modules:

Module 1 Disability awareness

Module 2 Acquisition of key and transversal competences

Module 3 Practical methods in the coaching process

Module 4 Mainstreaming and digital technologies as support to the education, employment and well-being of PwD

Module 5 Supported Employment Basics – curriculum

Module 6 Career guidance – labour market methods

Module 7 Approaches and attitudes towards PwD

Module 8 Pre employment agenda

Module 9-Implementation and Networking

(from project website)

Duration

2014 - 2017

Partners

ZGURA-M Ltd., Bulgaria

National Agency for Vocational Education and Training, Bulgaria

National Federation of employers of people with disabilities, Bulgaria

Interprojects Ltd., Bulgaria

Jugend am Werk Steiermark GmbH, Austria

UBITED _ Uluslarasi Bilim, Inovasyon, Teknoloji ve Egitimi Destekleme Dernegi, Turkey

Fundación Pascual Tomas, Spain

Professional field

Support employment providers – a method of working with disabled people and other disadvantaged groups to access and maintain paid employment in the open labour market

Project website

www.supportemployment.eu





Module 1	Title: Disability Awareness
Responsible partner	ZGURA-M
Aims and Overarching Objectives of the module	 The SE coachers should be able to: Increase his/her awareness towards different types of disabilities and the challenges and barriers associated with the particular disability. Make references between disability and ability for social inclusion in all areas of life (professional, personal and community based activities). React appropriately in different situations while working with his/her client with a disability.

aff 2.	To be literate, have basic knowledge on disability and social fairs. Good communication skills. Basic ICT skills.			
2.	Good communication skills.			
3.	Basic ICT skills.			
4.	Ability to cooperate with others.			
	Positive attitudes and ability to express empathy towards			
	ople with disabilities.			
	6. Basic knowledge in the field of working with clients with			
	special needs.			
	Knowledge:			
	 Knowledge: Knowledge about how the person with disability feels a what they consider important for their autonomy. Positive awareness towards different types of disability and the challenges and barriers faced by the particular disability. Possible reactions in different situations and different social contexts while working with his/her client with disability. Skills: 			

ECVET/ECTS points Assessment (type)	 Increase of SE coachers' awareness and empathy while supporting and consulting of clients with disabilities. ECTS = 1 credit; ECVET = to be completed when all modules are available. Self-assessment test Case based exam
	 Skills how to act with clients with various disabilities as well as how to apply personalised centred approach. Skills how to communicate using positive statements and non-discriminative words. Skills how to provide reliable services and consultation on issues related to accessibility, coping with prejudice, positive identity building-up. Skills how to avoid victimization. Skills how to arrange and consult on possible accessibility adjustments. Attitudes: Increase of SE coachers' awareness toward disability and the peculiarities of services which should be adjusted to the individual needs of each client Increase of SE coachers' self-efficacy while supporting and interacting with clients with disabilities.

(from Module-1-Disability-awareness-curriculum.pdf)

Comparison with ECVET recommendation:

The VET program for training of Supported employment coachers is divided in Modules. These modules seem to be the projects equivalent to the ECVET units of learning outcomes. In the documents we had access to no reference to an EQF or NQF level is mentioned. ECVET points are planned but will only be provided later. Learning outcomes are provided for Knowledge, Skills and Attitudes. No criteria for the assessment of the learning outcomes are mentioned, but the assessment methods are described.

In addition to the ECVET recommendation further fields for the aims and objectives, a summary of the content, the training workload, required educational resources, learning pathways and previous knowledge are included.

2.6. CO.L.OR.

Project description

The CO.L.O.R. (COmpetency and Learning Outcomes Recognition for migrants) project aims at satisfying specific labour market requirements related to competency valorisation and learning outcome recognition for migrants. Failure to recognize migrants' work experience and learning outcomes not only makes it difficult for employers to appreciate what migrants can offer, but also leads to a unused potential of work force and the de-valorisation of competences.

CO.L.O.R. will put ECVET mechanisms into practice to achieve:

- adapted and tested qualifications (in terms of LO) on the basis of shared and tested transferable methods;
- defined assessment, validation and recognition processes;





- testing activities (including a repertory of case studies) to assess the transferability of the recognition processes in a cross-sectoral dimension;
- A Memorandum of Understanding on ECVET-related issues among the Italian Regions involved aimed at promoting a wider use of the project results and transfer of its results into mainstream policies.

The project will help to develop a framework for the effective valorisation and implementation of follow-up activities, secure the availability of tools, document results in technical journals, etc. The project will also support institutions (competent bodies) to adopt and apply the ECVET specifications within their systems.

Furthermore, the project will help to create innovative and concrete opportunities of Learning Outcome recognition. It aims at transferring the developed approach to other sectors/context/levels, while at the same time ensuring coherence with the overall system. The commitment of the competent ECVET institutions involved in the project will maximise its impact at regional and national level.

(from <u>www.ecvet-projects.eu</u>)

Duration

2011 - 2013

Partners

Lead Partner:

ARLAS, Agenzia Regionale per il Lavoro e l'Istruzione

Coordinator:

- ISFOL, Istituto per lo Sviluppo della Formazione Professionale dei Lavoratori
- Regional partners:
- Regione Campania (represented by ARLAS), IT
- Regione Lazio, IT
- Regione Piemonte, IT
- Regione Toscana, IT
- Regione Basilicata IT (associated partner)

International partners

- Centrul National de dezvoltare a invatamantului profesional si tehnic, RO
- Scottish credit and qualifications framework partnership, UK
- Kunsill Malti Ghall-Kwalifiki, MT

Professional field

- Personal Care and social service sector
- Specifically:
- family assistant/care giver
- dental assistant
- socio-assistance assistant
- care operator





- baby sitter
- The testing/piloting phase took place in Germany for the family assistant, care operator and socioassistance assistant profiles; in Poland for the Dental assistant and baby sitter profiles; in Romania for the care operator and family assistant profiles.

Website

http://www.color-project.org (not available)

ECVET implementation

Unit 6 – Construction Work Masonry

Reference qualification Construction Operator (IeFP)

Reference labour process: C. Masonry Work

Learning Outcomes:

Competence	Skills	Knowledge
Implement masonry	- Identify elements in the technical	- Characteristic of inert and binding
work for	plans;	materials;
development of	- Apply marking techniques;	- Safety regulations for work site injury
constructions based	- Apply mortar preparation techniques;	prevention;
on indications and	- Apply masonry work techniques;	- Knowledge of marking techniques;
specific project	- Apply techniques for creation of	- Cement preparation process;
details and respect	support structures;	- Masonry techniques;
of standard sector	- Apply techniques for the demolition	- Propping techniques;
safety requirements.	and removal of waste material;	- Types of brickwork;
	- Apply (flat and inclined) roofing work	- Types and construction techniques for
	techniques;	masonry facings.

(from

16-18_ECVET_Units_Framework_-Construction_sector_EN.pdf, p.42 see also 22_COLOR MoU EN.pdf from page 28)

The qualifications are structured in units of Learning Outcomes. The approach followed by the project aims at allocating points and credits to both qualifications and units.

As an example for the Construction sector the qualification of Construction Operator (CO) contains the following 9 LO Units:

- 1. Defining and planning operation phases
- 2. Preparing instruments, tools and machinery
- 3. Monitoring the operation of instruments, tools and machinery
- 4. Preparing and maintaining work sites
- 5. Setting up and clearing work sites
- 6. Masonry work for building construction
- 7. Carpentry work for construction and assembly of construction elements
- 8. Construction work finishing





9. Assessing conformity and adequacy of construction work

As an example for the healthcare sector the qualification of Healthcare Operator (HCO) contains the following 5 LO unit:

- 1. Assisting individuals in taking care of their primary needs and managing health and hygiene issues
- 2. Assisting individuals in their daily activities and hygiene needs
- 3. Managing dynamics of care relations
- 4. Interacting with social and health services organization
- 5. Helping take care of individuals in the social/health residential context

Comparison with ECVET recommendation:

For each qualification, the EQF level is reported, as well as the LO units related to the qualifications. Each unit is characterized by an EQF level, and its learning outcomes defined in terms of competence, skill and knowledge.

An assessment cross Matrix for each unit is defined with the aim of assessing the acquired competence.

A MoU between "competent authorities" identified according to the qualifications proposed has been drafted in the project.



2.7. CREATE

Project description

Often people engaged in creative fields such as web design and computer animation have gained their knowledge, skills and competence through a kind of informal learning. Informal learning occurs in a number of places like learning at home, work, during daily interactions or sharing knowledge in communities. Gradually validation of the results of informal learning has become a EU priority in the field of VET being "seen as a way of improving lifelong and life-wide learning".

Although addressed to a different extent in various EU countries, the issue of validation of the results of informal learning is still insufficiently explored and undeveloped in Europe. In Bulgaria a system for validation of the results of informal learning is still in the process of development, in Ireland there is some tradition in the field but not in creative professions, in Germany there are minor steps undertaken and some existing tools for validation of the results of informal learning but these are rather insufficient.

That is why the project proposes to develop a model for validation of the results of informal learning that can be applied to web design and computer animation outcome-based units. Since ECVET facilitates the development of flexible and individualized pathways and recognition of learning outcomes acquired through informal learning, project seeks to allocate ECVET points to the units in web design and computer animation making their recognition possible in EU states.

(from www.create-validate.org)

Duration

2011 - 2013

Partners

Student Computer Art Society /SCAS/, Bulgaria

National Agency for Vocational Education and Training /NAVET/, Bulgaria

DEKRA Akademie GmbH, Germany

Fastrack to IT /FIT/, Ireland

National Student Information and Career Centre, Bulgaria

Professional field

Web design and computer animation

Website

Www.create-validate.org

Title of description:	Web designer
EQF level:	Level 4

Title of working field 1: Preparation and design based on standards defined by the software industry (W3C)	
--	--





Title of unit 4:	Management (web sites management/maintenance)			
ECVET points:	18			
	Knowledge	Skills	Competence	
Learning outcomes 1: Content updating	User interface;	Able to change texts, images, etc. in news and article sections;		
1. Content aparting	Newsletter technologies;	Is able to communicate with a	customer comments;	
	Documentation technologies;	content developer;	Update the technology and the content regularly;	
Learning outcomes 2: Managing social	Basic knowledge about the usage of the exisitng social networks (Facebook; Twitter,	Is able to create pages in social networks;	Has an overview about existing social networks, their strengths and their weaknesses;	
networks	Xing; Youtube, Flickr, Twitter etc.);	Is able to import files- texts, images and video in the social networks;	Able to create and maintain a page/event/group in the social	
_				

Methods for assessment of self-	Tests and examinations Evidences from work place practices
acquired learning:	Additional methods:
	Declarative method

(from CREATE_units_web_design_en.pdf)

Comparison with ECVET recommendation:

The title of the qualification and the reference to the EQF level are given. The qualification is divided in working fields (not mentioned in the ECVET recommendation). These working fields are themselves divided in units of learning outcomes.

The title of the unit, ECVET points, learning outcomes (for Knowledge, Skills and Competence) and methods for the assessment are given. Criteria for the assessment are not given.

In addition to the ECVET recommendation the learning outcomes are grouped in subdivisions.



2.8. CREDCHEM

Project description

The main focus of the project is on promoting mobility in skilled work within the chemical sector. Alongside the tasks stipulated via the Call for Proposals (description of learning outcomes, definition of units of learning outcomes and points to be awarded, development of instruments and tools), the aim is for CREDCHEM to serve as a vehicle for the initiation of a European training network for the chemical industry. Within the term of the project, four essential objectives will be realised to set out the main contours for the structuring of such a network.

- Transparency will be created in respect of learning outcomes from the laboratory and production.
- Practically related, requirements oriented and user-friendly tools and instruments will be developed.
- Sector-specific mobility standards will be negotiated and piloted.
- A permanent cooperation structure will be supported.

(www.adam-europe.eu)

See Desk Research CVNO

Duration

2009 - 2011

Partners

Vocational education and training institutes from Bulgaria (NAVET), the Czech Republic (NUV), Slovakia (SIOV) and Germany (BIBB),

ITAS Scalcerle Padua,

Saxony Training Association for Environmental Protection and Chemical Occupations (SBG)

and others

Professional field

Chemical industry

Website

www.credchem.eu (not available)





Field of action	Working in the laboratory			X	
Learning outcome unit	1 - Separating and mixing substances			CREI	СНЕМ
EQF level		Competence level A: EQ Competence level B: EQ		L	EE 1
Relations to	BG	cz	DE	IT	SK
national qualifications		Chemical technician, chemical laboratory technician	Chemical laboratory technician, chemical technician, physics laboratory technician	Biochemical technician	Chemical technician / chemical laboratory technician, chemical technology modeller, chemical laboratory assistant
		Learning o	utcomes		
Competend	ce¹	Skills		Knowledge	
Competence level A (EQF level 3) - separates and mixes substances by using the standard methods and adapts these methods to the given conditions (selects methods depending on the properties of the substances)		substances and pla processing steps un result	espective laboratory essary chemicals ndles them	 knows chemicals (properties, structure, R/S statements) knows principles of separating/mixing and respective methods (knows steps of action) knows respective equipment and its functioning/ operation 	
Competence level B: (EQF level 4) - deals with problems methods	typical for the	approaches by app	cides how to solve the	methods a - knows stru which are i behaviour/ substance - knows solu	cesses which the re based on ctural characteristics responsible for responsible for properties of a bilities of substances t temperatures

(from CREDCHEM_OK_04_060Z_0408W_DE-EN_LEE_1_-_Stoffe_trennen_und_mischen.pdf, p.1)

Comparison with ECVET recommendation:

The project team described units of learning outcomes which a part of different qualifications in different countries. Each unit is described for different 'competence level' which correspond to different EQF.

The learning outcomes are provided for Competence, Skills and Knowledge. No ECVET points are mentioned. No criteria or assessment methods are mentioned, but for each unit (and 'competence level') occupational tasks and examination task are listed (with hint that these tasks could be downloaded at the project home page (which is no longer available).





In addition to the ECVET recommendation, the project team provides further information about the learning places where the unit of learning outcomes is offered, the number of learners, the offered competence level, the language and the methods used.



2.9. EASY METAL

Project description

The project EASYMetal is funded by the European Commission as part of the Lifelong Learning Programme (LLP) - Leonardo da Vinci Programme and the Hessian Ministry for Economy, Transport and State Development (term: 3/2011-8/2013). The mission of EASYMetal is to bring forward the European Credit System (ECVET) in Germany. EASYMetal is one out of 8 pilot projects funded as "second ECVET-generation".

The aim of ECVET is to make vocational competences acquired in one field of education transparent for other fields of education. Thus, already acquired skills can be transferred to other fields of education and recognised.

EASYMetal starts its work at the intersection between pre-vocational training and dual vocational training. The aim is to improve the permeability between pre-vocational training and dual training by means of a credit system. We are developing and testing our proceedings in 7 metal work occupations.

EASYMetal is offered support and counselling by its European partners from Denmark, Austria and Turkey.

EASYMetal aims at contributing to establishing partnerships between the competent bodies in Germany and the European partners.

(from www.en.easymetal.inbas.com)

Duration

2011 - 2013

Partners

Institute for Vocational Training, Labour Market and Social Policy (INBAS GmbH), Germany

Educational Institute of the Employers' Federation of Hessen e.V. (BWHW)

Federal Institute for Vocational Education and Training (BIBB)

Chamber of Crafts Rhine-Main (HWK)

The Danish Centre for the Development of Vocational Education and Training, Part of the Metropolitan University College (Metropol), Denmark

Eduser Consultancy Services Co. (EDUSER), Turkey

Lechner, Reiter & Riesenfelder Social Research OEG (L&R Social Research), Austria

Professional field

Metal work

Website

http://www.easymetal.inbas.com/





Industrial metal work occupations: (plant mechanic, industrial mechanic construction mechanic, tools mechanic, milling machine operator) Metal worker Machinery and plant operator Learning outcomes (def. according to recommendation of ECVET 2009): "Learning outcomes" statements about what a person knows, understands and is able to after having finished a learning process; these statements are defined as knowledge, skills and competences. Knowledge (def. EASYMetal): describes the dimension of a work task in which knowledge is used to select among different alternatives to complete the task appropriately. Skills (def. EASYMetal): describes the dimension of a work task in which (known) rules and/or (trained) movement sequences are applied to complete a work task. Competences (def. EASYMetal): describes the dimension of a work task in which self-organisation is necessary to find solutions in complicated	Unit of learning outcomes	No. 2	Basics of manual metal processing using simple machine production techniques
"Learning outcomes" statements about what a person knows, understands and is able to after having finished a learning process; these statements are defined as knowledge, skills and competences. Knowledge (def. EASYMetal): describes the dimension of a work task in which knowledge is used to select among different alternatives to complete the task appropriately. Skills (def. EASYMetal): describes the dimension of a work task in which (known) rules and/or (trained) movement sequences are applied to complete a work task. Competences (def. EASYMetal): describes the dimension of a work task in	National Qualifications	construction mechanic, tools mechanic, milling machine operator) Metal worker	
situations.	Definition of concepts	Learning outcomes (def. according to recommendation of ECVET 2009): "Learning outcomes" statements about what a person knows, understands and is able to after having finished a learning process; these statements are defined as knowledge, skills and competences. Knowledge (def. EASYMetal): describes the dimension of a work task in which knowledge is used to select among different alternatives to complete the task appropriately. Skills (def. EASYMetal): describes the dimension of a work task in which (known) rules and/or (trained) movement sequences are applied to complete a work task. Competences (def. EASYMetal): describes the dimension of a work task in	

Learning outcomes:

Gathers work sequences from the technical drawing and puts them into a reasonable order for later completion. Selects adequate tools, machines, materials and auxiliary materials to complete work task.

Uses appropriate clamping tools, tools, machines, auxiliary material and materials. Completes work piece using machine processing techniques.

Evaluates quality of work piece regularly during and after processing; corrects errors, if necessary.

Sees to proper state of workshop after finishing work task.

Observes safety regulations of the company and health protection regulations. In case of hazard potentials remedy through appropriate measures; appropriate reaction in case of emergency.

Works carefully and responsibly, communicates adequately, shows commitment.

Knowledge necessary for the learning outcomes:

Knows and is able to name the major drawing practice standards, drawing instruments.

Names materials and auxiliary material as well as their properties and fields of application from the title block of the technical drawing.

Assigns materials and auxiliary materials according to their properties to fields of application.

Names the major groups of manufacturing method: primary shaping, metal forming, cutting, joining, coating and changing of substance property.

Skills necessary for the learning outcomes:

Gathers all relevant information for processing from technical drawings and sketches.

