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Compromiso con OER en las universidades

Engaging with OER at universities

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Compromiso con OER en las universidades

Engaging with OER at universities

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Abstract:

At present, there is great interest over the concept of Open Educational Resources (OER) in all of its forms: OpenCourseware repositories OCW, spare open resources, or even more recently as Massive Online Open Courses (also called MOOC). This panorama has generated considerable debate about their effectiveness in terms of learning, sustainability and especially the role that higher education institutions play in this context. We understand that students are involved on formal and informal learning activities, and require universities should have new model to recognize their skills and abilities on these scenarios. One case study is the MOOC learning framework, where universities are interested but there are nowadays some doubts and fears about the official recognition as a usual learning activity. In this article we analyse some data from the activity in an Open Course developed in the University of Granada and the implications regarding learning skills and recognition. Finally, we link this approach with the studies given in the Open Learning Framework developed within the European project OERtest, in which five higher education institutions have conducted a pilot on this issue. We can offer some conclusions regarding the feasibility of certifying and award credits to a student.

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Keywords:

open educational resources, mooc, open learning, certification, recognition.

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1. Introducción

Since the establishment of the European Higher Education Area, European Universities have expanded their activities within different areas of collaboration and cooperation around course provision and joint degrees. According to (MILLER, 2011) the opportunity for faculty members and institutions to openly share content beyond traditional institutional boundaries has also grown into an international movement.

This movement is not isolated, as we also see how the open access movement has gained increasing traction within universities, leading to the creation of numerous open educational resources (OER) repositories. These kinds of courseware repositories are offered to all learners worldwide through the use of internet, offering self-guided learning and sharing possibilities to teachers (MITx, 2011) (WALS K, 2012), and in a explosion of great interest from students, institutions and educational associations, have evolved to the provision of Massive Online Open Courses (MOOC) (COURSERA, 2011) (Edx, 2012) (UDACITY, 2013) (MiriadaX, 2013) (UnedCOMA, 2013).

Many initiatives and projects were dedicated to the production of OER, the use and reuse of such material, the related legal issues, and the implications of OER within traditional institutions, as shown in Table 1. However, very few have explored the possibilities of gaining credits through OER-based learning (OERu, 2012). The recognition of OER-based learning and its feasibility within European Higher Education institutions are the main objectives of the OERtest project (OERtest, 2010), a two-year initiative funded by the European Commission (EACEA, 2010), with participant institutions[4] from across Europe. In the following sections we refer to its main outputs (OERTEST CONSORTIUM, 2012) and how it has positive affected to the Coordinating institution, University of Granada, resulting in a real experience in OER-based learning recognition.

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Name	Description	More information
SLOOP2 project	The project is focused on the gap between education and the world of work, and how this gap can be reduced through the systems of certification of knowledge and competences based on the European Qualifications Framework for lifelong learning (EQF), the reference framework adopted by the Member States in order to establish general criteria to compare the different qualification systems existing in different countries.	Contact person: sloop2desc@itd.cnr.it Website: http://www.sloop2desc.eu
OPEN SCOUT	The project will provide an education service in the internet that enables users to easily find, access, use and exchange open content for management education and training.	Contact person: info@openscout.net Website: http://www.openscout.net
OER HE EADTU	Task force on Multilingual Open Resources for Independent Learning (MORIL). This task force contained all the European Open Universities of EADTU, and was active in promoting online learning in two modes - informal and formal - both based on OER, so as to provide new gateways to university education.	Contact person: kees-jan.vandorp@eadtu.nl Website: http://www.eadtu.nl/oerhe
POLLEN Project	A shared workspace for individuals and groups of educators to develop and share open educational resources on OER Commons.	Contact person: info@iskme.org Website: http://wiki.oercommons.org/mediawiki/index.php/International_OER_Exchange_Pilot_Phase_II:_The_Pollen_Project
OLCOS-ODEC Roadmap 2012	A project which explores the possible pathways towards a higher level of production, sharing and usage of Open Digital Educational Content (ODEC).	Contact person: veronika.hornung@salzburgresearch.at Website: http://www.olcos.org/
UK OER	An array of institutional, discipline community and individual OER-related projects in a JISC/HEA managed programme (2009-10 and 2010-11), as well as studies into the effect of OER, e.g. current research into the impact of OER.	Contact person: sarah.cutforth@heacademy.ac.uk Website: http://www.heacademy.ac.uk/oer
OLNET	International project aimed at gathering evidence and methods about how we can research and understand ways to learn in a more open world, particularly linked to Open Educational Resources (OER) but also looking at other influences. (Supported by The William and Flora Hewlett Foundation, based at The Open University (OU) working with Carnegie Mellon University).	Contact person: p.mcandrew@open.ac.uk Website: http://olnet.org/
ORIOLE	The Open Resources: Influence on Learners and Educators (ORIOLE) project is looking at ways of gathering and sharing information about the effect of open educational resource reuse (both sharing and use sides).	Contact person: c.a.pegler@open.ac.uk Website: http://tinyurl.com/oriolep
SCORE	Support Centre for Open Resources in Education (SCORE). Based at	Contact person:

