IDENTIFICATION OF TYPES OF MICRO-CREDENTIALS IN HIGHER EDUCATION

IO 1 – Activity 3

OEPASS

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1 Introduction

Open education is offered by a multitude of different providers within Higher Education, and can take main forms, often blending formal, non-formal and informal education, as well as a variety of modes of provision. Credentials may take the form of certificates of participation, certificates which are valid for transfer credit in certain specific situations, ECTS and micro-degrees to mention but a few options.

Since different credentials may have different value in the workplace and in academia for purposes of recognition, transfer and portability, the report will introduce the concept of quality assurance of credentials whereby a high-quality credential would need to meet a set of a minimum criteria in these areas.

One of the aims of the OEPass project is to address the OER and recognition problematic issues by creating a standard format for describing open education and virtual mobility experiences in terms of ECTS which

- addresses common criticisms (lack of trust) of open education, in particular with respect to student assessment and identity,
- is scalable to hundreds or thousands of students through automatic issuing and verification of certificates, and
- can capture a wide range of non-formal and formal open education experiences.

The final report of the assembled O1 Activity reports will

- describe a quality system for analysing the quality of credentials through a lens of ease-of-recognition and portability
- classify different kinds of open credential according to a typology developed in the project
- provide an easy-to-read label showing the quality of a credential at a glance provide initial quality-assessments for a number of commonly issued open credentials in Higher Education.

The present activity report (O1-A3) of Identification of Types of Credentials in Open Higher Education is set out to provide an overview and analyses of the desk research conducted by the partnership, of the websites of higher education institutions that offer some form of open higher education, and record the features of each credential being awarded using a standardised format.

2 About the research

The research was conducted by the OEPass partner institutions during January and February 2018, the leader of the research activity was the Budapest University of Technology and Economics.

The gradual steps of the research went as follows:

1. Clarification workshop (Partner meeting Heilbronn)
2. Definition for research purposes
3. Credential collection roadmap
4. Common collection table with detailed explanation
5. Peer reviewing collection table and research roadmap.
6. Finalisation and opening common on-line table for avoiding overlaps
7. Analysis
8. Suggested typology (and classification)

Micro-credential definitions used for the purposes of research:

a) Micro-credentials are a digital form of certification indicating that a person has demonstrated competency in a specific skill, such as data literacy, teacher leadership, or growth mindset.

b) Micro-credentials offer students and working professionals alike a way to bulk up their resumes with field-specific skills. Micro-credentials are like certifications. Students or professionals take courses and develop specific skills in certain fields. *(*https://www.onlineschoolscenter.com/micro-credentials/*)*

c) To earn a micro-credential, you would need to complete a certain number of activities, assessments, or projects related to the topic. Once you've completed the requirements, you submit your work in order to earn the credential. (https://study.com/academy/popular/what-is-micro-credentialing.html)

d) At their core, micro-credentials are proof that a skill or level of mastery has been earned by the recipient. Think of micro-credentials as mini-certifications in a specific area of study or professional development, like leading a team or applying computer coding skills to complete a project. (http://blog.portfolium.com/what-is-a-micro-credential/)

Expressions that were searched:

- Micro-credentials
- Digital badges
- Micro-certifications
- Web badges
- Mini-degrees
- Nano-degrees

Gathering of information was done by a shared google xls sheet, in a common template:

- code (partner code)
- HEI
- Location
- Name
- Descripion
- Rules to earn
- Suggested (own) classification
- Link
- Date
- Reseacher
- Comment

