Chapter 6
Open Educational Practices and Resources in the Higher Education Learning Environment

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ABSTRACT
In this chapter, the authors highlight the potential of open educational resources (OER) to increase access to knowledge and the challenges to adapt these resources with the participation of students. They analyze the emerging practices resulting from pedagogical innovation, with open educational resources, in the cycles of design, implementation, and evaluation in the curricular unit of a Master’s course in Pedagogy of eLearning at Universidade Aberta de Portugal. The investigation is carried out through the methodological procedures of design-based research with two groups of students of higher education at a distance where they addressed the concepts related to OER and participated in the educational practices for integrating OER in online education. In the field of innovation scenarios in online education, the results demonstrate the need to carry out/think about training, with practical actions, so that students can know, adapt, produce, integrate OER in their activities and share resources, thus contributing to increase the availability of quality OER.

INTRODUCTION
The new configuration of the world in the digital age provides to democratize knowledge, but it can also generate a confusion of concepts, given the infinity of information to which everyone is immersed. It is essential to know where to look for relevant and reliable data, as well as to promote discussions based on scientific knowledge.

Cyberculture (Levy, 1999) demands new social and educational models. Education must not shy away from considering the emergence of collective intelligence, and for this reason, it must articulate and incorporate a new perspective of action, through the inclusion of new technologies and differenti-
ated methodologies, which can provide the student with an optimized experience for the construction of knowledge.

Considering this context, Levy, (1999) believes that the teacher needs to take on a new role, becoming facilitator of the collective intelligence of the groups he is in charge of, while also encompassing the personalization of the learning paths.

In addition, the development of communication and information technologies has brought about profound changes in the organization of today’s society, while human relations are increasingly taking place in digital environments. Hayles (2007) declares that information networks affect human relationships, changing our lifestyle, the way we communicate and even the way we think. Human relations happen more and more in digital environments.

The emerging society has been characterized as a knowledge and information society. For Castells and Cardoso (2006), this microelectronic-based information, through technological networks, provides new capabilities to an old form of social organization: networks. Such networks occur in several areas: social, cultural, economic, educational. Within the logic of a networked society. The educational system requires to workers develop with intellectual autonomy, self-programmed, with the ability to learn alone, with new values and the ability to adapt to changes with new technologies, pedagogies, content and organization of the learning process.

Open Distance Education is a modality of teaching and learning mediated by electronic equipment (computer, cell phone, etc.), in which those involved in this process do not share the same physical space for such a process to happen, as in the traditional model of education. Teachers and learners share virtual environments that can be accessed at any time and place, simply by having a connection network available for interaction between the individuals involved in the process. This online education model is supported by Digital Information and Communication Technology (DICT). Currently, the electronic teaching / learning model is based on the online environment, taking advantage of the Internet’s capabilities for supporting communication and distributing content.

In this context, Open Educational Resources (OER) completes to the pedagogical strategies that involve students with their learning process.

According to Pereira, Nobre & Rosa (2017), OERs promote a generalized exchange of knowledge, motivating learning and democratization of knowledge through on their five pillars: Retain, Reuse, Revise, Remix and Redistribute.

This type of resource allows both the customization of content by remixing and sharing it, which promotes the construction of learning networks and collective intelligence. The evolution and quality of resources is the result of a continuum of reuses and readaptations, for greater adherence to specific contexts.

In this chapter, we will cover the Open Educational Resource and Open Educational Practice: what they are, what they represent for a new school model that is gradually changing due to the needs of students, teachers and the community, as well as the way in which all of these actors interact with the new educational paradigms.

**Background**

According to the Cape Town Declaration on Open Education (2007), open education is an emerging education movement that combines the tradition of sharing good ideas with fellow educators and the culture of the Internet, marked by collaboration and interactivity. This education movement is built on the