Open Educational Resources (OERs) in Higher Education:

A Global Perspective

Tomohiro Nagashima International Christian University, Japan tomohiro.nagashima0529@gmail.com

Abstract: Based on the philanthropic philosophy, many open educational resources (OERs) have been developed in different parts of the world over the past few years. MIT OpenCourseWare in the USA, OER Africa in African countries, Japan OpenCourseWare in Japan, and OpenLearn in the United Kingdom are just a few examples of OERs. These OERs vary by type of media used, level of education, context of utilization, and so forth. This study aims to organize, compare, and contrast the growing phenomena of OER development in order to help researchers and practitioners in education to conceptualize differences and similarities in the OER movement. First, the cases of OERs development in Americas, Asia-Pacific, Europe, and Africa are identified, following this order. Then, the analysis framework is to be developed using differences and similarities among the cases. Finally, the study will conclude with a set of recommendations for future study areas.

Keywords: Open Educational Resources, OERs, Open Education, OER movement

Introduction

As the world has become connected, many initiatives of Open Educational Resources (OERs), defined as "teaching, learning, and research resources that reside in the public domain or have been released under an intellectual property license that permits their free use or re-purposing by others" (Atkins, Brown, & Hammond 2007), have gained popularity among educators and learners. Despite their shared philanthropic philosophy, those initiatives are different with each other in various aspects, and there are little research examining how they vary by presenting frameworks.

Major OER Initiatives

All of the selected OER initiatives below are on the recent paper by Commonwealth of Learning (McGreal, Kinuthia, & Marshall 2013), an established institution engaging in OERs.

MIT OpenCourseWare (OCW): Recognized as the first major initiative of OERs started in 2001, MIT OCW has provided almost all of MIT's course materials on the web without any charges and registrations. With MIT OCW, people who do not have access to higher education can learn several disciplines with quality courses (Lerman, Miyagawa, & Margulies 2008). Since its philosophy of "sharing" attracted the entire world, a lot of other universities have launched their O CW websites (Lerman, Miyagawa, & Margulies 2008).

Connexions: Developed at Rice University in the USA, Connexions not only offers free course materials, but also "a set of free software tools to help authors publish and collaborate" (Atkins, Brown, & Hammond 2007). Qualities of various materials are ensured by its unique quality control system called "lenses" (Baraniuk 2008). Through "lenses", which differ in focuses of qualities and reviewers, users can select the best materials for their uses (Baraniuk 2008).

Coursera: As one of the MOOCs (Massive Open Online Courses) movements, Coursera serves as a platform for delivering the free online courses from many higher educational institutions worldwide. Since it was started by two Stanford professors and other established institutions have joined (Lewin 2012), Coursera, the representation of future education enabled by the cutting-edge technology, receives attentions in the world today.

Japan OpenCourseWare (JOCW): Stimulated by MIT OCW, Japanese higher educational institutions launched JOCW to promote open education movement in Japan. As of 2010, the number of course provided reached 1,497. Among them, 1,285 courses are in Japanese and 212 courses are in English (Yamada 2013). Although it is managed by famous universities of Japan, awareness level remains to be low (Yamada 2013).

OpenLearn: Serving as one of the European leading open education initiatives, UK's OpenLearn was developed by U K Open University in 2006. It lets individual learners and educators explore Open University's quality courses with adequate technological supports (Fleming & Massey 2007).

OER Africa: This prominent movement in African countries focuses especially on the education in Africa, aiming to promote sustainable education through OERs, because OERs are perceived as having the potential to expand an access to the education in Africa. It actively promotes educators in Africa to create their own resources since resources should be suitable for African educational contexts, which are often dissimilar to those in developed countries ("Introducing OER Africa" 2009).

Analysis Framework

The analysis framework below visualizes differences and similarities among the initiatives introduced.