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	the OU and sharing expertise in OER across a national community of practitioners, SCORE is funded by the Higher Education Funding Council for England (HEFCE). It draws on lessons learned through the operation of the OU's OpenLearn.	SCORE@open.ac.uk Website: http://labspace.open.ac.uk/course/view.php?name=SCORE
OER Commons	OER Commons is a shared workspace for individuals and groups of educators to develop and share open educational resources. The OER Commons Initiative includes an OER platform for finding OER from a diverse range of providers and an OER professional development training program for creating OER and collaborating around OER.	Contact person: info@iskme.org Website: http://www.oercommons.org/
OpenER	The OpenER project is meant to offer open start courses. In 2006 Open Universities introduced Open Educational Resources (OpenER-project) in order to provide free accessible open learning materials via the Internet, as a means to increase the participation in higher education. We now offer about 20 free accessible courses. To achieve higher participation in higher education existing thresholds must be lowered and the willingness of individuals to invest in educational activities must be stimulated.	Contact person: communicatie@ou.nl Website: http://www.ou.nl/

Table 1. European initiatives regarding OER

2. A Massive Open Learning Experience

AbiertaUGR (abiertaUGR, 2013) is a good example as a case study to understand the relevance of involving universities at OER and informal learning activities. The University of Granada has started in april 2013 this experience in Open Learning with an initial offering of three online courses free of fee (even with free accreditation fee), and the possibility of awarding 3 ETCS to its own students. This proposal has been developed using features that should be taken into account in this kind of scenario:

- Use OER for learning activities and promotion of user-generated contents (GEA, M. 2013).
- Creation of online learning communities (GEA, 2011).
- Recognition at Universities (TANNHAUSER, 2012).

The courses have been developed to a wide community in order to adquire transversal competences and skills currently required in graduated tittles. Some of the most relevant competences are the following:

- Knowledge and skills for an autonomous learning by creating their own personal learning environment.

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- Enhancing the collaboration and work in groups.
- Enhancing the creativity, leadership, and reputation on a online community of learning.

These abilities are engaged in a context of social learning enhanced in the abiertaUGR platform using everyday technologies (blogs, twitter, groups, bookmarks, forums, etc.), and conceived as a social community where users have relevance (Figure 1), as a living community, and each member has the own personal learning environment or space (Figure 2).

