Inequality as Higher Education Goes Online

Laura Czerniewicz

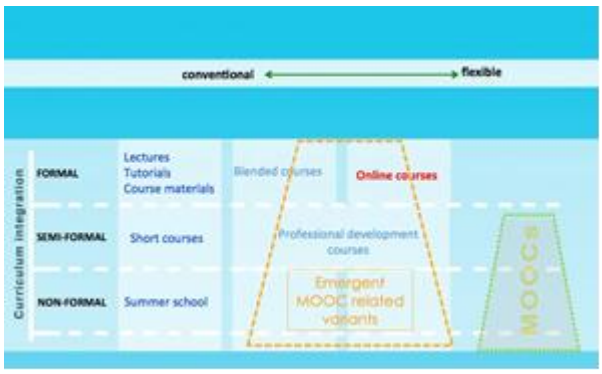
Department or Centre, Institution, e-mail address(s)

Abstract

This paper will discuss Higher Education (HE) and changes in HE, using inequality as a frame. It opens with a brief overview of the changes in the HE landscape; describes an equality/inequality framework suitable for this discussion; considers some of the key questions and implications at the global, institutional and course levels through this inequality lens; and finally asks some questions and make some suggestions for how the issues of inequality in HE could be addressed going forward.

Keywords

The Changing Higher Education Landscape



The fact and nature of a changing, digitally mediated landscape of HE has become familiar. Those academics working in the traditional formal sector, consisting of residential universities, have seen an initially slow shift, then a more recent acceleration to online education. Although 2012 is considered the "year of the MOOC", what has been particularly interesting, certainly from an inequality point-of-view, is how Czerniewicz, L; Deacon, A; Small, J; Walji, S (2014) Developing World MOOCs: a curriculum view of the MOOC landscape
MOOC-related areas are being explored.
Disaggregation and changing monetisation models have been a critical development in the landscape as education is becoming digitally mediated. Where the norm has been for all components of the educational process to be paid for by fees and subsidies, with students receiving a complete package of content, support, assessment and certification through a quality assured platform, now the entire, single "package" has unbundled. Each different aspect can be provided separately, and different elements may be paid for separately through, for example, "freemium" models. This also means that universities have become only one player in the HE sector, and are now competing with information and communication companies and private online providers who have in existence for decades; publishers who are becoming education providers; digital media and telecommunications companies, and mobile providers (Olds and Robertson, 2013)

While 2012 may have been the "year of the MOOC", that was in the non-formal (at least for traditional universities) space, and there is a growing recognition that 2015 is the year of "going online". This is the year that the mainstream goes online – the year that traditional, residential universities have started taking the shift to online education seriously, and have started asking serious questions about what this means for them as institutions. It is not simply the education sector which is noting this shift: the Horizon report, Forbes, and the Economist have all acknowledged the increasingly important role of online provision.

In the US, online provision has thus far been offered mainly by private companies, but this trend is decreasing globally, with residential universities moving dramatically and rapidly into online space (Allen & Seaman, 2015), and MOOCs, to the surprise of many, have not gone away. This is significant, as scholars who have been concerned and critical about MOOCs have tended to think that they could simply ignore the trend, which is not the case. MOOCs & MOOC type offerings continue to grow and be provided by a range of organisations with different agendas around the world (ICEF 2014, Swope 2015). In fact, probably the most important and interesting aspect of online education – especially from a global south perspective – is its increasingly global rather than local orientation. Talk is no longer about "our" students – but rather about students everywhere, and this has changed the entire landscape. The British Council, for example, is very explicit about considering education as an export, and even a recent JISC report talks about scaling-up online education for the global HE marketplace. This also means, from a learning point-of-view, that all HE is digitally mediated – it's a matter of "how much" rather than "if". The notion of the "online classroom" and the "traditional classroom" is over.

