OER AND OEP TOWARDS EQUITABLE AND QUALITY EDUCATION FOR ALL

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IDRC Grant/ Subvention du CRDI: 107311-001-Research into Open Educational Resources for Development



OER and OEP towards Equitable and Quality Education for All

Patricia B. Arinto University of the Philippines - Open University Open Education Global Conference, Cape Town, 8-10 March 2017



A vision for OER and open pedagogy

The Cape Town Open Education Declaration —

"We are on the cusp of a global revolution in teaching and learning. Educators worldwide are developing a vast pool of educational resources on the Internet, open and free for all to use. These educators are creating a world where each and every person on earth can access and contribute to the sum of all human knowledge.... [and] also planting the seeds of a new pedagogy where educators and learners create, shape and evolve knowledge together, deepening their skills and understanding as they go.

"...The expanding global collection of open educational resources... contribute to making education more accessible, especially where money for learning materials is scarce. They also nourish the kind of participatory culture of learning, creating, sharing and cooperation that rapidly changing knowledge societies need."

Some findings on OER-OEP dynamic from ROER4D



ROER4D Phase 1: Adoption Studies

ROER4D Phase 2: Adoption & Impact Studies

18 independent sub-projects - 100 researchers & research assistants - 16 time zones - Aug 2013- Dec 2017 Hosted by the University of Cape Town, South Africa and Wawasan Open University, Malaysia Funded by the IDRC & DFID from a study of the impact of OER on pedagogical practices in teacher education institutions in East Africa (Mauritius, Rwanda, Tanzania, Uganda) by Wolfenden et al. (2016)

Among teacher educators in institutions in East Africa that were identified as engaged with OER initiatives and projects, "[i]nnovation in the practice of teaching promised by OER is still relatively shallow, confined to a few converts working either independently or with one or two collaborators in their institution. Use of OER is highly fragmented and has yet to impact at institutional or department level...." (*emphasis added*) from a study of the impact of OER on cost and quality of distance education course materials in the Philippines by Bonito et al. (2016)

Many of the course materials include mostly copyrighted resources and less of resources with a Creative Commons license and even less of resources in the public domain.

Predominance of text-based resources, such as book chapters and journal articles, as well as Web pages (58%) and videos (50%) and to some extent some slide presentations (25%); few images, audio, animation, interactive tutorials, or quizzes included

Most of the learning activities around the resources were "reading/viewing/answering study questions" (92%). Some involved "reading/viewing/ participation in the discussion forum (52%). "Writing a critical review or analysis" was the third favorite (38%). Sharing with workplace or community also registered in some of the courses (14%). *(emphasis added)* For OER to contribute to achieving equitable and quality education for all, it is necessary to promote and support open educational practices (OEP).



OER and the Sustainable Development Goal (SDG) for education



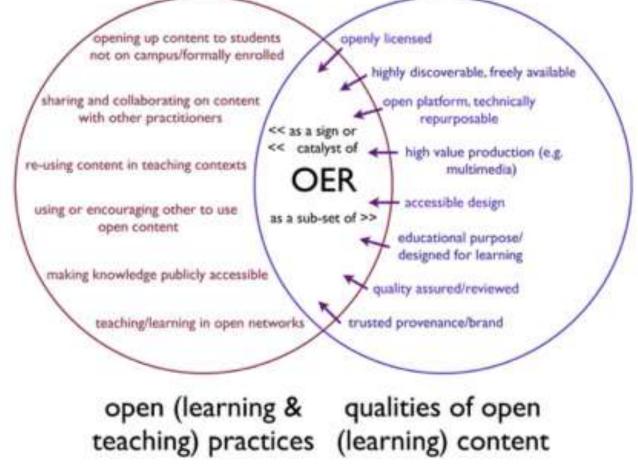
Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

not only equity of access but also equity of outcomes

Defining OEP

- "Practices that support the (re)use and production of OER through institutional policies, promote innovative pedagogical models, and respect and empower learners as co-producers on their lifelong learning path" (OPAL, 2011; emphasis added)
- "...collaborative practice in which resources are shared by making them openly available, and pedagogical practices are employed which rely on social interaction, knowledge creation, peer-learning, and shared learning practices." (Ehlers 2011; emphasis added)

(Beetham et al., 2012)



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Dimensions of pedagogical openness (Hodgkinson-Williams,

2014)

