OPEN EDUCATIONAL RESOURCES AND PEDAGOGICAL PRACTICES IN AFRICAN HIGHER EDUCATION: A PERSPECTIVE FROM THE ROER4D PROJECT. KEYNOTE PRESENTATION AT TRANSFORM 2015 RESEARCH COLLOQUIUM, 7-10 APRIL.

Hodgkinson-Williams, C;
;

© 2018, HODGKINSON-WILLIAMS, C

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
Open Educational Resources and Pedagogical Practices in African Higher Education: A perspective from the ROER4D Project

Cheryl Hodgkinson-Williams
University of Cape Town
Transform 2015
7 April 2015
Key challenges facing education in developing countries

- Education institutions under political & financial pressure
- Rising numbers of students in the education sector
- Expensive, limited in number, often outdated textbooks are not entirely relevant to the context
- Reduction of educational funding by governments
- Employability of graduates

OER as a response to some educational challenges facing education in developing countries

Finding the sweet spot: open educational resources in the developing world

on December 17, 2012

With debate about the benefits and future of the MOOC dominating the educational blogosphere in the last year, discussions about the open sharing of educational resources are becoming more prevalent. Open Educational Resources, or OERs, offer a potential tool for impacting education in developing countries and fast growing economies, particularly in the emerging technology hubs of Africa. These open, freely available educational resources can provide top education for people who don’t have access to universities or education in developing countries, but there is fear that educational resources created in highly developed countries will be of little use to those in developing countries because of cultural and economic differences.

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).
OER: Degrees of openness

Customise (e.g. translate, add local content)

Copy

Combine (e.g. select and mix content)

Contribute (e.g. share locally & with the world)

Creative Commons Licences

<table>
<thead>
<tr>
<th>Copyright</th>
<th>Attribution</th>
<th>Attribution</th>
<th>Attribution</th>
<th>Attribution</th>
<th>Attribution</th>
<th>Attribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>All rights reserved</td>
<td>Non-commercial</td>
<td>Non-commercial</td>
<td>Non-commercial</td>
<td>No derivatives</td>
<td>Share Alike</td>
<td>No rights reserved</td>
</tr>
<tr>
<td>Suitable file formats</td>
<td>PDF, password protected document file</td>
<td></td>
<td></td>
<td></td>
<td>Wiki, xml, ODF, html</td>
<td></td>
</tr>
</tbody>
</table>

Most restrictive | Most accommodating

BY = Attribution, NC = Non-commercial, ND = No derivatives, SA = Share Alike

Hodgkinson-Williams & Gray (2009:110) & Hodgkinson-Williams (2014)
Examples of OER from Africa (1)

http://oer.avu.org/

http://open.uct.ac.za/

http://www.oerafrica.org/
Examples of OER from Africa (2)

http://www.afrivip.org/open-education-resources

http://www.tessafrica.net
OER policy in Africa

This map shows policies around the world which have been established in support of open education. It includes open data from:

- The Creative Commons OER Policy Registry
- The Policies for OER Uptake (POERUP) wiki
- The list of OER projects published by Scholarly Publishing and Academic Resources Coalition (SPARC)

Click on the node and title to see the full record including the policy.

http://oermap.org/policy-map/
Slow uptake of OER in Africa

http://ocw.mit.edu/about/site-statistics/
Most OER research taking place in Global North

http://oermap.org/oer-evidence-map/
ROER4D Research: OER Adoption & Impact

Research on Open Educational Resources for Development in the Global South

GENERAL OBJECTIVE:
IMPROVE EDUCATIONAL POLICY, PRACTICE and RESEARCH in developing countries by better understanding the use and impact of OER

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

roer4d.org
facebook.com/ResearchOERforDevelopment
twitter.com/roer4d

August 2013 - February 2017

Mongolia
Australia
India
South Africa
Brazil
Kenya
Madagascar
Morocco
Zimbabwe
South Africa

Senegal
Ethiopia
Uganda
Somalia
Ghana
Rwanda
Zambia
Mauritius
Chile
Peru
Colombia
Malaysia
Philippines
Indonesia
Pakistan
Afghanistan

South Africa

researchonopeneducationalresourcesfordevelopment.org
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
86 researchers & associates
26 countries
16 time zones
In what ways, 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?
In what ways, 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?