Figure 1. abiertaUGR website, new members shown below

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Figure 2. Personal learning environment

2.1. Course analytic data

The first course (Digital Identity) started with more than 1.800 students enrolled in it. The user profile is approximately 60% related with teaching communities (K12, universities, etc.) and 30% belonging to professional sector (internet related works such as community manager or other kind of professionals with demands of a digital presence). We have a wide range of age so this kind of course has good acceptation for any kind of audience. Somme statistical data are show in Figure 3.
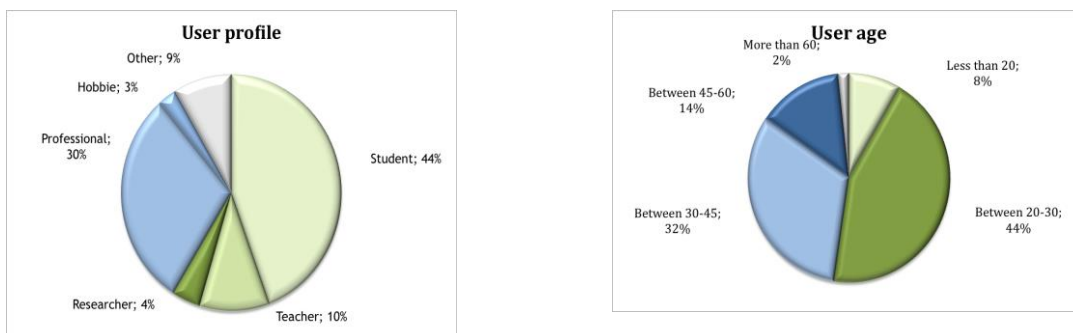

Figure 3. Students profile enrolled in Digital Identity mooc course.

Analytic data of internet access seem also to be very interesting. We had had during the first weeks of the course more than 22.000 visits of users, with an average of 15 minutes per visit (Figure 4). Also we covered (with only one Spanish course) visits from almost all the world (Figure 5).

Using the data gathered in this first course (the second course has just started at the time of writing this article) is the following:

- Students enrolled: 1.805

- Student passed the 4 week course: 620 (34'4%)

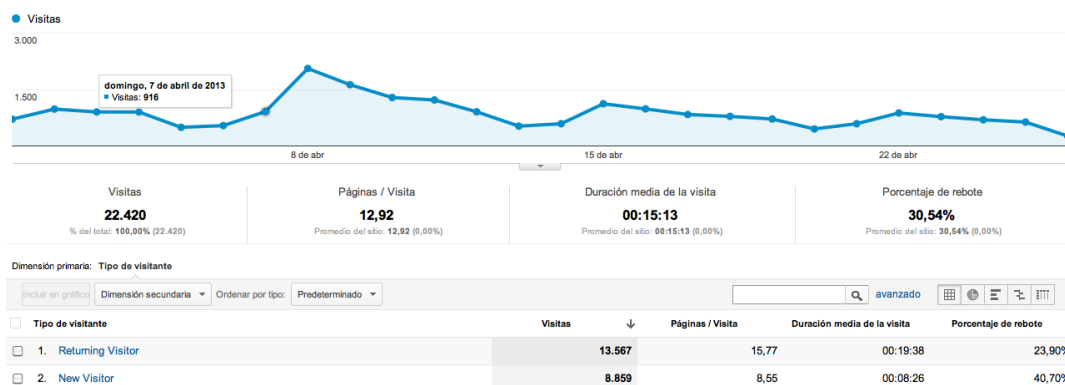- Student with high activity (more than usual) 162 (8'9%).

Figure 4. Students profile enrolled in Digital Identity mooc course.

