Distance Education

Equity considerations for open educational resources in the glocalization of education

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Equity considerations for open educational resources in the glocalization of education

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Open educational resources (OER) have become new buzzwords in the glocalization of education. While OER are often espoused as enabling educational equity, the reality is not always the case. Looking only at the positives of new educational methods can mask perpetuating challenges, which makes the open aspect of OER a misnomer. Taking an alternative stance, this article critically evaluates the broader notion of OER through the lens of equity. It contends that while equity reasons often underpin the provision of OER, challenges continue to be experienced by some in accessing open digital materials for learning. This article explores some of these issues and argues that equity considerations are fundamental in OER design.

Keywords: education; equity; e-inclusion; open educational resources

Introduction

Historically, distance education (DE) has been the means by which students who have been unable to attend classes in person could still access, and participate in, formal education (Gunawardena & Melsaacle, 2004). As such, DE has often been connected with social equity (Bates, 2005), helping individual students to overcome educational inequities in access, participation, and outcomes across a broad spectrum of formal learning contexts: primary and secondary schooling, technical and further education, workplace training, and higher education. Acting from a belief “that universal access to high quality education is key to the building of peace, sustainable social and economic development, and intercultural dialogue” (UNESCO, 2005–2011), UNESCO has actively pursued ways of fostering access to quality educational offerings for all peoples from around the globe. One means through which this goal of educational equity is being addressed is via the provision of open educational resources (OER).

This article explores the potential of OER to overcome issues surrounding educational equity (encompassing access, participation, and outcomes) and social inclusion in the context of the glocalization of formal education. Through a critical examination, the authors explore both the benefits and challenges of OER from an equity perspective, not only for those seeking access to education in third-world countries, but also for those who experience second- and third-world conditions in

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first-world countries. Some of the more challenging considerations for the creation of OER as discussed in this article are the language of instruction; contextualization and localization; technological applications; and access in regional and remote regions. These considerations encompass issues that must be taken into account while equitably developing and repurposing OER. Finally, in light of these considerations, this article will make recommendations on how OER might be better used to promote social inclusion and equitable access to education.

Localization, globalization, glocalization

Localization in education relates to the geographical context in which education is provided. In its earliest form, DE—or correspondence education as it was then known—was related to the available technology of the day and was print-based in format. Today, the provision of education via DE has grown to encompass several generations of media and technology (Nipper, 1989; Taylor, 1998, 2001). From its inception, the term distance education has embodied notions of openness and flexibility in formal learning (Bates, 2005) although not all distance learners will find their experience lives up to these common expectations (Willems, 2005). Distance education also enables both national and borderless education, considered as part of the globalization of education, reaching off-campus national and international students through technology (Ryan, 2008).

Globalization results in the overcoming of distance, the compression of space and time, and the enabling of free travel of information, commodities, services, and individuals (Kwiek, 2001). Pottruck and Pearce (2000) wrote that due to advancements in technology that have been driven by the growing need for information and services in the global market, traditional barriers such as time, distance, and form have now been transcended, ushering in a global electronic community. When the General Agreement on Trade and Services (GATS) was passed by the World Trade Organization (WTO) in 1995, education was included in the list of services that could be traded across nations (WTO, 2012). With this global electronic community comes economic opportunity for institutions of learning to compete for market share beyond their local or regional boundaries.


Formal education can be seen as becoming increasingly glocalized through the rise of a new global electronic community, which transcends “universal, ubiquitous connectivity and international protocols” (Pottruck & Pearce, 2000, p. 3). Through these means, there are several opportunities for educational institutions to compete for market share beyond their local or regional boundaries, made possible through the provision of e-learning (Marginson & van der Wende, 2007). Indeed the glocalization of education as one sector of formal education is in a historical period of rapid technological and global change, influenced by both national and international political and economic pressures (Marginson, 2008).

