

Accepted Manuscript

Rethinking the accessibility of online higher education: A historical review

Kyungmee Lee

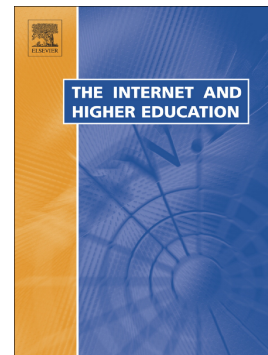
PII: S1096-7516(17)30011-8
DOI: doi: [10.1016/j.iheduc.2017.01.001](https://doi.org/10.1016/j.iheduc.2017.01.001)
Reference: INTHIG 628

To appear in: *The Internet and Higher Education*

Received date: 29 February 2016

Revised date: 7 January 2017

Accepted date: 10 January 2017



Please cite this article as: Kyungmee Lee , Rethinking the accessibility of online higher education: A historical review. The address for the corresponding author was captured as affiliation for all authors. Please check if appropriate. Inthig(2017), doi: [10.1016/j.iheduc.2017.01.001](https://doi.org/10.1016/j.iheduc.2017.01.001)

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Rethinking the Accessibility of Online Higher Education: A Historical Review

Kyungmee Lee, Ph.D.
Lancaster University
The Department of Educational Research
County South, Lancaster University
Lancaster, Lancashire, United Kingdom
LA1 4YD
k.lee23@lancaster.ac.uk
44-074948-46540

ACCEPTED MANUSCRIPT

Abstract

The rapid growth in online higher education, in terms of course offerings and student enrollment, has often been celebrated on the grounds that moving education online is an innovative way to increase the accessibility of university education. This article problematizes a range of assumptions that underpin those claims. To do so, two concepts are deployed: “authentic accessibility” and “programmatic definition”, each of which encourages us to examine actual practice rather than aspirations. This article further deconstructs the commonly held perceptions of online education by presenting conflicting discourses about the purposes of distance education, the characteristics of distance students, and the technologies that have mediated distance education throughout its historical development. The findings highlight the increasing multiplicity of online education practices and realities, and the limitations of typical conceptualizations of those phenomena, which have historically conceptualized distance education as a single domain. The article calls for a more sophisticated approach to considering the quality of online higher education, a value judgement which continuously needs to be understood and discussed in relation to the complex and multi-dimensional issues of increasing the accessibility of university education.

Keywords: online higher education, distance education, history of online education, authentic accessibility, disadvantaged students

Rethinking the Accessibility of Online Higher Education: A Historical Review

In the broader context of the development of information and communication technologies, online education has been suggested as a ‘revolutionary’ solution to diverse educational problems of inequality (see Allen & Seaman, 2014; Contact North, 2012; Online Learning Task Force, 2011). It has been commonly anticipated that adopting online forms of educational delivery will enhance the ‘accessibility’ of university education, and that expectation has tended to underpin further suggestions of an expansionary nature: that it is imperative to adopt online education throughout the higher education (HE) sector (see Bradshaw, 2014). That logic of argument is evident, for example, in the following excerpt from a strategic national report, *The state of E-learning in Canada*:

[ICTs] bring advantages to the learning process that are not readily available in other ways. The most prominent of these are more access to learning; better allocation of teaching resources; shared learning content; deeper learning; and a social component to learning. The learning potential of technology and the internet is evident and can provide one solution to the growing demand for post-secondary education and skills and training. (Canadian Council on Learning, 2009, p. 13)

At the same time as arguments like that have been in broad circulation, there has been a rapid growth in online education (in terms of both online course offerings and student enrollment) in many countries over the last two decades (see Allen & Seaman, 2013, 2014; OLTF, 2011; White, Warren, Faughnan, & Manton, 2010). That rapid growth has produced, in turn, a gradual shift in focus in the policy documents. Another public report, *Online learning in Canada: At a tipping point* (Contact North, 2012) concludes that online education has reached its ‘tipping point’: it has already succeeded in becoming an integral part of HE, and now it needs to turn its focus, from providing *access* to university education, to increasing its *quality*.

This article problematizes claims of that kind about the current state of online HE and argues that those claims need to be critically examined *before* online HE moves its focus away from increasing the accessibility of university education. In order to examine those claims—and to ultimately demonstrate their limitations—this paper uses a historical review approach aiming to understand and question some of relevant discourses¹ that construct the rhetorical base for those

¹ Discourse in this article follows Foucault’s: taken-for-granted assumptions or beliefs, which are not necessarily true but taken-for-granted and shared among people in contemporary society. Foucault’s approach to discourse can be distinguished from a more general linguistic approach that focuses on analyzing language at the conversational or dialogical levels (see also Gee, 1996 for two kinds of discourse). Further, discourse, here, needs to be differentiated from the common use of the term in much online education literature, where it is used largely to refer to communication and its linguistic product between learners (see Xin & Feenberg, 2006). According to Foucault (1985, 1990, 1995), as discourse is a historical product, it can only be analyzed,

claims about the accessibility of online HE. This historical review draws on two underlying assumptions: firstly, it assumes that our current views on online HE are not simply given by a single social group or created in a vacuum; but, instead, that they are a historical product, which has been influenced by multiple educational, social, and political factors over time. Thus, online HE needs to be conceptualized against the backdrop of its long historical development, which requires some contextualisation within the prior and surrounding discourses of *distance education*. Secondly, it assumes that adopting online education does not *naturally* or *automatically* increase the accessibility of university education. Increasing the accessibility is, in fact, a very complex and challenging process.