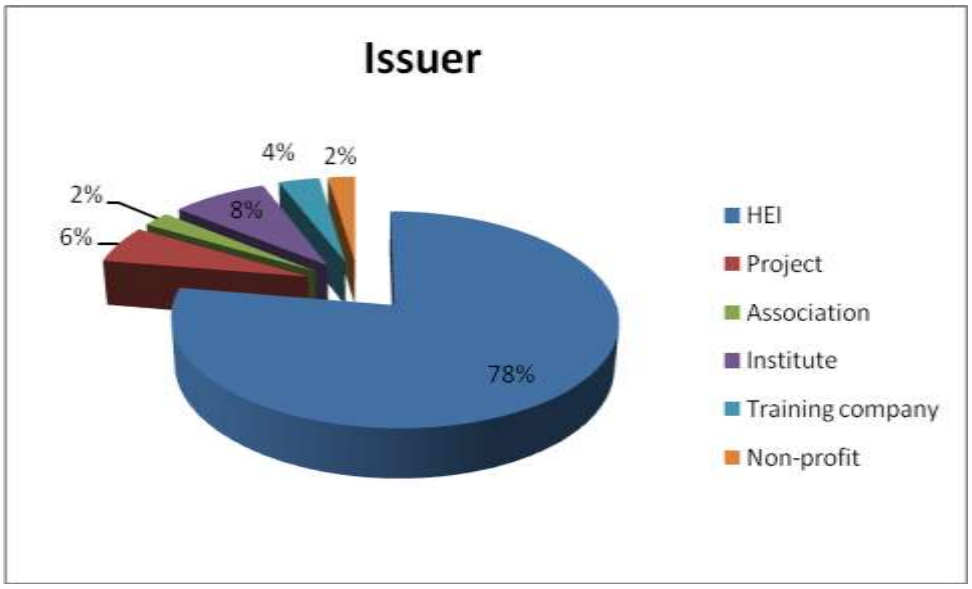
3 Analyses of research data

Research data were collected in an excel table and the collection of 85 records can be seen in Annex 1 of this report. The 85 records were split in cases when consortia of HEI-s issued common credentials to have one record per HEI. The final number of records exceeded 100 records.

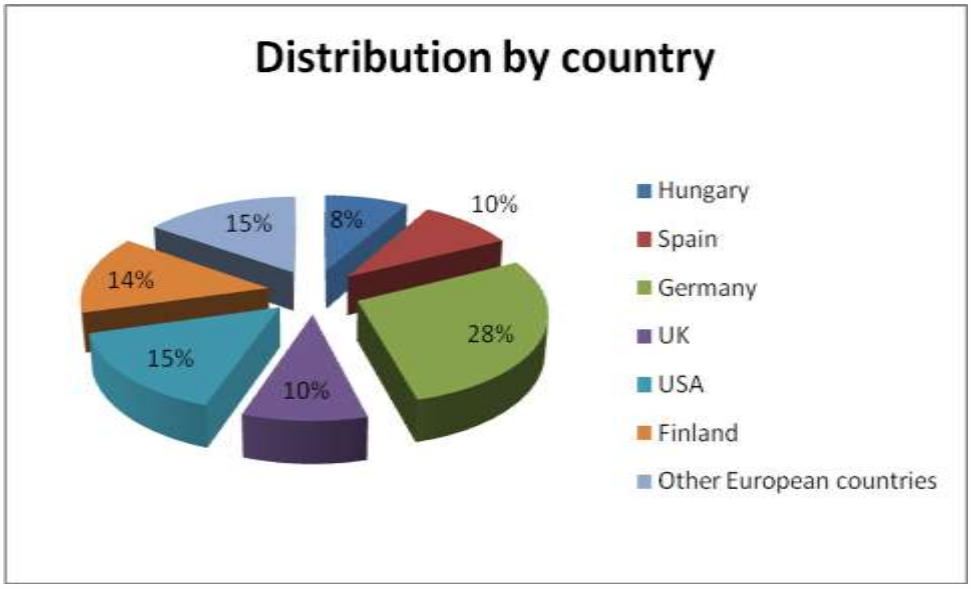
We have analysed those records, in terms of quantitative and qualitative content. Quantitative content is showing the geographical distribution, issuers of credentials, while qualitative research was counting the content of the description, names, rules to earn and suggested typology of the credentials.