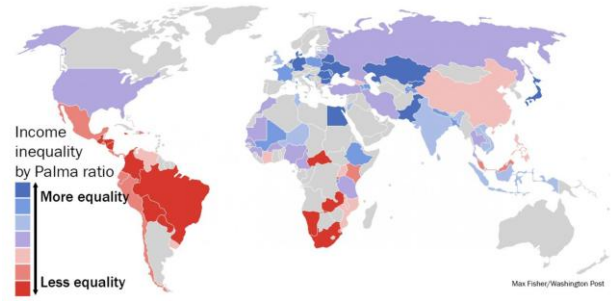
ISBN 978-1-86220-324-2

Beetham's (2015) suggestion of rather thinking about different types of learning and learners that enable and require independent study or guided and supported learning is a much more useful way of thinking about things . This is pertinent when one is considering a range of learners, and particularly so when one's interest is in issues of inequality.

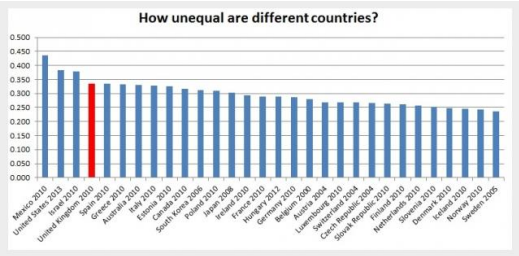
Inequality

At the same time as the rise of online in higher education, equality and inequality have become global concerns. A number of books have been written on the topic, and it has almost become a growth industry in the scholarly publication sector, which is a deplorable reflection of social realities. This paper draws loosely on Therborn's work, which provides a particularly useful framework in this regard, as he goes beyond resources and matters of economics when explaining inequality. He offers a simple definition of what is meant by equality – the "capability to function as a human being" (Therborn, 2013). He is also very clear about the immorality and injustice of inequality, being mindful both of individual and collective actions, and about the systemic arrangements which predicate inequality. This provides a valuable framework, a heuristic that shows the multidimensional nature of inequality, differentiating between the equality of opportunity and of outcome.

Of course, there is nothing particularly new about this. If one takes seriously declarations on human rights such as the American Declaration of Independence (1776), and French Declaration of the Rights of Man and Citizen (1793) which have made clear that "all men are equal", then hundreds of years later the situation has become more extreme, rather than less so. Indeed, the Constitution of the Republic of South Africa, drafted nearly 20 years ago, is premised on the notion of "human dignity, the achievement of equality and the advancement of human rights and freedom". It is therefore a grave problem when the World Economic Forum reports that the second most concerning trend in the world today is widening income disparities, and that increasing inequality is the number one challenge facing North America today.



There are many ways of measuring inequality. An effective and accessible measure is the Palma ratio, which divides the richest 10% of the population's share of gross national income by the poorest 40%'s share. Consider the graphic below. While there are no surprises about where the most unequal places are, what is perhaps surprising is where the mid-range lies. The position of the US, for example, is fairly sobering. At the extreme end is South Africa where the two richest people in the country, have wealth equal to the poorest 50%, ie. 2 people hold the same amount of wealth as 26.5 million people. South Africa, in fact, has the worst inequality in the world.



However, inequality is not exclusively a global south problem. It is interesting to note the position of the UK in relation to the income distribution of the OECD countries: out of 30, it is ranked 4th most unequal. It is the most unequal nation in Europe – the richest 10% of households in the UK hold 44% of the wealth, while the poorest 50% hold 9.5%. The US, of course, is even more unequal. https://www.equalitytrust.org.uk/scale-economic-inequality-uk

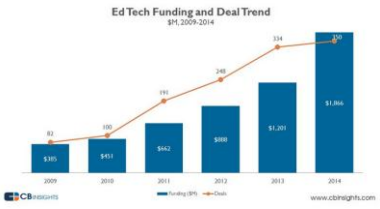
How might this link to technology? For many, the possibilities of technology promise solutions to addressing inequality. While there is unlikely to be a direct causal or determinist relationship, but there can be no question that technology – most significantly the Internet – should be a major part of combating inequality (la Rue, 2011). It is therefore surprising that recent major reports on educational technology make no mention of equality or inequality.

The contrasting views on creating equality in information societies are, of course, not unknown, but what is problematic is how to address the issue. Mansell (2013) has framed the issue succinctly – the prevailing, dominant social imaginary is market-led, and the alternative is "open" or commons-led. This conflict "leads to major problems for stakeholders in deciding which policies or mix of policies and strategies, is most likely to

ISBN 978-1-86220-324-2

facilitate progress towards more just and equitable information societies" (Mansell, 2013). This is not necessarily an either-or scenario – a hybrid situation prevails, and history has shown that a completely public-led and government funded approach does not necessarily lead to equality. The challenge therefore lies in is balancing these approaches.