Carefulness: handles drawings with care.

Communication: in case of uncertainty: asks appropriate (clarification questions) and adequate (choice of language) questions; listens attentively. 1

Sees to serviceability of machines including tools and provides the necessary auxiliary materials.

Aligns work pieces and tools and clamps them according to material.

Competences necessary for the learning outcomes:

Plans the work sequences according to information gathered from the technical drawing and puts them into a reasonable order.

Carefulness: pays attention during the planning process to the work sequences being complete.

Evaluates and selects appropriate tools, machines, materials and auxiliary materials subject to procedures and materials.

Communication: in case of uncertainty: asks appropriate (for clarification) and adequate (choice of language) questions; listens attentively. Makes arrangements with colleagues to co-ordinate use of materials and machines.

(from 1308_en_lee2_maschinelle_grundlagen_metall.pdf, p.4-6)





Comparison with ECVET recommendation:

The project team described units of learning outcomes for the pre-vocational training in metal work occupations.

For each unit, the name and a reference to the EQF and GQF level are given. References to national qualifications are given. For each of the referenced qualifications ECVET points are provided.

Learning outcomes are described for each unit. For these learning outcomes the Knowledge, Skills and Competences necessary are given whereby the project team uses its own definitions of Knowledge, Skills and Competences (See above).

Assessment criteria and instruments are mentioned including their weight for the assessment.

In addition to the ECVET recommendation a brief description of the unit, an example for an entire work task and other information are given.



2.10. ECO QUALIFY

Project description

Objectives: The **main objective of the ECVET-EcoQualify** project is to create a training course for teachers/trainers and tutors/instructors oriented to offer them the abilities needed, so that they will be able to design, plan and distribute ECVET and EQF-based training courses in the field of organic food retailing, including e-learning.

The **specific objectives** of the project are:

Translate and adapt of the EQF and ECVET for EcoQualify to NQF of partner countries;

Analyze, compile and define didactics and methodologies for training of teachers/trainers and tutors in organic sector based on the "EcoQualify" QAS and following the EQF and ECVET learning outcomes approach;

Piloting the on-line training course and collect feedbacks for its improvement;

Define of Community of Practice shared interests and manifest a common cooperation agreement among stakeholders of VET in organic retail sector in order to produce a market oriented training course.

Target groups: ECVET-EcoQualify addresses the Priority titled: Support to initial and continuous training of VET teachers, trainers, tutors and VET institution managers (LEO-TraInno-8). The target group includes teachers and trainers, VET providers of services and trainers in the field of lifelong learning. The target sectors are education, agriculture, organic trade and retailing, ecological field and food safety. In fact, we refer in particular to a very specific sector – organic food retailing which is characterized with a gap of well qualified teachers/trainers and tutors.

(from www.ecvet-ecoqualify.eu)

Duration

2013 - 2015

Partners

University of agribusiness and rural development, Bulgaria

ORA - Organic Retailers Association, Austrian

Zivy Venkoy, Czechh Republic

FORUM Berufsbildung e.V., Germany

Ökomarkt e.V. Hamburg, Germany

Institut Equalita, Germany

ADRIALAND - Associazione Terre dell'Adriatico, Italy

Canakkale Onsekiz Mart University, Turkey

ERA - Education Research Association, Turkey

Professional field

Organic food retailing

Website

www.ecvet-ecoqualify.eu





	Units of learning outcomes by profession:
	RETAILER OF ORGANIC PRODUCTS
2	Product Knowledge I

Unit number	Unit title	Credit points	Validation Hrs.
1.2	Product Knowledge I, Fresh Products	4	40

Qualification	Qualification level according to NQF	Qualification level according to EQF
General Agro-food Shop Beginner	-	1

Unit description:

The unit will provide the student with comprehensive knowledge, skills and competences in the following topics:

- . Knowledge of the basics of organic fresh food (K)
- · Ability to support selling activities (S)
- · Working under supervision inside the shop (C)

Learning outcomes, included in the unit:

LO 2.1 Vegetables and Fruit

LO 2.2 Bread & Bakery Products

LO 2.3 Milk & Dairy Products

LO 2.4 Cheese

LO 2.5 Meat Products

LO 2.6 Fish

Subjects of LOs	Knowledge	Skills	Competences
LO 2.1 Vegetables and Fruits	SB has Basic knowledge about specific characteristics of organic vegetables and fruits offered in organic food shops or in organic department of supermarkets	SB is able to operate in the shop taking into account the specific features of organic vegetable and fruits.	SB is able to accurately fulfil tasks assigned by supervisors to sell organic vegetables and fruits.
LO 2.2 Bread & Bakery products	SB has Basic knowledge about specific characteristics of organic bread and bakery products offered in organic food shops or in organic department of	the specific features of organic bread and bakery	SB is able to accurately fulfil tasks assigned by supervisors to sell organic bread and bakery products.



Assessment procedure	Assessment criteria
1. Test	 Basic knowledge about main criteria and principles of subjects.
2. Practical assessment	2. Level of capability to fulfill basic tasks in selling activities.
Resources for as	sessment
1. Study hall	
2. Organic food sto	re
Technology of va	lidation
Multiple choice t Assessment on t	

(from ECVET-(ECO)Qualify_Learning Outcomes_EN.pdf, p.16-17)

Comparison with ECVET recommendation:

The project describes a number of unit of learning outcomes. The units consist of sub units. For these sub units, the name of the sub unit, the name of the qualification, the EQF and/or NQF level and the credit points are given. In addition to the ECVET recommendation additional fields for the validation hrs. and a description of the sub unit are given.

Each of the subunits consist of a number of learning outcomes. For each of these learning outcomes Knowledge, Skills and Competences are given. For each subunit assessment procedures and criteria are mentioned.

In addition to the recommendation additional fields for the resources for assessment and the technology of validation are given.



2.11. ECVET ASSET PROJECT

Project description

After several years of mobility projects development, the lack of recognition appears as a "frustration". ECVET is an efficient tool for going from a regular mobility (without link with the qualification) to a "recognized mobility" (recognition, inside the qualification of origin, of the learning outcomes obtained abroad). Thus, recognition will create a real added value to the European mobility and turns the mobility towards vocational objectives.

This test will be based on Automobile Services Branch and will deal with the certifications related to the job profile of electro-mechanic (field of diagnosis/maintenance) which exists in each country.

It will concern 4 countries (Hungary, Romania, Finland and France) representing the 4 VET sub-systems identified in the ECVET Connexion Study.

(from adam-europe.eu)

Duration

2008 - ?

Partners

Chambre de Métiers et de l'Artisanat de Vienne ESPACE FORMATION DES METIERS et de L'ARTISANAT, France

ANFA (Association Nationale pour la Formation Automobile), France

Vanyai Ambrus Gymnazium, Hungary

George Bibescu School, Romania

OMNIA, Finland

Jàsz Nagykun Szolnok County Chamber of Commerce and Industry, Hungary

NSZFI (National Institute of Vocational and Adult Education, Hungary

AKL - Autoalan Keskusliitto Ry, Finland

NCTVETD National Centre for Technical and Educational Development, Romania

Professional field

Automobile Services

Website

www.assetecvet.eu





UNIT 2: INJECTION AND IGNITION SYSTEMS IN PETROL ENGINES

3. CONDITIONS OF ACCESS TO THE UNIT:

TECHNICAL PRE-REQUISITES:

Before starting the training course, the student must be able to :

· Undertake basic maintenance on a petrol engine

METHODOLOGY PRE-REQUISITES:

Before starting the training course, the student must be able to :

- · Read a basic electrical diagram
- · Explain the basic theory of combustion
- Use an oscilloscope to visualise the signals from vehicle's systems
- · Choose the appropriate documents for the job to be done

4. VALIDATION OF UNIT 2:

Test: practical assessment in a real situation allowing the acquisitions obtained during the training course to be assessed.

Objective of the assessment: Assess the capacities of the candidate to establish a diagnostic on injection and ignition systems in petrol engines using the appropriate information and testing methods, and to repair the fault.

Duration: 2 hours 30 maximum

Material Necessary:

Written information about the problem

Vehicle presenting a malfunction on the injection and ignition systems.

All useful technical documents

Equipped work station/ multimeter/ oscilloscope/ diagnostic tool....

NB

The assessment is to be done by at least two instructors competent in the professional domain of automobile maintenance.

UNIT 2: INJECTION AND IGNITION SYSTEMS IN PETROL ENGINES

KNOWLEDGE	SKILLS	COMPETENCE
K1: General description	S1: Explain physical phenomena of combustion in petrol engines	C1: Diagnose and repair a vehicle stability management system
K1.1: Combustion		,
K1.2: Fuel	S2: Identify the elements of the injection and	C1.1: Identify with precision the symptoms of the fault
K1.3: Advanced theory of combustion	ignition systems	C1.2: Identify the causes of the fault
		C1.3: Test the system
K2: Indirect injection system	S3: Explain how each element of the injection	C1.4: Validate the malfunction and choose the
	and ignition system works	appropriate action to be done
K2.1: Fuel supply system		C1.5: Respect the methods and schedule
K2.2: Fuel pressure	S4: Use electrical diagrams for fault diagnosis	
K2.3: Air supply system		C2: Organise the work respecting health and safety
K2.4: Electrical circuits	S5: Measure pressure and flow	rules
K2.5: The different ignition systems	SS. Establish a diagnostic procedure to identify	
K2.6: Control unit input and output signals K2.7: Diagnostic tools	S6: Establish a diagnostic procedure to identify the fault	
K2.8: Diagnostic, maintenance and	the fault	
servicing	S7: Apply the diagnostic procedure using the diagnostic tools	
K3: Direct injection system	-	
K3.1: Air fuel ratio		
K3.2: Diagnostic, maintenance and		
servicing		

CREDIT POINTS



(from ASSET_UNITS.pdf)

Comparison with ECVET recommendation:

The project describes four units of learning outcomes. For each unit the learning outcomes are given for Knowledge, Skills and Competence. Credit points for each unit are given for each of the four partner countries. No reference to the EQF or NQF level is given. Method(s) for the assessment of the units are described, but no criteria are given.

In addition to the ECVET recommendation information about the technical and methodology pre-requisites are given.



2.12. ECVET BUD

Project description

The main project's objective was to enhance VET quality and attractiveness through innovation practices transfer to identify, certificate and recognize knowledge, skills and competences acquired within different learning paths (non-formal and informal) in different UE Member States, i.e. promotion of qualifications/competences transparency through non-formal and informal learning on the job validation.

The mean to realize this objective was ECVET model transfer denominated with units of learning outcomes (transferred from Italian partner Training 2000). The model was supplemented and adjusted to calculate, accredit and accumulate ECVET credits denominated with validated professional competences as learning outcomes acquired on-the-jobs. Thanks to this closer unification of meanings: educational standard and professional standard have occurred.

Among goals there was designing of common guidelines as well as procedures and tools indispensable to draft common standard of validation of qualifications/competences for chosen professional profiles in building construction sector.

Thanks to this, the project gave the answer on dynamically changing needs of building construction sector towards qualifications/competences through enhancement of ECVET instrument implementation. The project contributed to increase of building construction sector competitiveness in Europe and had an impact on increase of EU Member States citizens' employability.

(from www.ecetbud.eu)

(see Desk Research CKU)

Duration

2013 - 2015

Partners

Towarzystwo Naukowe Organizacji i Kierownictwa – TNOiK, Poland

Institute for Sustainable Technologies - IteE, Poland

Budowlani, Poland

EnAIP FVG, Italy

Training 2000, Italy

ECAP R&D, Italy

Professional field

Building construction

Website

www.ecvetbud.eu





Unit of learning outcomes No.	2		
Name of occupation	Roofer Carrying out roof work		
Name of qualification			
Type of Learning	Non-formal and informal		
Name of unit of learning outcomes	Carrying out roof work and roof slope drainage		
Name of component of learning outcomes	Skills and knowledge	Personal and social competences	
Respecting Safety&Health rules in regard to self and co-workers	- Foresees risks to human health and life and property and the environment associated with execution of tasks professional - Identify the hazards associated with the presence of harmful environmental factors in the workplace - Organize their own work station in accordance with the requirements of ergonomics, safety regulations and hygiene, fire protection and environmental protection - Used protection measures of individual and collective in the performance of tasks professional - Observes the principles of health and safety and apply the rules of law concerning fire protection - Give first aid to victims of accidents at work	- Updates knowledge and improves professional skills - Foresees results of taken actions - Is able to bear responsibility for taken actions - Cooperation in a team - Flexibility - Emotional balance	
Preparation of drawings concerning roof work and elements of roof slope drainage	- Use of project documentation, technical specifications concerning carrying out and accepting works, standards and instructions concerning roof work and roof slope drainage - Preparation of drawings and drafts concerning roof work and elements of roof slope drainage - Preparation of a bill of quantities related to construction and demolition of roof work and roof slope drainage, calculation of costs of their carrying out - Application of software supporting roof tasks performance - Carrying out works related to preparation of a sheet metal to process it - Carrying out and installing roof works		

(from Rapport_WP3_IteE_final_4.pdf)

Comparison with ECVET recommendation:

The project describes a number of units of learning outcomes for different qualifications. For each unit the name of the occupation, the name of the qualification and the name of the unit is given. The learning outcomes for each unit are described for 'Skills and knowledge' and 'Personal and social competences' (not



for Knowledge, Skills and Competence). The learning outcomes for 'Skills and knowledge' are additionally grouped in 'components of learning outcomes'.

A field for the procedures, methods and criteria for the assessment of the learning outcomes and for the ECVET points are given but without content. No reference to the EQF or NQF level is given.

In addition to the ECVET recommendation a field for the type of learning (formal or non-formal and informal) and the workload is given for each unit.



2.13. ECVETour II

Transfer of VET innovation in the field of gastronomy and hotel management

Project description

The stimulus for the project and partner consortium have been firstly the long term experience with functioning of the VET sector in Slovakia as well as experiences with the quality of services provided in the field of gastronomy, hotel and tourism management.

Situation in Slovak and Czech Republic in the field of vocational education focused on gastronomy and hotel management is quite similar - both countries face problems with low mobility of students, insufficient modernisation and incorporation of non-formal and informal ways of learning, lack of flexibility and modularity, insufficient cooperation with the professional sector or low mobility of workforce.

The main aims of the project

The ECVET Tour II project will transfer methodology of ECVET system (European Credit System for Vocational Education and Training), which is the main European tool for supporting the lifelong learning, mobility of students (and teachers as well) in the whole European Union and flexibility of learning pathways.

Project will work with these partial aims:

- introduction of tools and framework for acceptance and recognition of qualifications for the professions of cook and receptionist
- modernisation and quality enhancement of the system of VET in the field of gastronomy and hotel management in Slovakia and the Czech republic
- development of an environment in which VET institutions in the field of gastronomy and hotel management will be able to strengthen the cooperation with VET institutions in other EU member states,
- strengthening the links between VET institutions and employers
- increase of number of student mobilities while ensuring greater mobility of workforce.

(from project website)

Duration

2012 - 2014

Partners

SMC - SMC Studien und Management Center Saalfelden gGmbH, Austria

3s Research Laboratory, Austria

EDUcentrum, Czech Republic

APEL. Slovakia

Professional field

Vocational education in the field of gastronomy and hotel management

Website

http://www.ecvettour2.eu/





Title of qualification/degree	632	3 K hotel academy	EQF level of the qualification 4 (if available)		
Number and title of the learning outcomes unit	ET	LMU - 2: Technological process of preparate	ion of milk pr	oducts	
Expected learning outcomes					
Knowledge		Skills	Competences		
Student knows: - Technological principles of preparation of selected milk prowith an emphasis on strict adher to time and temperature. - Raw materials needed for prepart of selected milk products. - How to ensure quality raw mater and preliminary preparation of rematerials.	ence ation	safety rules in relation to the preparation of selected milk products. - Appropriately use the technological kitchen equipment needed for preparation of selected milk products. - Organise his/her wor preparation of selected stages of preparation products.			dishes. rk related to the ted milk products. my in various
Learning units'outcomes descrip	tion:			Estimated duration	n:
 During the mobility, student will acquire these additional knowledge and skills: Distinct the differencies of multicultural environment and traditions. Acquire the ability to work in international team. Enhance other competences (appropriate adjustment of food on the plate in combination with side dishes). 					s (10 l training aining - n of and

- Theoretical Exam test 30 minutes
 By answering the test questions, student will prove that he/she has acquired necessary theoretical knowledge written in learning units' outcomes. Test questions will be annexed to this learning unit.
- Evaluation and self-evaluation 1 hour
 Student will gain feedback and assessment of his/her achieved knowledge, skills and competences.
 Assessment will be writen into the special assessment grid which will contain information set out in part "expected learning outcomes" of learning unit.

Assesment grid is annexed to this learning unit.

(from ECVETOUR2_124.pdf, p.1-3)

Comparison with ECVET recommendation:

The project describes some units of learning outcomes for different qualification in the gastronomy and hotel sector. For each unit the name of the qualification and the EQF level is given. The learning outcomes are described for Knowledge, Skills and Competence. No ECVET points are given.

Information about the assessment methods are given but no criteria (at least in the documents accessible for us).

In addition to the recommendation fields for the learning units' outcomes description (containing information about the additional knowledge and skills acquired, the theoretical and practical training) and the validation of learning units' outcomes are given.





2.14. EREIVET

Project description

EREIVET - European Regions Enhancing Internationalisation of Vocational Education and Training is a network of regional school authorities, networks/clusters of schools and big schools or school-centres in vocational education and training of 12 countries in Europe (see who we are).

EREIVET is as well the name of the LEONARDO DA VINCI network project which lasts from November 2012 until October 2015 to develop strategies for the enhancement of learning cross-border mobility in Europe. The cooperation in the network includes some other topics, for example the transparency instruments as ECVET and EUROPASS.

The aim of the EREIVET project is to build up a network of school regional authorities and big school clusters which is able to improve quality and quantity of learning mobility for students, teachers and trainers in vocational education and training.

We are working together to enhance the internationalisation of our vocational organisations especially vocational schools. We help them to find adequate partners, to understand the different school systems throughout Europe and support them to get funds from European programmes, e.g. lifelong learning programme.

We are convinced that learning mobility (for young people and professionals in VET) will improve as well quality of vocational education and training as individual competencies. It also will add to transparency and mutual recognition of qualifications and therefore it is appropriate to be part of the Europe 2020 strategy.