ADOPTION STUDIES

1. In what ways, and under what circumstances are OER being adopted in the Global South?
In what ways, 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?

ADOPTION STUDIES
1. In what ways, and under what circumstances are OER being adopted in the Global South?

IMPACT STUDIES
2. In what ways, and under what circumstances can OER adoption impact upon the increasing demand for accessible, relevant, high-quality, and affordable education in the Global South?
Overview of ROER4D’s 7 Project Clusters

- Baseline educational expenditure (2)
- OER Desktop overview (1)
- Survey of OER adoption by academics & students (1)
- OER impact studies (7+1)
- ROER4D Network hub
- Academics’ adoption of OER (2)
- OER adoption in one country (1)
- Teacher educators’ adoption of OER (3)
ROER4D’s Project Clusters & Coordination

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

University of Cape Town
South Africa

OER adoption studies

SP1 OER adoption studies
SP2 OER adoption studies
SP3 OER adoption studies
SP4 OER adoption studies
SP5 OER adoption studies
SP6 OER adoption studies
SP7 OER adoption studies
SP8 OER adoption studies
SP9 OER adoption studies
SP10 OER adoption studies

SP10.6 Impact of OER use on educators’ practice in Sri Lanka
SP10.7 Impact of OER material at UPOU in the Philippines
SP10.8 Impact of OER on teaching and learning in Pakistan
SP10.9 Impacts of OER on education in Afghanistan
SP10.10 MOOCs as OER in a higher education context in Malawi

SP10.1 Impact of TESSA project OER on educators in Tanzania, Rwanda, Mauritius, Uganda

Leadership
Management
Knowledge building
Research capacity building
Evaluation
Communication
Networking
Data curation

South America
Peru, Colombia, Chile

South Saharan Africa
Kenya, Ghana, South Africa

South/southeast Asia
Indonesia, Malaysia, India

Sub-Saharan Africa
Kenya, Ghana, South Africa
ROER4D 7 projects, 14 countries in Africa

1. Ethiopia
2. Ghana
3. Kenya
4. Madagascar
5. Mauritius
6. Mozambique
7. Rwanda
8. Senegal
9. Somalia
10. South Africa
11. Tanzania
12. Uganda
13. Zambia
14. Zimbabwe
ROER4D Research sites and participants in Africa

SP1
• Desktop Review – Ghana, Kenya, South Africa

SP2
• Cross regional survey – 12 institutions in Ghana, Kenya, South Africa

SP4
• Case study or academics’ adoption of OER – South Africa

SP10.1
• Impact study of educators’ practices in TESSA project

SP10.3
• Impact study on MOOC development on academics’ pedagogical practices – South Africa

SP11
• Baseline study of government spending on educational resources – South Africa, Kenya
Understanding OER terms

- Open Content
- Learning Objects
- Open Courseware
- Open source content

Ressources éducatives libres
Recursos Educacionais Abertos
Conceptual clarification strategies: Open Google Doc

ROER4D Research Concepts - DRAFT under construction

Created in March 2014 by Cheryl Hodgkinson-Williams
Updated by Cheryl Hodgkinson-Williams and/or Henry Trotter on 29 March 2015

To make sure we all have a shared understanding of the concepts that we use in the ROER4D study, here with are the initial descriptions that have been compiled. Please feel free to comment and Henry and I will synthesize the comments!

Table of Contents

Open Educational Resources
Educational materials
Adoption
Access
Create/Creation
Awareness
Share/Sharing
Re-distribution
Identifying pedagogical practices in OER adoption

- Awareness of OER as a concept as well as finding OER
- Deliberately creating OER to share with others
- Merely reusing OER as is (i.e. copying)
- Revising OER (e.g. customising by translating, adding examples, resequencing materials)
- Remixing OER (i.e. combining materials from more than one source)
- Retaining OER (i.e. keeping legal copies of materials)
- Redistributing OER (i.e. sharing with others openly)
Uncovering slower OER adoption than expected

- **Relevance** of OER for various contexts
- **Policy influence** - national, institutional and departmental
- **Infrastructural issues** - hardware, software, connectivity
- **Institutional support** - incentives, recognition, rewards, technical support
- **Facility provisioning** - uninterrupted power supply
- Familiarity with **intellectual property mechanisms** including Creative Commons
- **Quality assurance** issues
- **Socio-cultural norms** - creation of own materials, unwillingness to use others’ materials
Establishing who is adopting OER or not

- Age
- Gender
- Qualifications
- Experience
- Type of educational environment - campus-based university, distance university
- Personal knowledge and skills
- Personal motivation - time, priorities
- Etc.
### Teasing out relationships between ...