And yet it's obvious that the market-led approach is dominant. Educational technology funding is growing – it reached $1.87 billion in 2014 – and it has become global in scope and reach. Over 50% of educational technology investment over the last two years has been in non-US companies. Particularly interesting to note is that Coursera's latest roundup of investment included a significant contribution from an Indian backer, so the investment is not only going into non-US entities, but is also coming from an increasingly global venture capital source.



https://www.cbinsights.com/blog/ed-tech-funding-record-2014/ January 20, 2015

The counter-narrative is the democratic "open" movement, epitomized by the Cape Town Open Education Declaration (2007) which states that "each and every person on earth can access and contribute to the sum of all human knowledge." However, one of the concerns is that the commons movement as a counter-narrative is not getting the same level of attention and thought in terms of structures and resourcing. And all of this is of course happening in the face of massive and sweeping budget cuts. The challenge lies in finding ways to address issues of inequality in an austerity environment.

A recent Oxfam report argues strongly that there is a need to take back control of public policy, and that least 20% of government funding should be spent on education; however, between 2008 and 2012, more than half of developing countries reduced spending on education (Seery & Arendar, 2014). Those who are working in environments where transformation and decolonization is the predominant discourse are emphatic that "transformation will not happen without a recapitalization of our institutions of higher education." (Mbembe, 2015) . The question is therefore, how a values-led hybrid ecology of digitally mediated educational provision can be shaped that strikes a strategic balance between state support and private sector provision to prioritise and enable equality in higher education?

Kinds of inequality

Therborn (2013) considers human beings in three ways – as organisms, as actors, and as persons –and refers to three different types of inequality in this regard – vital inequality, resource inequality, and existential inequality.

Vital inequality

If one considers education in terms of vital inequality, could it be regarded as a "life-and-death" issue? Of course it could, given that it is well known that poor people are less likely to be educated (Seery & Caistor, 2014), and that educated people generally live longer (Meara et al, 2008) – even parents of college graduates live longer (Friedman & Mare, 2014; Ingraham, 2014). It is also not irrelevant that more complex indices of poverty alleviation are now including educational deprivation as one of the major indicators (Noble & Wright, 2012).

In HE in South Africa, there are serious concerns around inequality, not only of access but also of success – only 25% of students graduate in regulation time, and more than half of students who enroll in universities never graduate, even accounting for students who take longer than 5 years, or who return after dropping out. The situation is further complicated by racial considerations, with completion rates among white students being on average 50% higher than among African students, and only about 5% of apartheid-category black and coloured youth succeeding in any form of higher education (Council for Higher Education, 2013).

In the early days of MOOCs, there was some visionary – and perhaps hyperbolic – discourses about the democratization of HE (Agarwal in Palin, 2014), and the possibilities for online education to solve poverty (Friedman, 2013). Many academics were naturally dismissive of such grand statements, and indeed research has shown that: MOOC students are predominantly highly educated and employed; more often men than women, more educated than the general population (especially in BRICS [term for the loose grouping of Brazil, Russia, India, China, South Africa] and other developing countries); largely from developed countries, and

ISBN 978-1-86220-324-2

generally older where they are from developing countries (Christensen et al, 2013; Palin, 2014). Other studies – based on very large datasets (40 000 online students in nearly 500 000 courses) have shown that online learning is more challenging, especially for males, younger students, black students, and students with lower grade point averages (Xu & Jagger, 2014). Online education then certainly presents marked challenges, and these challenges are exacerbated in under-resourced contexts like Africa, where solutions need to be particularly pragmatic.