(from project website)

Duration

2012 - 2015

Partners

Ministry of Education of Lower Saxony, Germany

Académie Reims, France

SOSU Sjælland, Vocational Training Centre, Denmark

North-Trøndelag County Council, Norway

Regional district government in Düsseldorf, Germany

Istituto Tecnico Commerciale Statale "Domenico Romanazzo", Italy

Ministry of Education of Regional Government in Andalusia, Spain

Académie Aix-Marseille, France

School Inspectorate of Lower Silesia Province, Poland

Nordwin college Leuuwarden, Netherlands

Styrian Government, Austria

Raisio Regional Education and Training Consortium, Finland

Tekirdağ Provincial National Education Directorate, Turkey

Regional Council of Jämtland County, Sweden

CFA La Châtaigneraie, Upper Normandy, France

Professional field





Different fields

Project website

Www.ereivet.net

ECVET implementation

Name of the Unit:	Knowledge of Champagne							
Reference to the qualification:	Chef	Chef						
Area of work tasks:			EQF-level:4	DQR-level:4				
Cheese as a dessert								
Knowledge		Skills	Competence					
He/she is able to:		He/she is able to:	He/she is able to:					
I list at least 8 different cheese mentioned region explain different kinds of che (lab ferment/lactobacillus) explain different milks to pro	ese production	create a cheese platter after the criteria of a "cheese-watch" store cheese in the correct way use cheese at the food prep to identify the stage of maturation of different cheeses		ese with different food for cheese desserts in a menu				
Additional information: Core curriculum, 2 nd learning year, regional products The trainee creates a report to the Developed by: Sven Wersien, Imko	indicated knowle	edge, skills and competences mentioned above.						

www.ecvet-info.de

(from cook.doc)

Comparison with ECVET recommendation:

The project described units of learning outcomes for different qualifications. For each unit of learning outcomes, the name of the unit, the name of the qualification and the EQF level is given. For some units, also a NQF level is given. The learning outcomes of the units are described for Knowledge, Skills and Competence.

No ECVET points are assigned, no criteria or methods for the assessment of the learning outcomes are described.

In addition to the ECVET recommendation a field for the area of work tasks and a field for additional information are given.



2.15. Esto – European Specialist in Traditional Orchards

Project description

European landscapes are constituently shaped by traditional orchards. More than 80 percent have disappeared over the past 60 years. While modern growing and planting techniques yield to increased crops, they also lead to a significant reduction of quality, species, biodiversity and genetic resources. Traditional growers, in possession of expert's knowledge in orchard farming, have become rare. Throughout Europe, the loss of ken becomes increasingly evident.

Comprehensive material on different aspects of orchard farming is not yet available. ESTO takes a stake in developing new and innovative methods of teaching and learning, in order to preserve traditional orchards as a sustainable system and warrantor of bio-diversity, considering economic and ecological aspects. Orchards shall also shape 21st Century landscapes.

The project is embedded in the Leonardo da Vinci Lifelong Learning Programme, comprising twelve partner organisations and experts in the field of traditional orchard farming, management and education from six European countries - Austria, Poland, Hungary, Denmark, France and Germany.

(from project website)

Duration

2011 - ?

Partners

Thueringer Oekoherz e.V., Germany

Solagro, France

Corvinus University of Budapest , Hungary

Spoleczny Instytut Ekologiczny , Poland

Fachschule für Obstwirtschaft und EDV Technik, Austria

UBZ - Umwelt-Bildungs-Zentrum Steiermark, Austria

ZESPOL SZKOL CENTRUM KSZTALCENIA ROLNICZEGO IM. J. DZIUBINSKIEJ, Poland

OIKOS-Institut für angewandte Ökologie & Grundlagenforschung, Austria

Ökologiai Intezet a Fenntarthato Fejlödesert Alapitvany, Hungary

GRUENE LIGA Thueringen e. V., Germany

Blomstergaarden, Denmark

Research Institute of Horticulture, Skierniewice, Poland

Professional field

Agriculture

Website

www.esto-project.eu





Producing fruit juice	L 4
PROCESSING & MARKETING	Unit 7
ESTO – European Specialist in Traditional Orchards	esto General quantity Fundamental circums

KNOWLEDGE

He/she is able to

- describe ingredients and nutritive value of fruits and fruit juice (from old varieties)
- give basic information about the composition of the juice
- explain the nutritional and dietary properties of fruit
- 4. explain changes of compounds while processing
- explain the impact of variety and harvest date on the quantity and quality of fruit juice
- determine the most important requirements on room, equipment and procedure necessary for juice production (mashing, squeezing, clarification, pasteurization)
- 7. explain methods and recipes of juice production
- determine the most important microorganisms for juice production
- explain the principles of microorganism-growth and -prevention
- describe the general techniques of juice conservation
- 11. explain hot filling technology
- 12. analyse the demands of labelling fruit juice

SKILLS

He/she is able to

- choose suitable fruit species and varieties for juice production
- 2. define the perfect harvesting date
- 3. discard unusable fruits
- choose the appropriate method and machines for fruit juice production
- 5. use machines correctly
- 6. apply given recipes and adapt them if necessary
- find further information about machines and equipment (research)
- 8. choose appropriate conservation methods

COMPETENCES

- He/she produces fruit juice autonomously and on own responsibility with a given or a varied recipe and method
- He/she selects and applies appropriate technology to fruit juice production.
- He/she autonomously realizes hazards in juice production and takes measures against these hazards if necessary.

(from U7_juice_L4_20140813_OIK.pdf)

Comparison with ECVET recommendation:

The project describes the qualification of "Specialist in Traditional Orchards". The qualification is divided in three modules. For each module units of learning outcomes are described (sometimes the units are also





given for different EQF levels). For each unit, the name of the qualification, the name of the module and the EQF-level are given. The learning outcomes are described for Knowledge, Skills and Competences.

No ECVET points are assigned, no information about methods and criteria for the assessment of the learning outcomes is given.

In addition to the ECVET recommendation fields for the training aim, the total amount of teaching hours, the modules, the target group definitions, supportive materials and tools and short descriptions of the curriculum modules are given for the curriculum (or qualification)

2.16. Ett-edu

Concept and content of a profession based on learning outcomes for occupational travellers using the example of "showman" on the basis of the European Quality Framework EQF.

Project description

The acronym 'ett-edu' stands for 'European transfer of travellers' vocational education'. All countries participating in ett-edu face the similar situation of an inadequate schooling of young occupational travellers. Therefore, the participating educational institutions along with showmen's associations and the state school board have used their current approaches and experiences in order to search for ways to improve training opportunities for young people who had been deprived till now. The professional activities of showmen are no longer limited to their home country. Christmas markets all over Europe which are served by German showmen demonstrate clearly that working in Europe is part of everyday life, so that the European perspective of an EU project – given the internationalization of their own activities – is no longer unfamiliar even in our quite traditional target group.

Transfer

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The vocational college 'Berufskolleg für Wirtschaft und Verwaltung der Stadt Herne' already provides the training programme 'Bekosch' for about 10 years. Bekosch is especially designed for young showmen. Here courses in the winter months are closely linked to e-learning lessons and distance-learning units during the travelling period in the summertime. In cooperation with the vocational college Friedrich-List-Berufskolleg in Herford, the French and British schools Lycée Peltier in Ham and the Gloucestershire College in Gloucester those modules were being adapted, supplemented, and systematized, in order to realize pilot courses in Herford, France, and Great Britain. The project has been supported officially by the county governments Bezirksregierung Arnsberg und Detmold and by the Académie

The target group has a very sceptical stance towards education. This proved to be a great obstacle for the transfer of the concept of the Vocational College in Herne to the French and British Colleges. Besides, it turned out to be a critical fact that neither England nor France have had well-established structures of cooperation of official authorities and showmen's associations in the area of vocational education, and that furthermore both countries don't know mandatory vocational schooling, so that the participation in courses is only based on perspicacity and free will.

Especially in France the gathering of participants for the pilot course, for which units were planned in French, mathematics, business administration, welding, and glassware industry, proved to be very difficult. The main reasons were showmen's prejudices concerning national biased interests about the educational efforts. Particularly the French showmen's associations vehemently rejected the pilot courses. A further problem was the remote geographical situation of the Lycée with poor public transport links (the fact that the Lycée was a boarding school was insignificant, because parents only wanted day schools). The commercially oriented pilot course in the Friedrich-List-Berufskolleg in Herford was successfully implemented from 7th until 18th of January 2013 with 7 young showmen from the regions of eastern Westphalia and southern Lower Saxony. In spite of the established cooperation between school supervisory authorities, the competent teachers for the children of showmen ("Bereichslehrer"), and the showmen's associations in Germany and in addition to the great interest previously mentioned by showmen of the eastern Westphalia region and southern Lower Saxony, even here the 2-week commercially oriented pilot course in Herford has not been fulfilled without any difficulties. This was chiefly due to the lacking responsibility for the compulsory nature of participation and the heterogeneity of the group, especially the different educational backgrounds. The pupils were taught English, typing, business administration, and commercial law and finance as well as basics in MS Word in the vocational college in Herford. In spite of the problems mentioned above the great interest of the institutions in Lower Saxony and the inquiries of interested persons during the preparations for the course have shown that there is indeed a great demand for a specific offer of vocational education in eastern Westphalia and southern Lower Saxony, so that all





participants – students and teachers - considered its lasting development and installation as useful and desirable.

In Gloucester the funding proved to be the principal problem. That their transfer project finally was a great success was mainly due to the EU project funding of ett-edu, because the welding course (with recognised certificate) exactly matched the needs of the showmen and furthermore the pilot course brought them significant financial advantages, as it were offered free of charge.

Vision statement and educational framework

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Occupational travellers need a flexible design of the vocational training, which is focussed more on outcomes than on regularly attending school. The showmen's associations ESU, DSB and BSM participating in ett-edu drafted the model for a job related to the field of the work of a showman as guidance for the project realization, at the same time summing up the reasons for the vocational training of young showmen. This model was the basis for the catalogue of skills required for running a fairground business that was designed during ett-edu. This educational framework consists of 10 learning units in the EQF-levels 2 till 4 whose three categories Knowledge, Skills, Competences consider the specific requirements of the profession of showmen. The modular vocational concept of ett-edu is inspired by the German dual vocational training, the catalogue of professional competencies/skills contains blended-learning elements and is oriented towards learning outcomes. The focus on learning outcomes means, that informal learning is treated equal to learning at school. It combines traditional training units such as Purchasing of Goods with showmen-specific modules which are concerned with Event Management, Start-up Business, and Corporate Governance – a unique combination unknown so far in other professions. The modularization of the programme, the design of the learning units as coherent packaging makes trainings flexible and reusable and their updating easy - an optimal concept for young occupational travellers in fairground business.

Project work and dissemination

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Crucial prerequisite for the success of the project was and is the significant support by the German and European showmen's associations, because many showmen think that their children's traditional 'learning by doing' in family business not accompanied by vocational training in college is sufficient. Besides, it turned out to be a critical fact that neither England nor France do know mandatory vocational schooling, so only based participation in courses is on perspicacity A majority of project activities were aimed therefore to address and remove reservations and to promote the educational acceptance of the target group. This especially included the improvement of the cooperation between schools and supervising authorities on one side, and the showmen and their associations on the other.

The project work of ett-edu was supported and accompanied by numerous publications. E.g. the WDR, one of the largest public programmes in Germany, broadcasted a television feature about the vocational efforts in favour of the young showmen. All in all, a notable success regarding sustainability is that ett-edu has been triggering the discussion of French showmen's associations regarding the problem of vocational education. The Showmen's Guild in Great Britain has also initiated concrete measures. In Germany, the process to offer programmes designed for the target group, which started a few years ago, has made progress by ett-edu.

The website http://www.ett-edu.eu represents the project externally and has been up-dated continuously. An internet based communication platform was used for communication within the partnership.

Project evaluation by the Ruhr-Universität Bochum



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The university Ruhruniversität Bochum, department of business computer science, was responsible for support in research and evaluation.

The evaluation of the project ett-edu by the Chair of Business Informatics at the Ruhr-University Bochum dealt with the project work as well as with the impact of the project results on the target group. Aims and concept of the evaluation implied both formative and summative evaluation methodologies, which have made possible process evaluation (e.g. for the timely detection of problems in project work), product evaluation (regarding the actual project results), and the examination and confirmation whether the objectives had been reached by the project partnership as a whole and by individual project participants. The evaluation aimed at:

- Project management support
- Assessment of the success of the project
- Increase of the project flexibility and efficiency
- Fulfilment of the requirements to the evaluation by the European Commission

In a total of four investigative phases both the areas of Project Management /Project Partnership as well as the 2013 Pilot Classes, the European Educational Curriculum for travellers according to EQR/ECVET and the effects on the target group were assessed.

Priorities were set on the collection of data from standardized assessments of the project participants and teachers and students of the pilot courses by way of online surveys (in 2 investigative phases 6/2012 und 1-4/2013). In addition, the colleagues of the RUB chair of business information technology assessed the project events and results as external observers. Moreover, qualitative questionings in structured interviews were conducted with teachers and students, which basically strengthened the fair statements of the online survey.

Results of the evaluation:

The ett-edu project has allowed young showmen to participate in vocational programmes, to improve their personal and business prospects and to shape their profession sustainably.

From the outlined evaluation results valuable conclusions can be drawn for a lasting development of the results achieved in the Leonardo da Vinci project ett-edu:

- The cooperation of schools, supervisory authorities and professional associations has proved its worth and is indispensable for a lasting installation of educational efforts in German and European partner schools. This cooperation should be maintained and developed further on in those European countries where this isn't common practice.
- For vocational education designed for a target group provision of funds and staff is necessary for a lasting establishment of educational opportunities for showmen. Teachers have to have outstanding commitment, enthusiasm and strong identification with the new programme.
- The elaborated concept of flexible instruction modules, which are valid throughout Europe, has a promising future and will guarantee the results with a lasting effect. As demanded in the EQF informal learning in a showman's business must be of the same value as the classic teaching forms.
- The prerequisite for a multifaceted modular system is a high degree of acceptance and willingness of the young showmen to participate in such training courses. The more multifaceted the range of vocational education and the more options to choose from, the more students are requested or there will be serious financial questions and problems to organise and justify the quantity and cost of the many required different courses.
- Such a concept may also prove promising at the European level, because modular concepts for other sectors that connect school- and company-based parts are common in many European countries. Such models have accordingly the secure legal basis of the national school authorities.



The EQF-based vocational education system designed by ett-edu may consequently be the first step for a skilled occupation for the profession of 'showman' recognized throughout Europe.

Duration

2011 - ?

Partners

Berufskolleg für Wirtschaft und Verwaltung der Stadt Herne, Germany

Gloucestershire College, United Kingdom

Bezirksregierung Arnsberg, Germany

Deutscher Schaustellerbund e.V., Germany

Friedrich-List-Berufskolleg Herford, Germany

European Network for Traveller Education - ENTE e.V., Germany

Lycee Professionel Peltier, France

Bezirksregierung Detmold, Germany

Bildungsnetz Förderung:Individuell e.V., Germany

Ruhr-Universität Bochum, Fachbereich Wirtschaftsinformatik, Germany

Bundesverband der Schausteller und Marktkaufleute e.V., Germany

Europäische Schaustellerunion, Luxembourg

Professional field

Showman

Website

Www.ett-edu.eu (not available)



European Transfer of Traveller	Advertising and sales promotion	ECVET Unit no X
edu Vocational Education		Level 2 Credit points

Knowledge	Skills
 Communication with customers Personal sales Sales promotion Sales advertising Legal provisions of competition Law against unfair competition Exceptions Legal consequences of violations of competition Advertising planning AIDA formula Elements of the marketing plan Advertising material and media Within the sales site Outside the sales site Packaging Tasks and design Environmental aspects Cost of packaging 	 consider ways of promoting, design the sales site appealingly, place goods reasonably, develop proposals for customer acquisition, design advertising, select packages.
Competences	t-

Competences

The trainees are able to ...

- promote the sale by targeted communication with customers,
- prepare the sales site appealingly and to place the goods to promote sales,
- select the promotional material as needed,
- take into account the economic, legal and ethical boundaries of advertising in the design of advertising.

(from Learning_Unit_Marketing.pdf)

Comparison with ECVET recommendation:

The project describes a number of units of learning outcomes for the professional field of showmen. Each unit is described for three levels (EQF levels 2 -4).

For each unit, the EQF level and the name of the unit are given. The learning outcomes are described for Knowledge, Skills and Competences.

No information about the assessment of the learning outcomes is given (neither criteria nor methods). A field for the Credit points (ECVET points) is provided but no values are given.





2.17. EURIAC

Project description

EURIAC aims to create a hands-on, integrated European Class in automation to support VET students in the acquisition and use of knowledge, skills and competences to facilitate personal development, employability and entry to a European labour market.

To accomplish this, a mutual VET platform must be created to facilitate the transfer of and ensure that the learning outcomes are recognizable both by national curricula and the industry. This will be managed by adapting and utilizing the ECVET methods and tools developed within the European Class in Trucks Maintenance project (133971-LLP-2007-SE-LMP) and the validation system developed in the Validation of Maintenance Technician project (2005-SE/05/B/F/PP-161003).

The platform will be composed by the following ECVET devices:

- Design and qualifications in units of learning outcomes
- Allocation of ECVET points to units and qualifications
- Adaption and utilization of the ValidMaint validation system
- Development of an operational a partnership based on a mutual trust concept including memorandum of understanding and learning agreements.

This joint approach ensures that all partners are involved in the ECVET design process and gain experience on how to employ EQF and ECVET.

The European Class will be transferable to other European VET in automation at EQF 4 (Upper secondary school) and 5 (Higher VET/Adult education). The project will therefore employ a dissemination strategy that attracts a number of strategic stakeholders.

Objective 1

To adjust the previous market research form and then conduct an additional market investigation to identify the skills needs of maintenance electricians working on PLC-programming in industrial automation as a complement to the one performed in the VocTrainMaint project to ensure the training content of the EURIAC is in line with industry skills needs.

Objective 2

To adapt and utilize the ECVET tools and methods developed within the European Class in Trucks Maintenance project to create an ECVET system for EURIAC for transparency and recognition of students' knowledge, skills and competences gained abroad and to continue the experimentation on ECVET and EQF in European VET.

Objective 3

To adapt and utilize the validation system developed in the ValidMaint project to establish students' skills level before entering the European Class and to validate learning outcomes at completion. The adaption of the ValidMaint system will also ensure the continued development of the same.

Objective 4

To establish a mutual trust consortium of European partners from industry, administration, and education sectors who will collaborate to create the VET platform on which the European Class will be founded. This includes memorandum of understanding and mutual recognition of learning outcomes. This approach will improve the quality and increase the volume of co-operation between training centres, administration and industry.





