

The LearnWithClay Project

5



5.1. Project aims

The aim of the project is to promote individual professional development and mobility by allowing individual learning outcomes in earth building to be recorded, presented transparently and in a comparable way, tested and validated independently of the learning environment.

Based on the European Qualification Framework (EQF), learning outcomes can be accredited irrespective of the place of learning so as to improve the training and career opportunities of the various target groups interested in earth building and promote mobility. The existing, lively earth building culture of learning is to be retained in all its variety. Activists who save a Bulgarian village from dereliction are to have the opportunity to certify their newly acquired learning outcomes, just like migrants who set up a self-help earth-built community house in an intercultural park in Berlin and self-helpers who clay plaster a straw-bale house in Wales or young people who work on heritage conservation as part of youth gatherings or during their gap year or work on earth building projects at vocational college during their foundation year. When switching between systems of learning they should be able to build on what they have achieved as part of their educational career.

The opportunity to record acquired learning outcomes and add them to existing qualifications also enhances the training opportunities of disadvantaged young people. The project also hopes to open up equal vocational involvement, and therefore career opportunities in the growing European earth building sector, to those with a history of migration.

5.2. EQF and ECVET

The European Qualifications Framework for Lifelong Learning (EQF)

On 23 April 2008, the European Parliament and Council passed a recommendation to set up the **European Qualifications Framework for Lifelong Learning**. It is recommended that member states use the European Qualifications Framework as a reference tool for comparing the qualification standards of various qualification systems and linking their national qualification systems together in the European Qualifications Framework by 2010.

We quote from the brochure “The European Qualifications Framework for lifelong learning (EQF)”, issued by: European Community, 2008 *“The EQF is a common European reference framework which links countries’ qualifications systems together, acting as a translation device to make qualifications more readable and understandable across different countries and systems in Europe. It has two principal aims: to promote citizens’ mobility between countries and to facilitate their lifelong learning..... The EQF recognises that Europe’s education and training systems are so diverse that a shift to learning outcomes is necessary to make comparison and cooperation between countries and institutions possible.”*

To allow comparison, the European Qualifications Framework focuses on learning outcomes. These define what a learner knows (knowledge), is able to do (skills) and understands (competence). Learning outcomes are independent of the learning environment and neither the venue, learning environment or the length of the learning process are taken into consideration.

Descriptor defining levels in the EQF

The European Qualifications Framework has 8 qualification levels (levels), which are described by the following descriptors.

LEVEL 1

- Knowledge:
basic general knowledge
- Skills:
basic skills required to carry out simple tasks
- Competence:
work or study under direct supervision in a structured context

LEVEL 2

- Knowledge:
basic factual knowledge of a field of work or study
- Skills:
basic cognitive and practical skills required to use relevant information in order to carry out tasks and to solve routine problems using simple rules and tools
- Competence:
work or study under supervision with some autonomy

LEVEL 3

- Knowledge:
knowledge of facts, principles, processes and general concepts, in a field of work or study
- Skills:
a range of cognitive and practical skills required to accomplish tasks and solve problems by selecting and applying basic methods, tools, materials and information
- Competence:
 - take responsibility for completion of tasks in work or study
 - adapt own behaviour to circumstances in solving problems

LEVEL 4

- Knowledge:
factual and theoretical knowledge in broad contexts within a field of work or study
- Skills:
a range of cognitive and practical skills required to generate solutions to specific problems in a field of work or study
- Competence:
 - exercise self-management within the guidelines of work

or study contexts that are usually predictable, but are subject to change

- supervise the routine work of others, taking some responsibility for the evaluation and improvement of work or study activities

LEVEL 5

- Knowledge:
comprehensive, specialised, factual and theoretical knowledge within a field of work or study and an awareness of the boundaries of that knowledge
- Skills:
a comprehensive range of cognitive and practical skills required to develop creative solutions to abstract problems
- Competence:
 - exercise management and supervision in contexts of work or study activities where there is unpredictable change
 - review and develop performance of self and others¹

LEVEL 6

- Knowledge:
advanced knowledge of a field of work or study, involving a critical understanding of theories and principles
- Skills:
advanced skills, demonstrating mastery and innovation, required to solve complex and unpredictable problems in a specialised field of work or study
- Competence:
 - manage complex technical or professional activities or projects, taking responsibility for decision-making in unpredictable work or study contexts
 - take responsibility for managing professional development of individuals and groups

LEVEL 7

- Knowledge:
 - highly specialised knowledge, some of which is at the forefront of knowledge in a field of work or study, as the basis for original thinking and/or research
 - critical awareness of knowledge issues in a field and at the interface between different fields
- Skills:
specialised problem-solving skills required in research

