

A Social Justice Framework for Understanding Open Educational Resources and Practices in the Global South

Cheryl Ann Hodgkinson-Williams and Henry Trotter

Centre for Innovation in Learning and Teaching, the University of Cape Town, South Africa

Abstract: At the heart of the open educational resources (OER) movement is the intention to provide affordable access to culturally relevant education to all. This imperative could be described as a desire to provide education in a manner consistent with social justice which, according to Fraser (2005), is understood as “parity of participation”. Drawing on her concept of social justice, we suggest a slight modification of Fraser’s framework for critically analysing ways in which the adoption and impact of OER and their undergirding open educational practices (OEP) might be considered socially just. We then provide illustrative examples from the cross-regional Research on Open Educational Resources for Development (ROER4D) project (2014-2017) to show how this framework can assist in determining in what ways, if at all, the adoption of OER and enactment of OEP have responded to economic inequalities, cultural inequities and political exclusions in education. Furthermore, we employ Fraser’s (2005) concepts to identify whether these social changes are either “affirmative” (i.e., ameliorative) or “transformative” in their economic, cultural and political effects in the Global South education context.

Key words: Open Educational Resources, Open Educational Practices, social justice, Global South

Introduction

Many countries in the Global South face similar educational challenges, including but not limited to: “unequal access to education; variable quality of educational resources, teaching and performance; and increasing cost and concern about the sustainability of education (Arinto, Hodgkinson-Williams, King, Cartmill & Willmers, 2017, p. 6). The need for education in Global South countries is continuing to grow, propelled by high population growth (World Bank, 2017) and the burgeoning demand for post-secondary education. In some countries, such as South Africa, there are additional challenges, such as low participation and high attrition rates in higher education (Bajjnath, 2018).

The OER movement has been seen as a “means of contributing to the challenge of expansion of scale and opportunity and lowering cost in particular in post-secondary education” (Tait, 2018, p. 111). A few studies in countries in the Global South have indeed reported cost reductions as a result of OER adoption (Arumugam, 2016), including reduction of costs associated with course development (Pande, 2018). However, a recent study in the United States (US) raises a caution about the cost reduction argument for OER and suggests that “touting the financial value of an OER might not solely be a convincing argument for students or instructors independent of their educational use” (Abramovich & McBride, 2018, p. 37). A number of studies, mostly conducted in the Global North, have garnered evidence for cost savings of OER for students (Hilton, 2016; Pina & Moran, 2018), though some suggest that these student savings were not accompanied by any real change in their



learning outcomes (Hendricks, Reinsberg & Riger, 2017) or student course satisfaction (Lawrence & Lester, 2018). Thus, the economic value proposition for OER may not be connected to any pedagogical, cultural, or political improvements, which would certainly be the hope for the OER community.

Moreover, while OER are “often espoused as enabling educational equity, the reality is not always the case” (Willems & Bossu, 2012, p. 185). For example, in Kenyan schools, Orwenjo and Erastus (2018, p. 148) report that “poor infrastructure, negative attitudes, lack of ICT competencies, and other skill gaps among teachers and lack of administrative support are some of the implementation challenges that have continued to dog the implementation, adoption and use of OERs”. Crissinger (2015) suggests that the perceived relationship between openness and social justice be interrogated as, “in our excitement about the new opportunities afforded by open movements, we might overlook structural inequalities present within these movements”.

These perceptions are in line with the findings by the Research on Open Educational Resources for Development (ROER4D) project which investigated the adoption and impact of OER in 21 countries in South America, Sub-Saharan Africa and Asia.

ROER4D Project

The ROER4D project, funded by Canada’s International Development Research Centre (IDRC), the United Kingdom’s Department for International Development (DFID) and the Open Society Foundations, commenced in 2013 and included 18 independent sub-projects. Hosted by the University of Cape Town, South Africa and Wawasan Open University, Malaysia, a total of 103 research team members from 19 countries worked on these sub-projects.

In the ROER4D project OER was seen as a component of Open Education and referred to “teaching, learning and research resources that reside in the public domain or which have been released under an intellectual property licence that permits activities enabled by different degrees of openness” (Hodgkinson-Williams, Arinto, Cartmill & King, 2017, p. 31). The open educational practices (OEP) that undergird the OER referred to are: individual or collaborative conceptualisation; creation, curation (retention), circulation (distribution) of OER through practices such as open pedagogies; crowdsourcing; and open peer review using open technologies so that they can be easily located to encourage copying (re-use “as-is”), adaptation, re-curation and re-circulation. In other words, “for OER to exist, there must of necessity be prior OEP” (Hodgkinson-Williams et al., 2017, p. 31).

In the ROER4D meta-synthesis, an “optimal” Open Education cycle (Figure 1) was used to identify the key OEP that underlie the phases of OER creation, use and adaptation (Hodgkinson-Williams et al., 2017, p. 32).

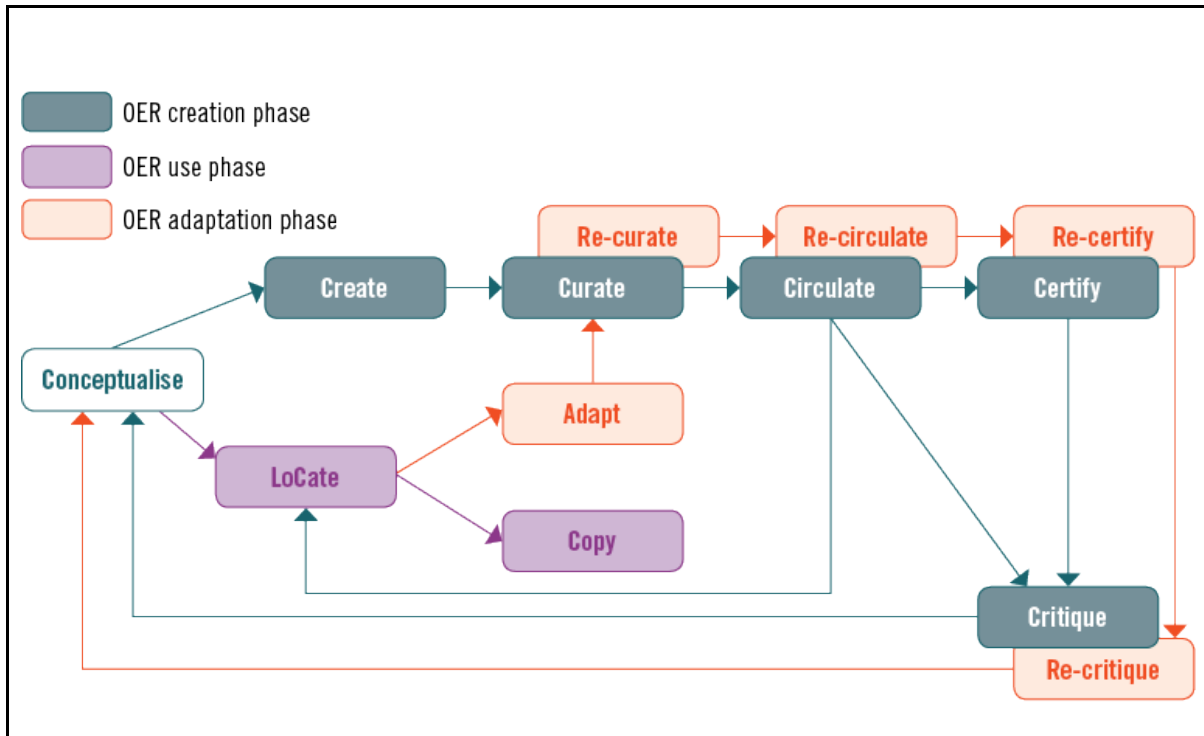


Figure 1: An “optimal” Open Education cycle (Hodgkinson-Williams et al., 2017, p. 32). Image CC BY

In the main output of the ROER4D project, an edited volume comprising 16 chapters (Hodgkinson-Williams & Arinto, 2017), there are two meta-synthesis chapters, Chapter 2 and Chapter 16. Chapter 2 (Hodgkinson-Williams, Arinto, Cartmill & King, 2017) adopts the key components of Archer’s (2003) social realist model of social change to identify the key factors influencing OEP and OER across the sub-projects. Chapter 16 (Arinto, Hodgkinson-Williams & Trotter, 2017) employs the social inclusion framework of Gidley, Hampson, Wheeler and Bereded-Samuel (2010) to uncover the factors that might account for the extent of OER use, adaptation and creation observed in the ROER4D studies to draw insights into how social inclusion through OER and OEP can be achieved in the Global South.

