

Towards New Computational Architectures for Mass-Collaborative Open Educational Resources

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ABSTRACT

Open Educational Resources offer several benefits mostly in education and training. Being potentially reusable, their use can reduce time and cost of developing educational programs, so that these savings could be transferred directly to students through the production of a large range of open, freely available content, which vary from hypermedia to digital textbooks. This paper discuss this issue and presents a project and a research network that, in spite of being directed to Latin America's reality and need, search for answers that would help to solve some educational questions that go beyond countries' boundaries.

KEYWORDS

e-learning, open educational resources, digital textbooks, learning objects, hypermedia educational content.

1 INTRODUCTION

Open Educational Resources (OER) [1] offer benefits in education and training, since they allow to reduce time and costs of establishing educational programs, through their adaptation, reuse and remixing. An initial definition for the term was “the open provision of

educational resources, enabled by information and communication technologies, for consultation, use and adaptation by a community of users for non-commercial purposes” [2].

Nowadays, the definition of OER now most often used is: “open educational resources are digitized materials offered freely and openly for educators, students and self-learners to use and reuse for teaching, learning and research” [3].

Conceptualize them involves a brief review of its origins, and thus the predecessor theory, regarding to Learning Objects (LO) [4]. David Wiley, using the term “learning object” coined in 1994 by Wayne Hodgins, helped to popularize the whole idea of design and reuse digital elements to use them in different teaching and learning situations and contexts. According to [3], also David Wiley used the term “open content”, inspired in open source philosophy, to refer to learning objects that could be freely available and openly adapted, edited and remixed [5].

Thus, an OER should include, according to [3] [6]:

- Learning content: full courses, courseware, content modules, collections and publications.