1

and/or innovation in order to develop new knowledge and procedures and to integrate knowledge from different fields

- Competence:

- manage and transform work or study contexts that are complex, unpredictable and require new strategic approaches

- take responsibility for contributing to professional knowledge and practice and/or for reviewing the strategic performance of teams

LEVEL 8

- Knowledge:

knowledge at the most advanced frontier of a field of work or study and at the interface between fields

- Skills:

the most advanced and specialised skills and techniques, including synthesis and evaluation, required to solve critical problems in research and/or innovation and to extend and redefine existing knowledge or professional practice

- Competence:

demonstrate substantial authority, innovation, autonomy, scholarly and professional integrity and sustained commitment to the development of new ideas or processes at the forefront of work or study contexts including research

From the brochure: The European Qualification Framework for Lifelong Learning (EQF), Publisher: European Community, 2008

European Credit System for Vocational Education and Training - ECVET

ECVET is a tool of the European Union which serves as a kind of translation aid between the national vocational training systems in the countries of the European Union. The Technical Specifications are defined in Annex 2 of the RECOMMENDATION BY THE EUROPEAN PARLIAMENT AND COUNCIL dated 18 June 2009 on setting up a European Credit System for Vocational Education and Training (ECVET), Official Journal of the European Union (2009/C 155/02) as follows:

“ECVET is a technical framework for the transfer, recognition and, where appropriate, accumulation of individuals’ learning outcomes with a view to achieving a qualification. ECVET tools and methodology comprise the description of qualifications in terms of units of learning outcomes with associated points, a transfer and accumulation process and complementary documents such as learning agreements, transcripts of records and ECVET users’ guides.

ECVET is intended to facilitate the recognition of learning outcomes in accordance with national legislation, in the framework of mobility, for the purpose of achieving a qualification. It should be noted that ECVET does not imply any new entitlement for citizens to obtain the automatic recognition of either learning outcomes or points. Its application for a given qualification is in accordance with the legislation, rules and regulations applicable in the Member States and is based on the following principles and technical specifications:..”

ECVET units of learning outcomes

A unit of learning outcomes, known as a unit of learning or unit for short, is a coherent set of knowledge, skills and competence that can be individually assessed and validated. The units can be accumulated and can be transferred to existing national qualifications.

A “unit” in the aforementioned recommendations by the European Parliament and Council dated 18 June 2009 is defined as follows:

“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.”*

5.3. Project design

According to the basic terms of EQF and ECVET, our project encountered the following problems:

In implementing the European Qualification Framework (EQF) and the European Credit System for Vocational Education and Training (ECVET) for the vocational area of earth building, we had no practical examples in other vocational fields to draw upon. As new EU tools, EQF and ECVET are still at the trial stage. National Qualification Frameworks (NQF), which serve as a reference level for the European EQF, are only just being drawn up at national level in EU countries and are still in the early trial stage.

A second challenge came from the selected vocational area, earth building. The occupation of earth builder does not currently exist in any European partner countries.* It is therefore not yet possible to apply the units to any existing initial vocational training course. We therefore initially based it on the 200 hour course “Designer in Clay Plastering (HWK)”, a qualification awarded by the Chamber of Trade in Schwerin in Germany and which was developed through the previous project “Clay Plaster”. We have broken down and defined the learning outcomes from this qualification into six ECVET units. In classifying the qualification “Designer in Clay Plastering” we were unable to draw on any existing classified qualification level. We therefore focused directly on the European Qualification Framework and assigned the qualification “Designer in Clay Plastering” to Level 4.

In order to address the target groups defined in the survey, the ECVET units are also to be available in different levels ranging from entry level through to an academic level. LearnWithClay has therefore also drawn up the six **ECVET Earth Building** units for Levels 1-3 with the exception of Unit 6 which has only been created for Levels 3 and 4. Skills and competences for each unit outline what a person is able to do and with what degree of autonomy and responsibility within a vocational setting, e.g. on a building site or in the building industry. **ECVET Earth Building** thus allows learning outcomes to be tested at various levels and comparable qualifications to be awarded.

We recommend developing units for the higher levels (5-8) to offer master craftsmen and those with an academic training an adequate qualification. Architects attend a variety of earth building courses and are interested in courses and qualifications tailored to their vocational field. However, this was not possible as part of this project.

Composition of partnership

To obtain usable results in a reasonable reference framework within the two year project period, unlike the previous “Clay Plaster” project, we restricted ourselves to four countries Bulgaria, Germany, France and the UK. Bulgaria represents a country that can call on a rich earth building cultural heritage even if there is currently little noticeable interest in a vocational training in earth building. In Germany and France, earth building is available in further education with two possible qualifications and in vocational colleges there are the first efforts at integration. In the UK, amazonails is an example of a non-profit-making enterprise that focuses on learning on the construction site and is also seeking possible certification.