In this paper, we endeavour to move beyond social change and social inclusion to develop a framework to make apparent the relationship between social justice and the adoption of OER and OEP. Drawing on examples from the ROER4D project, we propose a slightly adapted version of Fraser’s (2005) social justice framework as a way to map how and under what circumstances the adoption of OER and OEP by students and/or educators may counter economic inequalities, cultural inequities and political exclusions in education. In addition, we highlight the extent to which these resources and practices can be construed as being what Fraser (2005) terms affirmative or transformative interventions.

Social Justice

Following Rawls, Fraser endorses the notion that “justice is the first virtue in the following sense: it is only by overcoming institutionalized injustice that we can create the ground on which other virtues, both societal and individual, can flourish” (2012, p. 42). By extension Fraser conceives of social justice as “parity of participation” (2005, p. 73), as both an *outcome* where “all the relevant social actors [...]

participate as peers in social life” and a *process* in which procedural standards are followed “in fair and open processes of deliberation” (Fraser, 2005, p. 87). However, both these outcomes and processes can be socially unjust in three ways, which Fraser terms: (1) economic maldistribution; (2) cultural misrecognition; and (3) political misframing.

In relation to economic injustice or maldistribution, Fraser explains that “people can be impeded from full participation by economic structures that deny them the resources they need in order to interact with others as peers” (2005, p. 73). With respect to OER and OEP, this implies that educators and students in the Global South may be impeded from full participation by the lack of access to necessary educational infrastructure and materials, such as adequate buildings for instruction, uninterrupted power supply, functional technological equipment, affordable and stable connectivity and access to requisite educational materials. Because of these challenges, they may then lack the digital literacy necessary for engaging with OER and OEP. These types of obstacles, following Fraser, indicate “distributive injustice or maldistribution” (2005, p. 73) and need to be addressed through economic redistribution or economic restructuring.

Economic redistribution is what Fraser refers to as an “affirmative” change, where attention is paid to the inequitable outcomes by ameliorative adjustments. An example of OER as an affirmative response, or what we prefer to call an ameliorative intervention, would be direct cost savings for government for the schooling sector (Wiley, Hilton, Ellington & Hall, 2012), higher education students (Hilton, 2016; Pina & Moran, 2018), and educators and institutions (Arumugam, 2017). By contrast, economic restructuring is a “transformative” shift that addresses the root causes of the maldistribution. An example of OER as a “transformative remedy” (Nilsson, 2008, p. 35) would be a change in the manner in which educational materials such as textbooks and academic journals are created, adapted, used and disseminated and how their production is funded by governments, institutions, donors foundations, etc.

With respect to cultural inequality, or “misrecognition”, Fraser points out that “people can also be prevented from interacting on terms of [participatory] parity by institutionalized hierarchies of cultural value that deny them the requisite standing” (2005, p. 73). In relation to OER and OEP this means that educators and students in the Global South may be deprived of participatory parity due to the current domination of Western-oriented epistemic perspectives and proliferation of hegemonic English-language OER, a condition that can only be countered through the creation, localisation and/or redistribution of OER in preferred languages and from alternative epistemic stances. Countering cultural inequality or misrecognition with ameliorative modifications or symbolic change would assist in valuing local languages and esteeming various cultural interpretations; the process and outcome that Fraser refers to as “recognition”. By contrast, a transformative advance would involve what we have termed “re-acculturation” (Fraser does not specify a particular term for a transformative response to misrecognition) which would respect alternative epistemic positions and acknowledge alternative authorities on what is considered to be worthwhile knowledge and dispositions. With respect to education transformation, and therefore directly to OER and OEP, Lockett and Shay suggest that a “transformative approach would involve dismantling the power relations, social hierarchies and cultural hegemonies that currently underpin the canons, the assumed norms and values of inherited curricula and setting up processes to reimagine more inclusive ways of participating in curriculum and pedagogic practices” (2017, p. 3).

Referring to political inequality, or “misframing”, Fraser explains that this “tells us who is included in, and who is excluded from, the circle of those entitled to a just distribution and reciprocal recognition” (2005, p. 75). In other words, political misframing surfaces “asymmetries of political power” (Fraser, 2009, p. 103) between those who have, and do not have, rights of membership in a decision-making community. In relation to OER, the question is: Who has the right to decide on what counts as worthwhile knowledge, who decides on school and university curricula and who publishes and disseminates textbooks, journals, etc.? An ameliorative response to political misframing is, according to Fraser, the provision of representation for under-represented people which creates the opportunity for participatory decision-making. However, as Lockett and Shay point out, this “affirmative approach works for justice within a given framing or ‘grammar’ - it accepts the social structures and institutions that have framed the social practices that need changing” (2017, p. 2). For a truly transformative response what is needed instead is a “reframing” so that people excluded from the authorised contexts are given a chance to “democratis[e] the process of frame-setting itself” (Lockett & Shay, 2017, p. 12). In other words, to have what Arendt refers to as the “right to have rights” (1951). With respect to OER and OEP, it refers to the opportunity for all the relevant stakeholders to decide on what is really important educationally in order to avoid becoming “objects of charity or benevolence [...] or non-persons with respect to justice” (Fraser, 2005, p. 77). For just as national or provincial ministries of education and institutional agencies might be prescribing what counts as valuable knowledge, appropriate skills and desirable dispositions, so, perhaps unwittingly, do creators of OER.

Our conceptualisation of Fraser’s social justice dimensions, injustices, affirmative (or ameliorative) and transformative responses is summarised in Table 1.

Table 1: Conceptualisation of Fraser’s Social Justice Framework

Dimension	Injustices	Affirmative response: <i>addresses injustice with ameliorative reforms</i>	Transformative response: <i>addresses the root causes of inequality</i>
Economic	Maldistribution <i>of resources: economic inequality</i>	Redistribution: <i>of resources</i>	Restructuring <i>of economic model</i>
Cultural	Misrecognition: <i>attributes of people and practices accorded less respect, status inequality</i>	Recognition: <i>valued, respected, esteemed</i>	Re-acculturation: <i>plurality of perspectives, but always fallible</i>
Political	Misrepresentation: <i>lacking right to frame discourse, norms and policies</i>	Representation: <i>social belonging</i>	Re-framing: <i>parity of rights</i>

In her conceptualisation Fraser (2005) does not use the term “re-acculturation”; this is our suggestion for a transformative response to cultural misrecognition. We currently conceive of “re-acculturation” as a valuing of a plurality of perspectives, with the condition that all these perspectives are fallible and open to deliberation (following the tenets of social realism held by scholars such as Archer [2003]).

Methodology

Theoretical and Conceptual Framing

As this paper is a conceptual piece proposing a way in which to better understand how OER and OEP could be judged as promoting social justice, and whether these are ameliorative or transformative interventions (Fraser, 2005), the main theoretical assumptions and conceptual framing are drawn from Fraser (2005; 2009; 2012), our underlying critical realist position draws on Bhaskar (1997 [1975]) and our social realist position on Archer (2003). The main method is conceptual research and specifically a critical analysis (Epstein, 2001) to illustrate the presence or absence of ameliorative and/or transformative adoption of OER and enactment of OEP. Where an OER or OEP example was not immediately identifiable in the ROER4D studies, we have drawn on examples from other OER initiatives.

