THE POTENTIAL CONTRIBUTION OF OPEN EDUCATIONAL RESOURCES TO E-LEARNING AND DISTANCE EDUCATION. 3RD E-LEARNING AND DISTANCE EDUCATION CONFERENCE LAHORE, PAKISTAN, 14-15 MARCH 2016.

Arinto, P.B.;

© 2018, ARINTO, P.B.

This work is licensed under the Creative Commons Attribution License (https://creativecommons.org/licenses/by/4.0/legalcode), which permits unrestricted use, distribution, and reproduction, provided the original work is properly credited.

Cette œuvre est mise à disposition selon les termes de la licence Creative Commons Attribution (https://creativecommons.org/licenses/by/4.0/legalcode), qui permet l’utilisation, la distribution et la reproduction sans restriction, pourvu que le mérite de la création originale soit adéquatement reconnu.

IDRC Grant/ Subvention du CRDI: 107311-001-Research into Open Educational Resources for Development
The Potential Contribution of Open Educational Resources to e-Learning and Distance Education

Patricia B. Arinto
3rd e-Learning and Distance Education Conference
Lahore, Pakistan, 14-15 March 2016

http://www.slideshare.net/ROER4D/
Presentation Outline

1. The ROER4D project
2. OER and e-learning and distance education frameworks and models
3. Concluding note
Researching OER Adoption and Impact: The ROER4D Project
ROER4D: Research on OER Adoption & Impact in the Global South
ROER4D funding


Grant 1 - IDRC CAD 2 million & OSF
Grant 2 - DFID CAD 500,000

3 Regions
- South America
- Sub-Saharan Africa
- Central, South & South-East Asia

18 research projects in 7 clusters
100+ researchers & associates
26 countries
16 time zones
ROER4D hosting – network hub

Centre for Innovation in Learning & Teaching (CILT)
Centre for Higher Education Development (CHED)
University of Cape Town
South Africa

Wawasan Open University
Penang, Malaysia
ROER4D objectives

1. Build an empirical knowledge base on the use and impact of OER in education
2. Develop the research capacity of OER researchers
3. Build a network of OER scholars
4. Communicate research to inform education policy and practice
5. Develop a strategic approach towards the curation and dissemination of research documents and data collected in the project

Implicit objective: Undertake research on OER as ‘openly’ as possible
In what ways, for whom and under what circumstances, can the adoption of OER impact upon the increasing demand for accessible, relevant, high-quality, and affordable education in the Global South?
Rising numbers of students in the education sector

Education institutions under political & financial pressure

Expensive, limited in number, often outdated textbooks are not entirely relevant to the context

Reduction of educational funding by governments

Employability of graduates

http://commons.wikimedia.org/wiki/File%3APCoE_students_at_AICTE_Regional_Office_in_Mumbai.jpg
Open Educational Resources (OER) provide teaching and learning materials that are —

- easily available via the Internet
- more affordable
- localised in terms of content and language
- scrutinisable, editable
What are OER?

Open educational resources (OER) are 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 and re-purposing by others (e.g. Creative Commons) (adapted from Smith & Casserly, 2006: 8).

Free lecture notes

Free videos

Any learner or teacher
5Rs of OER (Wiley, 2014)

- Retain
- Reuse
- Revise
- Remix
- Redistribute

(Lumen Learning, 2014)
ROER4D 7 Research Clusters

SP1 - 3 regions
SP2 - 9 countries
SP3 & 4 - 2 countries
SP5, 6 & 7 - 3 countries
SP8 - 1 country
SP9 & 10.1-7 - 15 countries
SP11 & 12 - 6 countries

Baseline educational expenditure
ROER4D Network hub
OER impact studies
OER adoption in one country
Survey of OER adoption by academics & students
Academics' adoption of OER
Teacher educators' adoption of OER

Overview of ROER4D's 7 Project Clusters

OER Desktop overview
ROER4D relationships being investigated

INFLUENCING FACTORS
(See Archer)

- **Structural:**
  - Infrastructure
  - Policy
  - Repositories
  - ...
- **Cultural**
  - Compliance culture
  - Management styles
  - ...
- **Agential**
  - Will / volition

OER & OER PRACTICES
(Innovation) (See Wiley, Beetham, Hodgkinson-Williams)

OER as the object/product
- Awareness
- Creation
- Reuse (as is)
- Revision
- Remixing
- Retaining
- Redistribution

OER as a practice/process

IMPACT INDICATORS
(Of aspect of educational problems/development imperatives) (See Mulder)

Learner
- Performance
- Satisfaction
- ...