Although both underlying assumptions will be discussed in more detail later, it is important to note here immediately that this article does *not* consider the simple increase of student enrolments in HE institutions as equivalent to, or demonstrating the increase of, the accessibility of university education. As Levin (2007) argues, providing access to educational institutions is more than allowing the disadvantaged *in*. Rather, it suggests that institutions must accommodate those students by recognizing their prior situations and needs, thus allowing them to actually benefit from their institutional experiences. In this perspective, the notion of accessibility is neither value-free nor objective. Borrowing Levin's (2007) terms, this article will argue that to increase the "authentic accessibility" of university education is to give opportunities to the "have-nots" and to accommodate the special needs of the disadvantaged, rather than to provide additional opportunities for the "haves" who *already* possess access to university education (p. 1). That notion of authentic accessibility has also important implications for the conceptualization of *quality* in this article—this will be articulated later in this article. The interrelated ideas of accessibility and quality based on the notion of authentic accessibility will be used throughout the paper in order to make critical judgements regarding the claims about the current state of online HE.

The next section first contextualises online HE in the course of distance education (DE) development, which will be followed by a brief description of the methodology this review study used to deconstruct the claims of online HE: it increases, or has increased, the accessibility of university education.

Locating online higher education in the continuum of distance education development

Although online education tends to be discussed as if it is an entirely new form of educational practice that did not exist before the age of the Internet, this article sees it as one of the most recent forms of DE that dates back at least to the mid-1800s (Verduin & Clark, 1991). A large part of our perceptions of online education closely resemble earlier views on DE, while at the same time, many current online

understood, and questioned in the historical context of its emergence and development.

HE practices are heavily influenced by DE practices of the past (Saba, 2013). At the early stages of its development, the nature of *learning at a distance* tended to be regarded—at least among distance educators themselves—as a promise to provide educational opportunities to those people who were not able to attend face-to-face programs offered by traditional campus-based universities (Wedemeyer, 1981). For example, most distance universities (e.g., open universities) were established with an explicitly stated humanistic commitment to serve different groups of non-traditional students and to offer those learners more accessible educational opportunities (Peter, 2008). Who they referred to as ‘non-traditional students’ and how they made educational opportunities ‘accessible’ are explained further in the next section. For now, what is important to note is that the stated focus of the most distance universities on opening the door of HE has remained unchanged, while the most of the associated education practices have been shifted to online education, as the following mission statement from one of the open universities illustrates:

[Athabasca University] is dedicated to removing the educational, geographical, financial, social, cultural and other barriers that often limit access to post-secondary achievement... Distance education is different from conventional classroom-based education in that it allows you as a student to complete courses and programs without attending scheduled group classes in a central location, such as a university campus... (Athabasca University, 2016)

It is perhaps also significant that this university, like other similar distance institutions, still actively uses the term ‘distance education’ to refer to the diverse forms of educational practice that are differentiated from conventional face-to-face practices; in other words, in a way that *encompasses* ‘online education’. In the current HE context, in which multiple forms and providers of DE co-exist and compete, it is challenging, if not impossible, to arrive at one clear definition of DE. Other scholars have already discussed that issue at greater length than space permits here (see Schlosser & Simonson, 2010). While acknowledge the increasing complexity and diversity of current DE practices, this article follows a relatively straightforward definition that highlights two elements that all DE practices have in common: the separation of teacher and learner, and concomitant use of technological media to unite teacher and learner (Keegan, 1980, 1996; Moore, 1973).

Further consideration of Keegan’s (1988) critical reflection on the earlier DE scholarship, which built a clear distinction between programmatic definitions and scientific definitions of DE, may be helpful here in defining ‘online education’. According to Keegan, scientific definitions attempt to address the question “what does the term mean?” and to provide “an account of the meanings of its prior usage in educational discussion” (p. 6). The programmatic definitions, on the other hand, normatively describe a fraction of DE (those elements to be *liked*) or the future of DE (those elements to be *wanted*). Keegan—three decades ago—indicated that most DE definitions were not scientific but

programmatic, and noted that DE scholars often confused programmatic definitions of DE with scientific ones. The result, Keegan further argued, was that much scholarly understanding was not based on the authentic nature of DE, the shared aspects of real-life DE practices, or what differentiated DE from “non-DE”, but, instead, was focused on the positive characteristics of particular DE programs and the goals or ideals to be achieved. Thus, the definition of DE, above, which highlights the two essential elements (distance between teacher and student and technological mediation) is effectively a scientific definition. On the other hand, the one of Athabasca University, which focusses ultimately on the virtues of learning at a distance and its positive characteristics (such as being accessible and flexible), is of a programmatic nature.