However, is is worrying that by emphasizing the problems, and rejecting the positive discourse, there has been rejection of a commitment to the possibilities that these innovations present. There is an imperative to bring back the discussion and focus around how the new landscape of educational technology and digitally mediated HE can address the needs of the disadvantaged and enable social inclusion (Yanez, 2014). There is also a need to draw policy attention – both at institutional and at government levels – back to the social, rather than the commercial possibilities of online education. Although there is a small body of innovative literature and research into the new forms of provision in fragile environments with disadvantaged students (eg. Dillahunt et al, 2014; Yanez, 2014; de Waard et al, 2014; Moser-Mercer, 2014; Nkuyubwatsi, 2014; Liyanagunawardena et al, 2013; Nyoni, 2013; de Boer et al, 2013), the answer to the question "how can online education (including MOOCs) help less privileged people to learn and/or get an acknowledged education?" has not yet been found.

Which forms of blended and online education can best serve the social and economic interests of developing countries and of the disadvantaged in unequal societies? How can advances in online education (and successful online education providers) have a positive competitive effect on educational practices in contact higher education institutions?

Resource inequality

Inevitably when one talks about resources, one must address contestations of power – who has access to which resources, and in which configurations: economic, material, and infrastructural. When considering resource inequality in an educational context, it is helpful to think in terms of cultural capital as either "institutional", ie. qualifications, or "embodied", ie. abilities or dispositions.

In a global climate where resources are running short, assumptions about even basic resources such as electricity are often misguided. Internet connectivity remains the exception, not the rule, and location is key – rates of internet access within the population continue to be largely determined by levels of development, with North America enjoying 84% connectivity, while sub-Saharan Africa has only 13% connectivity (Internet.org, 2014).

Within this climate, mobile connectivity seems to provide a solution to the problem of inequality. However, rates of mobile device ownership and subscription do not necessarily translate into opportunities for connectivity, as it is the data that counts, not the device. Mobile data affordability when calculated at 5% of monthly income is still low, with 53% of the population in sub-Saharan Africa able to afford only 20MB of data – only just enough for SMS and email. Entry-level connectivity is estimated at 100MB per month, maturing connectivity at 500MB, and full connectivity at a level where online education becomes viable is estimated at 2GB per month (Internet.org, 2014). This has many implications for learning design for mobile, and the assumptions which are made about smartphones.

There are differing views in developed and developing countries on the purposes of connectivity. In developing countries, people tend to have more practical requirements, using connectivity for personal development, as opposed to developed countries, where people tend to view it as more of a convenience. Forty percent of respondents in developing countries state that connectivity has "improved their earning power" – compared with just 17% in developed countries – and 39% have experienced a "significant transformation in their access to education" because of connectivity (Global Bandwidth Index, December 2014).

All of this means that student populations have become more differentiated, delivery models have become more diverse, and there is wider differentiation of cultural capital. However, as flexible learning comes into the mainstream, the literature has shown that to-date the HE sector has not been successful at accommodating part-time, flexible and non-traditional students, and universities are not well set-up to support them. This is not only a learning design issue, but a systemic, institutional problem. More than 50% of the student population within the HE sector in SA is part-time (Buchler et al, 2007). This requires seriously rethinking digital literacies.

ISBN 978-1-86220-324-2

The concept of the perfect online learner brings to mind the fantasy of the "digital native". This learner is someone who has a strong academic self-concept; is competent in the use of online learning technologies, particularly communication and collaborative technologies; understands and engages in social interaction and collaborative learning; possesses strong interpersonal and communication skills, and is self-directed (Dabbagh, 2007), The much more stark and sobering reality, as captured in Beetham's (2015) research, is of very differentiated learner engagement with the digital world; digital skills which are shallower than thought; the many contradictions hidden in "digital native" stories; the minority of active knowledge creation and sharing; activities typically introduced by educators; consumer practices and populist values dominating the digital space, with many feeling excluded or worse (Beetham, 2015).

Institutional capital in the form of certification can be thought of as an equity issue. New forms of provision often lack legitimacy, and certification therefore does not carry value, but rather instead a stigma. However, around 70% of students with a Coursera credential list this on their LinkedIn profiles as a form of professional development (Koller, 2014), which could be seen as shifting the legitimacy of these types of certification. For many in developing countries, this – rather then issues of access, sophistication, or even context – is the crux of the matter: a certification helps in getting a job, which puts food on the table. Until the issue of verifiable certification for free online courses can be resolved, many say that there will not be much traction (de Hart).

