

Ramirez, M. S., and Burgos, J. V. (2011). Latin-American educational practices towards a culture of openness in education. *eLearning Papers* (23). Disponible en <http://www.elearningpapers.eu>.

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

**Maria Soledad Ramirez-Montoya**  
Tecnológico de Monterrey (Mexico)  
Graduate School of Education, Virtual University

**J. Vladimir Burgos-Aguilar**  
Tecnológico de Monterrey (Mexico)  
Center for Innovation in Technology and Education

## 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](http://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 (from 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

- Bennet, A., Bennet, D. (2007). *Knowledge Mobilization in the Social Sciences and Humanities: Moving from Research to Action*, MQI Press (Knowledge Series)
- Burgos, J. V. (2010). *Diseminación digital de Recursos Educativos Abiertos y potencial aprovechamiento*. XI Encuentro Internacional Virtual Educa, Santo Domingo, República Dominicana.
- Burgos, J. V., & Ramírez, M. S. (2010). *Open Educational Resources: Experiences of use in a Latin-American context*. Open Ed 2010 The Seventh Annual Open Education Conference, Barcelona. Available at <http://hdl.handle.net/10609/5062>
- Mortera, F. J., & Burgos, V. (2010). *Innovative Applications Using New Technology: The Case of the Knowledge Hub Search Engine and Open Educational Resources Building Communities of Practice*. Education and Research Technology (ERT) Forum (section 2, Supporting research with new technology and emerging technologies). California, EUA.
- Ramírez, M.S. (2010a). Ed5049. Demandas educativas en la sociedad del conocimiento, temoa: Open Educational Resources Portal, retrieved at January 6, 2011 from <http://www.temoa.info/es/node/42476>
- Ramírez, M. S. (2010b). *Generando recursos educativos abiertos y móviles para la formación de investigadores educativos: una colaboración interinstitucional*. XI Encuentro Internacional Virtual Educa (seminar of technological resources for education and research). Santo Domingo, República Dominicana.
- Ramírez, M. S. y Burgos, J. V. (2010) (Coords.). *Recursos educativos abiertos en ambientes enriquecidos con tecnología: Innovación en la práctica educativa*. México: ITESM. [www.lulu.com](http://www.lulu.com)
- Ramírez, M. S. y Valenzuela, J. R. (2010). *Trans-formando a los profesores: desarrollo de competencias para una Sociedad Basada en Conocimiento mediante objetos de aprendizaje abiertos*. XI Encuentro Internacional Virtual Educa (seminar of technological resources for education and research). Santo Domingo, República Dominicana.
- 

#### License and Citation

This work is licensed under the Creative Commons License

Please cite this work as: Ramírez, M.S., and Burgos, J.V. (2011). Latin-American educational practices towards a culture of openness in education, eLearning Papers (No. 23; 2011). <http://www.elearningpapers.eu>

## 5. Authors profile



### **Maria Soledad Ramirez Montoya, Ph.D**

Full time Professor at the Graduate School of Education (EGE) and Principal of the Chair of the investigation group of Innovation in Technology and education in Tecnológico de Monterrey (ITESM).

ITESM, Edificio CEDES, SS1; Av. Eugenio Garza Sada No. 2501 Sur; Col. Tecnológico, Monterrey, Nuevo León 64849. [solramirez@itesm.mx](mailto:solramirez@itesm.mx)

She made studies in Elementary Education and Bachelor of Science in Education in the Technological Institute of Sonora in Mexico. Concluded graduated studies in Educational Technology and Doctorate in Education and Educational Psychology: Curriculum and Instruction at the University of Salamanca (Spain). She is currently professor at the Graduate School of Education and director of the Research Chair of Innovation in Technology and Education. She is a member of the National System of Researchers in Mexico and participates in the Network of Graduate Studies in Education at the Mexican Council for Educational Research (COMIE), the Research Network of Educational Research (REDIIE) and is President of Applications and Allocation Committee Funds at the University Corporation for Development of Internet (CUDI) in Mexico.



### **J. Vladimir Burgos-Aguilar, MTI, M.Sc**

Full time Liaison Officer of Innovation and Educational Technology at the Center for Innovation in Technology and Education (Innov@TE), and part time Professor at the Graduate School of Education (EGE) in Tecnológico de Monterrey (ITESM).

ITESM, Edificio CEDES, CD117; Av. Eugenio Garza Sada No. 2501 Sur; Col. Tecnológico, Monterrey, Nuevo León 64849. [vburgos@itesm.mx](mailto:vburgos@itesm.mx)

Associate researcher at the Chair of Innovation in Technology and Education at the Tecnológico de Monterrey. Project Manager of the OpenCourseWare (OCW) at the Tecnológico de Monterrey (<http://ocw.itesm.mx>) and the Knowledge Hub OER Index ([temoa.info](http://temoa.info)). Bachelor in Informatics at the Instituto Tecnológico de Culiacan, Mexico; Master's degree in Administration of Information Technologies (MTI) and Master's degree in Information Science and Knowledge Management (M.Sc) at the Tecnológico de Monterrey (ITESM). He is co-author and editorial coordinator of two specialized books in the area of "Educational Technology" by Noriega Editores-LIMUSA in 2007 and in 2010 Editorial TRILLAS distributed in Spanish speaking countries (Latin America). Is also co-author and editorial coordinator of a research book in the area of "technology-mediated educational innovation" through the editorial press of the University at Tecnológico de Monterrey. With more than 10 years teaching at graduate level, has a formation specialty in the areas of project management, instructional technology, implementation and evaluation of strategies for information.