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Building an OER - OEP ecosystem

Innovative impact

School Access to digital content like OER has expanded and open repositories play a significant role in this field, but to improve the use and reuse of these OER it is important to understand how they can be used. To link OER to practices, Universidade Aberta (UAb) is developing an OER-OEP ecosystem, which includes the creation, description, preservation, sharing and possibility of reuse of educational resources used in open educational practices, that is, the articulation between resources and their didactic-pedagogical contextualization, based on real pedagogical contexts of use.

Besides, important aspects like quality through external validation and sustainability of the project are guaranteed considering the procedures that have been implemented. The case of UAb Open Repository, giving this kind of information, is an important tool to improve the effective use of OER and can be considered an example of good practices, of transversal interest for administrators of institutional repositories, teachers and other educational agents with an interest in open education.

Introduction

Looking at the open movement, it is important to explore a broader notion of openness in education. Considering the definitions that have been proposed for OER, we find that the concept itself has been broadened, incorporating a greater variety of resources (OECD, 2007; UNESCO, COL, 2011, 2015). But although, in the theoretical domain, the benefits of Open Education - whether in terms of creation, availability and access to resources or in relation to educational practices - are widely documented, in reality, there are still many challenges in this field. In fact, the availability of tools and resources, by itself, does not guarantee the transfer of knowledge and a wider exploitation of the multiple possibilities of OER. In this context, it is important to consider that the focus on the content (OER) should be shifted to the practices (OEP) that are necessary for the use of this content (Deiman & Farrow, 2013).

There are already initiatives and experiences that have proven how this perspective can result in important and significant changes, in teaching and learning process, contributing, namely, to implement more active forms of learning, especially when working with adult populations (Bastos, 2018; Cronin, 2017; ELI, 2018; Paskevicius, 2017). But, in fact, the results seem to appear more slowly in this specific field of open movement. That is why it is also essential that, in other areas of action, tools are at everyone's disposition to enable organizing and making OER available in conjunction with OEP to facilitate access and also decision-making in relation to new open practices. One of the reasons cited for its still little comprehensive use lies precisely on the difficulties in researching OER: "materials are difficult to locate, retrieve and sometimes impossible to download to be adapted, translated or updated" (Atenas et al., 2014).

From OER to OEP

When talking about OEP, we have as a reference the way they are presented by the ICDE and OPAL project: "practices which support the production, use and reuse of high quality Open Educational Resources (OER) through institutional policies, which promote innovative pedagogical models, and respect and empower learners as co-producers on their lifelong learning path" (The OPAL Report, 2011). But how to accomplish this step? The OPAL project has identified five main barriers faced by individuals when wanting to participate in the use and development of OER: lack of institutional support; lack of technological tools to share and adapt resources; lack of skills and time; quality or adequacy of OER; and personal issues, such as lack of confidence. All of these concerns are significant threats to ensuring the sustainability of OEP initiatives in higher education.

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In the context of the UAb, an ecosystem of OER and OEP is being build and is based on a set of vectors developed in a transversal and articulated way through: (i) an Institutional Policy of Open Education and (ii) the Institutional Repository. The existence of a strategy combined with the definition and application of an institutional policy is a determining factor for the sustainable development of these kind of projects. At UAb, with a consolidated role in the context of online distance education, Open Education has been achieved through several initiatives (Mendes et al., 2018, 2019), highlighting, in the context under analysis, the articulation between the Open Repository and the open courses made available on the AULAbERTA (Open Class) platform.

The Open Repository

The UAb Open Repository (OR) is structured around the principles of Open Access. Supported by an "Institutional Policy of Open Access", the OR is organized in thematic communities, and makes available - in electronic format and full text - the scientific production of its academic community (teachers and students) and pedagogical resources, the latter grouped in the OER community (Carvalho, 2018). The OER collection consists of contents of the most varied types, published under an evaluation process, based on criteria of quality and relevance, objectives, properly described and indexed to facilitate the retrieval of information, interoperability and free use by an extended set of users.

The AULAbERTA Initiative

As an online distance learning institution, acting mainly in the field of formal education, UAb has been expanding its action in the field of open education by developing a platform (based on MOODLE) which was named AULAbERTA (Open Class). Through this platform, UAb offers diversified training paths, from MOOC to free exploration trails. At AULAbERTA, then, we find OER and pedagogical scenarios for its use, concretizing the perspective of its association with OEP. Within the scope of the present ecosystem and taking into account the UAb's vocation for the production of multimedia products, the focus in this phase of the work is centred on the availability of resources of this type and their integration in OEP.

The Ecosystem OER - OEP

In the context of the articulation between the OR and AULAbERTA, a set of specific procedures were developed so that the OER, produced and used within the scope of AULAbERTA, were made available in the Open Repository and originated an OER-OEP ecosystem. The first step was to identify responsibilities and define an information circuit. Three levels of competence were identified:

- Pedagogical competence: AULAbERTA's Coordinator ensures articulation with the technical-pedagogical team and the UAb faculty, regarding the creation, selection and description of the available resources.
- Technical - library competence: Library Services (LS) - Responsible

version:

<https://repositorioaberto.uab.pt/handle/10400.2/8539>

OECD (2007). [Giving knowledge for free: the emergence of open educational resources](#).

Organization for Economic and Co-Operation and Development.

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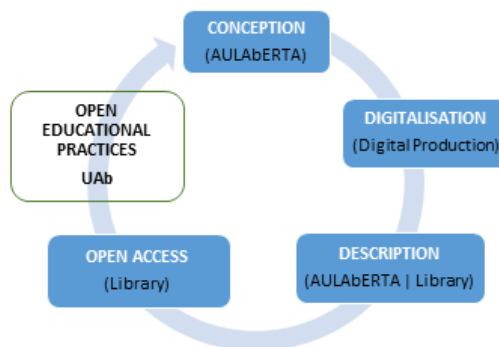
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for the administration of the OR, LS deposits the digital file and defines the metadata structure to be applied to the description of the contents in order to guarantee the retrieval of information and access to the contents, in accordance with its multiple pedagogical contexts of use.

- Digital production competence: Digital Production Services (DPS) -Responsible for the production of digital resources at UAb, this Service guarantees the availability of digital files in technical formats compatible with the deposit in the OR containing the identification of the authors, content titles and the defined CC license.



The definition of an internal information circuit gives agility to the process, namely in points that may be more critical or time consuming, such as the identification of the OEPs, which, in the case of UAb, were strategically associated with the AULAbERTA initiative.

Conclusions

In an institutional culture marked by the encouragement of open access and open education, this new step reinforces the path that has been taken in the field of pedagogical innovation. As highlighted by Conole and Ehlers (2010), "A core element of the concept of OEP is that it does not separate the resource from its usage, but takes into account the interplay between stakeholders, organizational elements and resources" and this is the pathway that we want to materialize. The dissemination and development of OEP are influenced by several factors. The existence of institutional strategies that sustainably and in the long term support the availability of OER-OEP is essential. This, in itself, will enable continued and quality work, given the many attempts that have proved to be poorly achieved (Atenas, 2014; Santos-Hermosa et al., 2017). The systematic availability of content through the UAb Open Repository, by allowing aggregation, research and access from a single point, to educational content, validated and subject to legal and reliable reuse, expands and enhances the dimension of the work that has been developed. At the same time, the content quality validation model applied to the systematic availability of OER in conjunction with the AULAbERTA context, enhances user confidence in the (re)use of resources and gives depth and consistency to the OEP ecosystem developed at UAb, helping to promote the project's sustainability.