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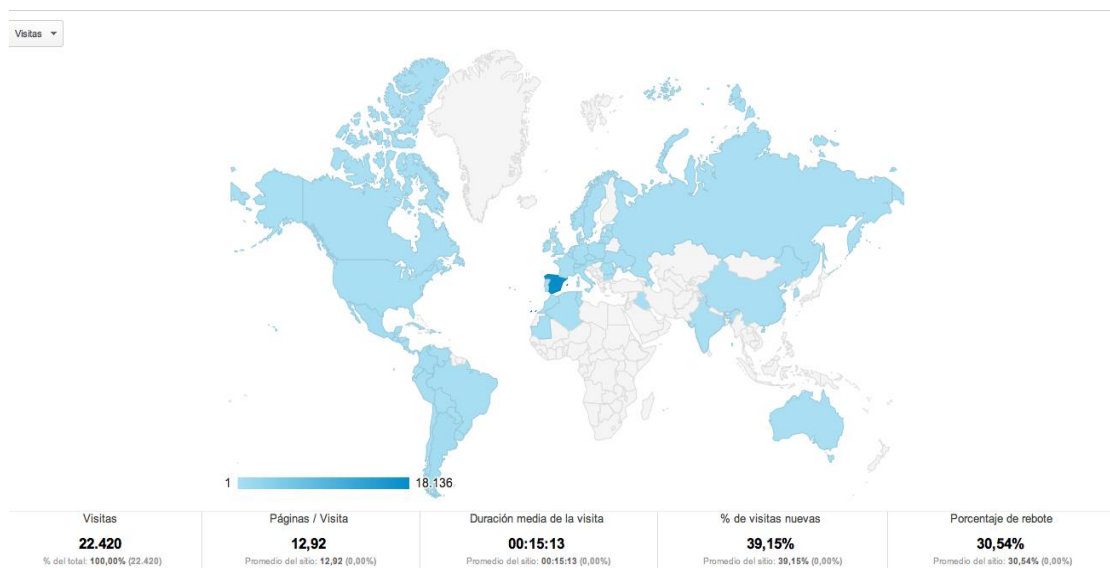| Visitas	Páginas / Visita	Duración media de la visita	% de visitas nuevas	Porcentaje de rebote
22.420	**12,92**	**00:15:13**	**39,15%**	**30,54%**
% del total: **100,00%** (22.420)	Promedio del sitio: **12,92** (0,00%)	Promedio del sitio: **00:15:13** (0,00%)	Promedio del sitio: **39,15%** (0,00%)	Promedio del sitio: **30,54%** (0,00%)

Figure 5. Digital Identity, a course in Spanish, has received visits from most parts of the world

Using the data gathered in this first course (the second course has just started at the time of writing this article), we can say that user satisfaction with this course (an in general with the social platform) was satisfactory (Figure 6 and 7).

So, these data confirms that this model is suitable for massive courses and also, as a model to construct online learning communities connected with hicher education institutions using OER and informal learning as a method for engagement.
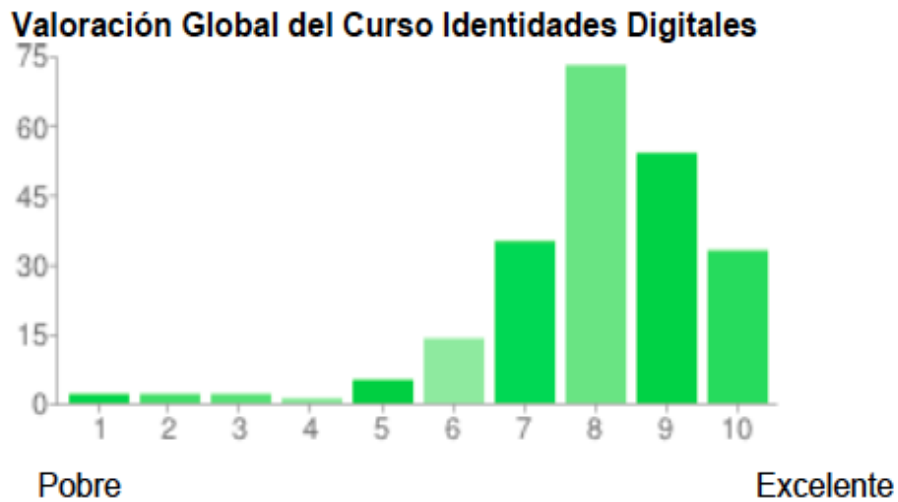
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Valoración Global del Curso Identidades Digitales

Figure 6. User satisfaction with the course is 8 in average.