Data Analysis

The data which this paper primarily draws upon is the open data set compiled for the two meta-syntheses of the ROER4D project (Arinto et al., 2017; Hodgkinson-Williams et al., 2017). In this paper, we re-engaged with the meta-synthesis open data and chose examples to illustrate our slightly reworked version of Fraser’s social justice framework which we have tabularised (Table 1) for conceptual clarity and comprehensiveness.

Insights

With Fraser’s social justice framework in mind, we draw upon the data and insights gained from the ROER4D project in assessing how OER and OEP may or may not promote social justice – in an ameliorative or transformational way – according to their economic, cultural and political dimensions. In each section we focus on various injustices that affect students and educators, assessing how certain OER and OEP strategies represent an affirmative or transformative intervention in different circumstances.

Economic Dimension

Some of the most powerful arguments made by the open education community regarding OER is that they can improve access to educational materials for students and educators in comparably poorer contexts. They can lower the cost of: (1) learning for students who may need to buy materials (such as textbooks); (2) funding by governments, bursars and philanthropic foundations who sponsor textbooks; and (3) teaching for educators, or their institutions, who must pay licensing fees to incorporate portions of copyrighted materials into their classroom teaching materials. To this end OER is being implemented by policymakers in a number of Global South countries (e.g., Colombia [Toledo, 2017]; Nigeria), states (e.g., Karnataka, India), institutions (e.g., UCT) and inter-governmental agencies (e.g., UNESCO, Commonwealth of Learning).

Here we discuss some of the ways in which OER and OEP deal with the challenges associated with educational costs and copyright restrictions from the standpoint of students and educators, seeking to better understand the limits and opportunities provided by OER and OEP, and whether an intervention has neutral, ameliorative or transformative potential.

OER in Contexts of Severe Infrastructural Constraint: A Neutral or Negative Intervention

The broadest and most obvious type of economic maldistribution in the education system can be seen in the comparison between the levels of technological infrastructure available to students and educators in highly developed countries versus those in less developed ones. It can also be seen within many countries, with well-resourced educational institutions catering to an elite urban strata and poorly resourced institutions serving those in poorer or rural areas. This divergence is often characterised by institutions' comparably different levels of access to stable electricity provision, functional computer hardware and affordable broadband connectivity – key technological foundations upon which OER adoption is often premised.

A number of ROER4D studies focused on educational environments characterised by mild or severe technological constraints in Africa (Adala, 2017; Cox & Trotter, 2017; Wolfenden et al., 2017), India (Kasinathan & Ranganathan, 2017) and Afghanistan (Oates et al., 2017). Considering that OER is often promoted as a pedagogical innovation that helps partially overcome economic maldistribution (or “access”) issues, ROER4D researchers were keen to understand how OER interventions might impact education in these situations. What they found is that, in contexts of irregular power supply, inadequate computer access and/or low levels of internet connectivity, most particularly in rural areas (Kasinathan & Ranganathan, 2017), digitally mediated OER (the type that is most commonly meant when discussing them) are not appropriate to the needs of all students, although less so for educators. What students require most are printed educational materials that do not rely on continuous access to technological platforms for their use. Of course, OER need not be digitally mediated – as printed textbooks, for instance, can also be OER (Goodier, 2017) – but the most comprehensive elaboration of OERs' value proposition does rely on them being digitally shareable.

Thus, in cases where OER are produced in non-digital formats (i.e., printed and physically distributed like traditional educational resources such as the Siyavula textbooks in South Africa), they may reduce government expenditure if the production costs are sponsored (Goodier, 2017), but it is unlikely that they would do much to reduce any economic imbalances faced by the students and educators per se. Such an OER intervention would be neutral from a student and educator perspective regarding social justice.

More worryingly, the continued proliferation of digitally mediated OER may, in some ways, unintentionally contribute to a “digital education divide” and inadvertently reinforce economic inequality. It appears that, for students and educators to truly enjoy the benefits of OER, they require a certain minimum standard of technological infrastructure which would allow them to engage with OER in a meaningful way (de Oliveira Neto et al., 2017). This minimum standard need not require great national or institutional wealth, but at least a level of provision where there is no question as to the stability of the power supply, hardware accessibility and Internet availability. Hence, for students and educators, the full value proposition of OER requires that institutions receive the necessary infrastructural and technological inputs to be able to leverage OER. Moreover, creators of OER need to

be mindful of technologically impoverished contexts and make resources available in a variety of formats, including the use of open source software that can be quickly downloaded and inexpensively reused (Kasinathan & Ranganathan, 2017).

OER for Reducing the Cost of Education: An Ameliorative Intervention

With the cost of higher education being borne more and more by students and their families – and less and less by the state – the use of OER has been proposed as part of a broader strategy to bring down education costs (Hilton, 2016). As shown above, this outcome has indeed been noted in US community colleges (Chae & Jenkins, 2015), as the nominally free price of OER reduces the overall education cost burden that students bear. This type of intervention is inherently ameliorative because it reduces costs but does not change the economic foundations of the costly system. For example, in the ROER4D project Czerniewicz et al (2017) describe the value of MOOCs that are made available as OER for non-degree purposes. For many students seeking immediate relief from educational costs, this is the best that can be hoped for. In this sense, in students' discrete moments of engagement with educational materials, OER can overcome key inequalities produced by otherwise commercialised, expensive educational resources.

A more transformative approach to this challenge, not reported in any of the ROER4D studies, would be for governments and institutions to make the successful completion of quality-assured MOOCs or OER count as micro-credentials towards a qualification, as recently announced by New Zealand's regulated education and training system. Another transformative approach would be for the relevant government agencies to prioritise educational spending to the point that it is free for all students. OER could contribute to this, especially if entire course materials (not just single textbooks) were openly licensed for extensive public use. But fully free education is typically only possible through massive state intervention (such as in Sweden, where even tertiary education is free). Thus, with regard to dealing with economic inequality borne by high education costs, an OER intervention is an affirmative response, and a worthwhile effort given the challenges that most governments face in pursuing the more transformative approach.

OER for Abolishing the Cost of Teaching Resources for Educators: A Transformative Intervention

For educators, materials can be expensive to source for using as teaching materials due to the commercial nature of how materials are accessed, coupled with copyright restrictions, which ensure that materials remain bound by commercial constraints. In many parts of the world, higher education instructors cope with this by leveraging national fair use (or fair dealing) legislation which allows instructors to use portions of copyrighted works for educational purposes. This offers educators and students limited access to a specific resource but without requiring its purchase. This is a useful, ameliorative intervention which seeks to balance the need of educators to provide high quality materials to their students while protecting the commercial interests of the copyright owners.

Yet because the proliferation of digital technologies has made the sourcing and sharing of educational materials so easy, piracy has become a common strategy for students and instructors to overcome copyright restrictions (on a range of materials), allowing them full, yet "illegal", access to some educational resources (Czerniewicz, 2016). In the ROER4D project a few of the studies pointed out that students and even educators were not sure about the difference between materials available on the Internet and OER per se (Cox & Trotter, 2017; Kasinathan & Ranganathan, 2017) and so may have

unwittingly contravened copyright regulations. While this “illegal” approach is certainly transformative in dealing with the cost and access issues associated with copyrighted materials, it also opens up users to potential legal scrutiny, which limits the extent of usability of materials. It is a hazard that few worry about in their own private use of materials but which they would fear for any public sharing of the same.