Objective 5

To test and evaluate the European Class concept by organizing mobilities with students from Sweden, Finland, Spain and the Netherlands and in order to establish a close co-operation between training centres in Europe for subsequent rounds of mobilities thus improving the quality and increasing the volume of mobility of young people in VET.

Objective 6

To implement and disseminate the results of the EURIAC project to the identified strategic stakeholders.

(from project website)

Duration

2011 - 2013

Partners

Kungsbacka Kommun, Sweden

Elof Lindälvs gymnasium, Sweden

UTEK AB, Sweden

Bundesinstitut für Berufsbildung BIBB, Germany

Optima Samkommun, Finland

Politeknika Ikastegia Txorierri, S Coop. Ltda, Spain

ROC West Brabant, The Netherlands

Wear Management, Switzerland

Professional field

Industrial automation

Website

www.euriac.eu





Unit B the	Title of the unit: Working with motor controllers						
Netherlands	Desig large design about	C159234 SC41114					
Prerequisites:	 Basic knowledge about most common sensors (optical, inductive, capacitive, mechanical) Basic principle of motors and generators Working with 400V systems Basic knowledge of using relays and contactors Basic knowledge of electricity 						
Work tasks:	- Produce general scheme		a production module usi	ng CAD systems			
	Assembly, programming a Using relays and contacto Applying general safety ru Working with frequency cc Using basic principles of n	nd commis rs controlle les accordi entrollers	sioning of a production of a production of a put of the low voltage direction in a motor control circust in a motor control circust.	module including Sequence the Y/D motor into service. ective	Ladder		
Learning	Knowledge		Skills		Compe		
Outcomes:	He/she knows how to define the processes using Ladder methe. He/she knows how to recognis of Ladder-language according 61131-3. He/she knows how to describe program the production module.	ods. se syntax to IEC	has to be controlled - He/she is able to it	analyse the process that ed. run through a PLC given Ladder, and check if	IEC	/she is responsible for applying C 61131-3 to create a PLC- ogram using Ladder.	
	He/she knows how to define the components of a frequency components of a frequency components of the state of the sta	ne basic introller. ne basic if the	controller to a mot	connect input to start	rigl fre- pai - He cor cor	/she is responsible for applying the nt combination of settings of the quency controller with the rameters of the motors. /she is responsible for applying the rect wiring of Y/D motor with its ntactors	
	He/she knows how to define the principles of a CAD systems. He/she knows how to recognist technical symbols and knows use them.	se electro how to	CAD.	produce a drawing using	nev cha	He/she is responsible for creating a new up-to-date drawing when changes have been made.	
	 He/she knows how to describe general safety rules for the lov directive. 	voltage doesn't meet with		o point out when a machine th certain safety standards o work in proper conditions, any kind of risk.	ger saf acc	 He/she is responsible for applying general and specific branch related safety rules and procedures according to low voltage directives i his/her work. 	
	 He/she knows how to explain the method of measuring the para a motor controlled by a frequent controller. 	meters of		neasure the current r of a motor controlled by oller.	the	she is responsible for analysing condition of the motor using the asuring results.	
					kno so t	she is responsible for sharing wledge, experience and insights that electro technical products and tems will be tested properly.	
Reference to national qualification:	The Netherlands	Sweden		Finland		Spain	
	Technicus (crebo 94421) inriktning Industritel inriktning underhålls		Isteknik ogrammet, inriktning			Automatizacion y robotica Industrial Técnico Superior en Mecatrónica Industrial Técnico superiro en Mantenimiento de Equipo Industrial	
Reference to NQF:	Level 4	N/A		N/A		Level 5	
Reference to EQF:	Level 4*	Level 4*		Level 4*		Level 5*	
ECVET points							
Assessment:	Observations						

^{*} The unit has been identified as part of the above mentioned national vocational qualifications and has by that been referenced to the same EQF level of the qualification.

(from Units of LO with Assessment Grids - Unit B_20130902.pdf, p.1-2)

Comparison with ECVET recommendation:

The project describes four units of learning outcomes. For each unit, the learning outcomes are described for Knowledge, Skills and Competence. References to national qualifications and to EQF and NQF levels are given (showing thereby the problem that one and the same unit of learning outcome might be part of different national qualifications which might be referenced to different EQF levels). ECVET points are mentioned but no values given. For each unit, an assessment method and an assessment grid with criteria is given.

In addition to the ECVET recommendation a field for the prerequisites and the work tasks are given.



Unit D the

^{**} Further experimentation of the concept of ECVET points is required at European level before utilisation in practice.

2.18. **GREEN**

Project description

The transnational project GREEN "BRIDGES FROM GREY TO GREENING JOBS" offers a European device to recognise, transfer and capitalise knowledge, aptitudes and competences of the workers on key "renewable energies" to tackle the challenges of sustainable development.

BRIDGES FROM GREY TO GREENING JOBS is aimed at contributing to the "European learning space" improving the transference and recognition of the learning and qualifications results through the European common tools: the European Qualification Framework (EQF) and the European Credit System for Vocational Education and Training(ECVET).

(from project website)

Duration

2011 - 2013?

Partners

ADEGI - Gipuzkoa Association of Employers, Spain

Fondo Formación Euskadi, Spain

BIVQT - The Basque Institute of Vocational Qualifications and Training, Spain

ACLIMA – The Basque Environment Industry Cluster Association, Spain

GIP-FCIP – Academy of Aix-Marseille, France

Kaunas Chamber of Commerce, Industry and Crafts, Lithuania

The Chamber of Commerce and Industry of Dobrich, Bulgaria

Noema Competency Management International Oy, Finland

Professional field

Sector of Renewable Energies

Website

www.greenjobsproject.eu





Title of the LO	INSTALL AND MAINTAIN WIND POWER PL	INSTALL AND MAINTAIN WIND POWER PLANTS				
Title UNIT 1:	Develop a working plan					
LO UNIT Reference info:	Reference document / link					
Nº of ECVET credits:	E	QF level:	4			
LO UNIT Performance Criteria / Success Indicators	# Criteria / Indicator Description C	Critically	Means of verification			
Knowledge	 Methodological specifications for t Procedures and operations to prepare 	 Kind of plants. Assembly of wind parks and wind turbines. Methodological specifications for the assembly of wind turbines and wind parks. Procedures and operations to prepare and rearrange the plants. Assembly stages, organisation and safety plan. 				
Skills	Interpret the technical drawings are Determine the possible dysfunction itself. Establish the sequence for the assesence of the control of the	 Identify and find the placement of the different components of the assembly or plant Interpret the technical drawings and specifications of the equipment and the plant to be maintained. Determine the possible dysfunction between the plant project and the features of the received materials or the placement itself. Establish the sequence for the assembly tasks basing on technical instructions, drawings and documents. Choose the materials, tools and other technical resources required for the kind of wind plant to perform. Prepare the working area according to the work requirements and according to established working proceedings. 				
Competence	Commitment with the established plans for Perseverance against difficulties Tidy and methodical attitude when perfor					
Means of verification	Describe the tasks to carry out in t use.	a wind plant in an assembly p ted with the assembly detail o he assembly or maintenance,				

(from LO_Wind_maintenance_technician_KPA1.pdf, p.3-4)

requirements.

Comparison with ECVET recommendation:

The professionals' profiles are defined in terms of KPA - Key Performance Area. For each KPA the correspondent learning outcomes (LO) are defined. LO are in turn composed by Units. Each Unit is characterized by Knowledge, Skills, Competence and Performance criteria.

The EQF level is reported both for LO and Unit. Whereas ECVET credits are envisaged in the definition of LO and Unit but are not defined in the available documents.



2.19. ICARE

Project description

The idea underpinning the **ICARE project** is that a high number of personal care and social workers are currently mobile across Europe, but the recognition of their competences, gained in other contexts (countries, institutions or systems) and learning settings (formal, non-formal, or informal ways of learning), is hardly achievable as no specific or equivalent qualifications exist in different European countries.

The lack of common frameworks for the evaluation, transfer, validation and recognition of learning outcomes and the rarity of related flexible training solutions still delays a full labour market integration, the development of human capital and the increase of mobility.

Apart from those regulated professions for which a specific recognition framework already exists (2005/36/EC), an experimental application of the ECVET system for the establishment of a recognition model in the field of personal care is the core of the I-Care project, which intends to establish a mutual trust area among partner countries (Italy, Germany, Poland, and Romania) and to further develop mutual recognition of training paths and qualifications.

(from project website)

Duration

2011 - 2013

Partners

Fondazione Cefass, Italy

Fondazione Ikaros, Italy

Federsolidarietà Nazionale, Italy

CISL / ANOLF Brianza, Italy

anc - National Qualification Authority, Romania

Amber Business Consulting, Romania

VHS Cham e.V., Germany

Sic! Foundation for social innovation centre, Poland

ANOLF / CISL Bergamo, Italy

Professional field

Personal Care and social service sectors

Website

www.icareproject.eu





ECVET points	UNIT OF LEARNING OUTCOMES	LEARNING OUTCOME	ECVET sub-points	KNOWLEDGE	SKILLS/ATTITUDE
	Carrying out the care operator role within the organisation structure and service and cooperate with the caring staff	Working in team	7	He/She knows team-working: dynamics, roles, functions He/She knows structure and dynamics of the organization system in which he/she works	He/She can work in team He/She can recognize and respect different roles He/She can recognize the organizative context of services.
		Handling and understanding files, charts, and forms to record what is observed during the service	5	He/She knows the main instruments and communication tools in different operative contexts and their use	He/She can cooperate to define procedures and protocols related to his/her tosks of caregiving, housekeeping and health-hygienic interventions He/She can work according to his/her competences and respecting the procedures and protocols defined by the working team
25		Cooperating to verify the quality of the service	6	He/She knows the main tools for quality monitoring and evaluation	He/She can cooperate to define care projects and to verify their results He/She can cooperate to verify the properness and quality of services
		Using common computer tools	1	He/She knows basics of information technology	He/She can carry out basic computer operations He/She can use the softwares at a basic level under specific training
		Carrying out the working activities respecting privacy regulations	3	He/She knows the regulations about communication/information	He/She can manage his/her activities confidentially and ethically He/She can identify the ways of upgrade his/her knowledge through self-training and refresher courses
		Cooperating for the realisation of training of support operators and for their evaluation	3		He/She can recognise and apply safety at work regulations to protect his/her health and the assisted person's health He/She can assist the student during the training period and transmit knowledge He/She can give an evaluation of the student assisted in the training period

(from Matrix-Care-Operator-with-ECVET-Points-[EN].pdf, p2)

Comparison with ECVET recommendation:

The ICARE partners have developed a common matrix of competences. The matrix describes learning outcomes distinguishing knowledge, skills and competences; but avoids uncoupling work tasks and global competences with cross-dispositions (attitudes). The essential cross-disposition (attitude) should be included in the learning outcome's description itself. The ICARE matrix also elaborates different levels of learning outcome whenever they help to describe a professional profile.



2.20. International Transfer: Building Service Engineering (IT:BSE)

Project description

The central objective of the ET-2020 Strategy is the increase of the energy efficiency and the reduction of CO2 emissions. In order to reach the central objectives of ET-2020 when operating buildings, a building must be seen as a complex technical system; it needs a systemic approach where all aspects from building to operating must be considered. A resulting field of activity is the Building Service Engineering (Gebäudesystemtechnik = GST) that is of growing importance in Europe although there have been just a few training and further education facilities in GST explicitly based on the systemic approach so far.

With the project, already existing VET as well as new training and further education in the GST- field are supposed to be oriented towards the systemic basis of GST. Therefore, new qualification demands have to be fulfilled by the employees. The project is targeted at the empirical recording of these specific demands and to describe them competence-oriented. By this means the future job training and further education structures are supposed to be coordinated in a better way with the demands of the job market. Furthermore, the transfer of acquired competences should be promoted among the different European countries and the cooperation between the world of work and the VET-system will be intensified.

Since GST combines and reinforces qualifications of different existing jobs that require training on the basis of its systemic approach, there is a need to make acquired competences transparent and easy to describe for new vocational training profiles within the GST. Thus, the model of the Vocational Qualification Transfer System (VQTS) is transferred to the field of GST. Job-related competences are described in learning units, suggestions for a possible distribution of credit points (ECVET) are developed and already existing training profiles in Europe are made transparent. Each trainee in the occupational filed of GST should be enabled to do parts of his job training in a different European country and it should be possible to acknowledge all acquired skills and competences as part of his training frameworks.

Core partners of the project are mainly vocational colleges in Germany, France, Bulgaria, Finland and Spain. In the empirical investigations, the implementation and the use of project results, chambers of commerce, district authorities, state governments, trading associations, employee associations and enterprises of the GST are integrated. The empirical investigation will be carried out with the cooperation of KN-Marketing, a consulting firm active in the field of further training in GST.

In order to coordinate job training and further education and the qualification systems in the field of GST and to make a lasting improvement on the demands of the job market, the results of the projects should be implemented in the frameworks for VET and the curricula of the VET and further education programmes in each participating country.

(from project web site)

Duration

2012 - ?

Partners

EU-Geschäftsstelle Wirtschaft und Berufsbildung der Bezirksregierung Köln, Germany

GIP-FAR: Goupement d'intérêt Public - Formation de l'Académie de Rennes, France

I.E.S. Campanillas, Spain

Gabrovska Targovsko-Promishelena Palata (Gabrovo Chamer of Commerce an Industry), Bulgaria

The City of Kouvola, Kouvola Region Vocational College, Finland

C.I.F.P. Matenimiento, Spain

Professional field

Building Service Engineering





Website

http://itbse.akbk-horrem.de

ECVET implementation

Name of the Unit:	semble and	dismantle components of building syste	ems	
Reference to the qualification:	ocational Qu	alification in Building Maintenance Tec	hnology (FI)	European Credit system for Vocational Education & Training
Area of work tasks: Plant mechanic for	sanitary, heating	g and air conditioning systems (m/f)	EQF-level: 4	DQR-level: 4
schedules regarding established norms	and standards a	d dismantle particular components of building syste and to carry out the associated wiring (Unit 1.1 of th	e IT:BSE-Matrix)	assembly/disassembly
Knowledge		kills	Competence	
describe installation and operation heat generators, fuel supply and exystems, heat distribution systems roomheating systems, systems for energy storage, air conditioning at ventilation systems, drinking water including decentralized heating sy water storage devices, drainage sy electrical systems for the connection relevant devices name the relevant technical normedescribe regulatory requirements read engineering drawings describe the working steps of a use connection method name important safety facilities describe health and safety requires suitable measures in the case of a	n mode of xhaust gas s, heat nd r systems stems, fresh sstems, on of s	install heat-generators to heat buildings and drinking water, connect them with heat distribution, fuel supply and exhaust gas systems, establish connections to electrical systems Install and concept pipes for heat distribution systems Install roomheating systems and connect them to the heat distribution system Install systems for heat energy storage and connect them with the heating and distribution components Install and connect pipes of fuel supply systems Install fittings and facilities of fuel supply systems Install components for the supply of fresh air, air conditioning and cooling of building	work steps with Plan and carry o and professiona Communicate in cutomers Understand and requirements	ut work tasks autonomously

(from LEE_Assemble_and_dismantle_components.pdf)

Comparison with ECVET recommendation:

The project describes a competence matrix for the field of Building System Engineering. Also, two units of learning outcomes have been defined (or at least for two units documents are accessible).

For each unit of learning outcomes, the reference to the qualification, the EQF and NQF levels are given. The learning outcomes are described for Knowledge, Skills and Competence.

No ECVET points and no information about the assessment of the learning outcomes are given (but assessment grids for some of the competence areas described in the competence matrix are available).

In addition to the ECVET recommendation a field for the area of work task is given.



2.21. LearnWithClay

Project description

The exciting EU partnership project Learn with Clay brings together twelve organisations across four European countries with the aim of providing vocational development and mobility opportunities for plasterers, trainers and crafts people in the earth construction sector. What we want to do:

- Make it possible for young people across Europe to learn earth construction techniques with our European partners.
- Make it possible for building & plastering specialists to learn and gain vocational qualifications through practical training, workshop and construction-site based, at home and abroad.
- Create and improve training opportunities and qualifications for migrant workers across Europe in the earth construction sector.
- Create a standardised European wide certification and training system implemented and recognised by each country.
- Promote a European-wide exchange of skills and networking in clay plasters and earth construction.

This project recognises the value both of the older apprenticeship systems of the UK and the European Tradition of Craft journeymen and women, whilst linking these with the requirements of the modern world. To achieve this, we aim to standardise certification of the learning outcomes from Level 1 to Level 8 (equivalent to the current NVQ 5) in a system recognised across Europe. The project follows the recommendations of the "European Credit System for Vocational Education and Training" (ECVET) and the "European Qualification Framework" (EQF), creating a full range of learning outcomes in a comparative and transparent manner, and simplifying international mobility and life-long learning opportunities for learners and practitioners across Europe.

The certification will be achievable to experienced crafts people across Europe who can provide evidence of appropriate learning outcomes, skills levels and understanding.

(from project website)

Duration

2007 - 2009

Partners

HWK Schwerin, Germany

FAL e.V., Germany

BAUFACHFRAU Berlin e.V., Germany

Knobelsdorff-Schule Oberstufenzentrum Bautechnik I Berlin, Germany

Lehmbaukontor Berlin Brandenburg e.V., Germany

Berufliches Schulzentrum Leipziger Land, Germany

Amazonails Hope Mill, United Kingdom

constructionskills National Specialist Office, United Kingdom

AsTerre – association nationale des professionnels de la terre crue, France

AKTERRE, France

Le GABION, France





Deutsch-Bulgarisches Berufsbildungszentrum, Bulgaria

Professional field

Earth building

Website

Www.Lernpunktlehm.de





Preparing Clay Plaster

Qualification: Designer in clay plastering (Chamber of Crafts, DE)

ECVET Unit n° 1

Level 4

Credit: 15%

Knowledge

- · Main constituents of earth as a raw material
- Behaviour of earth in relation to water : consistency, cohesion, reversibility
- Basic properties of earth composition and texture (grain size distribution), cohesion, plasticity, colour, absorbtion)
- · Different clay minerals and their properties
- · Field Identification tests for earth
- · Composition of clay plaster
- Finished plaster quality to achieve the required standard for the particular conditions of use
- Criteria in guaging correct proportions of constituents for clay plaster
- Principal additives (aggregates, fibre, stabilisers, pigments) their use and their effects
- Principles of stabilisation of clay plaster for interior and exterior work
- Manufactured products, their use and areas of application
- Sourcing of materials: raw material, manufactured products, clay powders
- Test method for determining the mixture (constituent proportions) for different plaster layers and for different areas of application
- Estimate of quantities and calculation of mixture ratios
- Awareness of impact on indoor climate and environment
- · Preparation and mixing of clay plaster
 - · Current legislative workplace requirements
 - · Relevant codes of practice and current standards for quality of work and materials
 - · Tools, machinery and equipment
 - · The order of work in planning and making plaster
 - · Safe and healthy working practices

Skills

- · Conduct field identification tests
- Prepare raw materials (dry, grind, size, sieve, soften in water, store, transport)
- Select the components for different plasters; conduct test methods and interpret the results
- Calculate quantities of each constituent for the mixing process
- Calculate total quantities of plaster for the finished job and totals for each constituent
- · Make sample panels
- · Select, calculate and source materials
- Select and use appropriate tools, machinery and equipment to prepare raw materials and to mix
- · Organise the building site
- Comply with current legislation, official guidance and workplace safety requirements at all times

Competence

- · Source materials, in particular find raw materials and select earth samples, and prepare them
- Explain your choice of recipes for different plaster layers and for different application techniques, from both raw materials and from manufactured products
- Plan and organise the process of preparing clay plaster for usual and predictable building sites
- · Control the quality of the plaster
- · Supervise the mixing process
- · Input into the decision making process concerning the plaster choice
- · Advise on suitable areas of application for clay plaster and the benefits for indoor climate

Comparison with ECVET recommendation:

The project describes the qualification of a 'Designer in clay plastering' which consists of 6 units of learning outcomes at EQF level 4. The units 1 to 5 are also described for EQF level 1 to 3, unit 6 only also for level 3.



