

Using World Reference Level (WRL) in the Process of Recognizing the Learning Outcomes – Case study

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Abstract: It is greatly important for the international knowledge recognition processes to understand the structure and importance of the learning outcomes, as well as qualification frameworks in different states, thus allowing easier knowledge mobility. European Union works a lot in this field, adopting conventions and regulations to be followed by the member states and aspirants. Probably the most important one is the Lisbon Recognition Convention (1997), concerning the higher education in Europe. Through UNESCO, a specific tool is created in order to suggest completely new approach in translating the qualifications gained in an understandable format for the countries, thus enabling easier and more precisely done mobility knowledge mobility between the countries. In this paper, the tool is applied to concrete study program at the GDU in Stip, MK.

Keywords: National Qualifications Framework, European Qualification Framework, Learning Outcomes, Higher Education, Higher Education Institution, European Higher Education Area

I. PRESENT CONDITION IN EDUCATION

Analyzing the education systems and National Qualifications Frameworks (NQF) among countries in European Union, it is pretty sure that the differences are getting decreased. Still, there is a lot to be done and differences exist between some countries, but this seems to be reduced with the accessing processes and compliances of the domestic regulations with the ones from EU. National HE systems are organized in three cycles (European Qualification Framework – EQF levels 6-8) as defined by the Bologna Process (there are slight differences in some systems, such as Latvia and UK, having EQF level 5 – short cycle of HE programs (120-180ECTS), more focused on the acquisition of professional skills needed in labor market. In general, the workload of first cycle (EQF level 6) studies varies from 180 to 240 ECTS credits, known as Bachelor level studies. Holders of first cycle qualification have access to the second cycle studies in any field of study. The workload of second cycle (EQF level 7) studies is in the interval between 60

and 120 ECTS credits, and the titles of awarded qualifications varies. For Master's degree in Europe, the overall workload of studies in first and second cycles is not less than 300 ECTS credits. Graduates of the second cycle have access rights to doctoral level studies. The third cycle (EQF level 8) qualifications are awarded on the basis of original research. Although the nominal length of doctoral studies is three to four years, workload also can vary by country.

II. COUNTRIES' NQF SYSTEMS

All the countries have developed their NQF and have already harmonized (or are in a process) their NQF systems to the EQF, with respect to all of the conventions, regulations and documentation. In almost all of the countries, higher education qualifications are located on EQF 6-8 levels. The scope of all NQF is pretty comprehensive and includes the specific levels of qualifications that are conducted within the education and/or training process of the student. For indication of the particular qualification, level descriptors are used. Level descriptors give the necessary information to the learners, education and training providers, and of course the employers to position and value a specific qualification in relation to other qualifications. Most of the European countries have designed level descriptors for a comprehensive national qualification framework (NQF), covering multiple types and different levels of qualifications. This allows the level descriptors to embrace a wide range of institutions, stakeholders and their interests, traditions, cultures and values. In terms of fundamental level descriptors, we speak about:

- Knowledge (knowledge and understanding and its application, understanding and level of practice);
- Skills (generic cognitive skills communication numeracy and ICT skills);

- Competences (personal, professional, autonomy and responsibility, learning skills etc.).

A. What are learning outcomes?

Learning outcomes (LO) describe precisely what students will be able to demonstrate in terms of knowledge, skills, competencies and values upon completion of a course, a span of several courses, or a complete study program. Clear articulation of learning outcomes serves as the foundation to evaluating the effectiveness of the teaching and learning process. According to the Bologna Process, it is mainly focused on pushing students in the process of acquiring knowledge, skills and competences that are favorable for their study program, thus making them meeting their self-development goals and social needs as good as it is possible. Therefore, LO are the main tool of the Bologna Process for improving mobility, transparency and recognition in the European Higher Education Area (EHEA). Certainly, in this direction are the familiar tools used in the process of mobility and awards recognition years backward, such as ECTS system of evaluation, Diploma Supplement (DS) and quality assurance processes. Practically, LO can be taken as a basis for a common understanding when comparing, assessing and recognizing qualifications offered in different education and qualification systems, needed for HE harmonization at international level.

There are several aspects that need to be met regarding LO:

- LO visibility – necessary information about all the sources (online or others) where the provided learning outcomes are published or are available to be seen and examined;
- LO definition – necessary information about the author who defines, body that approves and/or owns the provided learning outcomes;
- LO and QA - Information whether the learning outcomes are subject to quality assurance – positive or negative reply;
- LO vocabulary - Information about the terminology of learning outcomes – concepts or categories used when formulating the provided learning outcomes.