The recent forms of DE practice, which are mediated by web technologies, are now commonly referred to as *online education* and generally conceptualized based on the distinctive features of *the Internet* compared to those of other previous DE media, including textbooks, radio and television (e.g., Edwards, 1995; Kanuka & Brooks, 2010; Oblinger & Oblinger, 2003; Sims, 2008; Swan, 2010; Twigg, 2001). This article argues that Keegan’s (1988) earlier observation also corresponds to how online education is being conceptualized in the present day. Online education is often defined as ‘interactive’ and ‘collaborative’ (e.g., Adams, 2007; Harasim, 2000, 2010; Swan, 2010) and so regarded as an innovative form of DE that offers significant enhancements over conventional face-to-face HE:

There is no longer an issue of having to choose between access (independence) and quality (interaction). It is now possible for students to learn collaboratively anytime, anywhere. The online communication and conferencing capabilities of computer mediated technologies are providing opportunities to revolutionize [HE]. (Garrison & Kanuka, 2008, p. 18)

However, such conceptualisation of online education is heavily dependent on the promises that new communication technologies provide, rather than resulting from careful observation of general pedagogical practices in real-life online HE (Hamilton & Friesen, 2013; Pittman, 2013). A large proportion of research into online HE focuses on reporting *positive* instructional outcomes or proposing *ideal* pedagogical principles drawn from particular online programs of an experimental nature, which is already recognised and criticised in the literature (see, Davies, Howell, & Petrie, 2010; Naidu, 2005; Zawacki-Richter, Backer, & Vogt, 2009). By limitedly focusing on what online HE might possibly be or do (i.e., programmatic definitions), research may fail to effectively guide practice, advance theory, and thus develop the field—just as Keegan (1988) mourned for the field of DE thirty years ago. This historical review study, therefore, attempts to deconstruct the programmatic definition of online HE.

For that purpose, this study first explores the historical construction of our understandings of online HE, particularly the claims such as that it increases the accessibility of university education. This study then deconstructs those claims by presenting some of the conflicting ideas and research results that tend to be too negative or realistic to be included in the programmatic definition of online HE. In other words, it seeks out unpopular discourses about online HE and places them in parallel with the more popular discourses—to provide a more balanced account of the actual status of online HE. The seminal data sources for this review study are five handbooks of online education (or synonymous terms are used in their titles) published between 2000 and 2015 (Cleveland-Innes & Garrison, 2010; Evans, Haughey, & Murphy, 2008; Moore, 2013; Schlosser & Simonson, 2010; Szücs, Tait, Vidal, & Bernath, 2009). Because of the historical approach in this review work, purposefully selected those books that consider both recent online education practices and more traditional DE practices. In addition, a wider range of review articles published in peer-reviewed journals in the field were searched using a broader scope of key words such as “distance education/learning,” “online education/learning,” “e-learning” although the articles situated in HE settings were limitedly selected and reviewed.

To summarise, online HE in the present article conforms to the scientific definition of DE: that is, in online HE, teachers and learners interact at distance and web technologies are used to bring them together. Although I acknowledge that there are multiple forms and providers of online education in the current HE context, in order to sharpen the focus of my discussion, I clearly draw a boundary around online HE by excluding education practices: i) that include conventional face-to-face instruction (i.e., blended learning) and/or ii) that do not involve teachers or institutional provision (i.e., information learning) from my argument. In addition, although I perceive online education is also a kind of DE, for the sake of clarification, I subsequently use the term DE referring to early DE practices using technological media other than web technologies.

From Distance to Online: (De)constructing Discourses

This main body of this article explores several discourses regarding three particular aspects of DE practices (i.e., the purpose of DE, the characteristics of distance students, and propositions about instructional technologies) and unpacks the complex educational, social, and political conditions that influenced the construction of those discourses. Subsequently, the section discusses how those interrelated discourses influence the way that online HE is currently conceptualized and highlights points of continuity and discontinuity between the discourses of DE and those concerning online HE: that is, the ways in which the historic DE discourses have changed or remained the same. Throughout the discussion, the paper offers a range of critical reflections whose purpose is to gradually problematize the programmatic definition of online HE.

Purpose of Distance Education

The origin of DE and open learning movement

The origin of DE varies in the literature according to different researchers (Adams, 2007; Saba, 2013). Although much of the literature focuses on the Internet as a driving force for the development of DE, its origin, in fact, dates back *at least* to the mid-1800s (Larreamendy-Joerns & Leinhardt, 2006; Verduin & Clark, 1991). For example, in 1858, the University of London started to provide correspondence study programs for students seeking an external degree; the targeted students were “women and racial minorities who were barred from [HE] by political or personal circumstances” (Haughey, 2010, p. 48). The first US correspondence program, *Society to Encourage Studies at Home*, was launched in 1873 by a female American author and educator, Anna Eliot Ticknor: it was also designated as being ‘for women’. More than 7,000 women were enrolled in that program from across social classes and geographical boundaries (Agassiz, 1971; Bergmann, 2001). By the end of the 1800s, elite universities in both the US and the UK began providing a vast group of distance students with correspondence teaching as a part of the ‘university extension’ movement (Storr, 1966). As manifest in those examples, these first DE programs were largely dependent on the voluntary commitment of a few intellectuals and universities to increase access to HE among underserved populations, including women, blue-collar workers, and farmers (Tracey & Richey, 2005).

During the 1960s and 1970s, an open learning movement emerged in the HE field out of similar democratic concerns and consequently, influenced the rapid growth of DE. Beginning with the Open University of the United Kingdom (UKOU) in 1969, 20 open universities and autonomous DE institutions were established in more than 10 countries over a span of a decade, which aimed to provide accessible HE (Peters, 2008). Being differentiated from campus-based universities, the open universities specialized in distance teaching and DE research and focused on the mass production of independent correspondence study programs using affordable technologies (Guri-Rosenblit, 2009a). Unlike the previous university-led extension movement, this expansion of open universities was mainly guided by governmental planning and thereafter facilitated by both political and financial support from governments (Miller, 2010; Peters, 2008). The growing public interest in DE and generous funding for DE research led to the birth of DE scholarship during this period as well (Bates, 2005). With this increased attention given to DE, multiple slogans and mottos such as “education for all” (Daniel, 1999, p. 5) or “cradle-to-grave open education” (Wedemeyer, 1981) emerged and the rapid spread of these phrases throughout society gradually created the rhetorical image of DE as providing an open—or at least more accessible—point of entry to HE. In that context, the aspiration for a university education both accessible and open to the general public—including populations previously underserved by traditional, campus-based universities—was rapidly taken up by distance educators as a language to describe DE.