The partnership brings together recognised experts from 12 different organisations, associations, vocational colleges and chambers of trade. The partners represent various learning contexts such as pre-vocational training, vocational training, further education, open courses and on-site learning.

The composition of the partnership allowed the learning units developed over the course of the project to be tested with different target groups and learning contexts. As Terre, the French umbrella earth building organisation, the German Chamber of Trade in Schwerin and the National Specialist Team of Construction Skills from the UK are also partners which, as recognised authorities and/or umbrella interest groups, are working towards validation of the ECVET units under existing national qualifications.

Also crucial to the selection of partner organisations was their interest and willingness, once the project was completed, to offer training courses resulting in the award of an ECVET Earth Building qualification and to engage in student exchanges.

5.4. Quality management

External advisers and evaluators

Due to the complexity of the “European training concept” we were assisted by Dr. Hans-Jürgen Lindemann, vocational educationalist and scientist from Berlin, as a technical adviser on incorporating the EQF and ECVET tools. This allowed formal specifications and European terminology to be taken into account and incorporated from the start.

*. NVQ at level three for earth builders is available in UK, see chapter 2

We commissioned Professor Dr. Johannes Meyser and Dr. Michael Martin of the Institut für berufliche Bildung und Arbeitslehre (Institute for Vocational Training and Business and Employment Studies) at the Technische Universität Berlin (Berlin Technical University) to evaluate the work of the project.

The work of both partners ensured that not only the current work status and the overall course of the project was analysed and reflected but also that key current data was promptly implemented.

The external advisers and evaluation carried out by monitoring the project had a positive quantitative and qualitative impact on the project and its outcomes.

National advisory panels

In Germany, France and the UK, the progress of the project is being overseen by individual advisory panels.

Members of the German advisory panel were:

- Agentur für Arbeit Schwerin (observer status)
- bag Arbeit e.V.
- Bundesverband Ausbau und Fassade im ZDH
- Dachverband Lehm
- Fa. Made in Clay
- Forschungslabor für experimentelles Bauen, Kassel, Professor Minke,
- Maler- und Lackiererinnung, Berlin-Brandenburg
- Malerwerkstätten Heinrich Schmid GmbH & Co KG

- Offene Häuser e.V. - Open Houses
- Klaus Schirra, Lern.selbst
- Treff- und Informationsort (TIO) e.V.
- Villa Fohrde e.V.

The following organisations were represented on the French advisory panel:

- Mathieu Deleuze, Néopolis
- Anne Mervoyer, Batipole
- Gabriel David, CAPEB
- Thierry Murat, Afpa Toulouse

The British project partners have been advised by the following organisations and individuals:

- National Occupational Standards (NOS)
- Centre for Alternative Technology
- Ty Mawr - Lime & Clay- Wales
- Mark Womersely – Lime & Clay (North UK)
- Mike Wye – Lime (South UK)
- Hempire (Northern Ireland)
- Linda Watson – Earth Building (Plymouth University)
- Solway Plain
- Scottish Lime Centre
- Masons Mortars - Scotland
- English Lime Centre
- Colleges / Heritage Skills NVQ
- CADW - Wales
- SPAB (Society for the Protection of Old Buildings)
- BLF (Building Limes Forum)
- WAMT (Women & Manual Trades)
- BRE (Building Research Establishment)
- Genesis Centre (SCAT)
- National Trust
- English Heritage
- Historic Scotland

Panel members advised us not only on matters of content but also assisted us in disseminating the project results, especially with regard to the future implementation of the ECVET Earth Building.

ECVET unit testing

We tested individual draft ECVET units and the associated methods of assessment in various learning contexts for the following target groups: in pre-vocational training and in the training in vocational colleges, in short courses with mixed groups, in specific learning situations for people with a history of migration and as part of the partners' mobility policies.

To test the ECVET units and mobility, we came up with the Leonardo da Vinci Mobility Project **Lehmbau mobil (Earth Building Mobile)** for the target group of trainees in initial vocational training (IVT). Two placements were carried out at the same time as the LearnWithClay Project. One group of three trainees at the Leipzig Regional Vocational College (Beruflichen Schulzentrum Leipziger Land) visited the French organisation Batipole and attended an earth building course there. In the second placement, 12 trainee heritage conservation assistants from Knobelsdorff-Schule in Berlin visited the French partner le Gabion and attended a clay course for "ECVET Unit 2 – Applying clay plaster". Two further placements, one with le Gabion and one with the Polish partner Zespól Szkól Zawodowych, a vocational college in Zielona Góra in Poland, are scheduled for spring 2010.