# THE ADOPTION AND IMPACT OF OEP AND OER IN THE GLOBAL SOUTH: THEORETICAL, CONCEPTUAL & METHODOLOGICAL FRAMEWORK FOR THE ROER4D PROJECT META-SYNTHESIS

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# The adoption and impact of OEP and OER in the Global South: Theoretical, conceptual & methodological framework for the ROER4D project meta-synthesis

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













## Research on OER for Development (ROER4D) Phases 1 & 2





**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

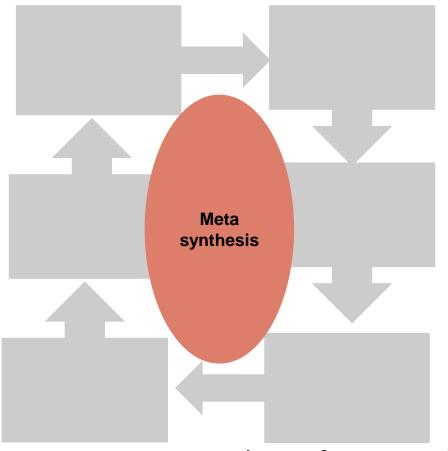
# ROER4D -18 studies

ROER4D - Clusters of empirical studies	South America	Sub-Saharan Africa (SSA)	South & Southeast Asia
Survey of students & lecturers adoption of OER	Brazil, Chile & Colombia	Ghana, Kenya & South Africa	India, Indonesia & Malaysia; Pakistan
Lecturers' adoption of OER (including MOOCs) & impact on pedagogical practices		South Africa (2 studies)	India; Mongolia
Teacher educators' adoption of OER & impact on pedagogical practices		Tanzania, Uganda, Mauritius (Wolfenden et al)	India; Sri Lanka
Course developers' adoption of OER in course development			India & Malaysia; Philippines
Students' adoption of OER & impact on achievement	Chile		
Institutions' adoption of OER curriculum		Kenya, Tanzania, Uganda, Zambia	
School teachers' adoption of OER & impact on pedagogical practices	Colombia		Afghanistan
School teachers and pupils and higher education lecturers and students' adoption of OER			Pakistan
Baseline studies of educational expenditure	Chile, Colombia, Uruguay	South Africa	

# Meta-synthesis question

Whether, how, for whom and under what circumstances can engagement with open educational practices and resources provide equitable access to relevant, high quality, affordable and sustainable education in the Global South?

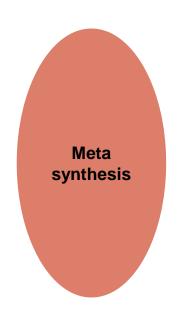
The purpose of a metasynthesis is to integrate themes and insights gained from individual qualitative research into a higher order synthesis that promotes broad understandings of the entire body of research, while still respecting the integrity of the individual reports (Scruggs, Mastropieri & McDuffie, 2007, 395)



Challenges - Studies held different philosophical positions

Some studies adopted a fairly positivist view of research, others more interpretivist, and a few explicitly critical realist. Likewise studies drew on a wide variety of conceptual and theoretical frameworks

# Meta-synthesis activities

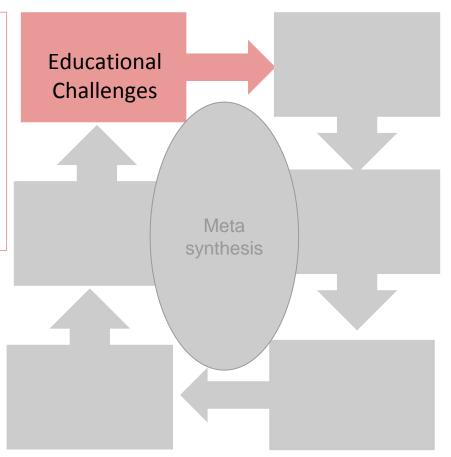


The **chapters** produced by the ROER4D sub-projects therefore serve as the **"data objects"** for this meta-synthesis which involves a number of stages, including:

- 1. reading through draft and final versions
- 2. engaging directly with the researchers
- 3. using a literature-informed set of themes from the meta-level conceptual framework
- 4. ingesting the pre-peer reviewed chapter into the qualitative software analysis tool, Nvivo
- using this framework to code the themes in the findings of each of the studies and then adjust the framework
- identify the most frequently occurring themes & mechanisms of change
- 7. distilling insights and recommendations

#### **KEY QUESTION:**

What are the specific educational challenges in each region and country to which open educational practices and resources are a possible response?