Existential inequality

According to Therborn, this is the most neglected type of inequality. He identifies five main areas where existential inequality manifests, namely: self-development, autonomy, freedom, dignity, and respect. These, of course, pertain directly to the work of educators. In relation to the HE sector, they involve issues of power and agency, both for academics and students, and they manifest at different levels across the sector and disciplines, within and across institutions, and within qualifications, curricula and courses. They are about the nature of relationships, and about who makes the decisions.

It is in this area of inequality that the extent of the resentment towards changes in the global landscape is most stark. As Mbembe (2015) says, "The rescaling of the university is meant to achieve one single goal – to turn it into a springboard for global markets. The brutality of this competition is such that it has opened a new era of global Apartheid in higher education. In this new era, winners will graduate to the status of "world class" universities and losers will be relegated and confined to the category of global bush colleges."

This antipathy has manifested very clearly in attitudes towards MOOCs, where critiques include the nature of money, power and condescending attitudes; the exclusion of epistemological world views due to practices ingrained in social realities; and questions regarding who are the real beneficiaries of this change. Terms like "neocolonialism" (Altbach, 2014) have been used, and Sharma (2013) goes so far as to say that "evangelical arguments and self-appointed saviors of the less civilized rule the airwaves on the global front."

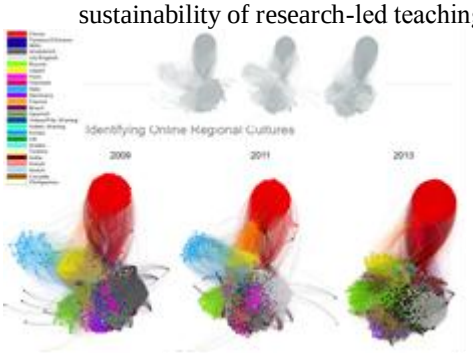
The critiques extend to larger trends such as the globalization of knowledge, where Gregson and others (2015) have identified the dangers of a flattened "Coca-colonisation" of knowledge, and there have been calls for the decolonization of the university, and "pluriversalism, via a horizontal strategy of openness to dialogue among different epistemic traditions" (Mbembe, 2015). The online system extends issues of inequality and white privilege into the online space, issues which pertain as much in online as they do in the face-to-face space.

Addressing these concerns involves the reshaping of networks, the redrawing provider-recipient relationships, and shifting from a broadcast model where the rest of the world is the customer, to a participatory model. There is a need to reduce the digital production gap, reshape the read-write web, and move away from the consumer culture (Brake, 2014; Schroeder, 2011), towards a model where access equals participation.

> This is not to say that the global north should not be generating content about the global south the problems it faces, but fostering partnerships and collaborative relationships around these new kinds of provision is essential. This is happening, and of course, it is more difficult; nevertheless is necessary. These tensions surface issues of mutuality and reciprocity, as Bowles (2015) says, "To recognise digital learning as the practice that networks small higher education institutions to global circuits of influence and profit, we need to think about … this strategic withholding of reciprocity … What are the obligations for care that should accompany the power to impose

ISBN 978-1-86220-324-2

curriculum from one place on learners at another? What are the implications for longer term sustainability of research-led teaching in smaller institutions around the world?"



When talking about inequality – especially in education – it is impossible to avoid talking about language. Eighty percent of all online content is in one of 10 languages: English, Chinese, Spanish, Japanese, Portuguese, German, Arabic, French, Russian or Korean. In order to make the internet relevant to 80% of the world, it would require content in at least 92 languages (Internet.org, 2014). There is, however, some exciting research being done on the rise of language communities, which may become a counter to the dominance of particular languages (see Wu & Taneja, 2015).

Of course most content online originates from the global north (Flick, 2011), and ironically the open access policies which predominate in Europe and the UK have made this more difficult for developing countries, as it means that online content from the global south cannot be found amidst the large volumes of content flowing from the north. This is problematic, as online representation matters, for knowledge, for learning, and for existential equality – what you find, shapes what you come to know. It is increasingly important to support initiatives such as the Hague Declaration (2014), which "aims to foster agreement about how to best enable access to facts, data and ideas for knoledge discovery in the Digita Age." In addition, legally enabling two-way engagement through the use of open licenses for remixing and adaptability is essential – anything else is simply another version of the broadcast model. Furthermore, user experiences should be respected, and user-generated content should be owned by users.