However, the glocalization of education can simultaneously serve to perpetuate the status quo of existing power relations from one region to the next. According to Giddens (1990), this process is made possible as a result of the increasing ability of
the mass media and interactive media of modern societies to transform traditional localized communication processes and shift these across space and time (Giddens, 1990). Following along this line of thought, Anderson (2002) wrote that e-learning can work as a prime device of modernization to “disembed” (Giddens, 1990) localized social relations—the good, the bad, and the ugly—and lift these across time and space where they are superimposed on the recipients. This includes power relationships. To overcome perpetuation of inequitable social relations in the electronic age, Gale (2009) has argued that equity issues need to be central on the research agendas of higher education across the globe. This means finding ways to support subgroups of the broader population who traditionally have had limited access to education due to social, economic, geographic, or cultural barriers.

**Social exclusion, social inclusion, and e-inclusion**

Inequality relates to social exclusion: “a set of factors and processes that accentuate material and social deprivation” (Arthursone & Jacobs, 2004, p. 26). In turn, social deprivation is defined by Saunders, Naidoo, and Griffiths (2008) as “an enforced lack of socially perceived necessities” (p. 175). Social exclusion is not simply the lack of something—for example, income—but also the accompanying social and power relations (Till & Giorgi, 2002). As such, it is a multidimensional phenomenon (Bradshaw, Kemp, Baldwin, & Rowe, 2004), which is contributed to by numerous “indices of deprivation” (Department for Communities and Local Government, 2011). In addition to low income, other possible causes of social exclusion include the “lack of adequate housing and education, poor health, homelessness, disability, unemployment, low income, nonparticipation in the regular activities of society, resource-poor social networks and lack of access to informal contacts linking to jobs or appropriate role models” (Arthursone & Jacobs, 2004, p. 29). The combination and overlap of these factors has a compounding effect on the individual or group (Willems, 2010). This “lack of access to goods and services reduces people’s life chances and helps to reinforce and, in some instances, create social exclusion and reduced quality of life” (Lucas, Walker, Eames, Fay, & Poustie, 2004, p. iv). Hassan and Rawcliffe (2003) argued that the concept of social exclusion poses a serious question: if some individuals or groups are excluded from opportunities available to most in a society, then who excludes them and how?

One area of social exclusion in the technological era relates to the digital divide. However, Kaplan (2005) is cautious to emphasize that e-exclusion is not synonymous with the digital divide. Some who have the means, abilities, and opportunities to participate might choose not to. Rather, the digital divide relates to an involuntary exclusion from the technology society (Kaplan, 2005). At its most basic, the digital divide is often referred to as a singular entity relating to those who do or do not have access to information and communications technologies (ICT) such as hardware, software, or Internet connections. Yet, as Warschauer (2003) noted, there is no single factor that defines the digital divide; rather, there are “multiple divides which relate to a variety of factors such as: age; gender; ‘ethnic clustering;” uncertainty of living/financial conditions; work insecurity; and social insecurity” (Mancinelli, 2007, p. 7). More succinctly, Kaplan (2005) recognized the social and political dimension of e-exclusion, defining the digital divide as measuring “the gap between those who are empowered to substantially participate in an information and knowledge-based society and economy, and those who are not” (p. 7). According to
Warschauer (2003), the concept of the digital divide helps focus attention toward what he signposts as a critical social issue of how ICT within a society can either marginalize and stratify social relations or foster equality. Spender (1995) labeled the digital divide as a new social revolution akin to that created by the advent of the printing press.

Social inclusion concerns equity. It is defined as the opportunity of individuals or groups to actively participate in society and “to access available educational, professional, economic and/or political opportunities” (Mancinelli, 2007, p. 17). For social inclusion to take place, policy and action must support these processes (Centre for Economic and Social Inclusion, 2012; Hassan & Rawcliffe, 2003).

As digital exclusion is “embedded in a complex array of factors encompassing physical, digital, human, and social resources and relationships” (Warschauer, 2003, p. 6), the goal needs to be a focus on social inclusion rather than simply on the digital divide. Strategies to foster social inclusion—the individualized; economic; palliative or curative; preventative; and emancipatory approaches (Estivill, 2003)—are the same five strategies that tend to be adopted to address e-inclusion (Cullen, Hadjivassiliou, & Junge, 2007). Examples of these social inclusion approaches for the purposes of e-inclusion are summarized in Table 1.