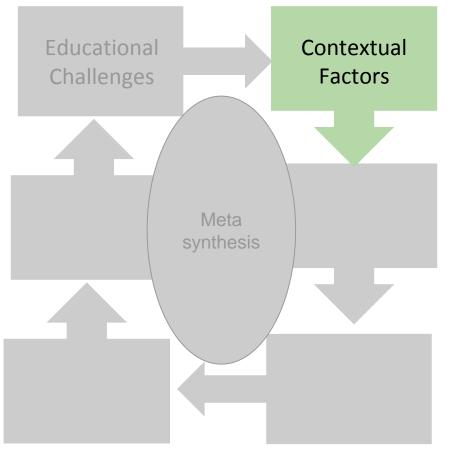


# Educational Challenges

Educational challenges faced in the various regions, countries, institutions, departments by educators and students in the formal education sector (schooling and higher education) need to be identified up-front so that there is a benchmark for judging the impact of the take-up/adoption of open educational practices and resources

#### For example:

- In Chile student protests have expressed the need for equal accessibility to quality education as a civil right (Westermann, et al., in press)
- In Colombia the wide cultural diversity necessitates the recognition of local ethnic identities in learning materials (Sáenz Rodríguez, et al., in press)
- In war-torn Afghanistan access to educational materials in local languages is a major difficulty for educators (Oates, et al., in press)
- In East Africa educators have access to limited and outdated proprietary teaching materials (Wolfenden, et al., in press)



#### **KEY QUESTION:**

Which structural and cultural conditions are shaping, and being shaped by individuals and/or institutions' uptake of open educational practices and resources?

Contextual factors which include both structural and cultural dimensions, can serve to enable or constrain individuals' (e.g. educators or learners) or institutions' (e.g. managers or policy-makers) uptake/ adoption of open educational practices and resources.

Structural conditions (e.g. institutional policies, systems, infrastructure) for example:

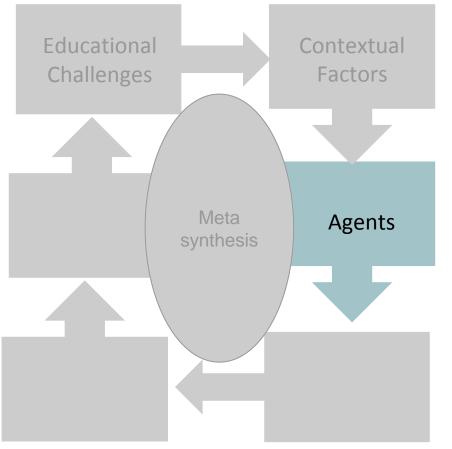
- Infrastructure: In East Africa impediments to uptake (and especially reuse) of OER include deficiencies in physical infrastructure (e.g. interrupted power supply, insufficient devices and unstable, expensive connectivity) Wolfenden, et al., in press)
- Language: In Afghanistan (Oates et al., in press), Mongolia (Zagdragchaa & Trotter, in press) and Pakistan (Waqar et al., in press) limited number of OER available in local languages means that a great deal of creation and/or translation of OER is still needed

Cultural circumstances (e.g. norms, ideas, beliefs), for example:

- Institutional culture: In South Africa institutional culture mediates the role that policy plays in academics' decision-making (Cox & Trotter, 2016)
- Disciplinary norms: In the 9 country cross-regional survey university lecturers from the Natural Sciences reported more OER use compared to those in the Humanities & Arts (de Oliveria Neto, et al., in press)

Contextual Factors





#### **KEY QUESTION**

Who are the key agents whose decision-making influences the uptake of open educational practices and resources?

Agential factors refer to the choices that individuals' (e.g. educators and/or learners) or institutions' (e.g. institutional personnel and/or government policymakers) make in relation to open educational practices and resources.

The term 'agent' (Archer 2000) has been used deliberately to indicate the intentional freedom to act exhibited by stakeholders and their take-up (or not) of open educational practices and resources in response to the structural and cultural (Archer 2003) conditions they face.