Although global online courses are increasingly diverse in terms of backgrounds, cultures, and ethnicities, it is important to remain aware of the good and bad sides of diversity. Good diversity can be enriching, while bad diversity reinforces inequality. More research is needed into learning design for diversity in the online space, reviewing principles of cultural inclusion (Marrone et al, 2013), and leveraging research into design for large scale provision (Kulkami et al, 2015).

The emergence of new online business models is increasing opportunities of access. Global access needs to be matched by increased access, and new forms of certification are not trivial in a rapidly changing world – they provide new forms of opportunities for some groups, and value for teacher education, professional development, and lifelong learning. However, in considering these new opportunities to succeed, it is increasingly important to distinguish between equity of access and equity of outcomes. Equal opportunities and outcomes in HE "depend crucially on supportive institutional environments and cultures, appropriate curricula and learning and teaching strategies and effective induction, and mentoring." (Badat, 2015)

The challenges of success in online and distance education provision are significant, and the value of fully online courses as part of full qualifications has yet to be shown. Ultimately, success online requires resources, scaffolding, and flexibility, and the role and extent of blended formats is unproven. The cost of providing the care and support necessary in online education needs to be measured against success.

Conclusion

Issues of inequality pervade the entire HE landscape – this is undeniable. The question then is how do to ensure values-based pedagogically-shaped online learning in an austerity environment and a hybrid higher education ecology.

There is a need for critical research, inequality-framed experimentation, policy and advocacy. Critical in all senses: necessary and important; asking difficult, argumentative questions; surfacing power relations. Policy-makers like research-based evidence, and it is necessary more than ever before to be researching the changing environment and theorising scholarship. Theory needs to help in understanding the landscape, as changes happen before implications can be understood, and by then new practices are in place. New forms of business models which support a commons approach require experimentation – this approach is weakend at the moment, and requires much more attention and support. There is a need to innovate with emergent forms of provision, with the specific intent to exploit the affordances of technology to support the needs of the disadvantaged. Policy matters, if one understands it to mean the allocation of goals, values and resources. (Codd, 1988); policy

ISBN 978-1-86220-324-2

provides an enabling environment. In addition, advocacy is required to remind, explain, and challenge decision makers.

If issues of inequality and inclusion are accepted as crucial and critical absences in the global online higher education landscape, communities of policy, research and practice are needed to find shared solutions amongst a range of parties from different parts of the world.

References

Allen, E., & Seaman, J. (2015). Grade Level: Tracking Online Education in the United States. Babson Survey Research Group and Quahog Research Group, LLC. Retrieved from www.onlinelearningsurvey.com/reports/gradelevel.pdf

Altbach, P. (2014). MOOCs as Neocolonialsim: Who Controls Knowledge. International Higher Education, (Spring), 5–7.

Badat, S. (2015, March). Social Justice in Higher Education: Universities, State, and Philanthropy. Presented at the The Advancement and Financing of the Social Justice Mission of Higher Education Institutions: A Symposium, Cape Town.

Beetham, H. (2015, April). What is blended learning?. Seminar presentation, Bristol UK. BIS. (2013). Literature Review of Massive Open Online Courses and Other Forms of Online Distance Learning.

Brake, D. (2014). Are We All Online Content Creators Now? Web 2.0 and Digital Divides. Journal of Computer-Mediated Communication, 19, 591–609.

Buchler, M., Castle, R., Osman, R., & Walters, S. (2007). Equity, access and success: Adult learners in public higher education (Triennial Review). Pretoria: Council for Higher Education.

The Cape Town Open Education Declaration. (2007). Retrieved from http://www.capetowndeclaration.org/read-the-declaration

Christensen, G., Steinmetz, A., Alcorn, B., Bennett, A., Woods, D., & Emanuel, E. (2013). The MOOC phenomenon: Who takes massive open online courses and why? Working Paper. University of Pennsylvania. Retrieved from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2350964

Codd, J. (1988). The construction and deconstruction of education policy documents. Journal of educational policy. 3 (3), 235-48.