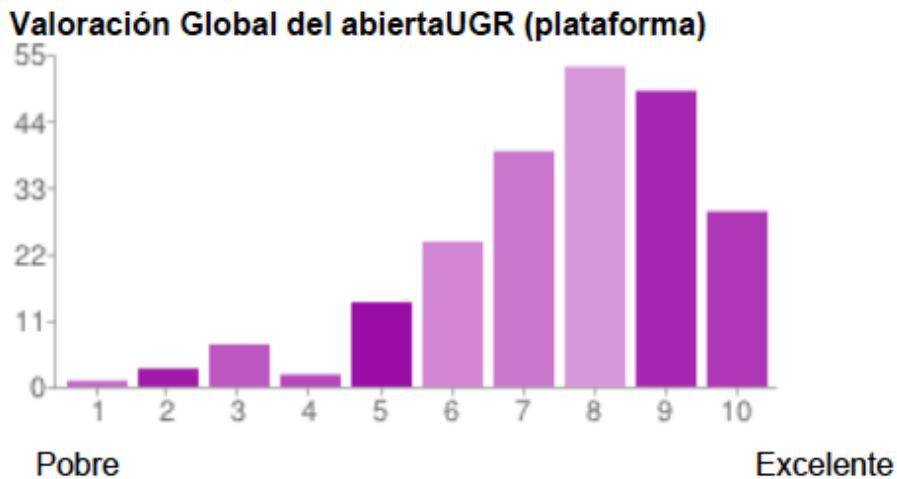**Valoración Global del abiertaUGR (plataforma)**

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Figure 7. User satisfaction with the social platform is 8 in average

Some questions we had to evaluate in this course before starting it were following:

- Course methodology: What is the best approach to conduct this kind of informal learning?
- Which is the evaluation process?
- Expected outcomes?

- Connection with the universities' learning model?

2.3. Main Outcomes

The outcomes of this kind of course were conceibed with some keypoint in its design:

- Creation of personal learning environments (PLE) connected with these courses.
- Course Content enriched with lots of comments and suggetion from the commnity.
- New resources generated by the users accessible to the community (some of them open to all).
- Creation of a stable community of practice with tools for communication, relationships, etc.
- Closing up conclusions obtained from the community users working in group team where anyone could contribute.

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3. An Open Learning Framework for Traditional Universites

The successfull execution of AbiertaUGR is the fulfilment of two important sides: theory and practice. In fact it was a labour of research and work which started with the OERtest project coordination from the University of Granada and the development of a formal framework for OER recognition. This project was the seed to future implementation of OER-based acreditation of informal learning, thouth in this article we focus on open question at the level of the project itself an not to the possibilities that it derivative actions could be taken. We also, face the theory of the project with the implementation of AbiertaUGR (abiertaUGR, 2013).

3.1 Model of social and informal learning

In the OERtest project, we focus on opening up possibilities for assessment of

resources, as a natural complement to the materials which are being made available. Mainly we move to the possibility of universities publishing courses as OER (probably already in their OpenCourseWare (OCWC, 2001) and also certifying students, maybe awarding ECTS. This posed two main areas of research that would follow in a testing phase and development phase as we shown in the following image.

The testing phase in the OERtest project was centered on the open materials. The learning framework is concerned with entire course-modules offered as OER with full course materials, guides, supporting documentation etc., equivalent to a unit/module offered in any HEI. The certifying framework assumes the possibility of unbundled course design, assessment & certification possibilities, and accumulation & recognition procedures, both within an institution and between institutions participating in a consortium.

A traditional system would see all of the following processes happening within one course, within a single institution:

- Course design – whereby a group of experts and pedagogues design a curriculum, course structure and materials.
- Teaching / Learning – whereby the materials created by the course designers are used to create a learning experience (often with the help of tutors / teachers).
- Assessment & Certification – whereby the knowledge acquired in the learning experience is tested, and thus the learning experience is validated. Certification serves as evidence of completion of the validated learning experience.
- Accumulation & Recognition – Whereby a student acquires validated learning experiences, and uses them as a passport to obtain more advanced learning experiences.