A gap between the stated purpose and the actual motivations

The open learning movement was, in fact, largely driven by complex political and economic interests that conflicted with the widespread understanding about its democratic motivation (Harris, 2008; Sumner, 2010). The open mandate of DE in the US, for instance, was not driven purely by democratic ideals but rather “a response to various workforce and economic developments” (Miller, 2010, p. 26). Political concerns about national competitiveness, which increased particularly after the launch of the Sputnik satellite in 1957 in the Soviet Union, were a strong driving force for governmental support of the open learning movement in the 60s and 70s (Haughey, 2010).

In many other countries, HE came to be regarded as essential for fulfilling a national mission to produce more educated and trained *workforces*. As part of that pervading mission, DE was perceived as a cost-effective means to achieve national economic growth plans (Peters, 2008). More specifically, building open universities was seen as a convenient means to relieve the financial burden placed on governments when expanding campus-based universities to satisfy growing demand for HE (Byrne, 1989). Since their birth, the growth of open universities has also been influenced by multiple groups such as DE scholars, higher educators, educational technologists, and policymakers, all of whom have different interests and agendas—some motivated by attracting more students to maximise that profit (Harris, 2008). As Haughey (2010) argues, DE, which was aimed to serve the needs of *marginalized* social groups, was, in reality, mainly shaped and driven by the collective efforts of *dominant* social groups: that is, ironically serve their interests. Nevertheless, the non-democratic and often profit-oriented, purposes of the early DE programs were not openly discussed in public.

While the full range of factors motivating the growth of open universities remained hidden or unrevealed, open universities actively promoted across the public sphere their self-perceived or self-identified mission: to open the doors of HE to the public and/or the underserved (Shale, 2010). Rather than developing a comprehensive understanding of “being open²”, however, open universities adopted and implemented the relatively simple approaches to making their educational provision more accessible, by: i) implementing open admission policies of lowering or even removing entrance requirements, and ii) adopting the particular mode of distance teaching, namely, independent correspondence study (Guri-Rosenblit, 2009a, 2009b; Lewis, 2002). In those ways, open universities did indeed attract and accept a large number of students who were looking for educational opportunities outside the traditional campus-based universities (Peters, 2008). Therefore, the positive perception towards DE, as a mean to increase the accessibility of university education, further grew and spread throughout different social contexts (Peters, 2008).

² In fact, the vagueness of the term open learning was questioned early in 1970s (Lefranc, 1984) and the first UKOU chancellor also argued that “being open” requires a multi-directional approach including being “open to people, open to places, open to ideas and open to methods” (Haughey, 2010, p 52). However, it is only in the recent years, with a burgeoning open access movement, that scholars have started to investigate the diverse meaning of being open (see Bayne, Knox, & Ross, 2015; Knox, 2013).

A shift to a new era of online higher education market

From the mid-1990s, open universities have been experiencing economic difficulties attributable to government cutbacks, and funding for DE research has become restricted for similar reasons (Black, 2013). In parallel with those changes, a phenomenon with a new label called *online education* has emerged, which has been associated with great excitement about the attendant instructional possibilities. The result has been a rapid increase in the size of the online HE enterprise: online materials have become more attractive marketable commodities for potential vendors and HE institutions (Harting & Erthal, 2005). Multiple new online HE providers have emerged, as competitors to the previous DE institutions such as open universities, including: i) newly established online universities that use advanced technological infrastructure and aggressive marketing strategies to increase student enrollments, and ii) traditional campus-based universities, which are offering increasing numbers of online programs (Harting & Erthal, 2005).

In this increasingly competitive context, the DE institutions have been under increasing pressure to maintain their enrollment levels, or even to increase them to compensate for a continuing starvation of public and government funds (Cleveland-Innes & Sangrà, 2010). It has been an ongoing struggle for the DE institutions to maintain the ‘balance’ between their original mission of serving the disadvantaged and new market-driven values—like ‘commercial imperatives’ to adopt corporate business models and seek new revenue streams (Evans & Pauling, 2010).

In fact, there has been a growing academic literature explicitly discussing new business strategies for DE institutions, where the focus of attention is on helping those institutions to increase their competitive advantage in the online education market (e.g., Elloumi, 2004; Rabiee, Nazarian, & Gharibshaeyan, 2013). That literature, strongly influenced by economic theories, does not hesitate to call students ‘clients’, ‘customers’, or ‘purchasers’, a matter which will be discussed more in the following section. Increasingly, whereas DE institutions still claim that their main aim is to serve the disadvantaged, their actual focus is increasingly moving even further away from the original democratic purposes of DE (see Author, 2014, 2015). Instead, those institutions focus on attracting the *general* population: not those being underserved by the traditional university system, but those seeking alternative, more convenient educational opportunities for themselves (Brabazon, 2007; Evans & Pauling, 2010) and this transition has further exacerbated the gap between the stated purpose of and actual motivations for DE. As a result, even though the notion of increasing the accessibility of university education is still valued as one of the core operational foci of the current online HE, it tends to be differently understood and approached.