Kaplan (2005) argued that the main approaches to address e-inclusion need to focus on the key facets of prevention, the exploitation of new opportunities, and the fostering and empowering of participation. The empowerment of individuals in redressing e-exclusion highlights the role of personal agency, by viewing those who are disadvantaged as key stakeholders in the e-inclusion process (Arthurson & Jacobs, 2004), rather than as victims. This, in turn, would suggest a multifaceted approach toward redressing issues of e-exclusion in the digital era.

Table 1. Correlation between social inclusion and e-inclusion strategies (based on Cullen et al., 2007, pp. 13–14).

<table>
<thead>
<tr>
<th>Approach to social inclusion</th>
<th>Explanation</th>
<th>Example of e-inclusion strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Individual</td>
<td>Views individuals as being responsible for the situation(s) that they find themselves in</td>
<td>e-inclusion strategies link issues surrounding digital literacy to unemployment</td>
</tr>
<tr>
<td>2 Economic</td>
<td>Views economic growth as the key to achieving social inclusion</td>
<td>e-inclusion strategies emphasize digital skills and lifelong learning in a global knowledge economy</td>
</tr>
<tr>
<td>3 Palliative or curative</td>
<td>Views the treatment of the most urgent symptoms of social exclusion as key to achieving social inclusion</td>
<td>e-inclusion strategies include assisting the acquisition of ICT and broader infrastructure such as the Internet</td>
</tr>
<tr>
<td>4 Preventative</td>
<td>View pre-emptive measures against the anticipated causes of social exclusion as key to achieving social inclusion</td>
<td>Similarly to the previous category, e-inclusion strategies include assisting the acquisition of ICT and broader infrastructure such as the Internet</td>
</tr>
<tr>
<td>5 Emancipatory</td>
<td>Views the involvement of those affected by social exclusion as key to achieving social inclusion</td>
<td>e-inclusion strategies have a focus on the emancipatory potential of new ICT to become active citizens and achieve personal wellbeing</td>
</tr>
</tbody>
</table>
Open educational resources (OER)

The term open educational resources (OER) was coined in 2002 (UNESCO, 2002) at the conclusion of the Forum on the Impact of Open Courseware for Higher Education in Developing Countries hosted by UNESCO (UNESCO, 2005–2011) when the gathered delegates expressed “their wish to develop together a universal educational resource available for the whole of humanity, to be referred to henceforth as Open Educational Resources” (UNESCO, 2002, p. 6). There are a number of definitions for OER, the most commonly adopted being that developed by the Organisation for Economic Co-operation and Development (OECD). According to the OECD (2007), OER are “digitised materials offered freely and openly for educators, students and self-learners to use and reuse for teaching, learning and research” (p. 10). Additionally, there is also a growing consensus that, to be considered OER, such resources must “reside in the public domain or have been released under an intellectual property license that permits their free use or re-purposing by others” (Atkins, Brown, & Hammond, 2007, p. 4). A few educationalists would go even further. Downes (2007) included within his definition of OER all resources that can enable education. This seems in line with the views of the OER Foundation, an independent, not-for-profit organization that assists and provides support to institutions and individuals, so they can “achieve their objectives through Open Education” (OER Foundation, 2011b, 1). According to the OER Foundation (2011a), “OER can, and do include full courses, textbooks, streaming videos, exams, software, and any other materials or techniques supporting learning” (1). The philosophy behind the OER movement is “that of making educational materials a common or public good from which all, in theory, can benefit, but most especially those who receive the least benefit from current systems of educational provision, whether publicly or privately funded” (Lane, 2008, p. 149).