For each unit, the name of the unit, the name of the qualification (where applicable, units for EQF level 1 to 3 not being part of a qualification) and the relative weight of the unit are given. The learning outcomes are described for Knowledge, Skills and Competence.

Criteria for the assessment of the Skills are described for each unit. Also, assessment methods are mentioned (in evaluation sheets given for each unit). Only ECVET points are not assigned.



2.22. M_ECVET_S

Project description

M-ECVET-S contained elements of sectoral transfer, geographic transfer, and method transfer. In the M-ECVET-S project, there was a transfer of methods and results from the ESO-CERT project which was entitled "Using the method of standardized competence verification and certification in a credit point system for vocational training — an approach for the integration of the ECVET". This transfer project advanced and enhanced the ECVET-based method for the assessment of professional competencies that have been developed in the EU-project ESO-CERT in order to make this method applicable on a European-wide basis. It was not relevant how the competencies that are assessed have been acquired. This means that learning outcomes from formal, non-formal and informal learning are merged. The enhanced method intended to assess modular training units that should lead to complex action-oriented competencies. Since this kind of assessment also considered competencies that have been acquired at the work-place, it leads to a greater transparency concerning the acceptance of these competencies by the industry. This enhances the employees' company-wide mobility.

(from www.adam-europe.eu)

Duration

2009 - 2011

Partners

IBS-Institut für berufliche Bildung und EDV-Schulung GmbH, Germany

IHK Bildungszentrum Cottbus GmbH, Germany

DIHK Gesellschaft für berufliche Bildung GmbH, Germany

TRAINING 2000 S.n.c., Italy

BAHCESEHIR ÜNIVERSITESI METGEM, Turkey

University of Bedfordshire, United Kingdom

Tinta Education, Sweden

Ufficio Studi e Ricerche della fondazione ECAP, Switzerland

Professional field

Commerce

Website

www.ecvet-modular.eu





Module number	T	itle
General name of the qualification		
Reference of the qualification to the E	QF	
description of the lea	rning outcomes	
Knowledge	Skills	Competence
itemised description of the learning outcomes	itemised description of the learning outcomes	itemised description of the learning outcomes
Work load		
Methods and criteria of assessing the learning outcomes		
ECVET points		

(from M-ECVET-S_Final brochure_A5_EN.pdf, p.21)



Module 2			MS Word, Excel - Advanced			
Generic title of the qualification		Computer application				
The reference of the qualification according level						
a.)	The candidate	uses MS Office	e Word to create high professional docu	iments.		
MS Office Word	Knowledge		Skills	Competence		
	Knowledge The candidate can define the both terms: 'style sheet' and 'document template', and can name advantages regarding the use of templates. S/he can name various tools to create, texture, and control large texts for a professional appearance and an easier handling. S/he can explain the advantages regarding the use of a master document.		The candidate creates documents using a document template or wizard. S/he creates a document template. S/he creates, edits, and uses style sheets. S/he controls the paragraph and text flow and inserts section breaks and adds header and footer for a document section. S/he uses the 'Search-&-Replace'-Function. S/he customises tables and charts as well as pictures and other illustrations. S/he organises data in master documents and manages work tasks. S/he types comments and uses cross-references in documents.	The candidate independently creates professional documents with various formatting and designing tools using MS Office Word. S/he supports other person in questions on the practical application of the program.		
b.) MS Office Excel	20 Att Comm. 51	The candidate uses MS Office Excel to organise, analyse and evaluate large data tables and calculations, and to create professional charts.				
Knowledge			Skills	Competence		
	The candidate describe speci techniques to large data tab S/he can expla functionality c	al manage les. ain the	The candidate creates, modifies and formats large data tables. S/he imports data using MS Query. S/he uses and controls formulas and functions in large data tables.	The candidate independently creates large tables and performs calculations, analyses and		



	S/he can name specialised fur complex calcu S/he can described to analyse evaluate data. S/he can explain handling and calculating in one workbooks.	nctions for lations. ribe various se and ain the controlling g the with others	S/he uses available Add-Ins to manage large data tables. S/he analyses data using Pivot tables and charts as well as other various analysis tools. S/he presents results of calculations and analyses with professional, created charts. S/he shares and organises workbooks in collaborating with others.	graphical evaluations using MS-Office Excel. S/he supports other people in questions regarding the application of MS Office Excel.
Workload		120 Notiona	al learning hours	
Procedures and cri assessment of thes outcomes				
ECVET points		6 (six)		

(from M-ECVET-S_Final brochure_A5_EN.pdf, p. 33-34)

Comparison with ECVET recommendation:

Qualifications are composed by modules. All modules must be passed before the qualification is awarded. The module is the smallest element of learning and it has an equal credit value of 6 ECVET credits. The ECVET credit are not graded, but are allocated to a specific EQF Level.

For each qualification, the learning outcomes are described in terms of knowledge, skills, and competence. In this project the workload is measured with respect to the notional learning hours and one ECVET credit point equates to the learning outcomes achieved through 20 notional learning hour.

Regarding the assessment procedures, ECVET credit (6 per ECVET module) are awarded on the basis of a rigorous testing process which assesses achievement of the module's learning outcomes.

The correspondence with the EQF level is included in the definition of the module. However, in the documents available on line related to the project this field is not reported.

2.23. MobEx

Project description

Mobility of learners is a European key priority in vocational education. In particular, the mobility of apprentices needs to be promoted to a greater extent. The differences in European vocational education and training systems currently have a rather inhibitive impact on the educational content. It is of great importance to create mutual understanding and trust with regard to transparency and recognition of learning mobility. The LEONARDO DA VINCI transfer of innovation project "Mobility Excellence" devoted itself to this task and aims to improve the value-added content of mobility as a formally recognized part of vocational training. Therefore, ECVET and EQF provide an ideal "bridge" in geographical mobility. An important ECVET instrument is the assessment of learning outcomes, as it serves as a basis for the subsequent validation and recognition. In our project, we transferred the CEMES® competence recognition procedure - first developed for management competencies - on the acquisition of competency in the mobility of apprentices.

(from www.adam-europe.eu)

Duration

2010 - ?

Partners

IHK-Projektgesellschaft mbH, Germany

Memo Malta Mobility, Malta

IBS-CEMES Institut GmbH, Germany

ALFMED, France

Foyle International, United Kingdom

Professional field

Commercial and hotel professions

Website

www.mobilityexcellence.eu





Units of Learning outcomes – B: Information Processing

A unit of learning outcomes is a component of a qualification consisting of a coherent set of knowledge, skills and competence that can be assessed and validated. (ECVET Recommendation)

	Reference system: German vocational training act							
	Aus German		/ training occupation / qualif English		cation: French			
1. Bürokaufmann/-frau		1. Office manager		Gestionnaire de bureau				
2. Kfm. für Bürokommunikation		Management Assistant for		Agent commercial dans la				
3. Industriekfm.		Office Communication		communication de bureau				
Kfm. im Groß- und Außenhandel		Industrial Management Assistant		3. Agent commercial dans l'industrie 4. Agent commercial dans le commerce				
Ausernander		Management Assistant for		de gros et commerce extéri				
			and Foreign Trade					
	Unit: B2							
	Title: Word processing							
	Thus. Trota proceeding							
	Level 3 or 4 (DQR/EQF)							
	= knowledge of facts, principles, processes and general concepts, in a field of work or study (EQF)							
	Knowledge		Skills		Competences			
	He/she knows		He/she is able to understands to		He/she is responsible for/ supervises			
	* word processing hard- and software (MS Word)		* use word processing, recording and reproducing devices * touch-type		* preparing and processing text information for administration by knowing and using the functional national language to an appropriate			
	* keyboarding							
	* standards to format business letter (e.g. DIN 5008)				level			
	,		* formulate and format texts according to given facts by		* using appropriate type of corporate			
Unit: B2 (1 week mobility)	* technical terms related to word processing in the foreign language		use of works of reference		correspondence depending on context			
			* create documents and edit them in an efficient way					
			* create documents and edit them following specific requirements					
			* chose the appropriate type of corporate correspondence					
			* evaluate the quality of documents					
			* deal with paper and electronic files					
			* manage E-Mails					
			* work with text process software	sing				
			* collaborate with colleagues of different cultures					
			* communicate with customers, clients and colleagues in their lang	uage				
			* assign priorities and working goal oriented					

(from UnitB_Office.pdf, p.2)

Comparison with ECVET recommendation:

The project describes a number of units of learning outcomes for the commercial and hotel professions. For each unit the national qualifications, the name of the unit, the EQF and a NQF (DQR) level are given. The learning outcomes are described for Knowledge, Skills and Competences. For the assessment of the



learning outcomes the CEMES®-competence recognition procedure is used, but no further information about the criteria is given (at least in the document we had access to).

No ECVET points are assigned to the units.





2.24. NETINVET (RECOMFOR)

Project description

RECOMFOR project is directly in view of the European ECVET Recommendation: "Recommending that Member States support the development of partnerships and national and European networks devoted to test, implement and promote ECVET".

The RECOMFOR partnership includes most of the stakeholders of vocational education and training systems in 10 countries, for the certification "assistant in international trade".

The main objective of the project is to develop within the network members a space for mobility for students, during their training pathway, using the ECVET principles and tools.

Upstream RECOMFOR project, the project COMINTER allowed partners to develop a "shared reference", i.e. a tool to maximize the areas of compatibility between different national certifications.

Duration

2008 - ?

Partners

Centre International d'Etudes Pédagogiques - CIEP, France

Center RS za Poklicno Izobrazevanje, Slovenia

Fondazione Giacomo Rumor Centro Produttivita Veneto, Italy

Gospodarska Zbornica Slovenije, Center za Poslovno Usposabljanje, Slovenia

Centrul National De Dezvoltare a Invatamantului Profesional si Technic TVET, Romania

Camera de Comert si Industrie a Municipiului Bucuresti, Romania

Narodni Ustav Odborného Vzdelavani , Czech Republic

Organisation for Vocational Education and Training OEEK, Greece

Albeda College / IBS , Netherlands

Conseil de l'Education et dela Formation de la Communauté Française de Belgique, Belgium

Confederação do Comercio e Serviços de Portugal, Portugal

Generalitat de Catalunya, Spain

AGEFA PME, France

Kenniscentrum Handel, Netherlands

Centro de Formação Profisional para o Comercio e Afins , Portugal

Ufficio scolastico proviciale di Venezia, Italy

Professional field

International trade

Website

www.netinvet.eu





Certification units	Skills (S)	Details of skills/wider competences (C)	Knowledge (K)				
CU1 : International marketing							
CU11 : Market research and market planning on foreign markets	CU11S1 Collecting information through permanent market monitoring (desk research) and field research abroad and checking reliability CU11S2 Analysing and selecting relevant commercial information and regulation constraints about foreign markets CU11S3 Formulating requirements for the subcontracting of studies and following up on the studies on foreign markets CU11S4 Proposing a general outline for a concrete action plan based upon the commercial policy of the company and the SWOT analysis CU11S5 Making a summary and communicating to superiors to prepare decision making	CU11WC1 Organising and planning work activities, being autonomous CU11WC2 Being alert to opportunities and threats CU11WC3 Applying commercial insight	1. International marketing 1.1 Introduction to marketing 1.2. Market principles and structure 1.3. Marketing plan 1.4. Monitoring and Market studies 1.5. Export « swot » 1.6. Internationalization strategies 1.7. Internationalization support networks 2. Computing 2.1. Information research techniques 3. Environment 3.1 Economic 3.1.1. Economic, human and social indicators 3.1.2. Development and international trade indicators 3.1.3. Insertion of national into international economy 3.1.4. Principles of organisation of international exchanges 3.1.5. Principal trends of world exchanges 3.2. 4. Principal trends of world exchanges 3.2. 2. Country risks and rating 3.2.3. International end reglementary environment 3.3.1. Legal system 3.3.2. Regulations fields (norms, certification, exchange regulations) 3.3.3. International legal frameworks 3.3.4. Fiscal, customs regulation				

(from Units of learning outcomes NETINVET_EN.pdf, p.2)

Comparison with ECVET recommendation:

The project describes a number of units of learning outcomes (or certification units) for the Import and Export Sales Assistant vocational profile. Each of the certification units consists of a number of sub units. For each of these sub units learning outcomes are described for Knowledge, Skills and Details of skills/wider competences (not Competence). The kind of description of the learning outcomes is in this case quite different to most of the other pilot projects.

No ECVET points are assigned, no reference to the EQF or NQF level, no criteria or methods for the assessment of the learning outcomes are mentioned.



2.25. **N.E.T.WORK**

ECVET system for No borders in tourism' hospitality European Training and WORK

Project description

The project is oriented specifically toward the application and development of the ECVET system in the area of reception in hotel structures, for which, in all the partner countries, the opportunity appears evident of starting up/consolidating both a functional formalisation of partnerships aimed at translating the orientations and applications already underway into lasting systematic accepted practices, and the coordinated and approved testing of such practices.

The project, therefore, does not intend to propose either new instruments or new procedures in the reference areas of the ECVET system, but on the contrary to coordinate, redirect and integrate within ECVET those processes which, in the current situation of the partner nations, have been recognised from the preliminary phase as effectively testable and which can be attributed to that system. In relation to this, the project includes a series of work phases which call for a continuous and profound sharing of the methodologies for the analysis and description of training profiles, which will be tested in the national contexts of the partnership, in particular:

- Description and selection of the training profiles to be tested;
- Sharing and validation of the description methods for the learning outcomes and units;
- Description of the training profiles by learning outcomes and units;
- Quantification and attribution of credit points;
- Definition of Learning Outcomes verification systems;
- Constitution of partners' agreements for the implementation of the experimentation;
- Fine-tuning the Experimentation Plan;
- Experimentation;
- Validation and dissemination of the ECVET system guidelines.

(from adam-europe.eu)

Duration

2008 - ?

Partners

ITALIAN CENTRE FOR ADVANCED STUDIES IN TOURISM AND IN TOURIST PROMOTION, Italy

CONSULTIS - ENTREPRENEUSHIP CONSULTANCY LtD, Portugal

ITALIAN CENTRE FOR ADVANCED STUDIES IN TOURISM AND IN TOURIST PROMOTION, Italy

Sviluppo & Competenze, SV&CO Srl , Italy

PROVINCE OF PERUGIA, Italy

Italian Federation of Hotel and Tourism associations, Italy

Center Republike Slovenije za poklicno izobraževanje , Slovenian

Association France-Europea, France

Professional field





Tourism

Website

Www.ecvet-network.eu (not available)

ECVET implementation

NAME OF UNIT 2

To inform guests and advise them about services and events in the local environment

Name of the LO

IT: To organise and manage information about services in the local environment; To improve the level of customer satisfaction about the services provide; To propose and handle measures to foster customer loyalty

PT: To organize and coordinate the activities of the reception service and ensure the most complex activities

To cooperate in the sales effort of the hotel

SL: Acquires and evaluates tourism data from differ rent sources, advises guests and sells services; Preparation and offer of the tourism programmes of home environment and selling tourism programmes; To encourage and coordinate connection between individual tourist subject (establishments) on the area of the tourism destination, forward informational, selling and marketing services in home environment tourism, to plan packet offers

FR: Advise clients on the opportunities offered by the territory; To manage a benefit in rural tourism

LEARNING OUTCOMES IN TERMS OF COMPETENCE

He/she is able to

- execute more specific or complex activities, as welcoming and taking care of VIP customers, groups, handicapped people, children, etc.
- propose programmes, packages of services or promotional means relevant in commercial terms and able to capture the interest of customers.
- obtain and provide meaningful data for developing strategies, programmes and resources appropriate to market trends and customer interests.
- acquire and evaluate tourism data from different sources, advise guests and sell services
- prepare and offer the tourism programmes of home environment and sell the tourism programmes
- forward information about natural and cultural heritage in Slovenia
- · achieve customer reception
- · take into account the motivations and expectations of customers
- undertake an assessment of the service (customer satisfaction, compliance with specifications
- inform customers about the possibilities offered by the territory

KNOWLEDGE LEARNING OUTCOMES

- General protocol and techniques for receiving and hosting V.I.P. and special quests.
- Techniques for research and data analysis for the exploration of interests and specific motivations within different types of clients.
- Techniques for improving customer loyalty
- Information about the region (transport, historical aspect, etc)
- The offer of home environment
- Statistical methods and different types of statistical data
- Different activities, which can be integrated in the tourism offer
- Procedures and instruments for organizing and implementing the reservations
- Legislation on preservation of natural and cultural heritage
- Business materials (publications) in foreign languages
- The tourist location and tourism environment
 Local and protected local products
- N.E.T. WORK 47788-LLP-1

47788-LLP-1-2008-1-IT-ECVET (Agreement nr. 2008-3996 / 001-001)

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- Eating and cultural habits of guests
- Techniques for understands different groups of guests their needs and customs
- Differentiates and understands ways of verbal and non verbal communication
- Different promotional approaches

SKILL LEARNING OUTCOMES

- Interacts with costumers correctly and in an empathic way, fulfilling their needs, solving any problems, demonstrating commitment to offer a pleasant stay, enhance their satisfaction and making them loyal to the hotel.
- Establishes contacts with various entities and potential costumers in order to obtain information on present and future interests regarding services in the field of tourism and hospitality.
- Collaborates in the assessment and improvement of the services provided to costumers.
- Acquires and forwards the information about the region
- Orders promotional materials
- Informs home environment about the tourism events and activities
- Presents specificities of individual tourism areas (geographical characteristics, cultural and natural historical development of home region, capitol city)
- Uses appropriate business communication
- Plans and implements business interviews
- Reacts appropriately in problem and/or conflict situations
- Uses the appropriate promotional approach according to the potential guest
- Adapts the way of communication according to different target groups
- Presents him/her self to guests adequately dressed and tidy (clothes, external appearance, tidiness)

Indicators fro	m EQF
Knowledge	- 11 11 11 11
Skill	
EVALUATION PRO	CEDURES
EQF LEVEL	4
EQF LEVEL ECVET CREDIT POINTS	

(from Units_of_learning_outcomes_hotel_management.pdf)

Comparison with ECVET recommendation:

The project describes a number of units of learning outcomes for the area of reception in hotel structures. For each of the units the learning outcomes are described for Knowledge, Skills and Competence. The EQF level and the name of the unit are given.