It is critical to note, however, that much of the contextual detail in descriptions of recent shifts in DE is not only limited to online HE, but reflects wider changes evident across the HE sector. The current HE is often described as being highly influenced by neoliberal political and economic

conditions: where government funding for public sectors is shrinking so that student tuition has become the main funding source for the operation of universities and where individual students are increasingly perceived as ‘customers’ exercising a free choice over education service products (see Giroux, 2014; Lewis, 2008). In this neoliberal context, it is frequently argued that the educational gap between different groups around the world remains as pervasive as ever (Perraton, 2000) and social and educational inequalities continue to grow (Haughey, Evans, & Murphy, 2008). These observations from the broader field of HE provides a counterpoint to claims that the spread of online education increases access—the ‘spread’ is happening, but access problems are still prominent, while also highlighting the increasing complexity of the issues of educational inequality—the issues will need to be accounted for if the accessibility of HE is to be genuinely improved.

In recent years, of course, there have prominent efforts to address issues of educational inequality using web technologies originating outside formal HE settings. Although those efforts are beyond the scope of this review article, to mention only two, massive open online course (MOOC) and open educational resources (OER) initiatives (Bonk, Lee, Reeves, & Reynolds, 2015; Laurillard, 2016; McAndrew, 2010; Simonson, 2012) have been greatly welcomed by the public and intensively discussed in the larger educational and social spheres (Daniel, 2012; Daniel & Killion, 2012). Unlike the previous open learning movement, which drew limited attention from a partial group of distance educators or higher educators, the current open access movement has invited a broad range of perspectives from different scholarly groups to provide insightful commentary (see Bayne, Knox, & Ross, 2015; Knox, 2013). Those varied contributions have resulted in a growing body of critical discussion among educational scholars emerging in the literature, which strives to better understand the messy realities of online HE praxis (Njenga & Fourie, 2010; Baggaley, 2013). I believe that those academic discussions can also contribute to developing a more nuanced understanding of online HE.

Distance Students

A traditional view of distance students

The early DE practices, which were mainly built in the open admission policies and the independent correspondence study model, were arguably influenced and facilitated by a limited representation of distance students. Being labeled as a group of “non-traditional students” or “back door learners,” distance students were generally conceptualized as adults who *could not* rather than *would not* access traditional HE because of their personal, financial, or social, somewhat disadvantaged, conditions (Keegan, 1993; Wedemeyer, 1981). In this context, the emphasis was being placed on their desire for learning. In fact, the current view about non-traditional students in the broader HE literature—a disadvantaged population in respect of their economic status; social, linguistic, and cultural conditions; as well as mental or physical abilities (see Levin, 2007)—is close to how distance students were initially perceived. The common view on DE students in the era of the expansion of the open

universities was also affected by theoretical works in a particular field of adult education named *andragogy*, wherein a large number of scholars deliberately differentiated their conceptual and theoretical approaches to adult learning from pedagogy (see Knowles, 1985). The andragogical perspective regarded adult learners, by contrast with children, as autonomous subjects relatively free from dependence. It was being perceived that adults' situations are influenced and controlled only—or at least chiefly—by sources 'from within'. That is, adult learners were conceptualised as being internally motivated and having the ability to maintain their motivation throughout a course of study which is initiated and led by their own needs and goals³.

This conceptualisation of adult learners also ties in closely with traditional portraits of 'back door learners' and the pedagogical assumptions underlying independent correspondence study programs (Haughey, 2008; Peters, 2002). Particular images were widely used and circulated to represent distance students: women putting their children to bed and working on assignments in the kitchen; blue-collar workers writing pieces of coursework during work breaks or after finishing their shift; or farmers reading textbooks in the field. In portraits of this kind, students' strong desire for learning is foregrounded and their situational difficulties or disadvantages concealed (Burge & Polec, 2008). Open universities seized upon those images of distance learners: they "touted themselves as institutions offering people a second chance to earn a degree" (Shale, 2010, p. 96) and focused on providing people with opportunities and "freedom" to begin and independently study "at their convenience" (Wedemeyer, 1971, p. 3). In more recent years, however, it has been reported that open universities have not been very successful in realizing their stated open education mandate, basically because the simple operation of open education such as letting students enter university does not ensure distance students' academic success (Guri-Rosenblit, 2009b). One reason for that is studying at a distance involves confronting a range of under-acknowledged challenges.

The challenging nature of learning at a distance

Many researchers have demonstrated that learning at a distance requires higher metacognitive skills than learning in classroom settings (Peter, 2001; Moore, 2009), while higher dropout rates among distance learners compared with face-to-face students have been known for some time (Levy, 2007). Contrary to andragogical assumptions about adult learners, distance students in HE are frequently express frustrations attributable to their lack of skills in self-regulating their learning, including even basic time management issues (Sáiz, 2009). Thus, their learning processes often proceed more slowly

³ Here, I do not intend to discuss the validity of the andragogical claims about adult learners, but aim to point out its relevance to DE practices in the past. In fact, it is important to note that the andragogical claims (and particularly the original distinctions between children and adult learners) have been largely criticised since 2000 in the field of adult education and much more nuanced understandings of adult learners have been developed (e.g., Edwards, 2008; Rachal, 2002; Sandlin, 2005).

than their or institutional expectation. For example, in a survey of students who had dropped out of DE courses at the UKOU, 43% chose “I fell behind with my course work” as the reason for dropping out (Thorp, 2009, p. 461). A great number of adult learners at UKOU report that it is challenging to complete courses, and that they tend to spend more time to complete their courses than the ‘standard’ time allotted (Thorp, 2009). Similarly, three major reasons for non re-enrollment among students of Korea National Open University are: heavy workloads demanded in their job contexts, insufficient feedback from their instructions, and difficulties in studying at a distance (Choi et al., 2013).