The OER movement emerged from a response to the limitations of the learning object portals and repositories created in the 1990s, and from the educational possibilities that became evident through the open source/free software movement (Downes, 2004). Educators asked themselves if the answer was to share learning materials that they had created. The next step was to create an equivalent license to free/open source software for free/open content and two open publication licenses were released in the late 1990s (Wiley, 2009). In 2002, the OER movement received new momentum from the release of the Creative Commons licenses. These were not only more flexible than the previous licenses available for educational content in the market, but they were also better written and easier to understand (Bissell, 2009). The Creative Commons licenses granted authors the rights to share their work with others to use, repurpose, and distribute. Today, these have become the standard licenses for the sharing of OER materials (Bissell, 2009; Wiley & Gurrell, 2009). With the release of the Creative Commons licenses, the elements were in place for the OER movement to expand.

Benefits of OER from an equity and access perspective

In democratic societies, equity in access to education is considered a basic human right. Yet this is not always the case even in the most developed of societies. In its current usage, student equity relates to access, participation, and outcomes (Coram, 2007) of different social groups (Vick, 2001) or individuals (Santiago, Tremblay,
Basri, & Arnal, 2008) in higher education. Equity relates to the fair distribution of resources and services, while access and social inclusion relate to the right of entry to these resources and services.

There are numerous benefits to be gained from adopting OER to promote equity for students in educational contexts, especially in DE. OER have been increasingly introduced into the recent dialogue in education, mostly in relation to their potential to increase access to education, improve quality, and reduce the cost of education mainly in developing countries (Kanwar, Kodhandaraman, & Umar, 2010). While some argue that educational institutions can take most advantage of the adoption of OER due to traditional academic altruistic views, return venue for taxpayers, marketing strategies, and the reduced cost of content material development by sharing and repurposing of resources (OECD, 2007), others, however, believe that the learners are the ones who can benefit the most from the adoption and use of OER (Kanwar et al., 2010; Panke, 2011; Schuwer and Mulder, 2009). Learners from all walks of life can benefit from using OER because they are accessible; provide learners with flexibility to study anywhere and anytime; at no or low costs; and have the potential to contribute to informal, non-formal, and formal education (Panke, 2011; Schuwer & Mulder, 2009). Other benefits for learners are the interaction with content and sharing of knowledge with other learners, “following personal learning goals and encountering different points of views” (Panke, 2011, p. 5). Learners within formal contexts can also benefit from the use of OER; they can be used as additional learning resources to deepen and broaden students’ perspectives and understanding of a certain subject (Panke, 2011).

Educators worldwide can also take advantage of OER. They can access a broad range of learning resources that in many cases are peer reviewed, which they can use for their own personal learning, incorporate into their existing units, and adapt and include in new units. All the above can assist educators to reduce teaching preparation time, avoid duplication, and concentrate their efforts on making students’ learning a greater experience. In other words, instead of focusing on information conveyed in a course, academics can finally focus on the process of learning (Johnson, Levine, Smith, & Stone, 2010).

In addition, OER have been also contributing to access to education in developing countries through programs and initiatives supported by the Commonwealth of Learning and UNESCO. One example of such initiative is the Teacher Education in Sub-Saharan Africa (TESSA) program, which has been developed to meet the needs of teacher training in Sub-Saharan Africa. TESSA is a consortium of 18 national and international organizations, including 13 institutions in Sub-Saharan Africa, and it is mostly funded by the Allan and Nesta Ferguson Charitable Trust and the William and Flora Hewlett Foundation (Wolfenden, 2008). This initiative has produced an extensive database of learning resources available in five languages with the aim of providing preservice and inservice teacher training to the institutions involved (Connolly, Wilson, & Wolfenden, 2007; Wolfenden, 2008).

**Challenges of OER from an equity and access perspective**

In adopting an equity lens through which to consider the adoption of OER into any educational context, the challenges also need to be considered, weighed up, and factored in to any program. An important consideration in the creation of OER is the issue of whether equity and access issues are considered. It is one thing to create...
resources for others to use. Where it becomes problematic is when the resources cannot be used or repurposed by those that they were initially intended to assist. As McGill (2010) noted: “not all OERs are fully open, not all learners have access to computers, or to the internet,” and in order to enable genuine access for all in the context of fully open resources, we need to ensure that “materials will be accessible on alternative technologies [including] mobile [technologies].”