3.1 Quantitative results

There were 85 complete results available. The significant majority of the credentials came from higher educational institutions, all the other results have connection to HE, such as projects of HEIs, HE related associations like the European Schoolnet, institutes that are connected to Ministry of Education and training companies specialising on training of teachers.



On the geographical coverage of the badges, the results came mostly from Europe with a couple of USA cases.

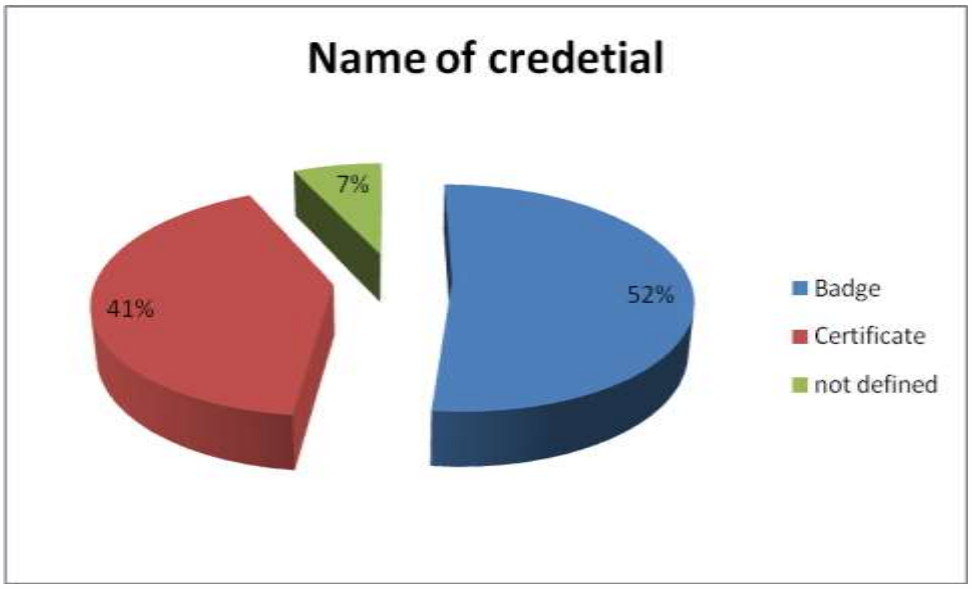


3.2 Qualitative results

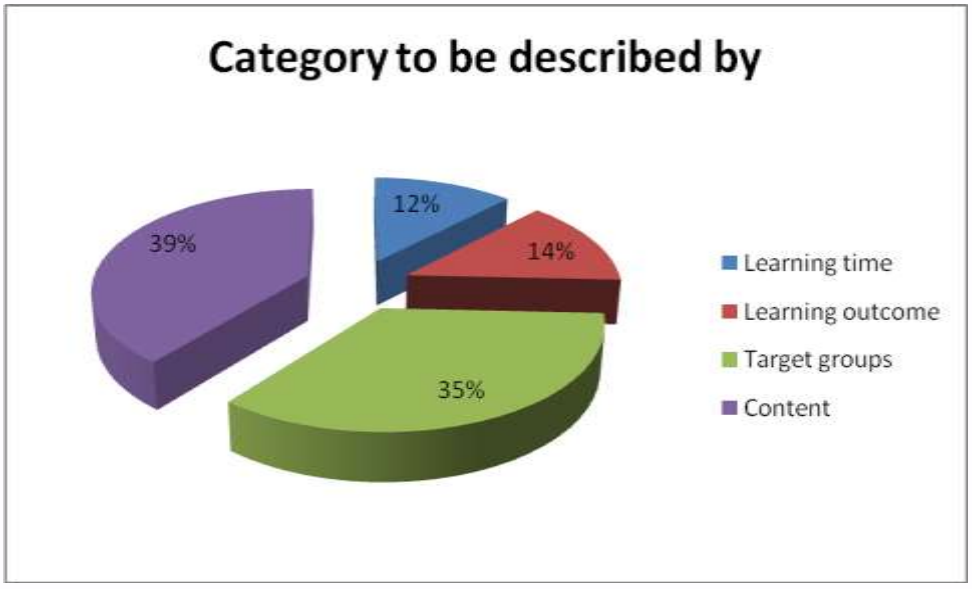
The two most common name for credentials are **certificate and badge**. In some cases there were overlaps between the two category: in some cases learners are entitled to certificate (usually a certificate of attendance), however when they do pass a final test or complete an activity they can get a badge as well. These cases were listed for badges.