Council for Higher Education. (2013). A proposal for undergraduate curriculum reform in South Africa: The case for a flexible curriculum structure. Report of the Task Team on Undergraduate Curriculum Structure. Pretoria.

Czerniewicz, L. (2015, March). Open Education: An International Perspective. Edinburgh, Scotland. Retrieved from http://www.slideshare.net/laura_Cz/oep-scotland-19-march

Czerniewicz, L., Deacon, A., Small, J., & Walji, S. (2014). Developing world MOOCs: A curriculum view of the MOOC landscape. Journal of Global Literacies, Technologies, and Emerging Pedagogies, 2(3).

Dabbagh, N. (2007). The online learner: Characteristics and pedagogical implications. Contemporary Issues in Technology and Teacher Education, 7(3), 217 – 226.DeBoer, J., Stump, G., Seaton, D., & Breslow, L. (2013). Diversity in MOOC students' backgrounds and behaviors in relationship to performance in 6.002 x. Presented at the Sixth Learning International Networks Consortium Conference.

Department of Higher Education and Training. Policy for the Provision of Distance Education Provision in South African Universities in the Context of an Integrated Post-School System, Pub. L. No. 535 (2014).

De Waard, I., Gallagher, M., Zelezny-Green, R., Czerniewicz, L., Downes, S., Kukulska-Hulme, A., & Willems, J. (2014). Challenges for conceptualising EU MOOC for vulnerable learner groups. In Proceedings of the European MOOC Stakeholder Summit (pp. 33–42).

Dillahunt, T., Wang, Z., & Teasley, S. (2014). Democratizing Higher Education: Exploring MOOC Use Among Those Who Cannot Afford a Formal Education. IRRODL, 15(5), 177–196.

Flick, C. (2011). Geographies of the World's Knowledge. Oxford: Convoco.

Franco Yanez, C. (2014). DeMOOCratization of education? Massive Open Online Courses, opportunities and challenges: views from Mexico, Thailand and Senegal. Retrieved from www.norrag.org/fileadmin/Working.../Working_Paper__8_Franco.pdf

Friedman, E., & Mare, R. (2014). The Schooling of Offspring and the Survival of Parents. Demography, 51(4), 1271–1293. http://doi.org/10.1007/s13524-014-0303-z

Friedman, T. (2013). Revolution Hits the Universities. New York Times. Retrieved from http://www.nytimes.com/2013/01/27/opinion/sunday/friedman-revolution-hits-the-universities.html

Global Bandwidth Index December 2014. (2014). Juniper Networks.

Gregson, J., Brownlee, J., Playforth, R., & Bimbe, N. (2015). The Future of Knowledge Sharing in a Digital Age: Exploring Impacts and Policy Implications for Development Jon Gregson, John M. Brownlee, Rachel Playforth and Nason Bimbe March 2015 (IDS EVIDENCE REPORT No. 125). Institute of Development Studies. Retrieved from opendocs.ids.ac.uk/.../ER125_TheFutureofKnowledgeSharinginaDigitalAge.pdf

The Hague Declaration. (2014). http://thehaguedeclaration.com/

Ingraham, C. (2014, July 31). Want to live longer? Send your kids to college. Washington Post. Retrieved from http://www.washingtonpost.com/blogs/wonkblog/wp/2014/07/31/want-to-live-longer-send-your-kids-to-college/

Internet.org. (2014). State of Connectivity 2014: A Report on Global Internet Access. Retrieved from https://fbnewsroomus.files.wordpress.com/2015/02/state-of-connectivity_3.pdf

Kulkarni, J., Cambre, C., Kotturi, Y., Bernstein, M., & Klemmer, S. (2015). Making Distance Matter with Small Groups in Massive Classes. In CSCW: ACM Conference on Computer-Supported Cooperative Work,. Vancouver, BC, Canada: CSCW.

La Rue, F. Report of the Special Rapporteur on the promotion and protection of the right to freedom of opinion and expression, Human Rights Council Seventeenth session § Agenda item 3 (2011).

Liyanagunawardena, T., Adams, A., & Williams, S. (2013). The impact and reach of MOOCs: a developing countries' perspective. Elearning Papers, 33.

