Researching OER adoption and impact in the Global South – an overview of the Research on Open Educational Resources for Development (ROER4D) project

ROER4D
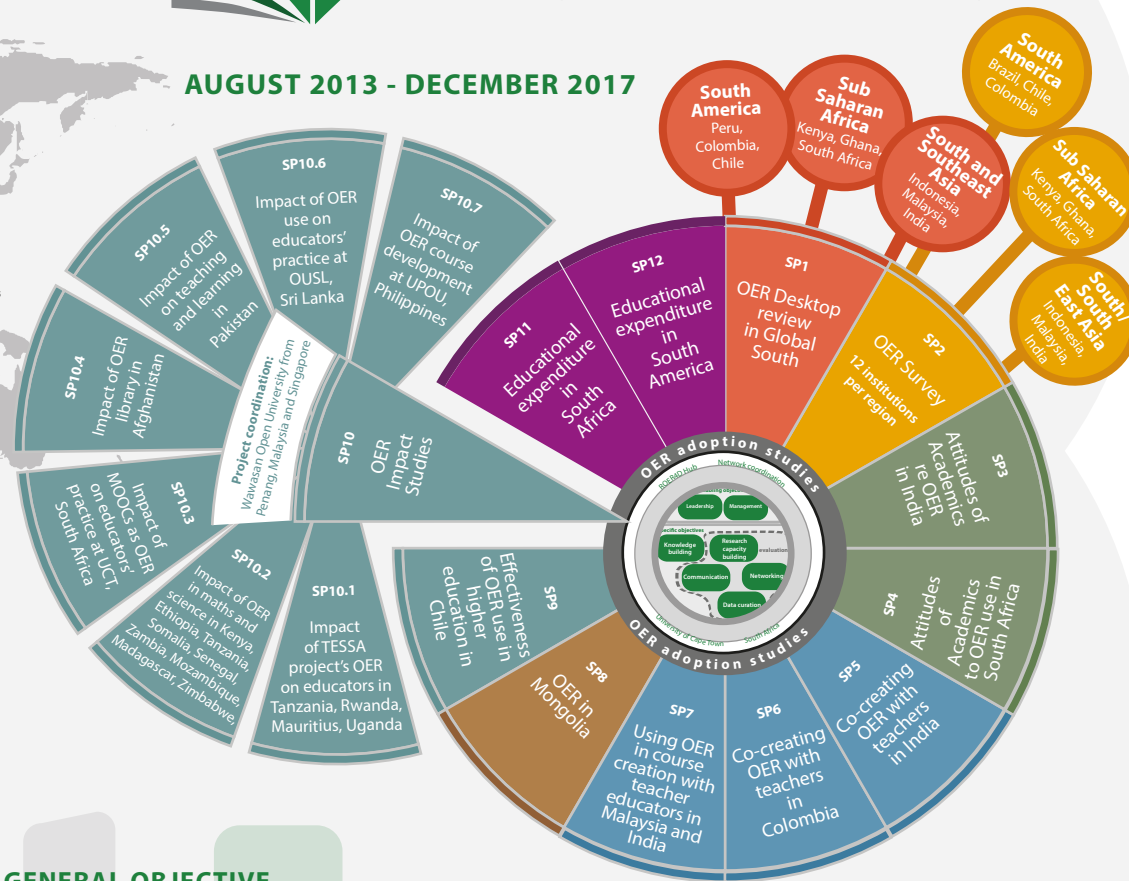Research on Open Educational Resources for Development

PROJECT CLUSTERS

- OER Desktop Review
- OER Survey
- Academics' adoption of OER
- Teacher educators' adoption of OER
- OER adoption in one country
- OER impact studies
- Baseline educational expenditure

AUGUST 2013 - DECEMBER 2017

Mongolia
Afghanistan
Pakistan
Senegal
Ethiopia
Uganda
India
Ghana
Somalia
Sri Lanka
Colombia
Rwanda
Kenya
Malaysia
Tanzania
Philippines
Peru
Zambia
Indonesia
Brazil
Mauritius
Chile
Madagascar
Mozambique
Zimbabwe
South Africa

18 sub-projects (SPs)
86 researchers & associates
26 countries
16 time zones

SP10.6 Impact of OER use on educators' practice at OUSL, Sri Lanka
SP10.7 Impact of OER course development at UPOU, Philippines
SP10.5 Impact of OER on teaching and learning in Pakistan
SP10.4 Impact of OER library in Afghanistan
Project coordination: Wawasan Open University from Penang, Malaysia and Singapore
SP10 OER Impact Studies
SP10.3 Impact as OER MOOCs on educators' practice at UCT, South Africa
SP10.2 Impact of OER in maths and science in Kenya, Ethiopia, Tanzania, Somalia, Senegal, Zambia, Mozambique, Madagascar, Zimbabwe.
SP10.1 Impact of TESSA project's OER on educators in Tanzania, Rwanda, Mauritius, Uganda
SP9 Effectiveness of OER use in higher education in Chile
SP8 OER in Mongolia
SP7 Using OER in course creation with teacher educators in Malaysia and India
SP6 Co-creating OER with teachers in Colombia
SP5 Co-creating OER with teachers in India
SP4 Attitudes of Academics to OER use in South Africa
SP3 Attitudes of Academics re OER in India
SP2 OER Survey 12 institutions per region
SP1 OER Desktop review in Global South
SP12 Educational expenditure in South America
SP11 Educational expenditure in South Africa

OER adoption studies
OER adoption studies

South America: Peru, Colombia, Chile
Sub Saharan Africa: Kenya, Ghana, South Africa
South and Southeast Asia: Indonesia, Malaysia, India
South America: Brazil, Chile, Colombia
Sub Saharan Africa: Kenya, Ghana, South Africa
South/South East Asia: Indonesia, Malaysia, India