Type of engagement	F2F	Internet supported	Internet dependent	Online Intensive	Fully online
Pedagogic strategy	DidacticExperiential Supportive pedagogies modeling, explaining, providing feedback, scaffolding, coaching Dialogic pedagogies articulation, reflection, supporting multiple perspectives, collaboration, social negotiation Experiential pedagogies inquiry-based learning, teacher guided discovery, experimentation, problem-solving, exploration, hypothesis generation, role-playing				
Learning response	PassiveActiv Responding watching, listening, undertaking incrementally more difficult tasks and receiving feedback Engaging speaking, writing, thinking, comparing perspectives, collaborating, negotiating Acting researching, problem-solving, experimenting, generating and contributing new ideas				

Assessment strategy	FormalInformal Teacher-assessment examinations, tests, assignments Peer-assessment draft assignments, Self-assessment quizzes
Certification or accreditation mechanisms	FormalInformal Accreditation Qualification Certification Course certification Acknowledgement Completion or attendance certificate, badge
Evaluation strategy	Formal evidenceInformal evidence

Pedagogical factors and degrees of ease in open education practices (Hodgkinson-Williams, 2014)

Process	Pedagogical factors	Degree of ease
Conceptualise	Type of engagement	F2FOnline
Create	Pedagogic strategy Learning response Assessment strategy	DidacticExperiential PassiveActive FormalInformal
Curate		
Circulate		
LoCate		
Сору	Type of engagement	F2FOnline
Customise	Pedagogic strategy Learning response	DidacticExperiential PassiveActive
Combine	Assessment strategy	FormalInformal
Certify	Assessment strategy Accreditation mechanisms	FormalInformal
Critique	Evaluation strategy	Formal evidenceInformal evidence

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Levels of OEP (Cronin, 2016)

Policy/ Culture Values **Practices Activities**

Individual

Institutional

Using OER for inclusive and equitable education

1. OER affords access to learning resources at little or no cost

- ✓ because these learning resources are openly licensed and are easily available via the Internet
- 2. OER affords localisation in language and content of learning resources
 - ✓ can support Mother Tongue Based Multilingual Education(in early childhood education / early literacy instruction) and multicultural education, among others
- 3. OER affords adaptation to individual learning needs
 - ✓ can support special needs instruction and differentiated instruction, and/or personalised learning, for example

Using OER to improve the quality of education

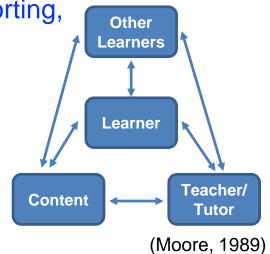
- 1. Improving the quality of content (what we learn)
 - ✓ Improvement in content accuracy, currency, relevance, and range
 - use of resources authored by experts in specific fields
 - content is easy to update (resources can be quickly replaced)
 - use of "authentic" resources
 - use of resources reflecting different perspectives

✓ Use of different media to support different learning tasks (Laurillard, 2002; Beetham, 2007)

- targeting different learning outcomes
- resources to scaffold learning

Using OER to improve the quality of education

- 2. Improving the quality of teaching and learning (how we learn)
 - Reusing, revising, remixing, creating, curating, and sharing OER can foster greater interaction between learner and content (engagement), between and among learners (collaboration), between learner and teacher (change in teaching role from transmitting knowledge to guiding, supporting, and assessing learning)
 - ✓ Reusing, revising, remixing, creating, curating, and sharing OER can enable learners to demonstrate multi-domain and higher-level learning
 - ✓ Use of OER can foster independent and self-directed learning



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Why OEP

- OER will not make a difference "if the dominant model is teachercentred education – a teacher mediates authoritative textbook or course content and learners digest and reproduce it." (Geser, 2012: 41)
- "Substituting OER for expensive commercial resources definitely save money and increase access to core instructional materials... [which in turn] will necessarily make significant improvements in learning outcomes for students who otherwise wouldn't have had access to the materials. However,....[u]sing OER the same way we used commercial textbooks misses the point. It's like driving an airplane down the road." (Wiley, 2013)
- "[F]or the potential of OER to be truly realised, there needs to be a radical change in current educational practice. (Masterman, 2016)

OEP as Phase 2 of OER movement (Ehlers, 2011; OPAL, 2011)