There were 3 cases of awards: completing several badges entitled the owner to be awarded as well. There were listed for badges as well.

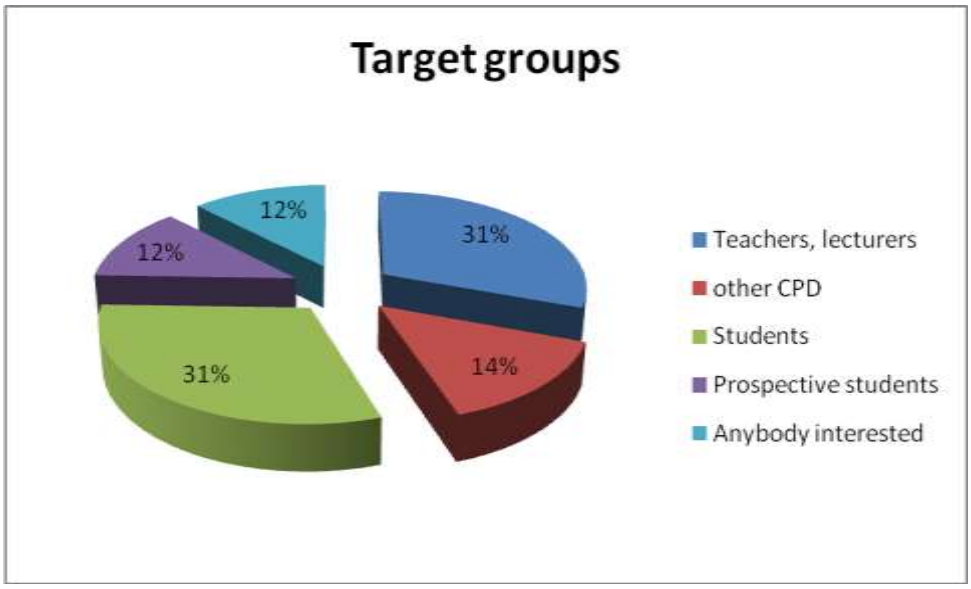
Not defined cases cover cases where it is unknown or it has no digital recognition yet.