DEFINITION AND PREMISE OF OER

Open Educational Resources (OER) are teaching, learning, and research resources that reside in the public domain or have been released under a copyright licence that permits their free use and re-purposing by others (adapted from Smith & Casserly, 2006, p. 8). They are purported to:

- Widen access to education
- Improve affordability of education through reducing textbook and course development costs
- Improve quality of learning materials through adaptation and localisation
- Increase visibility of academics' work through sharing of materials
- Enable pedagogical innovation and student-centred learning
- Allow for more flexible modes of learning and improve learner outcomes

However, empirical research is required to establish whether, how and under what circumstances the adoption of OER impacts on the increasing demand for accessible, high-quality and affordable education in developing countries, and how this can be sustained.

GENERAL OBJECTIVE

The general objective of this research project is to improve educational policy, practice and research in developing countries by better understanding the use and impact of OER in formal education settings.

MAIN RESEARCH QUESTION

Whether, how, for whom and under what circumstances can the adoption of OER and/or engagement with Open Educational Practices (OEP) provide equitable access to relevant, high quality, affordable and sustainable education in the Global South?

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Deputy Principal Investigator: *Prof. Patricia Arinto, University of the Philippines Open University*

ROER4D RESEARCH PRACTICES

WHY OPEN RESEARCH?

- Building research capacity through collaboration
- Engaging with potential stakeholders
- Extending range of research outputs
- Raising the visibility of research
- Improving quality of research

OPERATIONALISING OPEN RESEARCH

Dynamic sharing of research artefacts throughout the research process (shared internally within project and externally when appropriate). ROER4D research outputs (documents and data) published as legally shareable and adaptable resources under Creative Commons Attribution (CC BY) licences.
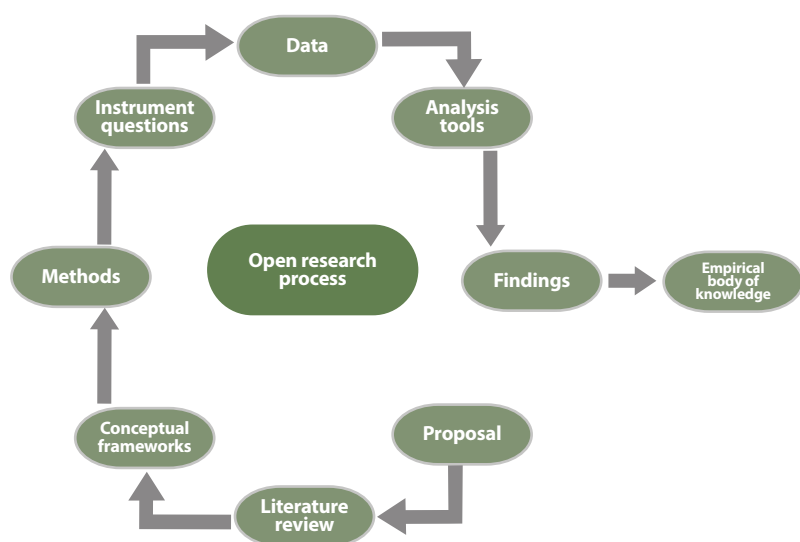
INITIAL FINDINGS

Awareness of OER

- According to a number of sub-project studies, **OER are not understood under the terms typically used in the literature.**
- Across most the studies, students and teachers in schools and universities often **assume that all resources on the internet are OER as they are "free".**

Creation and use of OER

- Although a few studies highlight educators' creation of OER, **overall educators are like to be users rather than creators of OER.**

Equitable access

- **University lecturers from less economically developed countries are more likely to use OER than those from more developed countries,** according to the nine-country, cross-regional survey of 295 university lecturers.
- **OER use is predicated upon students and educators enjoying a certain minimum level of access to electricity and ICT infrastructure,** which is more likely at universities than at schools.

Educators' pedagogical practice

- **Educators often do not hold the copyright over the materials they produce** (their institution does) and are therefore not legally in a position to share their teaching materials as OER.
- The use of the Darakht-e Danesh Library, a new digital repository of OER for teachers in Afghanistan, **positively impacted teachers' knowledge and helped them in lesson preparation.**
- The creation of MOOCs as OER at the University of Cape Town influenced MOOC educators' **approach to open licencing and stimulated learner oriented pedagogical practices.**
- A study in three East African higher education institutions found that **teacher educators reported greater confidence and competence in drawing on multiple forms of knowledge from OER and problematising what is valued knowledge.**

Students' academic performance

- In a study of Chilean first- and second-year higher education students, **the use of a teacher-selected collection of Khan Academy tutorials** appeared to improve students' examination performance when compared to the use of the teacher-created Open Textbooks (which afforded the teachers and students the opportunity to edit the text) or the traditional textbook.

Affordability and sustainability

- A study in three East African higher education institutions found that **support from library staff or instructional design colleagues** who acted as a resource for practice was influential in sustaining use of OER.
- A study of three universities in South African concluded that **identifying and engaging with the agent who holds legal copyright over the materials (the individual or the institution) is essential for sustaining OER practice**.

Winner of an Open Research Award 2016
Awarded by the Open Education Consortium

roer4d.org
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University of Cape Town · Universiteit van Kaapstad · UYunivesithi YaseKapa

wawasan open UNIVERSITY
the people's university

Centre for Innovation in Learning and Teaching

IDRC · CRDI
International Development Research Centre
Centre de recherches pour le développement international

UKaid
from the British people

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