In addition, it is suggested as well that students “from disadvantaged backgrounds need even more support and care than students from well-to-do backgrounds” (Guri-Rosenblit, 2009b, p.11). That is, in reality, a large group of academically less proficient students enter DE institutions and quickly encounter many challenges inherent in learning at a distance from their teacher and peers for which they are unprepared (O’Hara, 2008 in Kanuka & Brooks, 2010). Consequently, those who tend to *actually* benefit from DE are those individuals who are well-prepared (with high pre-existing academic skills) and well-resourced (including with funds, time, and technological or cultural access) (see Spronk, 2001; Choi et al., 2013). That situation has further generated a criticism towards many DE institutions unconditionally attracting and accepting unprepared students simply to increase their enrollments and ultimately profiles (e.g., O’Hara, 2008 in Kanuka & Brooks, 2010).

Diverse groups of distance students in online higher education

In the most recent period, where the discourse of ‘online education’ has started to be actively differentiated from the one of DE, there have been salient changes to the demographics and characteristics of distance students (Burge & Polec, 2008). The single representation of distance students described above is very limiting in the current online HE context where “the diversity of the student body is growing fast” (Bates, 2005, p. 211). A greater social recognition of *both* the necessity of lifelong learning and the value of online education, together with an increase in the size of the online HE enterprise, has resulted in a rapid growth in the population of distance students and the diversity in them (Bates, 2005; Harting & Erthal, 2005). In current online programs, for instance, there are a large number of new student populations, including: those often labeled as lifelong learners, who are pursuing second university degrees or graduate studies (i.e., professionals possessing several degrees); students registered at campus-based universities who want single course credits to earn a degree from their home universities; and high school students (who would not qualify as adult learners) taking online courses to supplement their home schooling or advanced learning (Bonk, 2009).

While traditional distance students tended to be grateful for the educational opportunities provided, deferential to the providers, and compliant with the systems set in place, current students are client service-oriented, resources-stressed, and credential-oriented (Burge & Polec, 2008). Those consumer-

like students tend to be less patient when encountering forms of inconvenience in their learning and have higher expectations that institutional services will correspond to their needs on the basis that their education is an investment of time and finances—even when enrolling in a single course. As a consequence, the established DE institutions have tended to struggle to retain students, who have an active awareness that there are many distance learning options available and so who are not generally loyal to their institutions (Author, 2015). In this new online HE context, the argument that has been constructed in the preceding sections—providing genuinely accessible HE opportunities that meet students' diverse needs is much more complicated and challenging than simply letting every adult in universities—seems even more pertinent.

Instructional Technologies

The technology-oriented conceptualization of DE

As set out in the preceding sections, since the first correspondence programs, one major concern among distance educators was to provide educational opportunities to the disadvantaged. DE scholarship was established in the 1960s-70s alongside a rapid growth of DE institutions as well as generous public funding for DE research (Black, 2013). Until that time, the dominant instructional medium in DE was typically printed-paper, and most DE institutions relied on the mass production of printed materials for independent correspondence study programs (Wedemeyer, 1981). However, the newly established field of DE quickly began to focus on the instructional possibilities that other technologies might bring, and early DE scholars⁴ attempted to improve the quality of DE by using different communication media (e.g., audio lectures; telephone tutoring) in a supplementary role to the dominant printed materials. The distinctive features of each medium were seen as constructing different instructional practices and enabling particular kinds of interactions among students, teachers, content, and environments—thereby offering students unique distance learning experiences (Evans & Pauling, 2010; Hughes & Hillebrand, 2006; Vrasidas & Glass, 2002). In that context, DE practices became increasingly conceptualized and differentiated according to the technological media that were being used (e.g., Guglielmo, 1998; Taylor, 1999).

That reductionist manner of conceptualizing DE, however, has increasingly resulted in a technological deterministic approach among DE scholars (see Pittman, 2013). For instance, the fact that DE practices are frequently categorized into different 'generations' based on the technologies being used (e.g., Moore & Kearsley, 2005; Taylor, 1999) clearly demonstrates that technology-oriented approach. In this categorization, newer generations of DE practices, which use recently emerged technologies, tend to be perceived better and more effective than the older generations of DE

⁴ To name only a few early DE scholars: Charles A. Wedemeyer and Michael G. Moore in the US, Börje Holmberg in Sweden, Otto Peters in Germany.

practices (Harting & Erthal, 2005). In more recent years, the development of the Internet has opened a new generation of DE—namely, online education—and it is often argued in conjunction that adopting web technologies, or “moving online”, has led to a radical transformation in the nature of DE practices and research (Beldarrain, 2006). One of the most distinctive merits of web technologies from the previously used technologies, it is suggested, is that they can provide a cost-effective means of supporting many-to-many interactions among dispersed people and communities (Kanuka & Brooks, 2010).

