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

Uncovering what enables and constrains ‘open practices’ in the Global South: Reflections from the ROER4D Project

Cheryl Hodgkinson-Williams
University of Cape Town
2nd International Conference of the African Virtual University
Nairobi, Kenya
1-3 July 2015
“Africa has the fastest growing population in the world and its size is expected at least to double between now and 2050. Some 40% of Africans are under the age of 15 (compared to a world average of 26%) but government spending is severely limited. No wonder that the supply of quality higher education is being outstripped by the growth of demand for university education” (Pfeffermann 2015:14).
Education contexts

- Expanding numbers of students
- Economically constrained environments
- Changing technologies, lack of infrastructure, expensive connectivity, limited bandwidth
- Changing and contested conceptions of valuable knowledge
- Outdated textbooks or not entirely relevant
Pressures on education institutions
- High **quality** education
- **Cost** effective education
- **Accessible** education

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E-Learning as a response
Affordances of the internet have enabled a range of educational activities to be supported digitally or conducted online to a greater or lesser degree (Arenas 2015).

e-Learning, also referred to as ‘online learning’ or ‘online education’, has become common-place in higher education institutions in so-called ‘developed countries’ and as part of commercial offerings by for-profit enterprises around the world, including ‘developed countries’.
Pressures on education institutions
- High quality education
- Cost effective education
- Accessible education

Commercial Education
- May be high quality
- Maybe expensive
- Copyrighted materials may be locked-down behind paywalls or need to be purchased

E-Learning as a response

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**Commercial Education**
- May be **high quality**
- Maybe expensive
- **Copyrighted materials** may be locked-down behind paywalls or need to be purchased

**Open Education**
- May be **high quality**
- Usually **low cost** (still have to have a device & bandwidth)
- Materials are **openly licensed** to increase access and legal reuse

E-Learning as a response
Open Education, embracing fairly new forms of web-enabled activities such as:

- **Open Educational Resources (OER)**
- **Open Textbooks**
- **Massive Open Online Courses (MOOCs)**

is being hailed as a flexible and cost-effective supplement to traditional higher education provision (See Smith & Casserly 2006).
Open Educational Resources (OER) can be briefly 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 and/or re-purposing by others”

Adapted from: [http://www.hewlett.org/programs/education-program/open-educational-resources](http://www.hewlett.org/programs/education-program/open-educational-resources)
Examples of OER from Africa (1)

http://www.oerafrica.org/

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

http://oer.avu.org/
Examples of OER from Africa (2)

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

http://www.tessafrica.net
An Open Textbook is a textbook licensed under an open copyright license and made available online to be freely used by students, teachers and members of the public. Many open textbooks are distributed in either print, e-book, or audio formats that may be downloaded or purchased at little or no cost.

http://en.wikipedia.org/wiki/Open_textbook
Open Textbook examples from Africa

http://www.siyavula.com/our-products/

http://open.uct.ac.za/handle/11427/4154

https://open.uct.ac.za/handle/11427/7549
A MOOC integrates the connectivity of social networking, the facilitation of an acknowledged expert in a field of study, and a collection of freely accessible online resources. Perhaps most importantly, however, a MOOC builds on the active engagement of several hundred to several thousand ‘students’ who self-organise their participation according to learning goals, prior knowledge and skills, and common interests. Although it may share in some of the conventions of an ordinary course, such as a pre-defined timeline and weekly topics for consideration, a MOOC generally carries no fees, no prerequisites other than Internet access and interest.

(McAuley, Stewart, Siemens & Cormier 2010:4)
MOOC examples from Africa

https://www.futurelearn.com/courses/medicine-and-the-arts/


https://www.futurelearn.com/courses/what-is-a-mind/
Open Education

- Open Educational Resources (OER)
- Open Textbooks
- Massive Open Online Courses

Affordable and current teaching materials
Expert and cost-effective teaching
Materials on the internet vs OER

**Internet**
- Visibility of all types of materials for others to access freely that are **copyrighted by default**

**Open Educational Resources**
- Intentional contribution of teaching, learning and research materials for others to access freely and **reuse legally**
OER: Degrees of openness

Adapted from Hodgkinson-Williams & Gray (2009:110) & Hodgkinson-Williams (2014)
OER: Degrees of openness