There are two categories of learning outcomes that can be analyzed: generic and specific. Researches have shown that generic learning outcomes have broader usage than the specific learning outcomes. Generic learning outcomes are referred to being transversal, soft or social knowledge, skills or competences whereas specific

learning outcomes are more related to the particular field or subject of qualification. The most significant differences may be observed in terms of cases when learning outcomes are used and sources of learning outcomes differ by different countries and different education systems. Thus, the conclusion may be drawn that more attention should be paid to clear identification of sources for learning outcomes that may be used in recognition.

B. Stakeholders in knowledge mobility

The recognition of learning across boundaries is urgent and challenging for multiple different stakeholders in the process of knowledge mobility, as shown in figure 1.

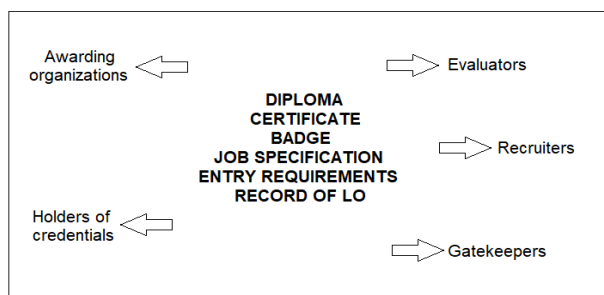


Figure 1. Knowledge mobility stakeholders

The largest goal to be achieved is automated (as it can be) international recognition, that embraces the need to work with different categories, types and levels of achievement, such as:

- life skills;
- application and responsibility;
- practicing knowledge gained;
- personal autonomy;
- context and systems;
- knowledge;
- skills;
- competences;
- learning;
- know-how etc.

So, this clearly goes above the concept of only knowledge, skills and competencies, into a broader (as it can be) picture of the person, both personal and professional, giving clear information about his ability to respond as qualified for something. Not only the specific skill or knowledge or competence is important, but also the level of achieving it, leading to the measurement of the difference between intended learning outcomes (what a learner is expected to know, be able to do and understand after having completed the learning process) and achieved learning outcomes (represented by the set of knowledge, skills and/or competences the learner has achieved and/or is able to demonstrate after completion of the learning process).

Two different recognition concepts can be analyzed:

- Recognition for the purpose of continuation of education (academic recognition), and
- Recognition for the purpose of professional engagement / employment (professional recognition).

Usually, authorities responsible for the different types of recognition differs on a state level, as well for the process of recognition of professional qualifications.

III. APPLICATION OF WRL TO A SPECIFIC STUDY PROGRAM

Countries need an international system (tool) which will be broad enough in several important spots:

- Speaking in a common language. This means that countries need establishment of a common (unique) path for comparison between the achievements and requirements (what we have vs. what we need);
- Tool needs to be pretty comprehensive, in order to be able to match any descriptors and different kind of levels;
- Should be a combination of factual information, professional judgements and supporting evidence;
- Has to produce uniform format (for example, report) which will not require any alterations in terms of regional, national or local arrangements (enabling not regulatory) and will be easy to read.

The tool should combine all the data that one study program offers, in terms of learning outcomes, general and specific, together with the gradation system or more general, levels of achievements specific to the countries, into concept that will offer unique way of awarding the learner with a report that will clearly show the quality and quantity of the learned and gained through the learning process, which will be base for further recognition. Since different countries still deals with a tremendously big set of different terms and levels describing the “skillset”, there is a need of a translation system (black box) that will give the answer about the quality and quantity of the learner being subject of recognition process.

For this purpose, several broad fields needs to me examined in order of creating convergence between the data specific for each field, regarding the need of recognition:

- National qualification frameworks;
- Regional qualification frameworks;

- Sectoral qualification frameworks;
- Competence frameworks;
- Job evaluation systems;
- Job specifications;
- Program entry requirements.

As a result, this system should translate any descriptors (learning outcomes) into internationally recognized form. This is in parallel with the global growth regarding the need to be able to measure everything, such as the kinds and levels of achievement. It should be able to work with any outcome-based structure (qualification, credential, study program, job specification or even framework level). The system should translate them into an internationally recognized form of description which can be used to compare achievements and/or requirements.