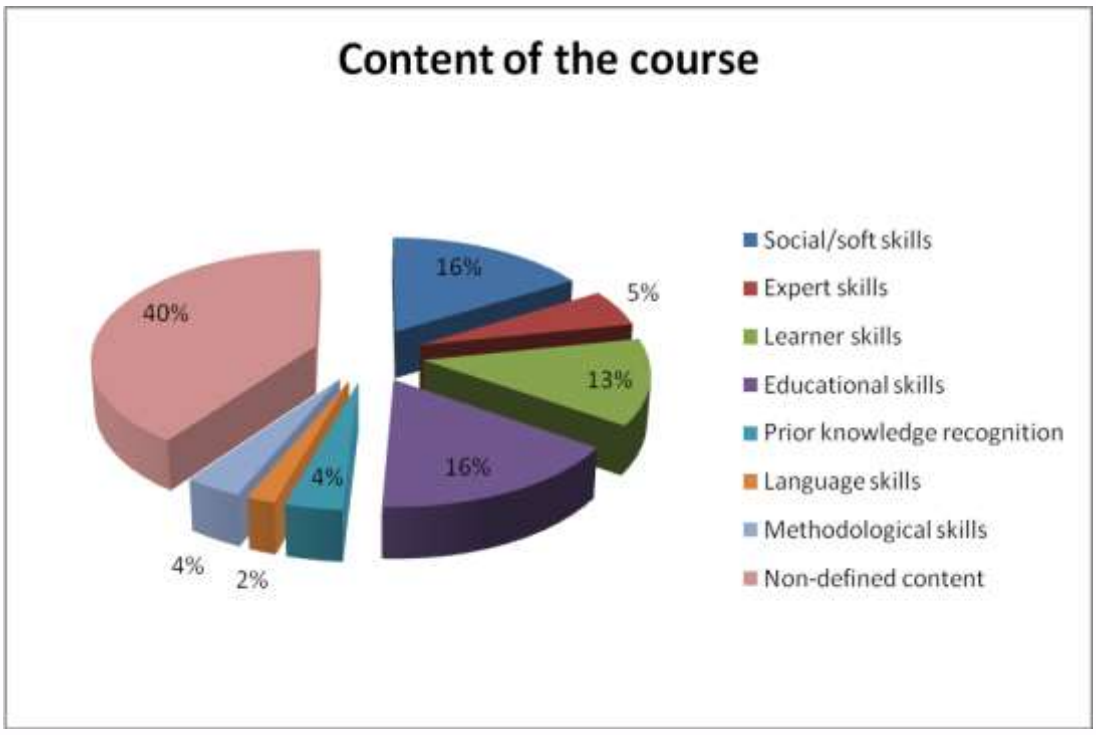
Regarding description, we studies the most common denominators when describing the credential, including learning time, outcome, target population, content of the course, level of the credential. In the description the most common denominators were the target group description (see next graph for details) and the content of the course. The outcomes (skills and competences) were not highlighted, nor the learning time it takes to acquire them.



When the credential was described by the target group, its distribution is as follows:



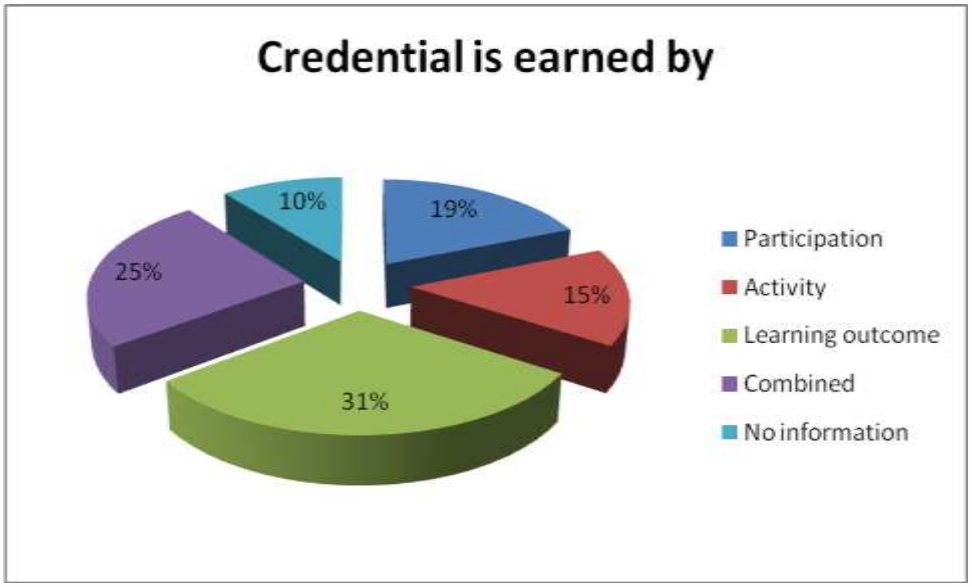
When studying the descriptions, when it was available, we created content clusters. Non-defined contents describe cases when the description referred more than one credential thus there were different contents or cases when it was not available in the description.