In an unbundled system, these processes are performed individually by separate teams, often in different institutions. This leads us to a set of situations from which we want to explore with you two according to their relevance.

Scenario name	Learner is	Studies OER module at	Requests assessment from	Uses credits at	Notes
OER traditional	Student at U1	U1	U1	U1	Only difference from traditional is OER-based materials. Self-study modules with credit are not unusual.
OER Erasmus	Student at U1	U2	U2	U1	Converse applies for students at U2 taking OER module at U1.
OER Summer School	Student at U1	U3	U3	U1	U1 has no agreement on standards etc. with U3, and so must assess quality of the credits, perhaps using exam or portfolio model.
OER Credit Market	Not currently a student at U1 / U2	U1	U1	Not at U1 or U2	U1 assesses learner using the methods it has decided are appropriate for its own OER module and offers ECTS credits to be taken away and used as learner wishes/is able.
OER Anywhere	Student at U1	U3	U4	U1	U1 has no knowledge of the curriculum or standards etc of the offering at X, and so must assess quality of the credits using RPL methods, eg exam or portfolio model
OER RPL	Not currently a student at U1 /	X	U1	U1	Learner wishes to enter U1 and offers

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U2	learning from OER as basis for entry. U1 must assess using RPL-type protocols as it has no prior basis for evaluating standards of the OER curriculum

Table 2. Scenarios for OER recognition according the OERtest project

In the table above:

- U1: represents the 'home' university, where the student following the modules is enrolled (if the student is actually enrolled at an institution).
- U2: represents an HEI which has signed an agreement with U1 for mutual recognition of qualifications and/or credit.
- U3 & U4: represent third-institutions which do not have any formal relations on mutual recognition, neither amongst themselves, nor with other institutions.

To take further steps to provide a framework which would allow this learning to be recognised, some open questions needed to be clarified or extended in further research.

1. Exploration of intuitions, beliefs, thoughts and feelings about the accreditation process from OER provision.

Based on the accreditation approach from OER provision, what is thefirst impression/reaction? (An exploratory question about their opinion about the issue).

To what extent is it feasible?

To what extent can the qualification be trusted? (Does it reach the quality standards of the accepting institution?).

Can (and how) can the qualification be compared to that applied to a traditional course?

2. Regarding the procedure of implementation.

How do you imagine the procedure of implementation in your unit or

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regarding your responsibilities?

How could your unit implement this new approach? (Question oriented to elicit a positive answer and a possible procedure or sub-procedure of the unit)

To guarantee the quality of the assessment this report proposes the creation of a learning-passport: a credit-level diploma supplement which would give full transparency to award the qualification. The learning passport is structured around a process-model of course design, provision and assessment, which when fully completed, gives a comprehensive picture of the holder's learning pathway.

The OERTest process model consists of 4 stages, each containing a number of processes, as following: design, learning, assessment and awarding. These stages are detailed at Figure 8.

In the context of abiertaUGR these requirements were satisfied as follows. We have organised the guidelides of the courses using gamification techniques, where students are awarded with some points due to their participation in the course. The available situations to aquire such recognition may be in one of the following circumstances:

- Participation in debates: comments, opinions and questions are valuable in order to promote the skills of belonging to the community.
- Creating knowledge and supporting new material to the course.
- Social relationships, making personal collection of friends, using internal message for helping other users, etc.
- Group workspaces. Enabling to create different teams to work together for a specific goal-oriented task.
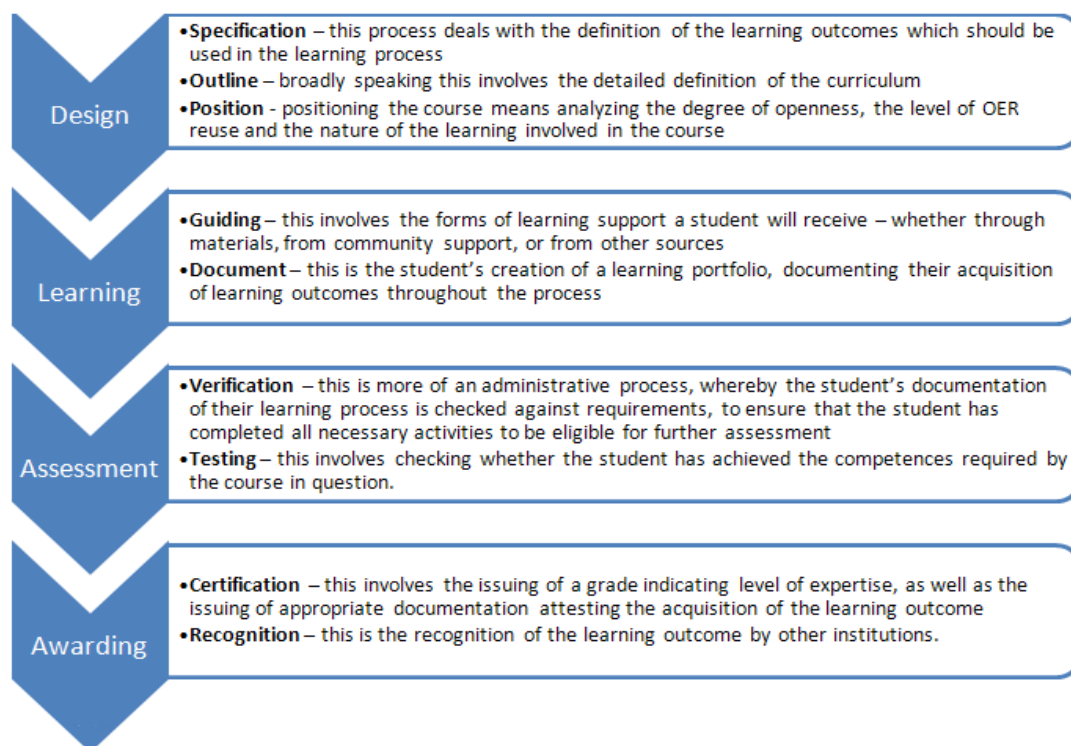
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Figure 8. OERtest model for informal learning

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3.2. Assessment Model

At this stage, the open questions were weighted as with importance as the intervewed people pointed it as a hot spot of research for the success of this kind of initiatives. The most representative questions are listed bellow.

1. Is it easier or harder to assess learning from OER with study at higher (e.g. Masters) or lower (e.g. University entry) levels? (high level: more 'difficult' LOs but more mature learners, lower level: the other way around).

2. Can all LOs be assessed for learning taking place through OER, and if so, how? If not, what kinds of LOs could not be properly assessed?

3. Focusing on assessment methodologies: How to assess all the learning outcomes that would lead to credit being offered?

4. What is the term assessment referring to? How can it be defined?

What is it used for?

5. What kind of assessment methodologies for the assessment of learning outcomes are usually used in universities in Europe? (Is it possible to find "more" and "less" accepted methods for assessment? Is there a mainstream?)

6. What are the main barriers for HE institutions to accept other institutions' assessments/ grades/ credits?

7. Are the results of assessment between universities transferable? (If one university X in country Y assesses a student, can this assessment result be transferred to another university - and under which circumstances and conditions would that be imaginable?)

8. Which factors determine the value of an assessment result? (e.g. if the assessment method employed has been conducted in a sound way, the value of the assessment result is still depending on the curriculum of the program and on other context factors)

9. Are there certain subjects for which the "transfer" or "recognition" of an assessment is more likely between universities and others where it is less likely?

In the context of abiertaUGR, we have several assessment methods:

- Automatic award system after participation in activities: positive points, rate.

- Recognition from the community and the training team: likes and badges.

- Working-teams developed in groups. This activity has been very interesting with exciting results from each team.

With the previous assessment tools the evaluation panorama is covered focusing in these contexts: activity, reputation and outcomes. Some of these tools need a pedagogical team behind (one teacher per week and at least two content curator / mentor). These activities are also linked with social networks such as twitter and facebook.