	Materials	Degree of	Funding	Languages	Scale	Other
		interactivit	(Name of	Translation		features
		у	foundations)			
MIT	Videos, course	Low	Hewlett,	English	World	First
OCW	materials used in		Kabcenell,	Chinese, Thai, Turkish,	wide	initiative of
	face-to-face		Mellon,	Spanish, Portuguese,		OERs
	classes		Rosenbaumetc	Persian, and Korean		
Conne	Materials are	High	Hewlett,	English	World	Lenses
xions	provided in		Maxfieldetc	Spanish, Portuguese,	wide	
	modules			Japanese, Chinese,		
				Vietnamese, and Thai		

Course	Videos,	High	Business model	English, Spanish, Chinese,	World	MOOCs
ra	assignments,		developed	and Italian	wide	(registration
	quizzes,			Russian, Portuguese,		needed)
	readingsetc			Turkish, Japanese,		Company
				Ukrainian, Kazakh, and		
				Arabic ("Coursera		
				Partnering" 2013)		
JOCW	Videos and course	Low	No support from	Japanese and English	Japan	Not utilized
	materials used in		foundations		and	much
	face-to-face				other	Low
	classes				countri	awareness
					es	level
Open	Varied (video,	High	Hewlett	English	World	Under the
Learn	quiz,		Foundation		wide	traditional
	readingsetc)					Open
						University
OER	Readings,	Low	Hewlett	English	Africa	For
Africa	textbooks, sets of		Foundation			developing
	materialsetc					countries
						(Africa)

Recommendations for Future Study

In addition to the examples shown above, there exist more differences and diverse OER initiatives. As they vary, users are required to consider what to care about when they adopt the appropriate materials for the situations and the contexts of uses. Since the main objective of OER movements is to reuse resources, there is a need for developing the reference information that users can refer to when choosing the OERs from numerous sorts of repositories.

References

- Atkins, D. E., Brown, J. S., & Hammond, A. L. (2007). A Review of the Open Educational Resources (OER) Movement: Achievements, Challenges, and New Opportunities. Report to The William and Flora Hewlett Foundation. Retrieved from http://www.hewlett.org/uploads/files/ReviewoftheOERMovement.pdf
- Baraniuk, R. G. (2008). Challenges and Opportunities for the Open Education Movement: A Connexions Case Study. In Iiyoshi, T. and Kumar, M. S. V. (Eds.), Opening Up Education: The Collective Advancement of Education through Open Technology, Open Content, and Open Knowledge. MA: MIT Press.
- Coursera Partnering with Top Global Organizations Supporting Translation Around the World. (2013, May 14). *Coursera Blog*. Retrieved from http://blog.coursera.org/post/50452652317/coursera-partnering-with-top-global-organizations
- Fleming, C. & Massey, M. (2007). Jorum Open Educational Resources (OER). Retrieved from the Jorum: http://www.jorum.ac.uk/squeezy/cms/docs/pdf/0707_JorumOERreportFinal.pdf
- Introducing OER Africa. (2009). Retrieved from the OER Africa:
 - http://www.oerafrica.org/understandingoer/UnderstandingOER/ResourceDetails/tabid/1424/mctl/Details/id/37438/Default.aspx. A contract of the contract of the
- Lerman, S. R., Miyagawa, S., & Margulies, A. H. (2008) OpenCourseWare: Building a Culture of Sharing. In Iiyoshi, T. and Kumar, M. S. V. (Eds.), Opening Up Education: The Collective Advancement of Education through Open Technology, Open Content, and Open Knowledge. MA: MIT Press.
- Lewin, T. (2012, July 17). Universities Reshaping Education on the Web. *New York Times*. Retrieved from http://www.nytimes.com/2012/07/17/education/consortium-of-colleges-takes-online-education-to-new-level.html?pagewanted= all& r=06
- McGreal, R., Kinuthia, W., & Marshall, S. (Eds.) (2013). Open Educational Resources: Innovation, Research, and Practice. Commonwealth of Learning.
- Yamada, T. (2013). Open Educational Resources in Japan. In Dhanarajan, G. and Porter, D. (Eds.), Open Educational Resources: An Asian Perspective. Vancouver: Commonwealth of Learning and OER Asia.