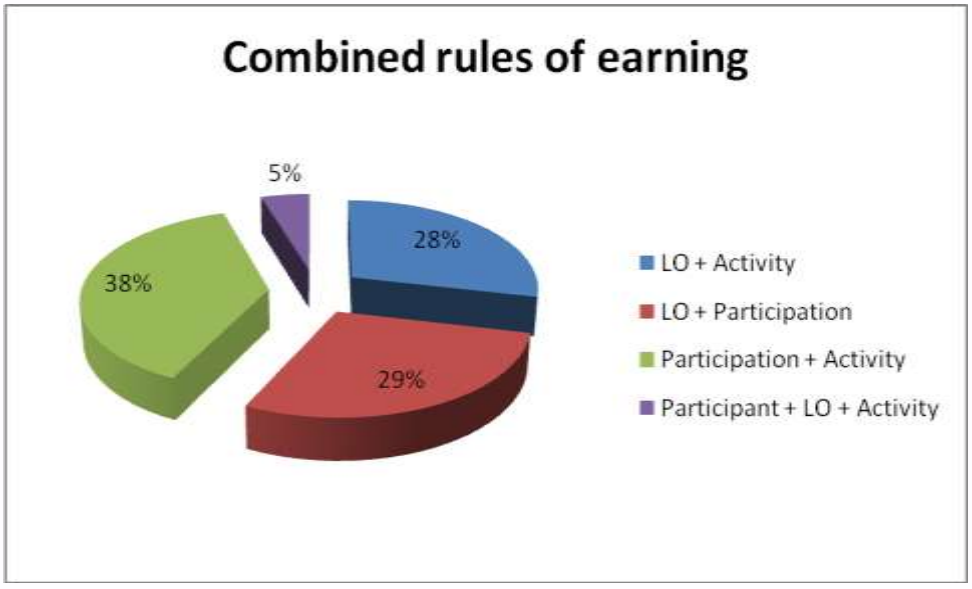
Concerning the rules to earn, we have studies the different criteria that were provided in the research results:

- Participation: full participation is rare, when it is given as the decisive factor; usually a certain percentage of attendance is give.

- Learning outcome: the most common are tests.
- Activity: there are some examples where the exact number of posts or detailed description of activity (article, presentation etc.)



Combined rules of earning is distributed as such.



3.3 Typology suggested by researchers

During the collection of credentials we collected suggested typology from researchers who had limited overview on findings, but deep understanding on the cohort they found. We have got plenty of suggestions of different manner, sometimes overlaping and definitely not disjunct.

- In 15 cases we had no indication, or suggestion. The most popular typology was – in a way – continuing the paper based typology of certifications:

- More than 10 suggestions were mentioning: Certificate for successful completion. Some variations of it: Certificate for successful completion of MOOC.

- Another type was participatory type: Credential for participation, Credential for active learning.

- Another set of suggestion was made to the prior leraning experience that is helping the enrolment to the University. A variation of prior learning was the badges of extra curricular learning experience in different fields, parallel with HE studies, like STEM studies. Those badges were aiming at awarding important knowledge and skills areas that are important on the job market and could raise the value of the HE diploma.

- There were suggestions of different and more specific content on successful completion, in the dimension of evidence based learning: Badge for evidence based learning outcomes.

- We had also variations of participatory badges, that was focusing on learning or training experience and student progress. Student experience and progress bagdes were combined with awards of best practices/achievements.