While DE had been much valued among distance educators and students (Wedemeyer, 1981), within the broader HE field, there had long been a prevailing perception on DE as ‘second-rate’ education or ‘inferior’ form of education that was nonetheless useful in particular circumstances (Hülsmann, 2009). Although the nature of learning at a distance had allowed DE programs to provide their students a higher level of accessibility (and flexibility) than that typically offered by face-to-face programs, the distance between teachers and students was seen as inevitably causing a lack of interaction between them, which was regarded as a major drawback of DE. However, the advent of the Internet has changed the landscape of HE and reputation of DE within the HE contexts. The Internet was rapidly envisaged as a disruptive force with the potential to carry pedagogical innovation—enabling and facilitating interactive and collaborative learning experiences⁵, not only among non-traditional students in DE contexts but also among traditional students across broad contexts of HE (Harasim, 2000). Online HE became consequently conceptualized as a revolutionary form of HE, and that reconceptualization rapidly produced positive claims about online HE. Online HE was still being conceptualized separately from ‘traditional’ face-to-face instruction, but this time regarded as innovative and preferable rather than as something inferior but occasionally useful (see Miller, 2010; Garrison & Cleveland-Innes, 2010).

That situation created both opportunities and imperatives among DE researchers (including a large number of new researchers who are exclusively interested in online education; see Saba, 2013) to change their pedagogical approaches from those focusing on individual, or independent, learning to ones attempting to foster more interactive and collaborative learning (Adams, 2007; Swan, 2005, 2010). Alongside such radical shifts in the conceptualization of DE from second-rate to technologically and pedagogically advanced, the original focus of the scholarship on accessibility gradually faded away to be replaced by new points of emphasis on pedagogical innovation.

The Complexity of Pedagogical Innovation and Limitations of the Deterministic Approach

⁵ Theoretical principles underpinning this pedagogical approach, which is beyond the scope of this paper, have been extensively discussed in a larger number of literature about constructivist learning (see Jonassen, 1991; Vrasidas, 2000) and more specifically computer-supported collaborative learning (see Stahl, Koschmann, & Suthers, 2006).

The purpose of this section is not to suggest that claims for improving the quality of DE practices using innovative web technologies are in themselves false. In fact, pedagogical activities in DE are mediated by technologies so that the use of technological media certainly influences the quality of pedagogical experiences in DE (Evans & Pauling, 2010; Hughes & Hillebrand, 2006). Instead, therefore, I wish to highlight the overemphasis on technological advancement among recent online education scholars, which I suggest reflects deterministic views about the relationship between technological media and pedagogical practices (see Hamilton & Friesen, 2013; Bayne, 2015). This technological deterministic understanding—as previously shown in McLuhan’s (1964) thesis that “the medium is the message”—assumes that each technology’s essential or *inalienable* qualities will regulate the pedagogical quality of online programs, somewhat independently from other social conditions. Such determinism brings two problematic assumptions into discussions related to technologies: i) that technologies progress along a fixed and linear course from less to more advanced forms, and secondly, that social institutions must adapt to the imperatives of technological innovation (Feenberg, 1992, p. 304). However, this perspective fails to consider the complexity of social change, which is influenced by multiple social and political factors, and it also overlooks the possibility that technological change does not always lead to more advanced forms of social practice (Feenberg, 1992; Hamilton & Friesen, 2013).

Our current understanding of online HE is arguably based on those technological deterministic assumptions that also contributed to the bursting of the “Tech Bubble” in the 90s when the Internet was introduced to the public (Ice, 2010, p. 139): that is, the great excitement about the potential social progress the Internet would bring about. Such assumptions have inevitably devalued old DE technologies (and pedagogical activities mediated by them), despite their ongoing value in broader social contexts (Bates, 2008). Subsequently, it has generated an imperative—one of changing, reforming or even eliminating historically established DE practices by adopting new web technologies. Yet the current status of online HE, and especially the extremely slow speed of pedagogical changes that traditional DE institutions have experienced even after adopting web technologies as their dominant technological medium (Author, 2014; 2015), seems to strongly undermine those assumptions. As Pittman (2002) argues, “the development of DE is not a simple linear progression, with each new medium topping the previous one... each medium or format can continue to have appropriate, legitimate, and beneficial uses” (p. 118). Taking a critical view on the assumptions in this way can ultimately serve to undermine the imperatives of technological innovation and institutional changes prevailing in online HE contexts.

Even though online HE tends to be perceived as innovative educational practice that can achieve both accessibility and interactivity (see Garrison & Kanuka, 2008), it has been repeatedly reported by practitioners that it is too challenging for online program to be both accessible (i.e., affordable) and interactive (Kanuka & Brooks, 2010). As discussed above, the most important

principle underpinning traditional DE practices and research was the increase of accessibility of DE programs by using affordable, and widely available, technologies. This principle was also supported by the operational mechanism of DE institutions: the mass production of *independent* study materials (Hülsmann, 2009; Perraton, 2000; Rumble, 2004; Woodley, 2008). The operation of online HE in ways that heavily emphasizes interactive and collaborative learning activities, on the other hand, tends to be costly and consequently to decrease the accessibility of online programs among disadvantaged students (Holmberg, 1995; Kanuka & Brooks, 2010). For example, collaborative pedagogical practices in online HE tend to work best in the particular educational conditions, like a small size class and generous tutor support, which tends to render online HE more expensive than the previous DE provision.