In this situation, OER represents the more transformative intervention than both fair dealing and piracy as open materials overcome the cost challenges associated with copyright restriction, and it does so in a completely legal manner. As OER are free for educators to source and use, whether partially or in their totality, they are potentially transformative financially and legally.

This section on the economic dimension of social justice has focused primarily on a particular OEP, which is OER “use” (as opposed to OER adaptation or OER creation). This is because, in the economically deprived contexts we’re concerned with here, it is the greater use of OER (whether derived locally or, quite often, from the Global North) that appears to offer the most relevant OEP response to the issues raised by educational economic injustice. As we will see in the next section, however, while OER use may be a fitting response to the economic inequities faced by many students and educators, it may also inadvertently lead to greater cultural imbalances if OER is used uncritically.

Cultural Dimension

While the initial promotion of OER largely centred on ensuring broader access to educational materials faced by those in economically deprived circumstances (Daniel, Kanwar & Uvalić-Trumbić, 2006), scholars have begun to be more critical about the cultural impact that OER — much of it produced in the Global North — might have on users, especially those in the Global South (Cannell, Macintyre & Hewitt, 2015; Willems & Bossu, 2012). The question is: Might the proliferation of OER from culturally privileged regions lead to even greater inequalities in the global cultural sphere, as students and educators in low-resource environments become inundated with (and/or reliant upon) “free” OER from more highly resourced contexts?

For OER advocates, this is a difficult question because the economic value proposition of OER discussed above seems to be so virtuous as to make other considerations potentially less important. But according to ROER4D’s research, one of the key desires that educators from the Global South have for the educational materials they use is that they be locally relevant with respect to content (Kasinathan & Ranganathan, 2017), language (Oates et al., 2017; Sáenz et al., 2017) and pedagogy (Karunanayaka & Naidu, 2017; Wolfenden et al., 2017). Indeed, because educators are typically as concerned about the pedagogical import of their materials as they would be about their costs (or even more so), the question of a material’s relevance — its meaningfulness and utility in a given cultural context — is often the ultimate one when deciding whether to use it or not (Cox & Trotter, 2017).

As we will argue below, OER should not be viewed as culturally neutral materials that can be used without attendant cultural ramifications. In this section we assess how three forms of OEP — OER use “as is”, OER adaptation through translation, and OER adaptation through content remixing — address the cultural dimension of social justice. Throughout, we will pay close attention to how the notion of pedagogical suitability can inflect the outcomes of these three types of OEP.

Using OER “as is”: Reproducing Cultural Inequality?

The use of an OER “as is”, without modification, is the quickest and easiest way to engage with OER pedagogically. In the Open Education cycle (Figure 1), this OEP use is referred to as “copying”. In some instances, such as when the OER is an image or short video that succinctly captures an intended educational lesson, then this copy-and-paste form of OEP makes sense. The unmodified OER would hopefully be the best possible example of the knowledge that the educator is hoping for the students to engage with.

In the cross-regional study undertaken by de Oliveira Neto et al (2017), among 295 randomly selected educators at 28 higher education institutions in nine countries in the Global South, 51% of respondents reported that they had used OER at least once; 25% stated that they had never used OER; and 24% were uncertain whether they had used OER or not. Of the 4784 students surveyed in the same study, 39% said that they had used OER at least once; 26% reported that they had never before used OER; and 35% were unsure whether they had used OER or not (de Oliveira Neto & Cartmill, 2017). Some of the other qualitative ROER4D studies confirmed that copying originals seemed to be a common practice. In Mongolia, for example educators confirmed that they were more likely to use OER “as is”, if at all (Zagdragchaa & Trotter, 2017).

As OER come in a variety of shapes and formats (courses, modules, lesson plans, etc.), the use of OER without alteration can be problematic if it ends up propagating hegemonic forms of knowledge and values, reinforcing the cultural power and prestige of the knowledge domain in which the OER was created rather than that in which it is used. This can reproduce a neo-colonial form of so-called “knowledge transfer”, privileging dominant discourses over local ones and external frames of reference over internally relevant ones. This is not to say that all such use of OER “as is” is necessarily culturally problematic but just that this particular type of OEP is often the least pedagogically critical as it relies heavily on the distant OER creator to develop the terms by which the knowledge embedded in the OER can be understood and applied locally.

To guard against this possibility, a more critical approach is necessary to ensure that OER use does not inadvertently lead to increased cultural injustice. In this case, criticality means situating the knowledge claims of an OER within a broader epistemological and cultural context, allowing learners to grasp the provisionality and locatedness of those claims. It encourages students to engage with the OER but in a way that allows them to understand that the knowledge offered through it is likely not “universal” and that it exists within a complex space of competing knowledge claims, some of which are more or less relevant and compelling for their circumstances.

Translating OER: Culturally Ambivalent OER Adaptation

In cases where educators are able to find relevant OER to use in their classrooms, these OER may not be in the languages most suited for their students. There might be a range of useful resources in English or some other widely-spoken language but these may be insufficient in contexts where students learn better in other languages which are not well-represented in OER. A practical measure that educators can employ to ensure that an OER is more linguistically accessible is to translate the OER (if they have the linguistic capacity to do so).

In the ROER4D Afghanistan study, teachers specifically requested OER in Pashto (Oates et al., 2017) which the Darakht-e Danesh Library in Afghanistan, supported by the Canadian Women for Woman in Afghanistan, addressed by translating existing English OER into Dari and Pashto with a team of bilingual Afghan volunteers. Sri Lankan teachers reported translating OER into Sinhala and Tamil (Karunanayaka & Naidu, 2017). Interestingly in Mongolia, educators were ambivalent about translating English OER into Mongolian because, even though it was a preferred language of engagement for students, those same students were reasonably proficient in English already, which meant that the time educators spent translating English OER into Mongolian might not yield as much educationally than if they spent that time doing other activities (Zagdragchaa & Trotter, 2017).

As an OEP, the adaptation of OER through translation has the virtue of being able to make a broader range of information and knowledge locally comprehensible. This by itself is educationally valuable, an affirmative intervention. However, translation does not necessarily make foreign language resources more locally “meaningful” or “relevant”. While translation may change the linguistic interface through which students engage with this knowledge, it may not do much to alter the underlying frames of reference upon which that knowledge is built. In contexts where the translation of foreign language OER might contribute to a broader erosion of locally derived ways of knowing, this otherwise pedagogically practical form of OEP might also inadvertently reinforce or deepen prevailing cultural inequalities.

As suggested above, the key to guarding against this would be ensure that the translated OER is treated critically. Students would be encouraged to engage the OER with care, keeping in mind that despite the linguistic comprehensibility of the OER, it derives from a non-local cultural context, one that might have a history in suppressing local knowledge traditions (e.g., the common use of British educational materials in South Africa, etc.). This recognition does not invalidate the potential educational utility of the OER in this particular context, but suggests that educators and students must remain mindful of the cultural consequences of this linguistically facile interaction with foreign materials.

OER Remixing: Affirmative and/or Transformative, Critical Pedagogy

The two OEP discussed above do not inherently demand a critical pedagogical approach, however, another type of OEP — OER adaptation through content remixing — inherently calls for a more complex, and hopefully more critical form of pedagogical engagement, as the educator integrates multiple materials into a new coherent educational resource appropriate for a local context.

Remixing educational materials — whether partially or completely OER — allows educators to develop the most locally relevant educational experience for students as each of the resources included is done so on the basis that they are the best materials for their particular element of a broader teaching mission. They have not been simply copied in “as is” but revised and integrated into a larger content mix that is pedagogically deliberate. This invites a pedagogically critical approach that enhances the likelihood that the mixed variety of educational sources would not exacerbate cultural inequalities but reduce or challenge them. We argue that this is a transformative intervention. Of course, critical engagement is necessary for any type of pedagogy to battle against cultural inequality, but OER remixing as a type of OEP is inherently more likely to push educators to do so than simple OER use “as is” or OER translation.