No information about the criteria and methods for the assessment of learning outcomes are given. A field for ECVET points is provided but no values given.

In addition to the ECVET recommendation a field 'Name of the LO' is given, containing information about the different formulations of the respective LO in the partner countries. Also, fields for the proposed duration and indicators from EQF for Knowledge and Skills are supplied but no values are given.

2.26. **OPIR**

Project description

THE COMMITMENT OF REGIONS TOWARDS AN ACKNOWLEDGED MOBILITY: the OPIR-ECVET project.

Within the Leonardo REGIO-LLL project, the working group of the project workshop on "the part played by Regions in the mobility of young people undergoing vocational training" offered a few proposals of concrete actions during the 2008 European Summer University of FREREF.

Among these proposals: "To make mobility become a true added value in young learners' training curriculum". Such a goal can be reached through the following steps:

- To develop the official validation of international mobility by taking it into account in the curriculum and FEP assessment process.
- To experiment the ECVET system which is a major innovation at the European level.
- To build a partnership of regions, trade unions or professional sectors, competent authorities for assessment and adequate partners.

Several partner regions thus committed themselves in an innovating project testing the ECVET: the European project OPIR-ECVET.

Goals and Objectives

The project's main objective is to develop a system of credit points on 2 trades, hairdresser and automation, providing learners transfer and accumulation of units of learning outcomes. The project does NOT aim to create a common qualification, but to ensure full transparency of all qualifications within the scope of these two professions.

The qualifications will be, in whole or in part, organized in common units. This implies to specify learning outcomes and evaluation standards for each unit.

The tools and devices to be developed will observe the following quality criteria:

- Readability, accessibility and usability by learners,
- Minimizing implementation costs (both human and material) for VET providers,
- Total transparency of tools for learners, for the VET providers and future employers,
- Taking account of regional specificities and languages diversity
- Field of application of the project

The regional partnership has chosen to produce practical tools for two trades: hairdresser and automation engineer. Several reasons underlie the choice of these two sectors.

The goal is to build concrete, easy to use tools. It seemed relevant to test these on trainings existing in all the regions involved.

These two sectors have a clear European dimension. Hairdressing is a quickly evolving sector, with the emergence of new trends (stylistic, hairpiece, social and medical aesthetics...) and new groups with branches in various countries. As for the automation sector, there have been important technological developments in this sector and systems have been developed everywhere in Europe.

It is also relevant to choose two professions in different sectors. It is absolutely necessary to test if the tools and schemes can be transferred from one trade to another. This is the reason why the project is based on professions that differ in terms of traditions, products and systems of production.





The choice of these two professions will also ensure that a wide audience of learners will be involved and most of all, it will aim at calling upon teachers' help, most of them having had already to cope with early leaving students. Thus, a clear political choice has been made to have operators teaching at levels EQF 3 and 4.

For these two trades L.O. (job profiles?) are available in all regions.

As each FEP operator deals with a specific learning public (age, type of apprenticeship...) this mobility is not necessarily geographical, but it is a key element in social mobility and an important factor to help our citizens to fulfil their personal goals. If we want to fully develop LLL, the FEP schemes must be interconnected and have entirely compatible training pathways. The implementation of all types of mobility is a response to political goals which have been saved in each of our regions. Let us mention:

- A reduction of school early leaving rate which is the cause of the difficulties encountered by so many unqualified young people to find a job.
- A raise of the rate of adults in vocational education.

(from project website)

Duration

2008 - 2010

Partners

Centre de Coordination et de Gestion, Belgium

FONDATION DES REGIONS EUROPEENNES POUR LA RECHERCHE EN EDUCATION ET EN FORMATION , Belgium

RECTORAT DE L'ACADEMIE DE GRENOBLE, France

CONFERENCE INTERCANTONALE DE L'INSTRUCTION PUBLIQUE DE LA SUISSE ROMANDE ET DU TESSIN (CIIP) , Switzerland

GENERALITAT DE CATALUNYA - DEPARTAMENT D'EDUCACIO, Spain

CONSEIL REGIONAL RHÔNE-ALPES, France

CONSEJERIA DE EDUCACION DE LA JUNTA DE ANDALUCIA - DIRECCION GENERAL DE FORMACION PROFESSIONAL Y EDUCACION PERMANENTE , Spain

CEFASS- Centro Europeo di Formazione per Affari Sociali e Sanità pubblica, Italy

CENTRUL NATIONAL DE DEZVOLTARE A INVATAMANTULUI PROFESIONAL SI TEHNIC, Romania

CONSEJERÍA DE EMPLEO, SERVICIO ANDALUZ DE EMPLEO. DIRECCIÓN GENERAL DE FORMACIÓN PARA EL EMPLEO, Spain

Professional field

Hair dressing and car mechanics

Website

Www.freref.eu/opir





Topic	Describing units of learning outcomes in the context of using ECVET for mobility of learners						
Project	OPIR	OPIR					
General context	The project OPIR was testing ECVET in the context of qualifications related to two professions: hairdresser and car mechanic.						
	The project developed a methor achieved during mobility (form learning outcomes and to sussessment criteria.	ing mobility units), to describe	e these in terms of				
	In line with the ECVET Recompositity unit in terms of:	ommendation, the project OP	IR described each				
	The title of the unit (in core activity of the prof	the context of the project this ression);	was the title of the				
		 The generic title of the qualification (in each partner country the title differs but in all cases it refers to the profession concerned) 					
	 The learning outcomes 	- The learning outcomes in the unit					
	- The procedures and criteria for assessment						
	 ECVET points in the home and the host system (these are recorded in learners' transcript of record) 						
	The NQF/EQF levels were not used because these have not yet been determined.						
	The descriptions of these items are illustrated below by extracts from the qualification related to the profession of car mechanic.						
Specific context	The OPIR project partners have identified key professional activities for which qualifications in all the partner countries prepare. Some of the key professional activities can constitute the basis of 'mobility units' or units that can be achieved during mobility abroad (but which do not necessarily correspond exactly to the national units). In order to ensure that all the partners have a common understanding of the learning outcomes required to be able to carry out the given professional activity (e.g. <i>Replacing defective components</i> in the motor engine), the project partners have described the learning outcomes in detail.						
	The project partners have not modified the qualifications existing in their national systems. The description of the mobility unit was designed to support learners' mobility not to replace the national units' definitions.						
Description	Qualifications related to the pro-	ofession of: Car Mechanic					
of learning outcomes	Unit related to the key activity:	Replacing defective compon	ents (extract)				
Jutcomes	Knowledge	Skills	Competence				

Reading technical data sheets and/ or manuals Probability of failure (AMDEC, PARETO, Ishikawa). Metrology Components' operational principles. Quantities and electrical/ mechanical data (voltage, current, resistance, power, torque)	Analysing the overall state of the component Take needed measurements, tests and surveys (electrical quantities, plate, dimensions). Establish an accurate diagnosis and suggest remedial measures Assess the need to replace or repair the component.	Run the defined test procedure on the defective component and interpret results to suggest reparations or replacement to the manager for validation
Reading technical data sheets and/or instruction manuals Security and hygiene rules: - Recording installation procedure (security procedure) - Protective equipment and signalling - Intervention material (tools, equipment, devices). Components' operational principles. Quantities and electrical/mechanical data (voltage, current, resistance, power, torque) Forms and types of intervention reports	Perform the functional testing of the installation Ensure the restart of the entire system according to a predefined protocol. Write a report about the intervention.	After the repair of the component and its installation, running the system in the presence of the manager.
		50

Description of the procedures and criteria for assessment

The assessment process (extract)

Assessment: Maintenance of a motor system functioning.

Task: Replacing a defective component in the installation of a motorized system

Material: Existing components in the system. Replacement components similar to the defective equipment. Measuring and control devices.

The practical examination: Organize the workplace according to safety rules. Identify the failure in collaboration with the manager. Identify the component to replace. Disassemble the defective component. Verify the defective component. Run the operational test of the facility. Complete the intervention report.

Competence (extract)			Lev	el forma	ance	of
	(extract)		0%	33%	66%	100 %
Run the defined test procedure	Adequacy and relevance of the	Maintenance reports are consulted and listed				0.5
on the defective component and interpret results to suggest	analysis of the causes of malfunctioning of the component (6%)	Overall visual control of the state of the component is undertaken and explained				0.5
reparations or replacement to the manager for validation	p2	The measurement procedures are adapted to each controlled variable and the measurements are recorded accurately				
		Specific control points are adequately selected (choice and order of controls and measures)			46	1

(from

OPIR example of good in describing units of learning outcomes v2.pdf)

Comparison with ECVET recommendation:





For the comparison, only one commented unit of learning outcomes was available from the www.ecvet-projects.eu portal (as an example of good practice for the description of units of learning outcomes). This was not sufficient as basis for a comparison.



2.27. PRO@

Using the "EQF and ECVET principles" to open new qualifications ways into shipbuilding sector

Project description

PRO@ used and promoted the European transparency instruments (EQF, ECVET and Europass), valorised methods experienced in previous projects (METALCERT) to favour the mobility among the States, increase the competence and productivity in the "ship building and repair" sector.

PRO@ defines all its activities with a "bottom up" approach, from the companies and their workers to the qualification systems and competent organisations. It involved the group of stakeholders with a reinforced participation of "advanced users" to ensure the usefulness of the products and prevent their quick expiry date and obsolescence.

PRO@ regarded two kinds of processes: the management processes, describing, organising and completing the project work (work packages 1, 8 and 9); and the processes focused on the product, specifying and creating the project product, defined by the cycle of life of the project (work packages 2 to 7).

METHODOLOGY AND ACTIVITIES RELATED WITH THE PROJECT MANAGMENT PROCESSES

We used PMBok technology and the tools integrated in this PMI methodology to ensure the compliance with the project in its different versions: scope- length - budget - risks and resources. WP1 was aimed at an efficient and integrated management of all the processes of the project in its different stages: start - planning - execution - monitoring - closure and inside each stage. In this regard, different organs were created: group ones (as the pilot team, the quality and valorisation team) and uni-personal (coordination, mainstreaming). The different organs met the principles of competence, task distribution, transparency, equality of opportunities and search for agreement.

WP8, in order to ensure excellence in all the processes of management and of product/result, as well as their integration, PRO@ decided to use the management excellence EFQM principles: leadership and coherence of objectives, management by processes, development and involvement of the people, learning and innovation, focus on client and results; and alliances and social responsibility. This WP had transversal character and establishes the quality planning activities, and those to ensure survey/monitor and to fit. WP9 was aimed at ensuring communication with the involvement of all the stakeholders: qualifications organisations and bodies, 298,000 employees at present and 9,000 companies. We described the processes to generate, collect, disseminate and deliver the information suitably and on time: planning the communications, distributing information, reports on performance and closure.

METHODOLOGY AND ACTIVITIES REGARDING THE PROCESSES FOCUSED ON PRODUCT/RESULT. LIVING CYCLE OF THE PROJECT

WP2. Answered to the need to plan the activities carried out along PRO@ living cycle and to achieve the project. Although it was a clearly "programming" stage, the planning basing on the deliverables of the previous stage was a constant in PRO@'s live. We started the organisational structure of the project and to approve the performance plans and programs. Communication with the stakeholders was a key for this stage to achieve their involvement.

WP3. Preparing ECVET grounds needs having some information on the different trends that influenced the sector and their incidence on processes, activities and, consequently, on the competences, knowledge and skills for an excellent professional performance. METALCERT methodology and using "open innovation" tools helped us reach the expected results.

WP4. This WP was critical. Here, we selected the central jobs in the sector activity and designed the professional qualifications required by the sector companies in terms of learning outcomes, with the assignation of ECVET marks, basing on the technical specifications of ECVET system. METALCERT





technology, experienced from 2006 to 2008, as well as ECVET guidelines and the results of ECVET projects (ex. project VQTS II) were used in this stage.

WP5. Comparing and establishing equivalences between the shipbuilding qualifications at national and European level was the objective of this stage, which allowed checking the possibility of this device to be transferred to the NVQ national realities.

WP6. We checked the reliability and validity of PRO@ device through experiences of practical use in companies and with workers from all the partner countries.

WP7. In this stage, we tuned the electronic device and disseminated the results to all the organisations involved in the project.

(from adam-europe.eu)

Duration

2011 - ?

Partners

FONDO FORMACIÓN EUSKADI, Spain

INSTITUTO VASCO DE LAS CUALIFICACIONES Y LA FORMACIÓN PROFESIONAL, Spain

GERENCIA DEL SECTOR DE LA CONSTRUCCIÓN NAVAL, Spain

GRETA MARSEILLE SUD, France

CENFIM NUCLEO DA TROFA, Portugal

Lithuanian Ship Builders and Repairers Association (LLSRA), Lithuania

Machine Technology Centre Turku Ltd, Finland

GROUPEMENT D'INTERET PUBLIC FCIP, France

Professional field

Shipbuilding sector

Website

Www.proaproject.eu (not available)











PROA PROFESSIONA PROFILE 1:	MANUFACTURING AND ASSEMBLY OF INDUSTRIAL PIPE FACILITIES
Definition:	Perform design, assembly and installation of pipes, fittings and incorporated items, as well as basic joining operations following established procedures, interpreting drawings and technical documents, in line with quality, occupational safety and environmental standards.
Nº ECVET Credits:	
EQF Level:	
UNITS OF PPP1:	1. DRAW AND MACHINE PIPES Interpretation of drawing in Pipe manufacturing Organization of workplace. Outlining and cutting pipes Pipe machining 2. PIPEBENDING AND ASSEMBLY Collecting technical documentation Organization of workplace Pipe forming and assembly Assembly of pipes Flanges and branches Treatment and finishing pipes 3. ASSEMBLY OF PIPE INSTALLATIONS Preparation of means for the assembly of pipe installation Preparation of templates and drawings for the pipe assembly Installation of supports for pipe assembly / positioning and fastening Making simple welds







PROA PROFESSIONAL PROFILE								
EQF LEVEL:	PARTNER:		COUNTRY: SPAIN					
NAME OF THE LEARNING OUTCOME		MANUFACTURING AND ASSEMBLY OF INDUSTRIAL PIPE FACILITIES						
DEFINITION OF LEARNING OUTCOME	operations fol	ign, assembly and installation of pipes, fittings and incorporated items, as well as basic joining of the procedures, interpreting drawings and technical documents, in line with quality I safety and environmental standards						
			.: DRAW AND MACHINE	PIPES (150	(h)			
KNOWLEDGE			SKILLS		COMPETENCE			
INTERPRETATION OF DRAW PIPE MANUFACTURING Have knowledge of the geor		MANUFACTU	TION OF DRAWINGS RING technical graphical in		INTERPRETATION OF DRAWINGS IN PIPE MANUFACTURING Obtain the information necessary to operate			
pipe routing. (Definition of angles, trangles, quadrar closed curves, perpendicula and parallel lines, triangles, circumferences, spirals: th oval, egg-shaped, ellips application on piping). Describe graphical represer used in the manufactt (Relationship between view possible views and mostificient views, most commin drawings of pipes, piclassification of represent orthographic, isometric a view) Elical standards and symmanufacturing drawings, set view, dimensioning in drawings, set view, dimensioning in drawings, most complete the pipe of the pipe of the pipe.	straight lines, gles and tlat rines, oblique quadrilaterals, eir application eie, parabola: attation systems re of pipes a fan object, accessary and on views used atts sketching, atton systems, nd schematic libuls used in pipes. (Types of tion and detail wing, symbols	Uniderstand systems e with the inf Interpret th orthogonal and schem Interpret s the measur Assess the	manufacture of pipes. J the various reprimployed in drawings of formation needed in a eacle eviews, sections and det American and European alto drawings. elf-control sheets and u rements to control. It time allocated for working ferent lengths of pipe.	f pipelines th case. tails of the n, isometric	and handle machine and tools to interpret (graphical, technical, or other) production engineering documentation. Get technical information for the lay-out and machining process by interpreting orthogonal (American, European), isometric or schematic pipe drawings. Adjust the specifications relating to machines and tools to the indications given in the technical documentation. Establish a work schedule setting durations and methods to use in laying pipelines. Obtain operations and self-control parameters for laying and machining pipelines from technical documentation.			

(from Piper – Definti.docx)

Comparison with ECVET recommendation:





The project describes the professional profiles in the ship building and repair sector. These profiles are the project's equivalent to the ECVET qualification. Each profile consists of a number of units (of learning outcomes). For each unit, the title of the unit is given. The learning outcomes are described for Knowledge, Skills and Competence. They are grouped in subdivisions.

For the professional profiles fields for the EQF level and the ECVET points are provided but no values are given. For the units (of learning outcomes) no fields for the EQF level or ECVET points are given. No information is given about the criteria and methods for the assessment of the learning outcomes.

In addition to the ECVET recommendation for each unit the number of hours is given.

An interesting point is that at the top of the table with the units, the name and the definition of professional profile is given but the labels states theses as the name and definition of the learning outcome.

2.28. Proper chance

Project description

Almost no other professional field is so much affected by the looming shortage of skilled workers as the field of health and social care. Due to demographic change and the ageing society it is getting more and more complicated to find qualified staff, especially in the western European countries. The project had the aim to help in filling in the gap between the provided and the needed qualified staff in the field of health and social care by providing basic instruments to assure mobility of skilled labour.