Teacher
- Learning materials
- Cost
- Learning processes
- Educational system
- Societal context
OER and e-Learning and Distance Education (DE) Frameworks and Models
Context: Evolution of DE and online learning

- From print-and-post DE
to computer-mediated and online DE
- DE “generations” (Taylor, 2001; Anderson & Elloumi, 2004)
  - correspondence study
  - mass media-based DE
  - telelearning
  - VLE and LMS-based networked learning
  - Semantic Web-based networked learning (use of social media, PLEs, and mobile technologies)
Context: Online DE course models (Mason, 1998; Jara & Fitri, 2007)

**Content + Support Model**
- Content usually in print form; tends to be static over time
- Guided study of content
- Some basic collaborative activity among students, peer commenting and/or online assessment
- Tutoring by email or a conference system

**Wraparound Model**
- A more resource-based approach: study guides are prepared to wrap around existing materials like textbooks
- Some content is created each time the course is run, through discussions and activities

**Integrated Model**
- Content is generated from discussion (discussion-based)
- Content is dynamic, mostly determined by group activity around learning resources
- No distinction between content and support
Affordances of OER for DE and online learning

✓ OER can lower the cost of DE course materials
✓ OER can improve the quality of DE course materials
✓ OER can improve the quality of online teaching and learning
How OER can lower the cost of DE course materials

- OER are usually **free of charge** (i.e. no fees for use and adaptation)
- OER-based modules require **less time to develop** because there is no need to create the resources themselves, and one does not need to wait for permission to use the existing resources
- OER-based modules can be developed by individual faculty, with minimal or no technical support — “**reduced version of course team approach**” (Power, 2007)
- There is **zero or minimal recurrent/variable cost** (e.g. access/user fees for proprietary materials) for OER-based modules
How OER can improve the quality of DE course materials

- Improvement in content accuracy, currency, relevance, and range
  - use of resources authored by experts in specific fields
  - content is easy to update (resources can be quickly replaced)
  - use of “authentic” resources
  - use of resources reflecting different perspectives

- Use of different media types to different types of learners and learning “styles”
  - use of text, audio, video, animation, multimedia
  - use of narrative, interactive and adaptive media (Laurillard, 2002)
### Media types and the learning tasks they support

*(Laurillard, 2002; Beetham, 2007)*

<table>
<thead>
<tr>
<th>Media type</th>
<th>Learning task supported or mediated</th>
<th>Example (digital tool or resource)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Narrative</td>
<td>Information assimilation</td>
<td>e-books, podcasts, Web pages, slide presentations</td>
</tr>
<tr>
<td>Interactive</td>
<td>Exploratory or investigative tasks</td>
<td>search engines, portals, databases, tutorials</td>
</tr>
<tr>
<td>Adaptive</td>
<td>Experimentation and practice</td>
<td>virtual worlds, simulations, games</td>
</tr>
<tr>
<td>Communicative</td>
<td>Communication and collaboration</td>
<td>email, chat/instant messaging, Web</td>
</tr>
<tr>
<td>Productive</td>
<td>Generation or construction of own representations</td>
<td>authoring tools, editing/processing tools, blogs, wikis</td>
</tr>
</tbody>
</table>

How do the media types map on to the 5Rs? What types and levels of OER use are fostered by which media types?
Use of OER (i.e. learning activities involving reuse, revision, remixing, and redistribution of OER) can foster greater interaction between —

- learner and content (engagement)
- learner and co-learners (collaboration)
- learner and teacher (shift from transmitting knowledge to guiding, supporting, and assessing learning)

(Moore, 1987)
Cognitive Inquiry Model
(Garrison & Anderson, 2003)

- Use of OER (i.e. learning activities involving reuse, revision, remixing, and redistribution of OER) can enable learners to demonstrate multi-domain and higher-level learning
Online Learning Model
(Anderson, 2008)

- Use of OER (i.e. the 5Rs) can foster independent and self-directed learning
- Use of OER can help to make DE provision more flexible

Use of OER can foster independent and self-directed learning
Use of OER can help to make DE provision more flexible
Concluding note

- Need to investigate the impact of OER in the context of the changing emphasis in DE (Burge & Polec, 2008; Anderson & Dron, 2011)

*from Content* (high quality, pre-designed materials; behaviorist-cognitivist pedagogy)

to *Connection* (interaction and dialogue; constructivist pedagogy)

to *Community* (aiming for group synergies in a medium that enable both self-interest and group-interest behaviours; connectivist pedagogy; emphasis on ‘produsage’ — i.e. production as consumption of educational content in/through networks)
In what ways and under what circumstances does use of OER make distance education more open, more effective, and more flexible?
References


Citation and attribution

Arinto, PB (2016). The Potential Contribution of Open Educational Resources to e-Learning and Distance Education. Presented at the 3rd e-Learning and Distance Education Conference. Lahore, Pakistan, 14-15 March 2016. Retrieved from: http://www.slideshare.net/ROER4D/