<table>
<thead>
<tr>
<th>Who ... is adopting (or not)</th>
<th>In what ways ...</th>
<th>Under what circumstances ...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers/educators/tutors/lecturers/academics with varying:</td>
<td>Adopting OER by:</td>
<td>Relevance of content</td>
</tr>
<tr>
<td>Age</td>
<td>Locating</td>
<td>Policy influence</td>
</tr>
<tr>
<td>Gender</td>
<td>Creating</td>
<td>Infrastructural issues</td>
</tr>
<tr>
<td>Qualifications</td>
<td>Reusing</td>
<td>Institutional support</td>
</tr>
<tr>
<td>Experience</td>
<td>Revising</td>
<td>Facility provisioning</td>
</tr>
<tr>
<td>Type of education</td>
<td>Remixing</td>
<td>Legal issues</td>
</tr>
<tr>
<td>Personal knowledge &amp; skills</td>
<td>Retaining</td>
<td>Quality assurance issues</td>
</tr>
<tr>
<td>Personal motivation</td>
<td>Redistributing</td>
<td>Socio-cultural norms</td>
</tr>
</tbody>
</table>
Open Research – ROER4D intentions to share

- Conceptual Framework/s
- Literature Review
- Methods
- Instrument questions
- Data
- Analysis tools
- Findings
- Proposal
- Research process
- OER Asia
- NEW Open project

- Open Research – ROER4D intentions to share

- Conceptual Framework/s
- Literature Review
- Methods
- Instrument questions
- Data
- Analysis tools
- Findings
- Proposal
- Research process
- OER Asia
- NEW Open project
Keep track of our website

http://roer4d.org/
ROER4D Communications overview

**Internal communications**
- CMS (Vula)
- Email
- Virtual meetings (Skype, Adobe Connect)

**External communications**
- Website
  - Blog
  - Resources
    - Project events
  - Newsletter
- SlideShare
- Twitter
- Facebook Page
- Conferences
- OpenUCT repository

**Conferences**
- ROER4D

**Communications overview**
- OpenUCT repository
- CMS (Vula)
- Email
- Virtual meetings (Skype, Adobe Connect)

**Website**
- Blog
- Resources
  - Project events
- Newsletter

**Social Media**
- SlideShare
- Twitter
- Facebook Page
- Conferences
- OpenUCT repository
Make open …
… if it adds value
… if it is ethical
… if it is legal
… by default

On public display in the West Rotunda Gallery of the National Archives Building in Washington, D.C.

Thank you!

Questions?
Comments?
ROER4D Network Team

**Funding Partners**
- Dr Matthew Smith
  - IDRC
- Ed Barney
  - UK Aid – DFID
- Melissa Hagemann
  - OSF

**UCT Support**
- Prof Danie Visser
  - Deputy Vice-Chancellor
  - Project signatory for UCT
- Keval Harie
  - Contracts Lawyer
- Prof Laura Czerniewicz
  - CILT Director
- Shirley Rix & David Worth
  - Finance administrators

**Communication & Evaluation**
- Sukainal Walji
- Sarah Goodier

**Network Project Team**
- Prof Cheryl Hodgkinson-Williams
  - Principal Investigator
- Prof Patricia Arinto
  - Deputy Principal Investigator
- Tess Cartmill
  - Full-time Project Manager
- Henry Trotter
  - Part-time Researcher
- Thomas King
  - Part-time Research Administrator
- Rondine Carstens
  - Contract Graphic Artist
- Tinashe Makwande
  - Contract Videographer