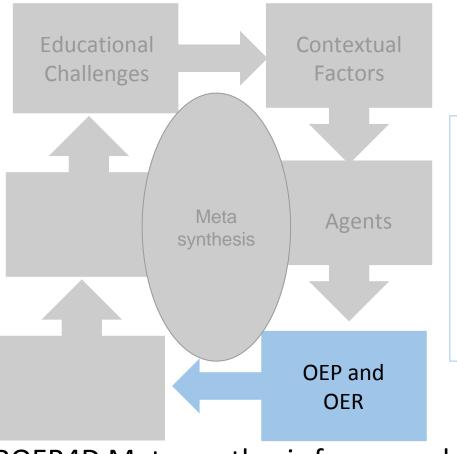
For example, individual choices are displayed in:

 Educators being more willing to share materials informally (e.g. via email) rather than upload them to a public repository/website (Karunanayaka & Naidu, in press)

For example, institutional choices are displayed in:

 Institutional personnel financially supporting the development of OERbased Massive Open Online Courses (MOOCs) (Czerniewicz, et al., in press)





#### **KEY QUESTION**

Which open educational practices and resources are most readily adopted, or not, and why might this be so

(ie. what is the underlying causes or generative mechanisms)?

For OER to exist there must be prior open educational practices in the form of individual or collaborative creation, curation, and sharing (distribution) processes, in order for others to locate, copy, adapt (revise or remix), re-curate, and re-circulate (re-distribute). For OER to be optimised and sustainable, there must be subsequent open educational practices

We need to identify which of these practices bring about changes or stasis (no change) with respect to the availability, quality and affordability of materials as well as the quality of teacher pedagogy and student learning.

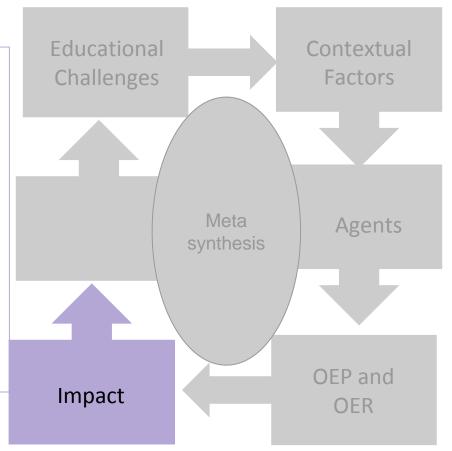
For example

- Creation: In the 3 regions, creation of OER by university lecturers is not yet a common practice (majority do not use open licences) (De Oliveira Neto et al., in press)
- Copying (use "as is"): In the study in Pakistan over 80% of university lecturers use the original materials as-is (Waqar et al, in press)
- Reuse: Many teachers drew on multiple online resources, but were unclear which of these resources were "open" and used them regardless as the relevance of the resources were more important than their licensing conditions (Wolfenden, et al., in press)

OEP and OER

#### **KEY QUESTION**

What is the impact of the adoption of open educational practices & resources on the availability of affordable, relevant & quality of learning & teaching materials, on teacher pedagogy, learner outcomes, & affordability & sustainability of education?



Impact can seen as the change that is preferred and promoted (e.g. improve quality of teacher pedagogy). The meta-synthesis will surface key how the open educational practices bring about these changes or not.

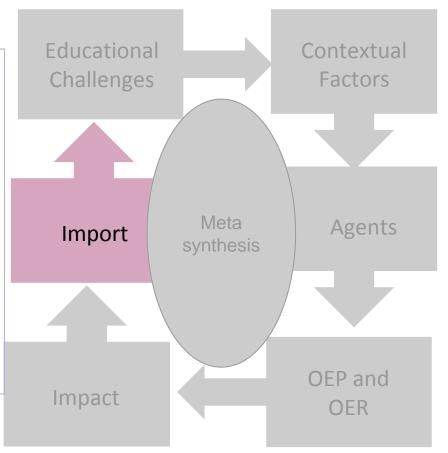
#### For example:

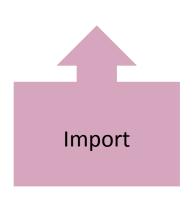
- Availability of relevant materials: Teachers have contributed OER to a provincial OER repository in India (Kasinathan & Ranganathan, in press) and teachers have access to materials in local languages in the Darakht-e Danesh ("Knowledge Tree") OER Library in Afghanistan (Oates et al., in press)
- Quality of teacher pedagogy: A study of trainee teachers in Sri Lanka reports greater collaboration and creativity in their pedagogical practices (Karunanayaka & Naidu, in press)
- Affordability: Cost-savings are quite difficult to establish as baseline data on government expenditure on teaching and learning materials in the school sector is not always available in sufficient detail to undertake a costanalysis (Toledo & Botero, in press; Goodier, in press), but a higher education institution has shown that the use of OER can reduce development costs by about 10% (Bonito, et al., in press)