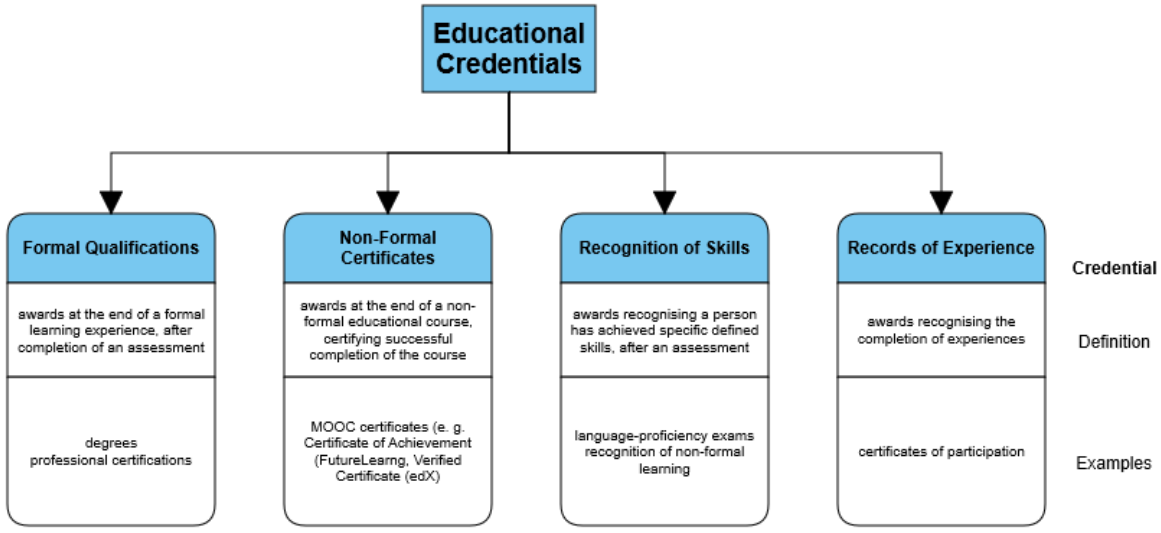
- There was a set of suggestions that were focusing on the skills rather than outcomes, and were suggesting different type of skills like: Networking skills badge, Social skills badge, soft skills badge.

- There were suggestions for credentials to teachers, educators, for their carreer development: Educators' badge.

4 Typology

Analying the mapped credentials and suggested typology, we have concluded the following Credential types, that can later be represented by labels:

In the light of peer reviewing (O1-A2) the first version of O1-A1 Concept Paper, and the further research that was continued during the peer reviewing period, a slightly modified definition and differention was formulated in the paper. The new suggestion is to use Three main types of credentials in OEPass out of the possible four represented in the diagram below:



The three that we will use are:

- Formal qualifications
- Recognition of skills
- Records of experience

In case of those broad certification types, it seems to be that there are sub-types that can be used later as technical classification, in a meaningful labeling system:

As it was metioned in the survey (Name of credetial), the most common techical types are:

- digital certificate
- open badge.

5 Classification

The main focus of this activity report was to find a good typology to feed the overall quality system and easy to read labeling, there was also focus on finding data about the different

inditacors (statements) that will serve in a measurable quality system. Those possible types are mostly content oriented types, and their existence may be regarded as minimum requirements as well in a later system.

During the data analysis we found the following type of credentials:

- Participation type: The most common certification is for participation (in a course, training).

- Earner type: Teacher credential – Student credential. This label can be given if the earner is defined in the credential description. (Many descriptions do not target the credential towards a a target, but to anybody who is interested)
- Activity type: Activity - Award label This label can be given if the credential is given to the level of activity during the learning process, or if this level of activity is awarded by specified schemes, like best of or master of expert of... etc.
- Performance type: Learning outcome - Learning skills – Learning experience (that can be combined, more labels can be used. We have distinguished in the analysis, and also suggested typology supports three type of performances, other than participation which we take as a basic level of input performance. Most of credentials are for successful completion of learning outcomes. Learning outcomes in higher education are mostly cognitive outcomes, so here we distinguish from more specific skills that are abilities to do demonstrate something practical. Finally we suggest to give similar performance label to learning experience which is a bit more articulated than participation in a theoretical course.
- Experience type can be given to credentials when the experience of activity and decision making situations, training environments, or work situations add up to a valuable experience. (It can be a sub-category of participation type)
- Contextual type: prior learning – supplementary, optional or free learning. This label can be given if the credential is showing another context than the core learning activity of students or teachers. This context can be a prior learning before HE to motivate pupils to choose a specific profession or HE institution, or learning activities that can be freely chosen on the top of curricular necessities, but can enrich the diploma (Credential) on the job market.