- "Builds on OER and moves on to the development of concepts of how OER can be used, reused, shared, and adapted"
- "Goes beyond access into open learning architectures, and seeks ways to use OER to transform learning"
- Focuses on learning as construction i.e. "constructing knowledge assets, sharing them with others, and receiving feedback and reviews"
- Subscribes to quality improvement through external validation (enabled by sharing and feedback)
- "Is about a change in educational paradigm from many unknowledgeable students and a few knowledgeable teachers to co-creation and facilitation of knowledge through mutual interaction and reflection"
- Considers the need for OER to contribute to institution's value chain

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

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

> to **COMMUNITY** (co-creation and produsage/user-led content creation; connectivist pedagogy)

(Burge & Polec, 2008)

Promoting and supporting OEP

- TPD on OEP: teacher professional development on
 - locating, localising/customising, combining, curating, and circulating OER
 - designing open learning architectures (Ehlers, 2011)
 - engaging learners in knowledge co-creation
- TPD through OEP: modelling OEP to teachers
- OEP in open online courses: engaging learners in OEP

Some ROER4D findings on promoting and supporting OEP

- Observing shifts in the pedagogical perceptions and practices of student teachers enrolled in the Open University of Sri Lanka "from a content-centric approach to a more constructivist, context-centric and collaborative approach to teaching and learning" and development of capacities and capabilities of teachers in the integration of OER and adoption of OEP measured through a designed-based research approach (Karunanayaka and Naidu, 2016)
- Understanding how the introduction of OER and CC licences as a tool, and MOOC design (defined as "the design and production requirements of the MOOC and the MOOC hosting platform") influenced educators' OEP at the University of Cape Town (Czerniewicz et al., 2016)

Works Cited

Beetham, H. (2007). An approach to learning activity design. In Beetham, H & Sharpe, R. (Eds.) *Rethinking Pedagogy for a Digital Age*. London and New York: Routledge. Pp. 26-40.

Beetham, H; Falconer, I; McGill, L & Littlejohn, A. (2012). Open Practices: Briefing Paper. Jisc.

- Bonito, S; Impact of OER on Cost and Quality of Course Materials in Postgraduate Distance Education Courses in the Philippines. Final Technical Report. Research into OER for Development (ROER4D) Program.
- Burge, EJ & Polec, J. (2008). Transforming learning and teaching in practice: Where change and consistency interact. In Evans, T; Haughey, M & Murphy, D. (Eds.). *International Handbook of Distance Education*. Emerald Group Publishing Ltd. Pp. 237-258.
- Cronin, C. (2016). Openness and praxis: Exploring the use of open educational practices in higher education.
- Czerniewicz, L; Deacon, A; Glover, M & Walji, S. (2016). MOOC-making and open educational practices. *Journal of Computing in Higher Education.*
- Ehlers, U-D. (2011). <u>Extending the territory</u>: From open educational resources to open educational practices. *Journal of Open, Flexible and Distance Learning*,15(2), 1-10.
- Geser, G. (2012). *Open Educational Practices and Resources: OLCOS Roadmap 2012.* Available at <u>http://www.olcos.org/english/roadmap/</u>.
- Hodgkinson-Williams, C. (2014). Degrees of Ease: Adoption of OER, open textbooks, and MOOCs in the Global South. Keynote Address, OER Asia 2nd Regional Symposium, 24-27 May 2014, Penang, Malaysia).

- Karunanayaka, S & Naidu, S. (2016). *Impact of integrating OER in teacher education at the Open University of Sri Lanka*. Final Technical Report. Research into OER for Development (ROER4D) Program.
- Laurillard, D. (2002). *Rethinking University Teaching: A Conversational Framework for the Effective Use of Learning Technologies*. 2nd Edition. London: RoutledgeFalmer.
- Masterman, E. (2016). Bringing Open Educational Practice to a Research-Intensive University: Prospects and Challenges. *Electronic Journal of e-Learning* 14(1), 31-42.

Moore, M. (1989). Three types of interaction. The American Journal of Distance Education 3(2): 1-7.

OPAL (2011). Beyond OER Shifting Focus to Open Educational Practices. OPAL Report 2011. Available at https://oerknowledgecloud.org/sites/oerknowledgecloud.org/files/OPAL2011.pdf

Wiley, D. (2013). What is Open Pedagogy. Blog post at https://opencontent.org/blog/archives/2975

Wolfenden, F; Auckloo, P; Buckler, A& Cullen, J. (2016). *Teacher Educators, pedagogy and OER: continuity or change?* Final Technical Report. Research into OER for Development (ROER4D) Program.

Thank you.