Thus, as we have suggested here, different types of OEP are, by their nature, more or less likely to promote the kind of critical engagement with OER that is required for promoting cultural justice, at least with regards to this quite specific element of course materials preparation. However, the cross-regional ROER4D survey revealed that only 18% of the 295 educators and 6% of the 4784 students reported some kind of adaptation of OER (de Oliveira Neto et al., 2017). But therein lies a conundrum: although OER can be licenced with a Share-Alike licence, which means that they have to be re-circulated, this is not the case for licenses such as Attribution only (i.e., CC-BY). By implication this means that OER can be adapted without the necessity of sharing these revised or re-mixed materials publicly. The ROER4D studies show some examples of where educators are adapting OER, but then sharing these localised materials within a restricted password protected learning management system (Karunanayaka & Naidu, 2017). More problematically, educators did not always know where to re-share these adapted materials (Adala, 2017). Fortunately, a number of the ROER4D studies also included workshops for educators (Cox & Trotter, 2017; Kasinathan & Ranganathan, 2017; Mishra & Singh, 2017; Sáenz et al., 2017) to model OER adaptation. For instance, the in-service teachers in all nine provinces in Sri Lanka systematically documented their OER adaptation process (Karunanayaka & Naidu, 2016).

This suggests that, for the most part, OER have been valued more for their ease and practicality of use (“as is”) rather than their ability to be remixed into a critically engaged set of resources. This does not mean that educators in the Global South are not using critically engaged materials in their teaching, but just that they are yet to formally share the re-mixed OER on a public platform. Going forward, open advocates need to consider the cultural dynamics of varying OEP and thus focus less on promoting the use of OER as is and push for the more critical form of OER remixing which has the greater likelihood of promoting social justice.

However, there is one major OEP that would have far more profound transformative consequences for cultural justice: the creation and sharing of OER by educators themselves. This, along with other OEP, will be discussed below under the political dimension.

Political Dimension

While much of the OER research has been focused on the economic and cultural dimensions, so far only a small number of studies have taken the political issues of power (Farrow, 2017), asymmetries of power (Olakulehin & Singh, 2013; Phelan, 2012) and intellectual property rights (McAndrew & Cropper, 2011) into account. The question is: Might intellectual property rights restrictions and the predominance of educational publishing in the Global North unwittingly entrench current asymmetries of power for educators and students in the Global South?

Formally Allowing Educators to Publicly Share their Teaching Materials: Affirmative OEP Intervention

In most countries studied in ROER4D, educators do not possess copyright of the teaching materials that they develop. National copyright laws typically state that any works produced during the course of employment belong to the employer. In educational settings, this employer may be the national government, a state or provincial government, or an educator’s institution. In the higher education sector, many institutions are also guided by their own intellectual property (IP) policies that reinforce

this principle of employer ownership of employees' work products. This usually includes the teaching lessons, tests and examinations that educators create. The problem with this is that educators are then only legally allowed to share their teaching and assessment materials with the students in their classroom, not the world beyond.

An ameliorative intervention would be to alter the institutional IP policy to allow educators to possess copyright of their own teaching materials, thus allowing them to openly license them and share them publicly. This is the approach taken at UCT (Cox & Trotter, 2017) where the institution automatically assigns copyright to authors. UCT has also engaged in other ameliorative interventions by releasing so-called "open" MOOCs, which have deliberately created and/or use OER, allowing educators to share their teaching materials with a broad and interested public (Czerniewicz et al., 2017).

But a more transformative intervention would be for a national or provincial/state government — or more typically an institution or multi-institution education system — to collate its mass of IP (teaching materials) and share them as OER on a mass scale. MIT's OpenCourseWare initiative paved the way in this regard, sharing many of the course materials used in the classroom with the public. In the Global South, some countries such as Colombia adopted a higher education initiative via their National Strategy for Digital Open Educational Resources (Recursos Educativos Digitales Abiertos) (Sáenz et al, 2017; ROER4D, 2017). In India, the Karnataka State partnered with a non-governmental organisation, IT for Change, to create the Karnataka Open Educational Resources (KOER) project to share locally developed and/or adapted OER (Kasinathan & Ranganathan, 2017).

However, in most cases in the Global South, few governments or institutions have the awareness, resources or volition to mobilise a country, state or institution-wide effort to share their IP as OER. The more feasible option in most cases — which is affirmative, not transformative — would be to allow individual educators to share their own teaching materials as OER. This is a very low-cost alternative to the high-cost efforts required for full-scale institutional mobilization.

Allowing Educators to Re-Circulate Each Other's Materials Openly: Transformative OEP Intervention

While intellectual property policies reduce the opportunities that educators have to share their own materials publicly, copyright legislation also makes it virtually impossible for them to share any of that content if it includes portions of others' fully copyrighted teaching materials, which may have been included (re-mixed) in the new teaching output. While fair-use policies might allow educators to legally use small portions of copyrighted material without formal permission in their classrooms, the limits on fair-use practices is vague in many jurisdictions, thus, many educators would not want to take a risk of running afoul of copyright legislation by sharing their teaching materials openly if it included material by others. A few ROER4D project researchers report that educators do re-circulate others' educational materials on an informal basis, usually via email, which is not technically legal but does serve an important community of practice among educators (Kasinathan & Ranganathan, 2017).

A transformative response would be to alter the current IP legislation to allow for educational resources, properly attributed to the authors, to be copied and shared without formal permission or obligatory fee. This view is in line with the recent joint conclusions reached by the European Trade Union Committee for Education (ETUCE) — European Federation of Education Employers (EFEE) — COMMUNIA Conference on Copyright in Higher Education and Research in the EU in April 2018.

Creating OER: Transformative OEP Intervention Economically, Culturally and Politically

The most transformative form of OEP that educators can engage in is OER creation. Assuming they have the legal right to create and share their coursework as OER, this OEP has broad ramifications for social justice — economically, culturally and politically — in the educational field.

Economically, the creation and sharing of OER by an educator overcomes many of the challenges associated with the strictures of the publishing industry, especially concerning its need for revenue (including profits) and its use of copyright as the mechanism to create artificial scarcity and commercial value for a resource. By creating OER, an educator can overcome the cost challenges that users face by offering the resource for free, and the legal restrictions of full copyright by making the resource open, while still retaining attribution of the original author/s.

Culturally, the creation of OER allows educators to contribute to the global production of knowledge without regard for various gatekeepers (publishers, peers, etc.) who might otherwise — intentionally or not — stifle their voices. This is especially true for educators in the Global South whose knowledge has often been “mis-recognised” or unacknowledged vis-à-vis that from the Global North. By creating their own OER, southern educators can play a greater role in the globally competitive production of knowledge, insisting on their own epistemic stance. This is true not only for producing information and data but theory as well (Comaroff & Comaroff, 2016; Connell, 2007). Indeed, because of the massively transformative potential of OER creation in the cultural sphere — in which educators can create and distribute resources of local relevance without catering to the biases or preferences of (often foreign) publishers — this potential provides the most persuasive rationale for engaging in OER creation for many educators in the Global South. ROER4D researchers highlighted the belief that “all education should be free” (Cox & Trotter, 2017, p. 335) and called for the inclusion of other stakeholders in education. For example, the educators of UCT’s *Education for All: Disability, Diversity and Inclusion* MOOC, specifically mentioned the need for building partnerships between “schools, parents, community members and disabled people’s organisations” (Czerniewicz et al., 2017, p. 367). OER creation also raises the prominence of local languages. For example, in the ROER4D projects Chilean teachers created a Wikibook in Spanish (Westermann Juárez & Venegas Muggli, 2017) and Indian educators contributed resources in Kannada to the Karnataka Open Educational Resources (KOER) repository.