**Advisory Group**
- Prof Raj Dhanarajan
  - Former VC & Emeritus Professor
- Prof Fred Mulder
  - Former VC & Emeritus Professor
- Carolina Rossini
  - IP Contracts lawyer
- Dr Savithri Singh
  - College Principal
- Prof Stavros Xanthopoylos
  - Director FGV

**Mentors**
- Ineke Buskens
  - Qualitative Research Consultant
- Dr David Porter
  - Researcher
- Dr George Sciadas
  - Statistician

**OER Impact Project Team**
- Prof Raj Dhanarajan & Maria Ng
  - Principal Investigators – OER Impact
- Suan Choo Khoo & Vivien Chiam
  - Administrative Officers
ROER4D Network (86 researchers & associates)

**Sub-Project 1 (7)**
Mariana Eguren, Peru
Maryla Bialobrzeska, Jenny Louw, Ephraim Mlanga, Catherine Ngugi & Rosemary Juma, SAIDE, South Africa

Prof Raj Dhanarajan
Wawasan Open University

**Sub-Project 2 (41)**
Prof Jose Dutra
University of Sao Paulo
2 part-time research assistants & 36 local coordinators

Judith Pete College, Kenya

Prof Daryono Universitas Terbuka, Indonesia

**Sub-Project 3 (3)**
Prof Sanjaya Mishra
Dr Ramesh Sharma CEMCA, India

**Sub-Project 4 (2)**
Glenda Cox
Henry Trotter, UCT, South Africa

**Sub-Project 5 (2)**
Guru Kasinathan
Ranjani Ranganathan
IT for Change, Bangalore, India

**Sub-Project 6 (3)**
Pilar Saenz
Dr Ulises Hernandez
Marcela Hernandez, Karisma Foundation, Colombia

**Sub-Project 7 (3)**
Prof Mohan Menon, B.
Phalachandra & Jasmine Emmanuel
Wawasan Open University

**Sub-Project 8 (1)**
Batbold Zagdragchaa
New Policy Unit, Ulanbataar, Mongolia

**Sub-Project 9 (3)**
Werner Westermann, Juan Muggli,
Victor Barragan
Chile

**Sub-Project 10.1 (3)**
Freda Wolfenden
Alison Buckler & Pritee Auckloo
Open University, UK

**Sub-Project 10.2 (5)**
Atieno Adala, Therrezinha Fernandes, Marilena Cabral, Tom Ojwang, Sophia Alexandre
AVU, Kenya

**Sub-Project 10.3 (7)**
Laura Czerniewicz, Sukaina Walji,
Michael Glover, Cheryl Brown, Janet Small, Andrew Deacon, Mary-Ann Fife, University of Cape Town

**Sub-Project 10.4 (2)**
Lauryn Oates, Rahim Parwani
CW4AW, Afghanistan

**Sub-Project 10.5 (3)**
Yasira Waqar, Saba Khalil, Sana Shams

**Sub-Project 10.6 (2)**
Shironica Karunayayaka, Som Naidu, Open University of Sri Lanka

**Sub-Project 10.7 (4)**
Sheila Bonito, Charisse Reyes, Rita Ramos, Joane Serrano
Open University of the Philippines

**Sub-Project 11 (1)**
Sarah Goodier
UCT, South Africa

**Sub-Project 12 (2)**
Carolina Botero & Amalia Toledo
Karisma Foundation, Colombia


Website: [www.roer4d.org](http://www.roer4d.org)

Contact Principal Investigator:
[cheryl.hodgkinson-williams@uct.ac.za](mailto:cheryl.hodgkinson-williams@uct.ac.za)

Follow us: [http://twitter.com/roer4D](http://twitter.com/roer4D)

Presentations: [www.slideshare.com/roer4D](http://www.slideshare.com/roer4D)
Acknowledgments & Attribution

Written by Cheryl Hodgkinson-Williams, Henry Trotter, Tess Cartmill, Sukaina Walji, Sarah Goodier & Thomas King

Contact:
cheryl.hodgkinson-williams@uct.ac.za

Graphics by Rondine Carstens rondine.carstens@uct.ac.za, Cheryl Hodgkinson-Williams & Henry Trotter henry.trotter@uct.ac.za

This work is licensed under a Creative Commons Attribution 4.0 International License.