It was implemented by the application of ECVET instruments and principles with the aim of increasing transparency and permeability. Qualifications were described and compared using nine examples from the field of health and social care from Germany, Belgium and Italy. The methods for description and comparison, which have been developed in this process, were transferred to multiplicators in several seminars. The sustainability of the project results and the permeability of the educational systems have been assured by signing Memoranda of Understanding.

(from www.adam-europe.eu)

Duration

2011 - 2013

Partners

AiD – Actions Intégrées de Développement, Belgium

FEProSoC - Fédération de l'enseignement de promotion sociale catholique, Belgium

CFP Zanardelli - Centro Formativo Provinciale "Giuseppe Zanardelli" - Azienda Speciale della Provincia di Brescia, Italy

Le FOREM – Office wallon de l'emploi et de la formation professionnelle, Belgium

Tempo Libero Soc. Coop. Sociale, Italy

TENDA Solidarietà e cooperazione Brescia Est – Consorzio di Cooperative Sociali Soc. Coop. Sociale, Italy

Professional field

Social and health care sector

Website

www.proper-chance.eu





Key Activity

Arrange and deliberate on your own work, and arrange in accordance with tasks and client requirements

Qualification	GQF Level	
Social Care Assistant	3	

Assessment Instruments:

Oral examination (Expert discussion), practical examination at workplace, written examination

Professional Competence

Develop a professional identity and socio-pedagogical attitude

Skills

- Conscientiously practice the professional role of Social Assistant in the Social Care and Pedagogical fields
- Cultivate a represent a pedagogical attitude
- Develop and represent professional ethics

Knowledge

- Describe the professional image of the Social Assistant in contrast to other professions in the Social Care and Pedagogical fields
- Define own professional role in accordance with the requirements of the Social Care and Pedagogical fields, and describe personal motivation and personal qualifications for the job as Social Assistant
- Understand the humanistic and ethical values as the guidelines to personal behaviour
- Understand the dimensions of pedagogical activities

Professional Competence

Purposefully organise own work schedule

Skills

 Use the instruments of time management for the effective execution of professional duties

Knowledge

 Describe the instruments for organise personal work schedule and work environment

Professional Competence

On the basis of perception and observation, comprehending the life situation of the various clients

Skills

- Observe patients in their behaviour with detail to attention and with awareness of the their situation
- · Observe patients objectively and purposefully
- Be actively aware/conscious of own effectiveness and activity
- Perform goal-oriented supervision in its various forms and methods under the direction of specialists
- Assess and document supervision

Knowledge

- Understand supervision/monitoring and monitoring procedures as a basis for professional activity
- · Describe mistakes in observation and its phenomena
- · Describe monitoring and assessment methods

(learning-outcomes_social-care-assistant.pdf, p. 2)

Comparison with ECVET recommendation:

The project describes different qualifications in the social and health care sector. Each qualification consists of a number of key activities (or units of learning outcomes). For each of these key activities the name of the qualification and the EQF level is given. Each of the key activities consists of a number of professional competences. For these professional competences, the learning outcomes are described for Skills, Knowledge and Personal competence.

For each key activity information about the methods for the assessment of the learning outcomes but no criteria are given. No ECVET points are mentioned.

2.29. ProfDRV – Professional driving – more than just driving

Qualification requirements and vocational training for professional drivers in Europe

Project description

Today the road freight and passenger transport sector provides jobs for more than 4.5 million EU-citizens and already since 1976 (Council Directive 76/914/EEC) professional driver training is considered to be a matter of European interest. During the past decades, qualification requirements changed and increased fundamentally for professional drivers because of changes in work organisation, new technical standards, changing legal regulations, market requirements and work environments as well as a fast internationalization of the transport market. These developments contradict with the rather low level of professional qualification and a missing "learning" culture in the branch, that characterises this occupation nearly all over Europe and leads, together with a mostly negative image of the sector, already today to an alarming shortage of qualified drivers who possess the qualifications required by employers. Because the qualification of professional drivers is considered to be an important factor regarding road safety with high relevance for all EU member states DG Energy and Transport introduced Directive 2003/59/EC that regulates common basic and continuous training for professional drivers.

In order to investigate further into this occupation with rapidly changing and increasing qualification requirements and an alarming shortage of qualified personnel, this project will:

- explore vocational training schemes (incl. those related to directive 2003/59/EC) for this occupation
 in the countries represented from a VET and LLL perspective,
- define a job/qualification profile for this occupation that describes skills, knowledge and competencies (compatible with the EQF) needed to perform competently in the workplace and therefore to create conditions for employability,
- draft "European educational standards" for basic and continuous VET of professional drivers compatible with EQF and
- draw conclusions from the projects finding to develop directive 2003/59/EC further.

(from project website)

Duration

2010 - 2013

Partners

DEKRA Akademie GmbH, Germany

Universität Erfurt, Germany

ASIMAG, Spain

Freight Transport Association, United Kingdom

TK Formazione , Italy

Canadian Trucking Human, Germany

EuroTransportMedia, Germany

3s research laboratory, Austria

DEKRA Albasafe Akademie Kft., Hungary

Institut Technik und Bildung, Germany





VTL, Netherlands

Professional field

Logistics and Transport

Website

Www.project-profdrv.eu

ECVET implementation



Subject-specific task/ learning area 2:

Performing pre-departure tasks

2.1 Implementation of departure checks

The professional driver knows:

- the parts of the vehicles that should be checked prior to a departure
- . how to conduct the different checks
- how the results should be to be acceptable
- · when corrections have to made
- what measures need to be implemented for different kind of necessary corrections
- occupational health and safety measures that need to be complied with during departure check
- about usage of personal safety equipment during departure check

The professional driver can:

- implement a complete departure check on different vehicles and vehicale combinations
- evaluate the checks results and introduce possibly necessary correction measures²
- implement necessary occupational health and safety measures during departure check and, if applicable, correction measures
- demonstrate thoroughness and attention to detail and work methodically
- exercise initiative and resourcefulness
- solve problems and make decisions

The professional driver implements autonomously and self-dependent regular departure checks on his/ her vehicle/ -combination in order to ensure vehicle, transport and road safety.

2.2 Take-over of a vehicle or a vehicle combination

The professional driver knows:

- what needs to be checked when taking over a vehicle or a vehicle combination
- in which conditions a vehicle/ combination needs to be in order to be safe
- what he/ she can do him-/ herself in order to assure safety
 whom to inform about what kind of difficulties, if necessary

The professional driver can:

- implement all necessary checks and evaluate the results
- communicate defects to the appropriate contact person
 document the take over of a vehicle or a vehicle.
- document the take over of a vehicle or a vehicle combination
- effectively communicate and cooperate with colleagues involved in the take-over

The professional driver implements autonomously and self-dependent, if applicable, together with another person involved in the take-over. He checks especially the vehicles safety and, if applicable, load security in order to ensure vehicle, transport and road safety.

If necessary, he/ she initiates necessary finishing work, maintenance activities or other necessary steps or

(from ProfDRV_finalrep_annex10_profile.pdf)

Comparison with ECVET recommendation:

The project describes the professional profile of a professional driver (freight transport). The profile consists of a number of subject-specific tasks/work processes and cross-cutting tasks. For each task learning outcomes are described for Knowledge, Skills and Competence. They are grouped in sub tasks.

No ECVET points are assigned, no reference to the EQF or NQF level, no criteria or methods for the assessment of the learning outcomes are given.



2.30. SKILLSUP

Project description

Continuing education and non-formal forms of learning and professional improvement prefer learning through practical experience. This idea is supported by innovative solutions like training modules and didactic materials that support employees when performing vocational tasks. E-packages for improvement of employees' competencies are solutions that make self- learning and improving skills easier in the workplace, as well as making possible self-learning of workers in convenient moment of time. In the economy based on knowledge and innovation, the value of the company is directly related to and dependent on knowledge and intellectual capital of the employees. One of the way to increase effectiveness of learning and training is to give learners the right of access to didactic materials. Interactive course of competencies' improvement, e.g. in the construction field, might be placed on electronic medium (off-line version) or on IT platform (on-line version).

The goals of the project are concentrated on transfer of innovation the areas of: (a) exploring training needs - "IT system of monitoring and evaluation of workers' competencies"; (b) training materials as the educational package of the Modular Training Program for the specialization "Technology of Interior Drywall Systems" and adjusting them to IT environment needs; (c) procedural solutions of validation and certification of competencies with the help of flexible mechanisms of validation and transfer of learning results with the use of ECVET rules.

The result of the project will include the educational e-package adjusted to the needs of IT environment and to different training forms, especially to non-formal and informal ways of learning. Moreover, its functioning will be tested by selected activities (vocational competencies) among workers who perform montage of gypsum products, apply new gypsum systems and products among workers who prefer self-learning. Acquired competencies based on solutions related to the ECVET system experiences will be validated and certificated. Intangible results: dissemination of innovative methods of vocational improvement among workers-installers of drywall interior constructors.

(from project website)

Duration

2011 - 2012

Partners

Institute for Sustainable Technologies – National Research Institute (Vocational Education Research Department), Poland

Universitatea Dunarea de Jos din Galati, Romania

Polish Gypsum Association, Poland

En.A.I.P.F.V.G, Italy

Towarzystwo Naukowe Organizacji I Kierownictwa w Gdańsku, Poland

Professional field

Construction, education

Website

Www.skillsup.eu





Project SKILLSUP – ECVET unit descriptions

- 1. Generic Title of the Unit: Installation of partition walls (JM.02)
- 2. Title of the Qualification: Technology of Interior Drywall Systems
- 3. EQF Level for qualifications:
- 4. NQF/PL/I/R Level for qualifications:
- 5. ECVET points for qualifications:

6. Learning outcomes description for the Unit:

Skills	Knowledge	Competence
		Competence
Prepare the workplace for the	Preparation and storage of boards	Applies the principles of
installation of partition walls	and steel profiles for installation.	culture and ethics
Prepare the place where the materials for the installation of partition walls can be stored Ensure a proper transportation of all the necessary materials used in the installation of partition walls	Types of partition wall systems. Selection criteria of partition wall systems; wall parameters. Steps in the installation of partition walls.	Predicts implications of taken a actions Is open to changes Updates the knowledge and improves professional skills
Establish the position of partition walls	Setting the positions of partition walls.	Is able to bear responsibility for taken
Prepare and cut down to size boards	Assembling metal profiles for	action
for flat wall installation	partition wall installation.	
To fac was installed	paradon wan moduladon.	Is able to work in a team.
Prepare and cut down to size boards for arc-shaped wall installation	Laying the boards.	
	Installation of additional fitting.	
Choose and assemble the steel		
profiles for the installation of partition walls	Finish work, concealing seams between boards	

7. ECVET points for the Unit: 12 (circa 30% of the overall qualification)

8. The procedures and criteria for assessment of the units of learning outcomes

Assessment of the units of learning outcomes consists of two stages: written and practical. Verifying tasks are provided and evaluated by the certifying authority. In the Skillsup project these functions are conducted by Polish Gypsum Association (PSG).

The written part of the examination is conducted in the form of closed choice of the multiple test with one correct answer. The written exam takes up to 60 minutes and 30 minutes of practical recognition (choice) of materials and tools. To pass the examination it is necessary to score at least 55% of all available to obtain points.

The practical stage of the test consists of carrying out examination tasks conducted for the particular unit of the learning outcome in the particular qualification. The estimated time of the implementation of practical test takes maximum 240 minutes. The examination candidates are required to perform **the product** or **service** as the result of implementation of the practical stage. To pass the practical examination it is necessary to score at least 75% of points in the practical stage.

The basic criteria for assessment of the practical test should also included:

- The quality of the outcome in terms of fulfilling the requirements set out in the practical test and in compliance with the standards / rules of conducting professional activities,
- The quality of indirect result in the case when his assessment has a direct impact on the end
 result's assessment and it is not possible after the execution of the test,
- The process of the implementation of the test in terms of the implementation of conformity with the methods / technologies relevant to the unit of the learning outcomes,
- The process of the implementation of the test in terms of compliance with the rules of the health and safety and environmental protection.
- **9. Expiry date of the units of learning outcomes**: 2 years from the date of completion of the test

(from skillsup Installation of partition walls.pdf, p.1-2)

Comparison with ECVET recommendation:

As basis for this comparison only one description of a unit of learning outcomes has been available.

For this unit, the title of the unit and the title of the qualification are given. Fields for the EQF (3.) and NQF (4.) levels and for ECVET (5.) points are provided but no values are given. The learning outcomes are described for Knowledge, Skills and Competence. The ECVET points and the relative weight of the unit are then given (7. (why are the ECVET points not given at (5.)?). Methods and criteria for the assessment of the learning outcomes are also described. An expiry date for the unit of learning outcome is given.



2.31. SME Master Plus

Project description

The <u>European Credit system for Vocational Education and Training</u> (ECVET) is a European instrument to foster transnational mobility in vocational education and training. It has been developed by Member States of the European Union in cooperation with the European Commission. In 2008, the European Commission issued a call for proposal to finance projects under the lifelong learning action programme whose aim was to test the implementation of the ECVET process. As a result, SME MASTER Plus and ten other <u>European pilot projects</u> were selected.

The SME Master Plus project was piloting the ECVET application within the framework of training for master craftsperson. The main goals were to support 'Europeanisation' of these CVET-qualifications and by enhancing transnational mobility of master craftsperson to also achieve a positive long-term effect on the mobility rate in IVET. Furthermore, the project aimed at implementing an international network of master craftsperson training providers. The partnership developed an ECVET-toolbox covering the main instruments and principles of the ECVET recommendation including:

- Learning outcome matrices for the master craftsperson qualifications in bakery, hairdressing, joinery / cabinetmaking and floristry.
- templates for a Memorandum of Understanding, to implement institutional mobility-partnerships between competent institutions,
- templates for Learning Agreement and Personal Transcript, for individual mobility projects,
- checklists for each step of the mobility process.

The feasibility of these tools has been tested in real mobility exchanges and adjusted on the basis of the feedback gained by the sending and receiving organisations as well as the participants.

Partners involved in SME MASTER Plus mostly represent the interests and needs of the skilled craft sector in their respective countries. Most of them are competent and/or intermediary bodies and active members of the European platform Euro-Apprenticeship which aims at enhancing mobility in VET. They consider the establishment of transnational mobility programmes as an important part of the vocational education and training of apprentices and master craftsperson trainees in craft sectors.

(from project website

Duration

2008 - 2012

Partners

APCMA - L'Assemblée permanente des chambres de métiers et de l'artisanat, France

FNC - Fédération Nationale de la Coiffure, France

Institut für Bildungsforschung der Wirtschaft, Germany

Mesterbrevnemnda, Norway

OZS - Obrtno-podjetniska zbornica Slovenije, Slovenia

ZDH - Zentralverband des Deutschen Handwerks, Germany

Professional field

Bakery, floristry, hairdressing and joinery / cabinetmaking

Website

www.sme-master.eu





ECVET implementation

Title of the Qualification	Master Baker Craftsperson						
Total ECVET Points					六次		
EQF Level						SIVIE MASTER MUS	
NQF Level	-	AT	DE	FR	NO	SI	
	U1	Acco	unting and Contr	olling			
	U2	Budg	jeting, Calculatio	n and Financing			
	U3	Entre	preneurship				
	U4	Hum	an Resources Ma	nagement			
	U5 Tutoring						
Units of Learning outcomes	U6	Marketing and Sales Management					
	U7 Production of bread, small breads and rolls				rolls		
	U8	Production of cakes, pastries and cookies Hygiene, Food-Safety and Food Quality Quality and Security Management Vocationally-specific Business Administration					
	U9						
	U10						
	U11						
	U12	Production of snacks and sandwiches (country specific un					
	U13	Com	munication in an	international cont	text (country spec	cific unit)	
Cross sectional Learning Outcomes	• 5	To acquire the learning outcomes properly the following competences are essential:					

Title of the Qualification	Master Baker	Master Baker Craftsperson				4
EQF Level						
Generic Title of the Unit	Accounting an	d Controlling				•
ECVET points / Relative Weight	AT	DE	FR	l	NO	SI
Learning outcomes						
S/he is able to apply basic accounting rules.	 to carry o 	a profit and loss stat ut internal accountin t an inventory valuat	g,	• t	able to read and evaluate to make write-downs and transfer them or to draw conclusions able to plan and imp	s and provisions nto a balance, for the company.

(from SMEMP_Bakerymatrix.pdf, p.1-2)

Comparison with ECVET recommendation:

The project describes different master craftsperson qualifications. For each qualification fields for the EQF and NQF levels and the total ECVET points are provided but no values are given.

Each qualification consists of a number of units of learning outcomes and some cross-sectional learning outcomes.

For each unit of learning outcomes, the title of the qualification and the title of the unit are given. Fields for the EQF level and ECVET points and/or relative weight are provided but no values are given. The learning outcomes are described for each unit but not in terms of Knowledge, Skills and Competence (In the project the decision against subdividing the learning outcomes into Knowledge, Skills and Competence was made to avoid redundancies as well as allocation problems).

No information about the methods and criteria for the assessment of learning outcomes are given. Some of the units of learning outcomes are used in more than one of the qualifications (e.g. the Unit "Accounting and Controlling").



2.32. Vegucation

Project description

The rising demand for vegetable dishes reveals the need for well-trained apprentices, teachers and future chefs. Especially as consumers increasingly tend after healthier, more progressive and meat-reduced menus. Furthermore, sustainability standards have become a major component within caterers' corporate social responsibility policy. Also, the vast majority of the European population have unhealthy eating habits. Several diet-related diseases, like cardiovascular disease, adipose, diabetes, gout and certain kinds of cancer could be prevented with a fully adequate, meat-reduced nutrition. Vegucation can help chefs to implement a balanced and tasty choice of food in Europe's canteens. Innovation pressure from gaps in gastronomical VET is common to all partner countries.

At the same time, caterers and chefs have not been prepared for their customers' new needs during their initial or continuing VET. The traditional VET and exam in Europe does not consider the know-how and the skills of a sustainable and balanced cuisine low in animal products. Nationally and internationally standardized content or official quality standards are missing completely. Therefore, chefs often do not have the competence to actively prepare and appropriately promote attractive vegetarian meals in order to meet their customers' new demand. Related skills are one important ingredient when starting new small businesses or for getting a new job opportunity in the field. Therefore, regional chambers and social partners are highly interested in an additional qualification to become a vegetarian chef.

