

FRAMEWORK FOR GROUPING COMMON LEARNING OUTCOMES IN NUCLEAR UNITS

1. PURPOSES OF THE FRAMEWORK

The main purpose of this framework is to provide support in grouping common Learning Outcomes into Nuclear Units as a step in the process of the transfer, recognition and certification of learning outcomes acquired by I-VET learners during their participation in European mobility programmes.

2. METHODOLOGICAL APPROACH

While many countries have made significant progress in using learning outcomes to describe and present their qualifications to citizens, existing approaches differ in length and focus and make understanding and comparison difficult. Agreeing on a set of common principles for presenting qualifications, for example to be used in databases and in qualification supplements, would make it easier for learners, employees and employers to understand the content and profile of a particular qualification. These common principles would not be to promote a harmonisation of qualifications but should support end-users, be these individual citizens or employers, to make informed judgements and choices in diverse and complex education and training systems.

3.1 How to group Learning Outcomes into Nuclear Units?

In the context of the Project *EURspace*, Units of Learning Outcome are understood as a coherent set of knowledge, skills and competence needed to put into practice key realizations or key tasks, which are interconnected in a coherent, comprehensible and logical set of key technical outcome, observable and verifiable in outputs.

The main rule for grouping *learning outcomes* into *units* is the coherence, interconnectivity, reciprocity and interdependence of knowledge, skills and competence associated with each *key technical outcome* among each other. The following criteria are taken into account to group *learning outcomes*: relation of *learning outcomes* to the same set of key technical tasks; relation of *learning outcomes* to the same product/outcome; relation of *learning outcomes* to the same production technique.

Each *unit of learning outcome* is composed of one or more *key technical outcome* which are interconnected and led to observable and evaluable *outputs*.

Whenever possible, *units of learning outcome* should be designed in such a way that can be achieved as independently as possible of other *units*, so that *learning outcomes* in a qualification should be assessed only once.

3.2 What are the components of a Unit of Learning Outcome?

Units of learning outcome should be described in accordance with a common conceptual framework in order to allow a reciprocal understanding of the qualification and allow to an objective comparison between countries.

For the purposes of the Project *EURspace*, it is considered that a *unit of learning outcome* should be composed by the following components:

♦ **Title of the Qualification** to which the Unit relates

♦ **EQF Level**

♦ **Title of the Unit**

The title of the Unit should be as short as possible and should reflect the importance of the Learning Outcome(s) for the labour market. The title should reflect the global learning outcomes that are contained in the unit, and not focusing only on some of them.

♦ **Key Technical Outcome**

Key technical outcome are statements that express the main technical tasks that the learner has to perform to prove a specific output.

Key technical outcome are expressed in a simple, short and objective statement, beginning by the action verb that indicates the main technical task that the learner has to perform, conjugated in the infinitive.

♦ **Knowledge**

Knowledge is the theoretical and/or factual body of facts, principles, theories and practices that are related to a field of work or study.

Knowledge is described in terms of what the learner knows and understands.

♦ **Skills**

Skills are cognitive or practical abilities to apply knowledge and use know-how to complete tasks and solve problems.

Skills are described in terms of what the learner is able to do.

♦ **Competence**

A competence is considered the proven ability to use knowledge, skills and personal, social and/or methodological abilities at work or in academic situations and in professional and personal development.

Competences are described in terms of what the learner does, applying knowledge, skills, and proving the following abilities: attitudes, personal, social and methodological.

♦ **Performance Criteria**

Performance criteria are the quality requirements associated with performance and the quality standards that ensure that the individual acts competently (required quality for achievements).

The performance criteria are specifically associated with each key technical outcome and respective set of knowledge, skills and competence.

Performance criteria are measurable, observable and provide qualitative important information on the expected performance.

♦ **Outputs**

Outputs are the results, the obtained products or the proof.

The outputs are directly associated with key technical outcome and performance criteria, being the observable result of the performance.

Outputs are described in a clear, objective and short manner, expressing the main nuclear professional proof for a given qualification.

♦ **Code (if applicable)**

The title of the Unit should contain the national code used in the national qualifications framework (when applicable).

In cases where the work of reformulating the qualification for learning outcomes implied reformulating the description of the existing unit for a focus on the results of the learning process, rather than the existing description focused on the inputs and learning process, without any alteration in terms of the expected results of the learning process that would be achieved by a learner with a successful evaluation, the code existing in the national system is maintained. In cases where the reformulation of the qualification also entailed, for example, the dismantling of modules into several units of learning outcome, the code is assigned as follows: assignment of the national code in which these learning outcomes were contained, followed by an asterisk and an integer (1, 2, 3, ...), assigned in ascending order of the number of units of learning outcome in which the original module was disassembled.

♦ **Number of Hours**

Although the number of hours of the Unit of Learning Outcome is considered to be of no relevance to the *matching process*, the number of hours is an indicator that helps to balance the size of the Unit between countries, and it is a fundamental indicator for the assignment of ECVET Points.

♦ **ECVET Credit Points**

In order to have a comprehensive view of the overall weight of learning outcomes in a qualification and the relative weight of Units in relation to the qualification, each Unit should contain the indication of the number of ECVET Points allocated to the Unit of Learning Outcome. The allocation of ECVET Points to Units of Learning Outcome is crucial for the validation and recognition processes of Units when the Learning Outcomes are acquired abroad.

3.3 Principles to be applied

The following principles should be used to agree on common learning outcomes:

1. It should be agreed among sending and receiving organizations that learning outcomes will consist of knowledge, skills and competence;

2. Both sending and receiving organizations should not replace existing learning outcomes descriptions as used at national or institutional level for qualifications, curricula or other purposes;
3. Sending partner should decide what learning outcomes their learners must achieve during the period abroad;
 - It is very important to agree on a predefined structure and syntax. In the Project *EURspace*, it was decided to use the following structure to define learning outcomes:
 - to describe knowledge, use the phrase “the learner knows and understands ...”
 - to describe skills, use the phrase “the learner is able to ...”
 - to describe competences, use the phrase “the learner does ...”

It must be supported by a standardized terminology, including lists of action verbs.

In the Project *EURspace*, it was decided to use the structure presented in *Image 1* to define Units of Learning Outcome.

Image 1: Components of a Unit of Learning Outcome.





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BIBLIOGRAPHIC REFERENCES

Recommendation of the European Parliament and of the Council of 23 April 2008 on the establishment of the European Qualifications Framework for lifelong learning.

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.

ANNEX I – TECHNICAL SHEET

1- This framework aims to provide:

- support in grouping common Learning Outcomes into Nuclear Units as a step in the process of the transfer, recognition and certification of learning outcomes acquired by I-VET learners during their participation in European mobility programmes.

2- This framework is aimed at – target group:

- VET Professionals;
- teachers;
- trainers;
- principals;
- directors of VET Centres;
- technicians who work in VET Mobility Programmes;
- project managers;
- representatives or technicians from organizations that intend to promote European Mobility Programmes.
- Schools;
- VET Centres;
- Organizations involved in European Mobility Programmes (sending organizations, receiving organizations, intermediary organizations, organizations providing internships in VET).

3- Phase and Stage of the Pedagogical Circuit in which the Framework should be used

Phase 1: Before Mobility

Stage 1: Identifying the expected Learning Outcomes