UNESCO has developed solid starting system regarding this issue, named World Reference levels (WRLs). The WRL Tool is designed to work with any outcomes-based qualification, credential, set of entry requirements, job specification or framework level. It translates them into an internationally recognized form of description which can be used to compare achievements and/or requirements. It is consisted of:

- 11 (eleven) different ways of describing achievement, which are elements of capability
 - Accountabilities:
 - Activities;
 - Responsibilities;
 - Working with others;
 - Quality;
 - Capacities:
 - Skills and procedures;
 - Communication;
 - Data;
 - Knowledge and know-how;
 - Contingencies:
 - Context;
 - Problems and issues;
 - Values.
- 8 (eight) different levels of describing the stage of progression, regarding each element of capability (A1 – D2).

The system deals with 51 (fifty-one) different indicators of progression.

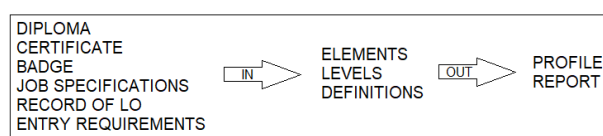


Figure 2. WRL conversing LO inputs in WRL outputs

The WRL tool is created to:

- Support owners and users to describe credentials, job specifications or entry requirements in a common language.
- Produce a WRL Profile based on the WRL Elements of Capacity and Stages of Progression for any achievements or requirements.
- Produce a WRL Report giving vital information on any quality assured credential.
- Combine factual information, professional judgements & supporting evidence.
- Use a standardized way of representing outcomes without changing them

A. WRL application to a specific study program

Subject of profiling in this paper is the accreditation elaborate for the study program of Business Economy at the Faculty of Economy, 2020, Goce Delcev University in Stip, Republic of North Macedonia. Title gained through this study program is BACHELOR OF ECONOMIC SCIENCE IN THE AREA OF BUSINESS ECONOMICS VI A (NQF). Documents that are considered to be important for this work are the main elaborate book of the study program and the additional common study programs book, containing the necessary information about the knowledges, skills, competences and values that students are supposed to gain through the study program and all the courses passed. The part of the documents containing this issue is well examined and translated into the terminology used into the WRL tool. In this context, all the steps are followed in creating the final WRL report and profile – documents that are crucial in the process of recognition of knowledge, skills and competences.

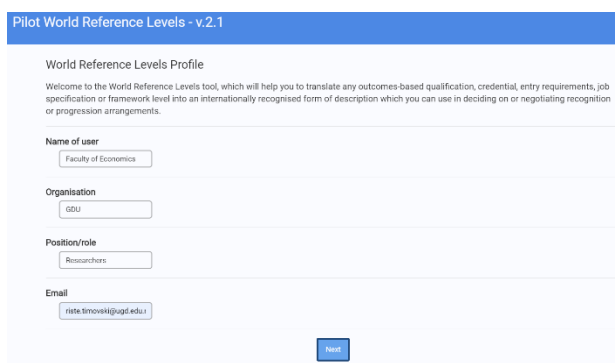


Figure 3. Creating profile in WRL

Three of the overall eleven elements of capability were examined in this research (one of each of the three general fields of capability that WRL deals with):

- Accountabilities:
 - Activities;

- Capacities:
 - Communication;
- Contingencies:
 - Problems and issues;

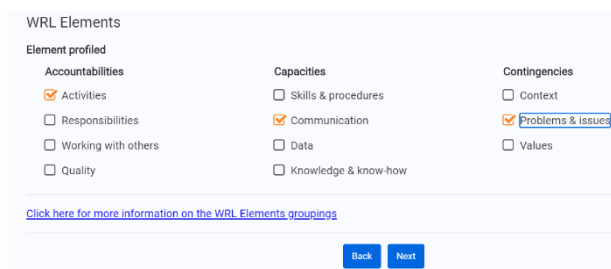


Figure 4. Choosing elements of capability for examining

Precise translation of the skills, competences and knowledges section from the documents available is done into the terminology used by the WRL tool, in order of answering all of the questions in the application. After selection of the elements regarding the subject, for each element the user will have to provide answer to a specific series of questions, each of which is accompanied by a list of possible answers. Many of the terms in the options are linked to a WRL definition in the WRL directory. The appropriate answers should be selected by the user (one or more). The possible answers contain one or more of 51 terms which indicate changes of technical difficulty, scope or autonomy. After this process, the tool generated level description and information about all of the three capability fields, describing the level and the skillset gained at that level to the study program. All the stage choices generated with the tool are shown at figure 5:

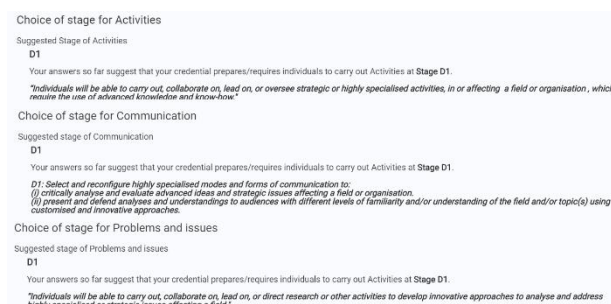


Figure 5: General WRL descriptors

At the end, we generated the final picture (profile and report) of the system. The final report is as shown in the following figure, containing the stage of progress of every different element chosen to represent the subject of profiling.