(from project web site)

Duration

2012

Partners

Vegetarierbund Deutschland e.V., Germany

Ethisch Vegetarisch Alternatief, Belgium

Nederlandse Vegetariersbond , Netherlands

Syntra West, Belgium

Deutsche Hotelakademie, Germany

Vegane Gesellschaft Österreich, Austria

OSZ Gastgewerbe - Brillat Savarin Schule, Germany

KTA Wemmel, Belgium

Professional field

Gastronomy

Website

Www.vegucation.eu





${\bf 100}\hbox{-}hour\,curriculum\,for\,Vegetarian\,Cuisine}$

Introduction

inti ouuction	
Training aim	This training is thought of as an enlargement and deepening of the classic professional training. The primary aim is to give students this needed knowledge: - preparing creative, tasteful, balanced vegetarian meals with a focus on health, sustainability, and ethics - preparing meals according to the wishes of various consumer groups - developing insight, an open-mind and understanding of the different point of views, ideas, visions, and trends about this cuisine The second aim is to develop the needed skills and competences to integrate this knowledge and insight in different kinds of professional environments.
Total amount of teaching hours	100
EQF-Level	4
Modules	Background information and basic products Basic preparation of meals Specialisation Management and marketing
Target group definitions	Students in initial and accomplished (secondary) vocational education and training
Prerequisites for participation	Basic knowledge in:well-balanced nutritioncomponents of foodstuff (carb, protein, fats, minerals, vitamins) and their nutritional and physiological valuesbasic preparation principleseffects of storage on food and how to store food correctlybasic understanding of relevant mathematics, i.e. the rule of threemenu planningKnowledge of the English language

Module 2: Basic preparation of meals

Module description	In this module students will learn to talk about what they've learned. They will also learn to experiment with new ideas on their own to make creative, tasteful, balanced, highly nutritious and/or healthy meals. The students will also learn about the different regional cuisines and will be able to adapt their differences for a wider range of possibilities. The students will learn how to create their own recipes and how to increase creativity and knowledge on their own. The students will also learn the basics of gluten-free bakery, so that they will be able to spontaneously adjust their baking technique to the needs of different guests and their diets or allergies. The will also learn to use different plant-based binders and softeners to change the texture of plant-based ingredients/products thus increasing creativity.
Total amount of teaching hours	42
Units	1. Nutrition Technology (4 hours) 2. Basic preparations (12 hours) 3. Flavor (8 hours) 4. World kitchen (4 hours) 5. Vegan desserts, bakery, sweeteners (8 hours) 6. Creativity and Presenting (6 hours)
Target group definitions	(future) community kitchen managers & chefs
Prerequisites for participation	Module 1 completed
Teacher profiles	depending on units
Description of the procedures and criteria for assessment	The assessment process (extract): Assessment: Preparation of complete course meals. Creative use of influences from world kitchens and new preparation techniques. The ability to draw up a plan with attention to the preparations, the implementation, and evaluation. Ability to implement the knowledge about different products and backgrounds and to prepare creative, flavourful, well balanced, highly nutritious, and healthy meals.

Module 2 Unit 1

Module 2 Unit 1	1. Nutrition Technology (4 hours)
Teacher profiles	Professional chefs
List of materials, infrastructure	Kitchen Technology classroom with ICT (internet and PC), smartboard or white board, beamer, DVD and video, TV, storage for didactic materials Demokitchen

Description of learning outcomes	Knowledge	Skills	Competence	Content
	The learner: -knows the basic rules of how to compose balanced, healthy, and highly nutritious meals -knows which ingredients are needed to compose such meals -knows the different binders and kinds of bindings and is able to use them -knows about the advantages and disadvantages of Maillard -understands the chemical processes during the preparation of food and how they change taste	The learner: -is able to compose and make balanced meals on the basis of his knowledge -is able to correctly ascertain an adequate portion size with regards to the menu and courses	The learner: -can describe how to compose balanced meals and how to integrate them into the environment or kitchen he is working in -is able to compose menus for guests with special needs (especially combined diets, allergies, and intolerances) -is able to work seasonally	In relation to preparations and cooking techniques:

(from Curriculum Vegetarian Cuisine EN final 10 10 2013.pdf)

Comparison with ECVET recommendation:

The project describes a curriculum for vegetarian cuisine. The curriculum consists of four modules for which different numbers of units of learning outcomes are described. For the curriculum (might be interpreted as the project's equivalent of a qualification) the name and the EQF level are given.

In addition to the ECVET recommendation fields for the training aim, the total amount of teaching hours, the modules, the target group definitions and the prerequisites for participation are given for the curriculum.

For each module fields for the description, the total amount of teaching hours, the name of the units and the teaching hours, the target group definitions, the prerequisites for participation, the teacher profiles are given. Also, a description of the procedures and criteria for assessment is provided.

For each of the units of learning outcomes the learning outcomes are described for Knowledge, Skills and Competence.

No ECVET points are mentioned, no reference to EQF or NQF levels are given for the units.

In addition to the ECVET recommendation fields for the teacher profiles, a list of materials and infrastructure and the content are provided for each unit.



2.33. **ZOOM**

Project description

The European Commission has introduced an eight-level Qualifications Framework, in which all EU Member States are to reference their national qualifications and diplomas by 2012. In this context, practical difficulties have to date emerged particularly where **traditionally different paths** lead to the acquisition of **similar diplomas**.

The project will focus on **two sectors: motor vehicle engineering** and **electrical engineering**. These two sectors have been chosen because they are key economic fields in all participating countries in quantitative terms in that they have a high number of employees. In addition, transnational mobility plays an important role in these sectors and thus there is a certain need for transparency of qualifications as a prerequisite for enhanced workers' mobility.

As the project aims at advanced technical levels, the focus will be on the descriptors of level 6 of the qualifications framework. Since learning outcomes for the qualifications in question are available only in part, it will be one major task of the planned project to draw up these descriptions. ZOOM partners will prepare precise descriptions and analyses of learning outcomes of the master craftsperson qualification in the participating countries.

Then the analysed **qualifications will be classified** on the basis of these descriptions. One procedural role to be applied in referencing qualifications to the reference framework is the so-called **best-fit principle**, which means that if not all three dimensions (knowledge, skills and competence) of a level apply, qualifications are to be referenced to the level whose descriptions fit the respective qualification best. To date, however, no procedural specifications exist on how to proceed when applying the best-fit principle.

But only after a testing phase and a **reality check** will it be possible to decide whether these first classifications have been justified or if reclassifications have to take place.

In general, **ZOOM** will contribute to establishing **transparency**, based on clear criteria in a common language and classification rules which rest upon agreed principles. In a larger context ZOOM will therefore support the linking of the European qualification systems and enable them to relate to each other.

(from project website)

Duration

2009 - 2011

Partners

Ibw – Institut für Bildungsforschung der Wirtschaft, Austria

BOS - Balkan Office for SME Support, Bulgaria

ZDH – Zentralverband des deutschen Handwerks, Germany

ASSET TEC - Asset Τεχνολογική (Asset Technology Ltd.), Greece

APCMA – Assemblée Permanente des Chambres de Métiers et de l'Artisanat, France

UPFM – Univerza na Primorskem, Fakulteta za management Koper, Slovenia

Professional field

Motor vehicle engineering and electrical engineering

Website

Www.zoom-eqf.eu





UNIT 2: Locating and confining fault	s – (diagnosis)		
He/she is able to operate diagnostic computers, testing and measurement devices.	He/she has knowledge in the following fields: - Circuit diagrams, operating diagrams and repair instructions - Control unit diagnosis - On-board diagnosis (OBD) - Graphic and analogue presentation of signals - Measuring voltage, current, resistances and capacities - Communication systems - Data query - Expert system, e. g. guided troubleshooting	He/she is able to read and apply circuit and operating diagrams and repair instructions correctly connect, interpret and implement control module diagnosis and on-board diagnosis. read out an error memory and assign errors based on groups of components. present and assess signals in graphic and analogue form. measure voltages, current, resistances and capacities conduct and interpret data queries. conduct guided troubleshooting and draw conclusions and implement them.	He/she acts independently and on his/her own responsibility or has ultimate responsibility if he/she delegates this work to a team he/she heads or to employees.
He/she is able to search for faults on a motor vehicle (incl. motorcycles and lorries) or trailer visually and acoustically, e.g. by conducting test drives.	He/she has knowledge in the following fields: Spatial hearing Visual and cosmetic check for dirt and damaged parts, e.g. scratches, stone-chipping Braking distances	He/she is able to hear faults, e.g. loose parts and rattling. see defects. assess braking behaviour and handling in the test drive.	He/she acts independently and on his/her own responsibility or has ultimate responsibility if he/she delegates this work to a team he/she heads or to employees.

(from AT_Lernergebnisse_KFZ_EN.pdf)

Comparison with ECVET recommendation:

The project describes different master crafts person qualifications. Each qualification consists of a number of units of learning outcomes. For each unit, the learning outcomes are described for Knowledge, Skills and Competence. The learning outcomes are grouped in subdivisions.

No ECVET points, no references to the EQF or NQF level are given. No information about the methods and criteria for the assessment of the learning outcomes are provided.



3. Annexes





3.1. Overview of the ECVET Projects

No	Project name			Competence matrix described	english documen- tation	internat. partners		more information at	selected
1	Proper chance	Geriatric nurse, Social care assistant	yes		yes		Ecvet- info.de	www.proper-chance.eu	yes
	Modell einer gestuften und modularisierten Altenpflegequalifizierung		yes		no		Ecvet- info.de		
3	Euriac	Working in industrial automation	yes		yes	yes	Ecvet- info.de	www.euriac.eu	no
4	Trift	Foreign trade	no	yes	yes	J	Ecvet- info.de		
5	NETINVET	Import and Export Sales Assistant	yes		yes		Ecvet- info.de	www.netinvet.eu	no
6		Master Baker Craftsperson, Master Florist Craftsperson	yes		yes	yes	Ecvet- info.de	www.sme-master.eu	yes
	Developing and Introducing a Sectoral QualificationFramework for the European Construction Industry	Construction Industry	no	yes	yes	J	Ecvet- info.de		
8	COLOR	Construction operator, Health care operator	yes		yes	yes	Ecvet- info.de	www.ecvet-projects.eu	yes
9	ECVETBUD	Bricklayer, Plasterer	yes		yes		Ecvet- info.de	www.ecvetbud.eu	no
10	LearnWithClay	Earth building	yes		yes	9	Ecvet- info.de	www.lernpunktlehm.de	yes
11	Ko-Transfer	Technischer Assistant für DV im Bauwesen	yes		no	unknown	Ecvet- info.de		





No	Project name			Competence matrix described	english documen- tation	internat. partners		more information at	selected
12	(Liebherr-Verzahntechnik GmbH)	Technischer Produktdesigner, Fachinformatiker/-in	yes		no		Ecvet- info.de		
13	M_ECVET_S	IT, Business English Basics, Economics & Business Studies	yes		yes		Ecvet- info.de	www.ecvet-modular.eu	no
	European Assistant in Crafts and Skilled Trades	Crafts and Skilled Trades	no	no	yes		info.de		
15	European Workplace Tutor	Workplace tutor	no	yes	yes	J	Ecvet- info.de		
16		Biologisch-technische Assistenten	yes		no		Ecvet- info.de		
17	MobEx	Office Manager, Management Assistant for Office Communication, Hotel clerk	yes		yes		Ecvet- info.de	http://www.adam- europe.eu/adam/project/view.htm?prj=6768	no
18	EsyCQ	Commerce and IT	yes		no	J	Ecvet- info.de		
19	CREDCHEM	Chemical Laboratory Technician	yes		yes		Ecvet- info.de	www.ecvet-projects.eu	no
	CHEMLAB	Chemical Laboratory Technician	yes		yes		Ecvet- info.de	www.eu-chemlab.eu	yes
21	VQTS	Electrical Engineering/Electronics, Mechatronics	no	yes	yes	J	Ecvet- info.de		
22	Theme	Electrical Engineering/Electronics, Cook, Mechatronics	no	yes	yes	yes	Ecvet- info.de		





No	Project name	Qualification	Units of Learning Outcomes described	Competence matrix described	english documen- tation	internat. partners		more information at	selected
23	Ereivet	technicians in business, administration and services; Health care; Social care	yes		yes	yes	Ecvet- info.de	www.erelvet.net	yes
24	ZOOM	master craftsperson in electrical engineering, Master Craftsperson in Motor Vehicle Technology	yes		yes	yes	Ecvet- info.de	www.zoom-eqf-eu	no
25	AIRE	Regenerative energies and energy management	yes		yes	yes	Ecvet- info.de	www.egegrup.com/aire/	no
26	GREEN	Wind Maintenance Technician, Solar Design Technician	yes		yes	yes	Ecvet- info.de	www.greenjobsproject.eu	no
27	SolTec	Service and Maintenance in the Solar Energy Sector	no	yes	yes	-	Ecvet- info.de		
28	IMPAECT	Child Care Worker	something like	no	yes		Ecvet- info.de		
29		Child Care Worker	yes		yes	unknown	Ecvet- info.de		
30	ECVET Ma-Flo	Florist, Maler	yes		no	unknown	Ecvet- info.de		
31	Gastromobil 2014	Fachkraft im Gatsgewerbe	yes		no	unknown	Ecvet- info.de		
32	ECVETTours	Cook, Hotel- and restaurant-trade commercial assistant	no	yes	yes	J	Ecvet- info.de		
	Vegucation	Vegetarian Cuisine	yes		yes		Ecvet- info.de	www.vegucation.eu	no
34	ECMO	Professional Caterer	no	yes	yes	yes	Ecvet- info.de		





No	Project name	Qualification	Units of Learning Outcomes described	Competence matrix described	english documen- tation	internat. partners		more information at	selected
35	IT_BSE	Building Service Engineering	yes	yes	yes	yes	Ecvet- info.de	www.itbse.akbk-horrem.de	no
36	ICARE	Health and social care	yes	yes	yes		Ecvet- info.de	www.icareproject.eu	no
37	CERTRANS	Health transport sector	no	yes	yes	J	Ecvet- info.de		
38	ProCareCareer	Health care	no	yes	no	J	Ecvet- info.de		
39	Junge Pflege	Health and social care	yes		no	-	Ecvet- info.de		
40		Case Manager/in im Gesundheits- und Sozialwesen und der Pflegeberatung	yes		no	unknown	Ecvet- info.de		
41	Home Economics for ECVET	Home economics	yes		no	unknown	Ecvet- info.de		
42		Internationale/-r Touristikassistentin/- assistent	yes		no	unknown	Ecvet- info.de		
43	N.E.T.W.O.R.K.	technician specialized in assistance to hospitality management	yes		yes	yes	Ecvet- info.de	http://www.adam- europe.eu/adam/project/view.htm?prj=6217	no
44	ECVET network for Tourism and Catering	Cook, Kitchen assistant	no	yes	yes	-	Ecvet- info.de		
	E-Competence Framework 2.0	·	no	no	yes		Ecvet- info.de		
46	EQF Code	E-Content Professions	no	no	yes	yes	Ecvet- info.de		





No	Project name			Competence matrix described	english documen- tation	internat. partners		more information at	selected
47	ett edu	Showmen	yes		yes		Ecvet- info.de	http://www.adam- europe.eu/adam/project/view.htm?prj=8368	no
48		Industrial Clerk	yes		yes	unknown	Ecvet- info.de		
49		Sales assistant	yes		yes	unknown	Ecvet- info.de		
50	ECVET : Asset	Car Mechatronics	yes		yes		Ecvet- info.de	www.asssetecvet.eu	no
51	careasyvet	car service and repair	no	yes	yes	unknown	Ecvet- info.de		
	eurotranslog	sector	something like		yes	unknown	Ecvet- info.de		
	ProfDRV	Professional Driver	yes		yes		Ecvet- info.de	www.project-profdrv.eu	no
	AEROVET		something like		yes		Ecvet- info.de		
	MOVET	Mechatronic Fitter	no	yes	yes	,	Ecvet- info.de		
56	PROA	Shipbuilding sector	yes		yes		Ecvet- info.de	http://www.adam- europe.eu/adam/project/view.htm?prj=8986	no
	ESTO	European Specialist in Traditional Orchards	yes		yes		Ecvet- info.de	www.esto-project.eu	yes
	ECVAET	Event technology	no	yes	yes		Ecvet- info.de		
59						-			





No	Project name			english documen- tation	internat. partners		more information at	selected
60	Be-TWIN	no	no	yes	yes	Ecvet- projects.eu		
61	CAPE-SV	no	no	yes		Ecvet- projects.eu		
62	МОТО	unknown	unknown	yes	yes	Ecvet- projects.eu		
63	OPIR	yes		yes	9	Ecvet- projects.eu	www.freref.eu/opir	no
	RECOMFOR (see NETINVET)							
65	VaLOGReg	unknown	no	yes	J	Ecvet- projects.eu		
66	EASY Metal	yes		yes	,	Ecvet- projects.eu	www.easymetal.inbas.com	yes
67	2get1care	yes		yes		Ecvet- projects.eu	www.2get1care.de	yes
69	Coach@Work	yes		yes	yes		www.supportemployment.eu	no
70	CREATE	yes		yes	yes		www.create-validate.org	yes
71	Eco Qualify	yes		yes	yes		www.ecvet-ecoqualify.eu	no
72	ECVET Tours 2	yes		yes	yes		www.ecvvettour2.eu	no
73	Skillup	yes		yes	yes		www.skillsup.eu	no



3.2. Excerpt from the Recommendation (2009)

1. Units of learning outcomes

A unit is a component of a qualification, consisting of a coherent set of knowledge, skills and competence that can be assessed and validated with a number of associated ECVET points. A qualification comprises in principle several units and is made up of the whole set of units. Thus, a learner can achieve a qualification by accumulating the required units, achieved in different countries and different contexts (formal and, where appropriate, non-formal and informal), while respecting national legislation relating to the accumulation of units and the recognition of learning outcomes.

The units that make up a qualification should be:

- described in legible and understandable terms by referring to the knowledge, skills and competences contained in them,
- constructed and organised in a coherent way with regard to the overall qualification,
- constructed in a way that enables discrete assessment and validation of learning outcomes contained in the unit.

A unit may be specific to a single qualification or common to several qualifications. The expected learning outcomes defining a unit may be achieved irrespective of where or how these have been achieved. Thus, a unit is not to be confused with a component of a formal learning programme or training provision.

The rules and procedures for defining characteristics of units of learning outcomes and for combining and accumulating units for a given qualification are defined by competent institutions and partners involved in the training process according to the national or regional rules.

The specifications for a unit should include:

- the generic title of the unit,
- the generic title of the qualification (or qualifications) to which the unit relates, where applicable,
- the reference of the qualification according to the EQF level and, where appropriate, the national qualifications framework (NQF) level, with the ECVET credit points associated with the qualification,
- the learning outcomes contained in the unit,
- the procedures and criteria for assessment of these learning outcomes,
- the ECVET points associated with the unit,
- the validity in time of the unit, where relevant.