3.3. Requirements and standards of resources

In this sense, the research line for universities to fulfill their open scenario should answer the following questions:

1. How do you cope with the issue related to OER licenses (copyleft / copyright)?

2. Do you know a similar experience of guidelines / standards (on national / international level) which could be used in the OERTest perspective because it shares common standards related to OER development.

3. What are the technical, educational, methodological quality criteria which we could take into account when using OER? Should we require methodological issues such as competences or activities?

4. Do you think the SCORM standard should be mandatory for the modules offered? Or else, content with general support (pdf, avi, swf) is enough?

5. The interaction between students could be seen as collaborative knowledge generation. Do you think that it would be important to include this type of interaction in the design of an OER module?

6. Do you give more value to multimedia content (youtube, slideshare, podcasts) compared to conventional plain-text based content?

7. Do you consider possible to establish a relationship between the number of ECTS and the amount of material that should be offered by an OER module?

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3.4. Credentilization, certification and recognition

The hot spot of the implementation of this stage in a traditional university is the area of credentialization, certification and recognition. Most of the MOOC initiatives EDX (2012), COURSERA (2011), UnedCOMA (2013) have not at present resolved this very important issue. The open questions that need to be clarified

in a further research line are:

1. Are the processes that your university uses to set the standards (level) and assure quality of its educational offerings and to define the ECTS credits that any study may carry, be able to also be used for assessment of learning acquired through OER? If NO, what are the reasons why your present processes are not appropriate (e.g. they specify traditional teaching and assessment methods, they exclude some forms of teaching and assessments)

2. Would your university regard ECTS credits obtained from another university through its assessment of learning acquired through OER as acceptable or would it in principle decline to recognize them?

3. Would your university regard such ECTS credits as below/same as/higher in *quality* to those obtained by traditional methods?

4. Does your university have a standard process to assess the quality of ECTS credits presented to it by students or is this devolved to local units?

5. Would your university be prepared to offer assessment, and hence assign EDCTS credits, to learning acquired through OER? If not, what changes might be put in place to enable your university to be able to assign such credits?

6. What is the process to validate learning results coming from independent study of OER or other e-learning resources produced by our own HEI?

7. How to develop a strategy for such recognition?

8. What are the conditions to build trust between institutions?

9. What would be the difficulties to recognize learning outcomes from independent studies/self-studies of OER NOT generated by our HEI?

10. What are/would be the main obstacles in the implementation of such an assessment and validation/certification approach at inter-institutional and international level?

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11. What are the policy measures at the national and EU level to support mutual recognition of OER learning outcomes?

3.5. Regulatory Framework

One of the most important phases in the OERtest project is testing the feasibility of OER based learning assessment at the participating universities. To enable such a service offer at these institutions, the development of a set of regulatory standards is necessary. This framework should be based on the one hand, on the existing literature in the field of assessment and quality assurance, and the quality and standards of OER. On the other hand, it should also consider good practices and examples from the involved universities (assessment, quality, inter-institutional collaboration, good practices from OER related projects etc.)

Regarding the connection with the higher education model AbiertaUGR represents an informal learning scenario where students and professionals meet in a open online space organized as a regular courses, planning and tools to acquire knowledge, skills and competences though social activities. The intended goal is to include informal learning through massive online courses as regular activities at the university.

4. Conclusion

The specific focus on assessment and certification is justified by the concern that OER for learning may remain in the sphere of informal and non-formal –and non-recognized- learning. Through the development of the right quality and assessment tools, it can also form an important new-pathway for student-centre learning within formal education.

The danger is that Open Education may develop into a new and parallel system of education, that is already happening with the strong move towards MOOCs (Massive Online Open Courses) – assessed and certified educational programmers offered by major universities, whose certificates are expressly not

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equivalent to those awarded for "*traditional*" education, and which are not compatible with any system of qualifications.

5. Acknowledgment

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