Further, Bates (2005) noted that student diversity within the technological era has to be also considered:

Learners are not a homogenous mass, but vary considerably in terms of educational background, income, age and learning experience. This diversity of the student body is growing fast. It will become increasingly important for educational organizations to be able to deliver their teaching in a variety of technological formats, depending on the needs of the individual, the teaching context, and the target groups to be reached. (p. 211)

This diversity is growing at an exponential rate with the glocalization of education via technology. Other issues to take into account when considering adopting OER are related to the language of instruction, the contextualization, localization, technological applications, and access in regional and remote regions around the globe. Each of these aspects will be discussed separately in the following sections.

Language of instruction

The language of instruction can be problematic in the creation of OER. English is considered an international language due to its usage in knowledge dissemination, publications, international business, technology, and aviation, each being major drivers of globalization. However, the majority of learners worldwide come from non-English-speaking backgrounds. Even though the number of OER translated into different languages has grown substantially in recent years, and consequently this has increased access to OER repositories that provide resources in other languages, the majority of OER available are still in English (Petrides, Nguyen, Kargliani, & Jimes, 2008; Silver, 2009). This seems to reflect a trend across resources available on the Internet. Wikipedia, for instance, has a larger number of articles in English per total speakers, including functional users, than in any other language (see Table 2).

High linguistic diversity between any nation’s official, national, and spoken languages requires consideration in the development of OER. One example of such

<table>
<thead>
<tr>
<th>Language</th>
<th>Wikipedia articles</th>
<th>Total speakers</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>3,835,393</td>
<td>1+ billion</td>
</tr>
<tr>
<td>French</td>
<td>1,192,267</td>
<td>200 million</td>
</tr>
<tr>
<td>Arabic</td>
<td>164,690</td>
<td>450 million</td>
</tr>
<tr>
<td>Swahili (Kiswahili)</td>
<td>22,722</td>
<td>100 million</td>
</tr>
<tr>
<td>Ganda (Luganda)</td>
<td>142</td>
<td>10 million</td>
</tr>
<tr>
<td>Chichewa (Chinyanja)</td>
<td>133</td>
<td>9 million</td>
</tr>
<tr>
<td>Xhosa (isiXhosa)</td>
<td>125</td>
<td>8 million</td>
</tr>
</tbody>
</table>

Table 2. Comparison of the number of articles in Wikipedia per total speakers (all of which are official languages spoken on the African continent) (adapted from Vota, 2011; Wikipedia, 2011a, 2011b).
linguistic diversity is the Republic of South Africa. South Africa has 11 official languages recognized in its 1996 constitution—Sepedi, Sesotho, Setswana, siSwati, Tshivenda, Xitsonga, Afrikaans, English, isiNdebele, isiXhosa, and isiZulu (South African Government Information, 2009)—plus scores of native languages and creoles. In the current national anthem of South Africa—“Nkosi Sikelel iAfrika (God Bless Africa)/Die Stem van Suid-Afrika (The Call of South Africa)”—each of the five verses are based on a different official language: isiXhosa, isiZulu, Sesotho, Afrikaans, and English (South African Government Information, 2011). Other states in the African continent share similar linguistic diversity among their peoples.

Table 2 also depicts the articles available in Wikipedia per language, compared to the number of speakers of these particular languages. Based on the figures, it can be seen “that many [native] African languages are grossly under-represented online” (Vota, 2011, 3), not to mention the plethora of other languages that are not represented in the table.

The implications of this linguistic diversity at a glocal level and the language of OER are also pertinent in other continents. In the national census in Australia in 2006, for example, one in eight Indigenous Australians nominated a language other than English as their first language; the most common of these 145 Australian Indigenous languages are Arrernte, Djambarrpuyngu/Dhuwal, Pitjantjatjara, Warlpiri, Torres Strait Creole, and Kriol (Australian Bureau of Statistics, 2010). In Wikipedia’s list of articles available per language (2011a, 2011b), there is nothing existing in any of the Australian Indigenous languages. In terms of equity and the language of instruction in OER, this is of concern.