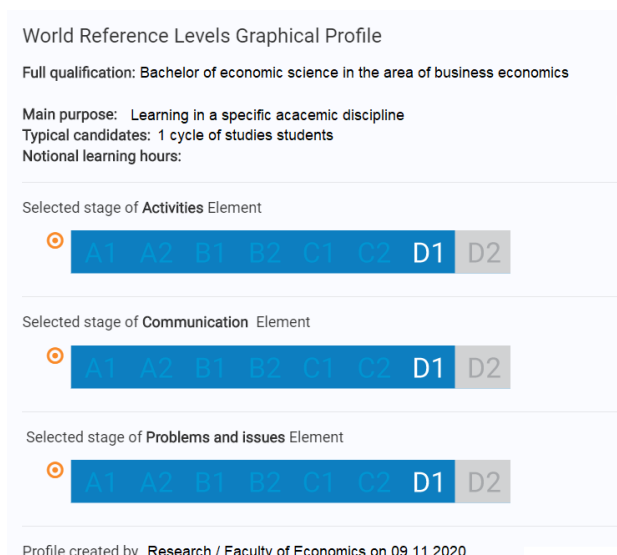


Figure 6. Final report

It is clear from the report that all three descriptors are at level D1, with appropriate explanation for each of them. Sure, the application offers possibility to choose from the neighbor levels of progression if found more close to the reality.

IV. CONCLUSIONS AND RECOMMENDATIONS

Conducted analysis on the use of learning outcomes in the process of recognition indicate that states/institutions use generic learning outcomes (more), but not specific learning outcomes. We have to note that this is also situation in our work here, but is directly correlated with the structure of the official documents we had to examine. However, the issue of how the learning outcomes of qualifications are used in recognition should be explored in more detail. Therefore, several challenges are identified as regards the use of learning outcomes in recognition, e.g., poorly articulated learning outcomes are subject to interpretation, variety in terminology and phrasing (including the issues of translation of learning outcomes), as well as lack of trustful sources of learning outcomes.

The following recommendations about learning outcomes are provided:

- The structure, formulation of learning outcomes should be improved by creating common guidelines on how higher education institutions (HEIs) should write learning outcomes in relation to the recognition practice. The content of the learning outcomes (topics, themes) would remain at the discretion of each provider.
- The availability of learning outcomes and its sources should be at a high level (and their translation into a commonly language).
- Permanent update relevant institutions and HEIs about the relevance and importance of learning outcomes of qualifications to ensure comparability and recognition of qualifications.
- Permanent level descriptors of NQFs.
- Regular trainings and methodological guidance for credential evaluators about learning outcomes and their use in recognition should be provided.
- Implementing and presenting standardized learning outcome analysis methods and tools to relevant institutions included in the recognition process for their use of analyzing the learning outcomes in recognition.

REFERENCES

- [1] Osters, S., Simone Tiu, F. (2003) *Writing Measurable Learning Outcomes. 3rd Annual Texas A&M Assessment Conference.*
 - [2] Crncic Sokol, M. (2020). *Development of automatic recognition.* International conference "Comparing qualifications for reliable recognition", Riga, Latvia.
 - [3] Bjornavold, J., Pouliou, A. (2020). *Comparing the content of qualifications across borders.* International conference "Comparing qualifications for reliable recognition", Riga, Latvia.
 - [4] *World Reference Levels.*, <https://worldreferencelevels.org/>
 - [5] CEDEFOP (2011). *Using Learning Outcomes. European Qualifications Framework Series: Note 4*, Luxembourg: Publications Office of the European Union, https://www.cedefop.europa.eu/files/Using_learning_outcomes.pdf
- CEDEFOP (2017). *Defining, writing and applying learning outcomes. A European Handbook.* Luxembourg: Publications Office of the European Union. https://www.cedefop.europa.eu/files/4156_en.pdf