(Adapted from Burgos & Ramírez 2011:6)
## Types of Open Education practices

<table>
<thead>
<tr>
<th>Open practices</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finding</td>
<td>Locate OER, Open Textbooks and/or open MOOCs on various platforms, aggregators or search engines</td>
</tr>
<tr>
<td>Copying (Reuse)</td>
<td>Copy the original, use “as is” or use verbatim</td>
</tr>
<tr>
<td>Creating</td>
<td>Produce or develop digital teaching / learning resources that are intended to be shared openly under some type of license that allows reuse</td>
</tr>
<tr>
<td>Customising (Revise)</td>
<td>Edit or modify OER so that they better meet user’s needs</td>
</tr>
<tr>
<td>Combining (Remix)</td>
<td>Combine OER with other OER and/or ‘open materials’ (e.g. photographs, graphics with a CC license) to produce new OER</td>
</tr>
<tr>
<td>Keeping (Retain)</td>
<td>Own, keep and control (curate) copies of the content created or copied, customised and/or combined</td>
</tr>
<tr>
<td>Circulating (Redistribute)</td>
<td>Share or republishing the original OER or the new version with others</td>
</tr>
</tbody>
</table>

(Adapted from Wiley 1998; 2014; Okada et al 2012; Hodgkinson-Williams 2014)
## Types of Open Education practices

(Adapted from Wiley 1998; 2014; Okada et al 2012; Hodgkinson-Williams 2014)

<table>
<thead>
<tr>
<th>Open practices</th>
<th>BY-NC-ND</th>
<th>BY-NC-SA</th>
<th>BY-NC</th>
<th>BY-ND</th>
<th>BY-SA</th>
<th>BY</th>
</tr>
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<td>Copying (Reuse)</td>
<td>* (must)</td>
<td>* (must)</td>
<td>* (must)</td>
<td>* (must)</td>
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<td>* (must)</td>
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<tr>
<td>Creating</td>
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<tr>
<td>Customising (Revise)</td>
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<td>* (must)</td>
<td>*</td>
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</tbody>
</table>

(Adapted from Wiley 1998; 2014; Okada et al 2012; Hodgkinson-Williams 2014)
What do we know about Open Education practices on Africa?

https://commons.wikimedia.org/wiki/File:Blank_Map-Africa.svg
Few OER policies in Africa

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

http://ocw.mit.edu/about/site-statistics/
Where CC-licensed works are published

- 37% North America
- 34% Europe
- 16% Asia-Pacific
- 10% Latin America
- 1% Africa
- 2% Arab World

https://stateof.creativecommons.org/report/
Most OER research taking place in Global North

http://oermap.org/oer-evidence-map/
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?
Research on Open Educational Resources for Development (ROER4D)

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

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

ROER4D Hub

- Network coordination
  - enabling objectives
    - Leadership
    - Management
  - specific objectives
    - Knowledge building
    - Research capacity building
    - Evaluation
    - Communication
    - Networking
    - Data curation

University of Cape Town

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

SP10.2
• Impact of AVU OER in Kenya, Ethiopia, Tanzania, Somalia, Senegal, Zambia, Mozambique, Madagascar, Zimbabwe

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

SP11
• Baseline study of government spending on educational resources – South Africa
<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: Age Gender Qualifications Experience Type of education Personal knowledge &amp; skills Personal motivation</td>
<td>Adopting OER by: Locating Creating Reusing Revising Remixing Retaining Redistributing</td>
<td>Relevance of content Policy influence Infrastructural issues Institutional support Facility provisioning Legal issues Quality assurance issues Socio-cultural norms</td>
</tr>
</tbody>
</table>
Initial trends from ROER4D research: 1. Concept of OER

- In a pilot survey undertaken by one of the ROER4D sub-projects (SP2) under the leadership of Prof Dutra Oliveira from the University of Sao Paulo and Judith Pete in, it was found that the term ‘OER’ was not well enough understood to be able to ask a direct question about OER such as: “When did you first hear about OER”? Consequently the final survey instead posed questions about OER indirectly by focusing on open practices that could be interpreted as engaging in the adoption of OER.

- The survey covers 36 institutions, 12 of which are in 3 countries in Africa (Ghana, Kenya & South Africa. The research is still in progress, but so far we have about 2760 responses from students and 130 responses from lecturers in these African institutions.
Initial trends from ROER4D research:
1. Concept of OER (2)

- Interview questions posed by other projects (SP4 – South Africa) were easier to interpret as the interviewer could clarify the questions posed to the interviewee and probe responses to establish actual open practices.