As a result, if learners are not proficient in English, they may be unable to access and/or learn with the assistance of OER. It may indeed be more economically viable to develop new OER materials in the required languages in terms of both the social capital of a nation and the individual learner themselves. Educational institutions, government, and funding bodies should support development and adequate translation of OER in order to increase access to these resources and thus promote social inclusion. While beyond the parameters of this article, this concept needs greater exploration. The translation and adaptation of OER are closely linked with the contextualization and localization of these resources, which is explored next.

Contextualization and localization

Contextualization of resources presents significant obstacles to the effective reuse of OER than was originally anticipated (Kanwar et al., 2010). The educational needs of students differ from institution to institution even within the same country (Matkin, 2009). The repurposing of OER materials for learners from developing countries poses additional challenges. It is not enough to simply translate a piece of OER from one language to another; such materials need to be extensively localized if they are to be educationally useful for the majority of learners (Matkin, 2009). Some contextual barriers can be overcome. Projects such as the TESSA initiative have demonstrated that effective localization is possible (Wolfenden, 2008). Unfortunately, this is a difficult and expensive process (OECD, 2007). Also, Panke (2011) believes that “local content development is crucial in order to avoid the risk of training students who are useful for other markets rather than providing education and training that is relevant to the regional conditions and demands” (p. 3).
Technological applications

Willems (2005) has highlighted the fact that access to technology remains a challenge for some students in DE contexts, including issues ranging from power stability to Internet access and computer skills. Bates (2005) wrote that “access is the most important criterion for deciding on the appropriateness of a technology for open and distance learning” (p. 211). Thus, the technological applications for learning resources, either OER or traditional teaching materials, should be suitable for the student cohort needing to access those materials. In Australia, for example, many Indigenous students do not have access to computers, whereas their ownership of mobile phones is on a par with that of the general population at around 88% (Brady, Dyson, & Asela, 2008). This is also the case in many developing countries (Silver, 2009). This leads to considerations regarding suitable tools for learning, and in this instance, the development of OER for mobile learning applications may be a more appropriate strategy to make OER widely available to these students. Despite the fact that because the cost of technology has fallen, personal computers have become more accessible, there are still a large number of learners and educators in developing countries who do not have the skills to effectively use, develop, or repurpose OER (Kanwar et al., 2010; Lane, 2008; Silver, 2009). More importantly, access and technological skills do not necessarily translate into effective learning. Helsper (2011) argued that in order to promote social inclusion and close the digital divide gap, government policies should focus not only on developing infrastructure, but also on raising public awareness. Otherwise, the users who are likely to take fuller advantage of these resources are the most educated ones, not those at the greatest disadvantage (Helsper, 2011).

Access in regional and remote regions

Regional and remote learners can also be excluded from mainstream education due to the lack of appropriate infrastructure, such as access to the university campus, broadband access, and instability in electrical supplies (Willems, 2005). Distance education has emerged to increase access to formal education to those remotely disadvantaged. To some extent, this reflects the core philosophical underpinning of OER. However, many issues in regional and remote regions across the globe still remain. Learners not only face the challenges mentioned above (issues of language, contextualization, and access to technologies), but also issues surrounding capacity building. This is related to the relevance of OER available to them. For example, many learners in remote regions often need to update and develop new skills in order to keep their jobs or improve their employment conditions (Meiszner, 2011). Thus, if the resources available are not relevant to the learner, OER have limited utility.

Beyond access issues

Beyond the current focus on the variety of access issues relating to OER, Richter and Ehlers (2010) have argued that too little attention is being given to the three considerations of support of educational practices, and the promotion of quality and innovation in teaching and learning practices. This, in turn, leads to the shift away
from the resources themselves and toward a focus on open educational practices (OEP) (OPAL, 2011).