#### **KEY QUESTION**

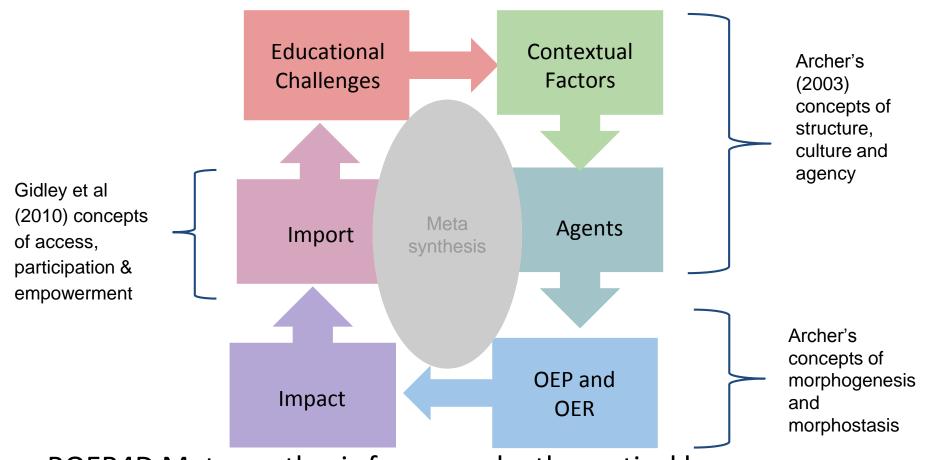
To what degree is the uptake of open educational practices and resources addressing access & economic factors, community participation, and personal & collective empowerment?





What is deemed to be an 'impact' or social change is "always expressed from a perspectival vantage point" (Archer 2013:4) and is inescapably value-laden and there likely to be contested. In other words from whose ideological perspective is the degree of OEP&R uptake being judged.

Drawing on the framework proposed by Gidley et al (2010) on social inclusion, the meta-analysis plots the degrees of social transformation along a "spectrum of ideologies involving - from narrowest to most encompassing - the neoliberal focus on access and economic factors, the social justice focus on community participation and the human potential focus on personal and collective empowerment from positive psychology and critical/transformative pedagogies" (2010:6)



ROER4D Meta-synthesis framework - theoretical, lens summary

Rapidly increasing need for and cost of education is restricting access to quality education & impinges upon ...

Contextual factors that influence and are influenced by ...

... resulting in social change (or stasis) according to which ideological perspective this is being judged. Import

Meta
synthesis

Agents
personnel and decision

... choices made by learners, educators, institutional personnel and/or government decision-makers ...

... equitable access, improvement in the quality of materials, teaching and learning and cost reductions of schooling and tertiary

education ...

mpact

OEP and
education
resources (

... to engage in open educational practices and resources (or not) which may (or may not) bring about ...

ROER4D Meta-synthesis framework - Storyline

HIgher education

Schooling

HE & schools

ROER4D	-18	studies
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ROER4D - Clusters of empirical studies	South America	Sub-Saharan Africa (SSA)	South & Southeast Asia
Survey of students & lecturers adoption of OER	Brazil, Chile & Colombia (De Oliveira Neto et al)	Ghana, Kenya & South Africa (De Oliveira Neto et al)	India, Indonesia & Malaysia (De Oliveira Neto et al); Pakistan (Waqar et al)
Lecturers' adoption of OER (including MOOCs) & impact on pedagogical practices		South Africa (Cox & Trotter; Czerniewicz et al)	India (Mishra & Singh), Mongolia (Zagdragchaa & Trotter)
Teacher educators' adoption of OER & impact on pedagogical practices		Tanzania, Uganda, Mauritius (Wolfenden et al)	India (Kasinathan and Ranganathan), Sri Lanka (Karunanayaka) & Naidu
Course developers' adoption of OER in course development			India & Malaysia (Menon et al), Philippines (Bonito et al)
Students' adoption of OER & impact on achievement	Chile (Westermann)		
Institutions' adoption of OER curriculum		Kenya, Tanzania, Uganda, Zambia (Adala)	
School teachers' adoption of OER & impact on pedagogical practices	Colombia (Sanez et al)		Afghanistan (Oates et al)
School teachers and pupils and higher education lecturers and students' adoption of OER			Pakistan (Waqar et al)
Baseline studies of educational expenditure	Chile, Colombia, Uruguay	South Africa (Goodier)	

### Citation and attribution

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