- Our lesson here is that we need to be cautious about making claims about OER adoption unless we are certain that the respondents actually understand the concept underpinning of OER rather than just the term.
Initial trends evident from the ROER4D pilot studies in the three regions, South America, Sub-Saharan Africa and Asia point to educators and students **lack of understanding of copyright and alternative licensing, unwitting infringement of copyright or disregard for copyright**. These findings seem to be consistent with a recent study undertaken on “Access to Learning Resources” undertaken by Czerniewicz and Brown (Czerniewicz 2015) with students in higher education institutions in South Africa illustrating quite **high levels of illegal use of learning materials**.
Initial trends from ROER4D research:

2. Lack of copyright and alternative licensing

- ROER4D will have to:
  - uncover is why this is so and if and how the use of open licenses could better support educators’ teaching and students’ learning practices
  - pay special attention to finding out how educators and students are dealing with educational content that may be ‘locked-down’ behind paywalls
  - explore what materials African educators (and students) may be developing themselves and if they are indicating the re-use permissions on these materials in line with their intentions
Initial trends from ROER4D research:

3. Levels of ease and difficulty of open practices

- ROER4D is grappling with a way to perhaps explain the difficulty educators and students might be having with the range of OER practices by surfacing possible structural issues (i.e. the compatibility of legal regimes in developing contexts) that might inhibit open practices.

- The lack of knowledge about open licensing may mean that many educators and students are assuming that everything on the internet is ‘open’ for reuse. By implication this means that they may not know how to best search for OER, Open Textbooks and/or open MOOCs thereby not undertaking the first open education practice - that of finding or locating open materials.
Initial trends from ROER4D research:
3. Levels of ease and difficulty of open practices

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<th>MOOCs</th>
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<tr>
<td>Locating (Finding)</td>
<td>Although there are OER aggregators and ways of searching for CC-licensed materials on search engines, finding OER can prove difficult to find if licenses are not understood</td>
<td>Difficult if licenses are not understood</td>
<td>Easy to find MOOCs in general, but not so easy to identify “open MOOCs”</td>
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</table>
Initial trends from ROER4D research:
3. Levels of ease and difficulty of open practices

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<tbody>
<tr>
<td>Copying (Reuse)</td>
<td>Easy to copy as this is a common practice. Unless licences are understood and applied, infringement of copyright is possible</td>
<td>Easy as this is a common practice</td>
<td>Difficult as many MOOCs prohibit copying unless they are “open MOOCs”</td>
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## Initial trends from ROER4D research:

### 3. Levels of ease and difficulty of open practices

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<tr>
<td>Creating</td>
<td>Easy to create</td>
<td>Relatively easy to create on Open Textbook platforms</td>
<td>Depending on the intended audience, this is more tricky to do individually</td>
</tr>
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Initial trends from ROER4D research:

3. Levels of ease and difficulty of open practices

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<td>Customise (Revise)</td>
<td>Relatively easy to revise if the re-user has suitable software &amp; skills. Unless licences are understood and applied, infringement of copyright is possible</td>
<td>Difficult unless the user is using a platform that supports revision</td>
<td>Very difficult unless the user is using a platform that supports revision</td>
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### Initial trends from ROER4D research:

#### 3. Levels of ease and difficulty of open practices

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<td>Combine (Remix)</td>
<td>Quite difficult especially with certain media, e.g. video. Unless licences are understood and applied, infringement of copyright is likely</td>
<td>Very difficult unless the user is using a platform that supports revision</td>
<td>Very difficult unless the user is using a platform that supports remixing and materials all have open licences</td>
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Initial trends from ROER4D research:
3. Levels of ease and difficulty of open practices

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<tr>
<td>Keep (Retain)</td>
<td>Easy as saving is a common practice. Unless licences are understood and applied, infringement of copyright is likely</td>
<td>Easy to keep a copy of the original</td>
<td>Relatively easy to download and keep copies of the videos and text materials</td>
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</tbody>
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### Initial trends from ROER4D research:

#### 3. Levels of ease and difficulty of open practices

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<tr>
<td>Circulate (Redistribute)</td>
<td>Difficult to undertake legally unless users have a public space to share openly</td>
<td>Easy to share a copy of the original</td>
<td>At this stage this does not seem possible for a re-user unless they work directly with the hosts of the platform</td>
</tr>
</tbody>
</table>
Keep track of our website

http://roer4d.org/
Make open …

… if it adds value

… if it is ethical

… if it is legal

… by default
Thank you!
Questions?
Comments?


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