Beyond access are also cultural and institutional issues. Some academics might be concerned with the concept of making their teaching materials open and available for free. Others might be apprehensive that they might lose control of their intellectual property, while others believe that OER might pose a threat to their reputation. Still, others are reluctant to give away their “precious” resources. In addition to this, part of the OER movement is still very much focused on the production of resources and it can be a concern that these resources are based on a teacher-content-centered approach to learning. Student-centered and independent learning, where students have more control over their learning, should represent the preferable approach to OER (Bossu & Tynan, 2011). Other institutional issues can include lack of staff awareness regarding copyright and intellectual property and lack of financial incentives and staff support for the adoption of OER. Addressing these concerns requires institutional policymakers to commit to a long, drawn-out process of consultation and review (Atkins et al., 2007; OECD, 2007; Wiley & Gurrell, 2009). Still at an institutional level, decisions regarding quality control, facilitation of Web access for students with disabilities, and technical issues related to the choice of metadata format, standards, and software architectures, are all issues that add to institutional overheads when launching an OER project (OECD, 2007).

Another issue that has emerged, as more and more OER become freely available, is quality. In fact, “there is a desperate demand in the world for high-quality OER” (Wiley & Gurrell, 2009, p. 19). Different from non-OER educational material, OER are in their large majority accessible at no cost, and are open to reuse, change, and distribution. The free and open characteristics of OER have contributed to suspicions about the quality of these resources. In addition, as Wiley and Gurrell (2009) argued, many people believe that “free educational resources must necessarily be of poor quality” (p. 19). On the other hand, there is also the assumption that all OER are of good quality. Despite issues of accuracy of information transmitted by an OER, the concept of quality of an OER can easily vary according to users and their needs (Wiley & Gurrell, 2009).

It is also argued that when adopting an OER, educators should adopt the same strategies and common sense that guided them when choosing a traditional learning resource. Such process takes time and requires a lot of research and analysis of materials, and most important of all, the resources must be relevant to the course being developed (McGreal, 2010).

Although one of the goals of the OER movement is the mutual exchange and collaborative development of educational resources, much of the movement seems to be one way (Bossu & Tynan, 2011). Thus, the uptake and repurposing of OER can also be considered as issues beyond access. Academics adhering to the ethos behind OER are far more likely to publish their own material for reuse than to take advantage of courses produced by others (Wiley, 2009). In fact, “it is clear that the simple existence of free and open material is necessary but not sufficient for wide scale adoption and use” (Matkin & Cooperman, 2009, p. 12). A culture of uptake and repurposing of OER must be encouraged and nurtured. McGreal (2010) suggested that this problem has a lot to do with academic pride and even university politics. Academics often believe that “material developed or chosen by someone else is commonly judged to be inferior” (McGreal, 2010, p. 3). However,
irrespective of who has created the OER, the point is that any learning resource—whether it is an OER or not—must go through a careful process of design and development (Petrides et al., 2008; Sclater, 2009). Currently, there is a wide range and growing number of OER available that are of good quality and are worthwhile to consider, not only when adapting an entire unit from a particular degree, but also when using smaller supporting learning objects such as modules or parts of units (McGreal, 2010).

**Concluding remarks**

The aims of OER are to support open access to learning and teaching materials in the era of the glocalization of higher education and to reach those who may have been marginalized in traditional approaches to formal educational contexts. However, the open nature of OER is a contested area and is not a given. In fostering ways in which equity and social inclusion can be supported through OER (Conole, 2011), care has to be taken so that existing exclusionary practices are not perpetuated through such means.

This article has examined OER through the lens of equity and access and highlighted a number of key areas warranting consideration in the use, development, repurpose, and dissemination of OER. These areas relate to the diversity of the student body in the era of glocalization of education; the language of instruction; the contextualization; localization; technological accessibility; and access in regional and remote regions around the globe. Taking to heart the nature of openness, we recommend as a consequence that the limitations of an OER discussed here be seriously considered by institutions, government, and funding bodies and clearly stated for the end user.

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