Politically, OER creation allows educators to participate directly in knowledge production, thereby disrupting traditional power relations between publishers, knowledge producers in the Global North and knowledge producers in the Global South. It bypasses the (mis-) framing mechanisms of publishing enterprises that often privilege the knowledge and theory of educators from the north. It also goes beyond a more ameliorative approach, which would simply include more participation and content production from educators from the Global South in already established publishing ventures (such as putting them on editorial boards of northern publishing companies, and publishing a greater percentage of content from the south). This would mildly alter the current mis-framing that animates the north-south knowledge divide, but it would not challenge or overturn it.

The creation and publication of materials by educators in the Global South (and often “for” other educators in the region) can do that in a more transformative way, as it bypasses, and therefore challenges, the current knowledge production regime, at least as it concerns educational materials. In

the ROER4D projects a number of educators produced original OER to be shared publicly, for example, contributions of Mathematics and Science OER in both Kannada and English on to the KOER Mediawiki platform (Kasinathan & Ranganathan, 2017), as part of the UCT MOOCs project (Czerniewicz et al., 2017) and the teacher development project in Colombia (Sáenz et al, 2017).

Framework for Analysing OER, OEP and Social Justice

Fraser’s tripartite theory of social justice has provided a lens for analytically disaggregating the intertwined dimensions of how OER and OEP can be said to offer “parity of participation” in education (Fraser, 2005), economically, culturally and politically.

In summarising the relationship between economic injustice and a proposed OER intervention, the “use” of OER (by students and educators) offers varying advantages depending on the context. For those in contexts of severe infrastructural constraint, OER do not appear capable of overcoming the challenges of those constraints. In many instances, they may reinforce them. However, in situations where students seek relief from the costs imposed by an expensive education, OER provision can serve to lower their total costs as they minimise the fees associated with certain materials. This is not a comprehensive or transformative intervention but an ameliorative and practical one, given the complexity of providing a completely free education for students. For educators who also must deal with the expenses involved in sourcing and using materials, they can of course overcome this challenge partially through fair-use practices or piracy but these are less transformative (and in piracy’s case, less legally sustainable) than simply using OER, which are financially and legally free to the user. A transformative response would also ensure that students and educators have a stable power supply, adequate access to functional computing devices and affordable and stable connectivity (in rural environments in particular); government funding for OER creation, adaptation and dissemination; and a mechanism for acceptance of OER or MOOCs as micro-credentials to lower the cost of formal education.

With respect to the cultural influences of OER, it is important to be aware that using OER “as is” (copying) may reduce immediate costs, but may unintentionally reinforce epistemological and linguistic inequalities. Likewise translation, unless undertaken critically, may perpetuate cultural “misrecognition” (Fraser, 2005) by reinforcing dominant viewpoints. An ameliorative remedy would locate and incorporate OER used “as is” within local epistemological and cultural contexts thoughtfully and prudently and then re-distribute to accentuate different interpretations. Transformative “re-acculturation” would include re-mixing OER critically to engage with and challenge hegemonic perspectives; creating original OER and sharing these and/or remixed teaching and learning materials publicly. Moreover, educators in the Global North can play their part in reducing the social injustices of the global education system — especially the cultural side of it — through engaging with more OER from the Global South and incorporating them into their teaching.

Political misrepresentation can be ameliorated by more favourable IP regulations within countries, states or institutions that provide permission to educators to create and share OER on publicly accessible platforms, unless the institution itself takes on this role. Transforming political injustices would require a more extensive international revision of current IP rights that allow for properly attributed educational resources to be created, adapted and shared without formal permission as the default practice.

Comprehensively, or treating these three dimensions at the same time, OER creation by educators from the Global South goes the farthest as an OEP in transforming educational justice economically, culturally and politically. As an activity, it offers the broadest transformative potential.

In Table 2, the economic, cultural and political social injustices are summarised along with their associated ameliorative responses (redistribution, recognition and representation) as well as their possible transformative responses (re-structuring, re-acculturation and re-framing).

Table 2: OER, OEP and Social Justice Framework

Dimension	Injustices	Ameliorative (Affirmative) response:	Transformative response:
Economic	<p>Maldistribution:</p> <ul style="list-style-type: none"> • <i>Intermittent power supply</i> • <i>Inadequate access to computing devices</i> • <i>Expensive and/or poor connectivity</i> • <i>Only digital OER</i> 	<p>Redistribution:</p> <ul style="list-style-type: none"> • <i>Printed OER</i> • <i>OER available in various formats, including Open source Software</i> • <i>MOOCs where the resources are OER</i> 	<p>Restructuring:</p> <ul style="list-style-type: none"> • <i>Stable power supply, adequate access to functional computing devices and affordable and stable connectivity in rural environments in particular</i> • <i>Government and/or institutional funding for OER creation, adaptation and dissemination</i> • <i>Mechanism for acceptance of OERs or MOOCs as micro-credentials</i>
Cultural	<p>Misrecognition:</p> <ul style="list-style-type: none"> • <i>Using OER “as is” (copying)</i> • <i>Translating OER uncritically</i> 	<p>Recognition:</p> <ul style="list-style-type: none"> • <i>Locating and incorporating</i> • <i>OER used “as is” within local epistemological and cultural contexts</i> • <i>Translating OER into local languages prudently</i> 	<p>Re-acculturation:</p> <ul style="list-style-type: none"> • <i>Re-mixing OER critically to engage with and challenge hegemonic perspectives</i> • <i>Sharing their remixed teaching and learning materials publicly</i> • <i>Creation of OER</i>
Political	<p>Misrepresentation:</p> <ul style="list-style-type: none"> • <i>IP legislation inhibiting educators from sharing materials created in the course of educators’ work</i> 	<p>Representation:</p> <ul style="list-style-type: none"> • <i>Permission by employer to create and share OER created in the course of educators’ work</i> • <i>Creating and sharing OER on a publicly accessible platform</i> 	<p>Re-framing:</p> <ul style="list-style-type: none"> • <i>Internationally alter current IP rights to allow for properly attributed educational resources to be created, adapted and shared without formal permission</i> • <i>Creation of OER and engagement of OEP that balances power on educational materials and authorities</i>

Conclusion

In this paper we have proposed the use of Fraser’s (2005) concept of social justice to critically engage with how OER, and their implicit OEP, might promote social justice in a Global South education

context. We employed a slightly modified version of Fraser's tripartite theory to assist in distinguishing how the adoption of OER and enactment of OEP have responded to economic inequalities, cultural inequities and political exclusions in education and which of these could be construed as being ameliorative or transformative responses. In short, the use of OER "as is" can be a relatively straightforward ameliorative response to lowering development costs as well as direct costs to the student, educator, institution or funder, but can be seen as an "assimilationist" response (Lockett, personal communication, September 11, 2018). Transformative remedies will require longer term financial and organisational (i.e., accreditation of micro-credentials) restructuring to optimise the value proposition of OER.

On a more positive note, OER and their underlying OEP are already providing some ameliorative cultural changes as educators and even institutions incorporate OER within local contexts which includes translating OER into local languages. However, these localised OER are not always re-disseminated on public platforms thereby unintentionally lowering the potential value of these localised resources. The longer-term transformative challenge is to re-acclurate (our newly coined term) educational materials and pedagogical practices, to create or remix OER that critically engage with and challenge hegemonic perspectives, to deliberately encourage a more deliberately "pluralist" perspective (Lockett, personal communication, September, 11, 2018) and make these new or adapted OER available publicly.

Challenges still remain at the political level where national and/or institutional IP legislation and/or regulations often restrict educators from sharing their teaching and learning materials. Fortunately, there are governments and institutions that are leading the way in providing more favourable IP rights, but to be truly transformative an overhaul of current IP legislation and agreements would be required.