Mansell, R. (2013). Imagining the internet: Open, closed or in between. In F. Girard B. Perini (Ed.), Enabling Openness: The future of the information society in Latin America and the Caribbean. IDRC.

Marrone, M., Mantai, L., & Luzia, K. (2013). MOOCs - what's cultural inclusion got to do with it? In Electric Dreams. Macquairie University Sydney.

Mbembe, A. (2015, May). Decolonizing Knowledge and the Question of the Archive (Text for lecture at Wits). WISER. Retrieved from http://wiser.wits.ac.za/system/files/AchilleMbembeDecolonizingKnowledgeandtheQuestionoftheArchive.pdf

Meara, E., Richards, S., & Cutler, D. (2008). The Gap Gets Bigger: Changes In Mortality And Life Expectancy, By Education, 1981–2000. Health Affairs, (March). http://doi.org/10.1377/hlthaff.27.2.350

Moser-Mercer, B. (2014). MOOCs in fragile contexts. In European MOOCs Stakeholders Summit. Retrieved from http://inzone.fti.unige.ch/Media-Upload_Xvc78HxeZ34xv/Kcfinder/files/MOOCs%20in%20Fragile%20Contexts.pdf

Nkuyubwatsi, B. (2014). A cross-modal analysis of learning experience from a learner's perspective. The Electronic Journal of eLearning, 195– 205.

Nyoni, J. (2013). The Viral Nature of Massive Open Online Courses (MOOCs) in Open and Distance Learning: Discourses of Quality, Mediation and Control.Mediterranean. Journal of Social Sciences, 4(3), 665.

Olds, K. (2013, October). European MOOCs in Global Context. Presented at the GlobalHigherEd. Retrieved from http://krisolds.files.wordpress.com/2013/10/oldsbrussels10oct2013.pdf

Palin, A. (2014, March 9). MOOCs: Young students from developing countries are still in the minority. Financial Times. Retrieved from http://www.ft.com/cms/s/2/8a81f66e-9979-11e3-b3a2-00144feab7de.html#axzz3Zr1w1HfF

Remodeling MOOCs in 2014. (2014, October 29). [Business Strategy]. Retrieved from http://monitor.icef.com/2014/10/remodeling-moocs-in-2014/

Schroeder, R. (2011). The Three Cultures of Postindustrial Societies. Sociological Focus, 44(1), 1–17. http://doi.org/10.1080/00380237.2011.10571385

Seery, E., & Arendar, C. (2014). Even it Up: Time to End Extreme Inequality. Oxfam. Retrieved from www.oxfamamerica.org/static/media/.../even-it-up-inequality-oxfam.pdf

Sharma, S. (). A MOOCery of Higher Education on the Global Front.
Retrieved from http://shyamsharma.net/a-moocery-of-global-higher-education/

Siemens, G., Gašević, D., & Dawson, S. (2015). Preparing for the digital university: a review of the history and current state of distance, blended, and online learning. Athabasca University, University of Edinburgh, University of Texas Arlington, University of South Australia.

Swope, J. (2013, November 25). What Do We Know About MOOC Students So Far?: A Look At Recent User Data [Reviews]. Retrieved from http://moocnewsandreviews.com/what-do-we-know-about-mooc-students-so-far/

Tait, A. (2015). Student success in open, distance and e-learning (The ICDE Report Series). International Council for Open and Distance Education.

Therborn, G. (2013). The Killing Fields of Inequality. Cambridge: Polity Press.

World Economic Forum. (2013). Outlook on the Global Agenda 2014. Retrieved from www.weforum.org/.../outlook-global-agenda-20...

Wu, A. X., & Taneja, H. (2014). Reimagining Internet Geographies: A User-Centric Ethnological Mapping of the World Wide Web. In Association for Education in Journalism and Mass Communication 97th Annual Conference. Retrieved from http://issuu.com/aejmcnews/docs/2014_aejmc_conference_program

Xu, D., & Jaggars, S. (2014). Performance Gaps between online and face to face courses: differences across types of students and different academic areas. The Journal of Higher Education, 85(September/October), 633–659. http://doi.org/10.1353/jhe.2014.0028