Latin-American educational practices towards a culture of openness in education

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Summary
(1) OER integrated with e-learning and traditional education systems, (2) production of OER through faculty, (3) development of a OER repository, (4) publication of an open ebook with teaching methodologies, (5) institutional training to faculty and students, including training to other educational institutions to study use and production of OER.

Keywords
Open, practice, education, technology, transference

1. Context of open educational practices in Latin America

The Tecnológico de Monterrey is a Mexican university that has worked since the year 2007, in several open educational projects towards innovative practices to improve academic achievement, and based on experiences on the use and production of royalty free course' materials, has identified some key critical factors to develop a model to effectively knowledge transfer the adoption of OER. The Tecnológico de Monterrey is a private, non-profit academic institution founded at the year of 1943, and composed of 33 campuses across Mexico offering high-school programs, undergraduate and graduate degrees, continuing education, as well as social programs. Through technology-based distance programs, since 1989 the Tecnológico de Monterrey is a pioneer in distance education with more of 20 years of experience through its Virtual University, reaching 29 countries at present time, and offers totally online undergraduate, postgraduate, continuing education, and social programs.

The Tecnológico de Monterrey as embraced the use of information and communication technologies for educational purposes, including the development of innovative distance education models and the production of digital educational materials for distance learners. Based on this context, in the past three years this educational institution has started to participate actively in the world movement of Open Educational Resources (OER) with:
[a] the adoption of digital materials for its undergraduate and graduate programs and courses produced from several open projects which belong to different higher education institutions, such as: the Carnegie Mellon University (Open Learning Initiative, OLI), Yale University (Open Yale Courses), and Massachusetts Institute of Technology (OpenCourseWare, OCW); [b] sharing its courses through the OpenCourseWare Consortium (http://ocw.itesm.mx/); [c] Tecnológico de Monterrey has developed an initiative called “Knowledge Hub” (currently named “temoa”: www.temoa.info) that provides a public and multilingual catalog of Open Educational Resources (Mortera & Burgos, 2010), aiming to support the educational community to find those resources and materials that meet their needs for teaching and learning through a specialized and collaborative search systems and social tools (Burgos, 2010).

2. Innovative forms of OER’s use

Some applications and innovations that have recently come about in the institution are:

1. The application of OERs, integrated with e-learning in graduate courses through the use of OERs like support for resources, and anthologies with OERs (Ramírez, 2010a). They have also integrated with traditional education systems through the application of OERs in the context of the work of students (Burgos & Ramírez, 2010).

2. The creation of OERs with six other Mexican institutions, generating educational open resources for the development of educational researchers (Ramírez, 2010b).

3. The creation of OERs by the graduate students that designed educational cases for basic education (K-12), high school and higher education, as well as open objectives for the formation of teachers in a knowledge based society (Ramírez & Valenzuela, 2010).

4. The creation of an open textbook (Ramírez & Burgos, 2010), resulting from 30 case studies/investigations where 120 graduate students implemented OERs in their learning environs and documented the impact on their learning.

5. The institution has developed a content repository of open educational resources (OER) and mobile learning resources on educational research which is available through a website (http://catedra.ruv.itesm.mx/), where these resources are open, free and licensed for use, reuse and distribution;

6. The institution has been training its own faculty and undergraduate and graduate students, and also it has been training faculty from other educational institutions (form basic education “K-12” to University level);

7. Finally, it has conducted research on all these experiences in several aspects such as: use of technology, legal issues about open educational materials, training for using and producing open educational resources and sharing best practices (http://www.ruv.itesm.mx/convenio/catedra/recursos/articulos.htm).

3. Conclusions

The challenge we are living towards a new knowledge-based society (KBS), where educational resources are fully accessible through different media formats at the Internet, is to spur the value of use of existing knowledge in the process of sharing, assimilation and application of focused knowledge to specific needs through bounded communities in academia. In terms of effective application, entails de explicit definition of new knowledge through the process of tailoring from its source to a specific application of need such that consequent actions are effective and significative (Bennet and Bennet, 2007).

The OER may provide a significative learning environment in a modern technological and digital world, fostering innovative scenarios enriched with technology to allow instructors to offer new ways of teaching and reflect on their teaching practice, empowering the student in the development of essential skills in the use of such technology to stimulate the learning process.

The recommendations that could be offered to decision makers to foster new learning environments to prepare educators in a knowledge-based society are: (1) to promote a new culture and educational practice to acquire the skills required to exploit fully the use of OER, for example, digital literacy and information literacy; (2) to promote a community of open sharing of educational best practices, with the main objective to facilitate the effective adoption of OER and to generate significant learning experiences in the use of OER in teaching strategies.
4. References


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