With all the good intentions of the open education movement, unless the economic, cultural and political dimensions of social justice are adequately addressed, amelioratively in the short term and transformatively in the longer term, the value proposition of OER, and their underlying OEP, will most likely not be fulfilled in the Global South.

Acknowledgements

We wish to thank Kathy Lockett and ROER4D colleagues Tess Cartmill and Thomas King for contributing to our initial thinking about social justice and OER, assistance with the meta-synthesis coding and thoughtful comments on the paper. We would also like to thank the anonymous reviewers of this paper and the opportunity to publish in *JLAD*.

References

- Abramovich, S., & McBride, M. (2018). Open education resources and perceptions of financial value. *The Internet and Higher Education*, 39, 33–38. Retrieved from <https://doi.org/10.1016/j.iheduc.2018.06.002>
- Adala, A. (2017). Assessing the Impact of Access to and Availability of OER on the Emergence and Extent of Open Education Practices in Sub-Saharan Africa: The Case of an ICT-Integrated Multinational Teacher Education Program in Math and Science. Presented at *OEGlobal 2017, 8-10 March 2017. Cape Town, South Africa*. Retrieved from <https://conference.oeconsortium.org/2017/presentation/assessing-the-impact-of-access-to-and-availability-of-oer-on-the-emergence-and-extent-of-open-education-practices-in-sub-saharan-africa-the-case-of-an-ict-integrated-multinational-teacher-education-p/>

- Arendt, H. (1951). *The origins of totalitarianism*. Orlando, FL: Harcourt Inc.
- Arinto, P. B., Hodgkinson-Williams, C., King, T., Cartmill, T., & Willmers, M. (2017). Research on Open Educational Resources for Development in the Global South: Project landscape. In C. Hodgkinson-Williams & P. B. Arinto (Eds.), *Adoption and impact of OER in the Global South* (pp. 3–26). Retrieved from <https://doi.org/10.5281/zenodo.1038980>
- Arinto, P. B., Hodgkinson-Williams, C., & Trotter, H. (2017). OER and OEP in the Global South: Implications and Recommendations for Social Inclusion. In C. Hodgkinson-Williams & P. B. Arinto (Eds.), *Adoption and impact of OER in the Global South* (pp. 577–592). Retrieved from <https://doi.org/10.5281/zenodo.1043829>
- Arumugam, P. V. (2016). Open Educational Resources and Cost Savings Efforts: Lessons from WOU. *International Journal on Open and Distance e-Learning*, 2(2), 49–60. Retrieved from http://www.ijodel.com/wp-content/uploads/2017/02/005_Arumugam.pdf
- Bajinath, N. (2018). Learning for Development in the Context of South Africa: Considerations for Open Education Resources in Improving Higher Education Outcomes. *Journal of Learning for Development*, 5(2), 87–100. Retrieved from <http://www.jl4d.org/index.php/ej4d/article/view/299>
- Bhaskar, R.A. (1997 [1975]). *A realist theory of science*. London: Verso.
- Cannell, P., Macintyre, R., & Hewitt, L. (2015). Widening Access and OER: Developing New Practice. *Widening Participation and Lifelong Learning*, 17(1), 64–72. Retrieved from <https://doi.org/10.5456/WPLL.17.1.64>
- Chae, B., & Jenkins, M. (2015). *A qualitative investigation of faculty open educational resource usage in the Washington Community and Technical College System: Models for support and implementation*. Washington, D.C.: Washington State Board for Community & Technical Colleges. Retrieved from https://oerknowledgecloud.org/sites/oerknowledgecloud.org/files/FINAL_OER_USE_WA_CTC.pdf
- Comaroff, J., & Comaroff, J. L. (2016). *Theory from the South: Or, how Euro-America is evolving toward Africa*. New York: Routledge.
- Connell, R. (2007). *Southern theory: The global dynamics of knowledge in Social Science*. Cambridge: Polity Press.
- Cox, G., & Trotter, H. (2017). Factors Shaping Lecturers' Adoption of OER at Three South African Universities. In C. Hodgkinson-Williams & P. B. Arinto (Eds.), *Adoption and impact of OER in the Global South* (pp. 287–347). Retrieved from <https://doi.org/10.5281/zenodo.601935>
- Crissinger, S. (2015, October 21). A Critical Take on OER Practices: Interrogating Commercialisation, Colonialism and Content. *The library with the lead pipe*. Retrieved from <http://www.inthelibrarywiththeleadpipe.org/2015/a-critical-take-on-oer-practices-interrogating-commercialization-colonialism-and-content/>
- Czerniewicz, L. (2016). Student Practices in Copyright Culture: Accessing Learning Resources. *Learning, Media and Technology*, 42(2), 171–184.
- Czerniewicz, L., Deacon, A., Walji, S., & Glover, M. (2017). OER in and as MOOCs. In C. Hodgkinson-Williams & P. B. Arinto (Eds.), *Adoption and impact of OER in the Global South* (pp. 349–386). Retrieved from <https://doi.org/10.5281/zenodo.604414>
- de Oliveira Neto, J. D., Pete, J., Daryono & Cartmill, T. (2017). OER Use in the Global South: A Baseline Survey of Higher Education Instructors. In C. Hodgkinson-Williams & P. B. Arinto (Eds.), *Adoption and impact of OER in the Global South* (pp. 69–118). Retrieved from <https://doi.org/10.5281/zenodo.599535>
- Epstein, W. (2001). Critical Analyses. In Thyer, B. A. *The handbook of social work research methods* (pp. 413–424). Thousand Oaks, CA: SAGE Publications Ltd. DOI: 10.4135/9781412986182

- ETUCE-EFEE-COMMUNIA (2018, April, 11). *Joint Conclusions from the ETUCE-EFEE-COMMUNIA Conference on Copyright in Higher Education and Research in the EU*. Retrieved from https://www.csee-etu.org/images/attachments/Joint-Conclusions-ETUCE-EFEE-COMMUNIA_Copyright-conference.pdf
- Farrow, R. (2017). Open Education and Critical Pedagogy. *Learning, Media and Technology*, 42(2), 130–146. Retrieved from <https://doi.org/10.1080/17439884.2016.1113991>
- Fraser, N. (2005). Reframing Justice in a Globalizing World. *New Left Review*, 36, 69–88. Retrieved from <https://newleftreview.org/II/36/nancy-fraser-reframing-justice-in-a-globalizing-world>
- Fraser, N. (2009). Feminism, Capitalism and the Cunning of History. *New Left Review*, 56, 97–117. Retrieved from <https://newleftreview.org/II/56/nancy-fraser-feminism-capitalism-and-the-cunning-of-history>
- Fraser, N. (2012). On Justice. *New Left Review*, 74, 41–51. Retrieved from <https://newleftreview.org/II/74/nancy-fraser-on-justice>
- Goodier, S. (2017). Tracking the Money for Open Educational Resources in South African Basic Education: What we don't Know. *The International Review of Research in Open and Distributed Learning*, 18(4). Retrieved from <http://dx.doi.org/10.19173/irrodl.v18i4.2990>
- Hendricks, C., Reinsberg, S., & Rieger, G. (2017). The Adoption of an Open Textbook in a Large Physics Course: An Analysis of Cost, Outcomes, Use, and Perceptions. *The International Review of Research in Open and Distributed Learning*, 18(4), 78–99. Retrieved from <http://www.irrodl.org/index.php/irrodl/article/view/3006>
- Hilton III, J. (2016). Open Educational Resources and College Textbook Choices: A Review of Research on Efficacy and Perceptions. *Educational Technology Research and Development*, 64(4), 573–590. Retrieved from <https://link.springer.com/article/10.1007%2Fs11423-016-9434-9>
- Hodgkinson-Williams, C., & Arinto, P. B. (Eds.) (2017). *Adoption and impact of OER in the Global South*. Cape Town & Ottawa: African Minds, International Development Research Centre & Research on Open Educational Resources. Retrieved from <https://doi.org/10.5281/zenodo.1038980>
- Hodgkinson-Williams, C., Arinto, P. B., Cartmill, T., & King, T. (2017). Factors Influencing Open Educational Practices and OER in the Global South: Meta-synthesis of the ROER4D project. In C. Hodgkinson-Williams & P. B. Arinto (Eds.), *Adoption and impact of OER in the Global South* (pp. 27–67). Retrieved from <https://doi.org/10.5281/zenodo.1037088>
- Karunanayaka, S. P., & Naidu, S. (2017). Impact of Integrating OER in Teacher Education at the Open University of Sri Lanka. In C. Hodgkinson-Williams & P. B. Arinto (Eds.), *Adoption and impact of OER in the Global South* (pp. 459–498). Retrieved from <https://doi.org/10.5281/zenodo.600398>
- Kasinathan, G., & Ranganathan, S. (2017). Teacher Professional Learning Communities: A Collaborative OER Adoption Approach in Karnataka, India. In C. Hodgkinson-Williams & P. B. Arinto (Eds.), *Adoption and impact of OER in the Global South* (pp. 499–548). Retrieved from <https://doi.org/10.5281/zenodo.601180>
- Lawrence, C. N., & Lester, J. A. (2018). Evaluating the Effectiveness of Adopting Open Educational Resources in an Introductory American Government Course. *Journal of Political Science Education*, 1-12. DOI: 10.1080/15512169.2017.1422739
- McAndrew, P., & Cropper, K. (2011). *Open Educational Resources and Intellectual Property rights*. Moscow: UNESCO Institute for Information Technologies in Education.
- Mishra, S., & Singh, A. (2017). Higher Education Faculty Attitude, Motivation and Perception of Quality and Barriers Towards OER in India. In C. Hodgkinson-Williams & P. B. Arinto (Eds.), *Adoption and impact of OER in the Global South* (pp. 425–458). Retrieved from <https://doi.org/10.5281/zenodo.602784>

- Nilsson, M. (2008). Rethinking Redistribution and Recognition: Class, Identity, and the Conditions for Radical Politics in the “Postsocialist” Age. *New Proposals: Journal of Marxism and Interdisciplinary Inquiry*, 2(1), 31-44. Retrieved from <https://ojs.library.ubc.ca/index.php/newproposals/article/view/119/235>
- Oates, L., Goger, L. K., Hashimi, J., & Farahmand, M. (2017). An Early Stage Impact Study of Localised OER in Afghanistan. In C. Hodgkinson-Williams & P. B. Arinto (Eds.), *Adoption and impact of OER in the Global South* (pp. 549–573). Retrieved from <https://doi.org/10.5281/zenodo.600441>
- Olakulehin, F., & Singh, G. (2013). Widening Access Through Openness in Higher Education in the Developing World: A Bourdieusian Field Analysis of Experiences from the National Open University of Nigeria. *Open Praxis*, 5(1), 31-40. Retrieved from <https://www.learntechlib.org/p/130656/>
- Orwenjo, D. O. & Erastus, F. K. (2018). Challenges of Adopting Open Educational Resources (OER) in Kenyan Secondary Schools: The Case of Open Resources for English Language Teaching (ORELT). *Journal of Learning for Development*, 5(2), 148-162. Retrieved from <http://www.jl4d.org/index.php/ejl4d/article/view/282/317>
- Pande, J. (2018). Opportunities and Challenges in the Adoption of Open Educational Resources for Course Development: A Case Study of Uttarakhand Open University. *International Journal of Information Technology*, 10(3), 339-347. Retrieved from <https://link.springer.com/article/10.1007%2Fs41870-018-0126-z>
- Pina, A. A., & Moran, K. A. (2018). Effects of an Open Educational Resource initiative on Students, Faculty and Instructional Designers. *Online Journal of Distance Learning Administration*, 11(2). Retrieved from https://www.westga.edu/~distance/ojdla/summer212/pina_moran212.html
- Phelan, L. (2012). Politics, Practices, and Possibilities of Open Educational Resources. *Distance Education*, 33(2), 279-282. Retrieved from <https://doi.org/10.1080/01587919.2012.692070>
- ROER4D (Research on Open Educational Resources for Development). (2017). *Spotlight on OER Policy in the Global South: Case studies from the Research on Open Educational Resources for Development (ROER4D) project*. Cape Town. Research on Open Educational Resources for Development. Retrieved from <http://dx.doi.org/10.5281/zenodo.844695>
- Sáenz, M. P., Hernandez, U., & Hernández, Y. M. (2017). Collaborative Co-creation of OER by Teachers and Teacher Educators in Colombia. In C. Hodgkinson-Williams & P. B. Arinto (Eds.), *Adoption and impact of OER in the Global South* (pp. 143–185). Retrieved from <https://doi.org/10.5281/zenodo.604384>
- Tait, A. W. (2018). Education for Development: From Distance to Open Education. *Journal of Learning for Development*, 5(2), 101–115. Retrieved from <http://www.jl4d.org/index.php/ejl4d/article/view/294>
- Toledo, A. (2017). Open Access and OER in Latin America: A Survey of the Policy Landscape in Chile, Colombia and Uruguay. In C. Hodgkinson-Williams & P. B. Arinto (Eds.), *Adoption and impact of OER in the Global South* (pp. 121–141). Retrieved from <https://doi.org/10.5281/zenodo.602781>
- Westermann Juárez, W., & Venegas Muggli, J. I. (2017). Effectiveness of OER use in First-year Higher Education Students' Mathematical Course Performance: A Case Study. In C. Hodgkinson-Williams & P. B. Arinto (Eds.), *Adoption and impact of OER in the Global South* (pp. 187–229). Retrieved from <https://doi.org/10.5281/zenodo.601203>
- Willems, J., & Bossu, C. (2012). Equity Considerations for Open Educational Resources in the Glocalization of Education. *Distance Education*, 33(2), 185–199. Retrieved from <http://www.tandfonline.com/doi/abs/10.1080/01587919.2012.692051>
- Wolfenden, F., Auckloo, P., Buckler, A., & Cullen, J. (2017). Teacher Educators and OER in East Africa: Interrogating Pedagogic Change. In C. Hodgkinson-Williams & P. B. Arinto (Eds.), *Adoption and impact of OER in the Global South* (pp. 251–286). Retrieved from <https://doi.org/10.5281/zenodo.600424>

World Bank. (2017). *World Development Indicators 2017*. Washington, D.C.: World Bank. Retrieved from <https://openknowledge.worldbank.org/handle/10986/26447>

Zagdragchaa, B., & Trotter, H. (2017). Cultural-historical Factors Influencing OER Adoption in Mongolia's Higher Education Sector. In C. Hodgkinson-Williams & P. B. Arinto (Eds.), *Adoption and Impact of OER in the Global South* (pp. 389–424). Retrieved from <https://doi.org/10.5281/zenodo.599609>

Authors

Dr. Cheryl Hodgkinson-Williams is an Associate Professor in the Centre for Innovation in Learning and Teaching (CILT) at the University of Cape Town (UCT), South Africa. She was the Principal Investigator of the IDRC-funded international Research on OER for Development (ROER4D) project (2013-2017). Email: cheryl.hodgkinson-williams@uct.ac.za

Henry Trotter is a researcher at the Centre for Innovation in Learning and Teaching (CILT) at the University of Cape Town (UCT), South Africa, and worked for the Research on OER for Development (ROER4D) project. Email: trotterhenry@hotmail.com

Cite this paper as: Hodgkinson-Williams, C. A., & Trotter, H. (2018). A Social Justice Framework for Understanding Open Educational Resources and Practices in the Global South. *Journal of Learning for Development*, 5(3), 204-224.