In addition, such pedagogical approaches tend to require a greater level of student participation in social learning practices (e.g., group discussions, collaborative projects). However, distance students with many other responsibilities or learning constraints have reported that they generally experience these social learning activities as more demanding and time-consuming—but less effective than individual learning activities (e.g., Asunka, 2008; Paechter, Maier, & Macher, 2010). Therefore, many prefer it if the structure of their online programs more closely resembles those of traditional independent study programs (e.g., Battalio, 2007; Zhu, Valcke, & Schellens, 2009). As a consequence, current online programs seem to be divided, or polarized, into two groups according to the dominant pedagogical approaches used: one group is more traditional, and is perceived as less innovative but more accessible and affordable; while the other is perceived as more innovative, but also as more expensive and thus less accessible to the disadvantaged.

Another vital issue to explore is the digital divide which, in the current social context, is *growing* (Guri-Rosenblit, 2009c). The key questions to ask with regard to this issue include who benefits and who is marginalized through online HE based on new pedagogical models and technological media. Given that there is currently a large group of people in both developed and developing worlds who do not have full access to the Internet, it is plausible that adopting web technologies might actually reduce the accessibility of DE in those contexts (Bolger, 2009; McKeown, Noce, & Czerny, 2007; North Contact, 2012). Even within developed countries like the UK or Canada, adult educational Internet *use* remains unequal among different socio-economic and occupational classes (McKeown et al., 2007; White & Selwyn, 2012). Recent studies show that the most active group in using social communication media consists of relatively young, well-educated, affluent Western males (Selwyn, 2009; 2011).

Baggaley (2008) has argued that DE has faded into the mainstream as online HE has somehow failed to realise the worldwide learning opportunities that had been prominently promised and hoped for. Contrary to the hope, there are only particular “slices of the population being included

and other more substantial slices being excluded” in the current online HE practices (Bolger, 2009, p. 305). Therefore, I argue, common claims about the accessibility of online HE tend to be rather rhetorical, and largely enabled by a technological deterministic approach to conceptualizing DE practices (Guri-Rosenblit, 2009a).

Conclusion

This article has attempted to deconstruct some common perceptions regarding the accessibility of online HE. While acknowledging that there have been many laudable attempts to increase the accessibility of university education throughout the long historical development of DE, inspired by the notion of authentic accessibility, I have focused on constructing a more nuanced view on the actual status of online HE. The evidence presented in this historical review article suggests it is difficult to know to what extent the *authentic* accessibility of university education is realized through online HE and in doing so, it actually weakens the popular claims about the accessibility of online HE. This is rather an empirical matter that can be investigated for particular settings and practices than a conceptual question whether the claim is true or false. One plausible next step might, therefore, be in-depth investigations rooted in actual online HE practices and distance students’ real-life experiences, with the broad objectives of understanding:

- i) to what extent current online HE practices have coped with the new body of service-oriented distance students while maintaining the originally stated focus of DE to cater for the underserved, and
- ii) to what extent online HE has effectively served the contemporary underserved, who may not be well-prepared for the post-secondary level of study and so require assistance beyond enabling them to begin their study.

Before having clear answers to those two questions at least, it may be difficult to develop a comprehensive account of the accessibility of online HE—beyond simply explaining how easy it is for disadvantaged students to *begin* their university study. From this perspective, the ways in which we conceptualize the quality of online HE also needs a more sophisticated approach than the currently prevailing modes of investigation, which are heavily influenced by newly developed technology-determined *or* single pedagogy-focused views in the field. As a minimum, this approach would need to take into account both the potential challenges and, subsequently, the issues or limitations inadvertently introduced by adopting new technologies or putting into practice particular pedagogical components. It is worth restating that the purpose of presenting conflicting discourses here is *not* to provide another simplistic account with a singular nature: one that argues that online HE is not accessible and that seeks to undermine the previous and genuine efforts to provide access to the disadvantaged. Instead, the paper has highlighted that “whether online HE is accessible or not” is not

a question that can be addressed in the abstract. Instead, this paper has sought to remind scholars in the field of online HE that increasing the accessibility of university education is a complex and multi-dimensional social issue, one which requires serious, and continuing, scholarly discussions.

ACCEPTED MANUSCRIPT

References

- Author (2014). [details removed for peer review process]
- Author (2015). [details removed for peer review process]
- Adams, J. (2007). Then and now: Lessons from history concerning the merits and problems of distance education. *Studies in Media & Information Literacy Education*, 7(1), 1–14. doi:10.3138/sim.7.1.002
- Agassiz, E. C. (1971). Society to encourage studies at home. In O. Mackenzie & E. L. Christensen (Eds.), *The changing world of correspondence study* (pp. 27–30). University Park, PA: Pennsylvania State University Press.
- Allen, I., & Seaman, J. (2013). *Changing course: Ten years of tracking online education in the United States*. Oakland, CA: Babson Survey Research Group and Quahog Research Group.
- Allen, I., & Seaman, J. (2014). *Grade change: Tracking online learning in the United States*. Babson Park, MA: Sloan-C™.
- Asunka, S. (2008). Online learning in higher education in sub-Saharan Africa: Ghanaian university students' experiences and perceptions. *International Review of Research in Open and Distance Learning*, 9(3), 1-23.
- Athabasca University (2015). *Mission & Mandate*. Retrieved from <http://www.athabascau.ca/aboutau/mission/>
- Bates, A. W. (2005). *Technology, e-learning and distance education* (2nd ed.). London, UK: Routledge.
- Bates, T. (2008). Transforming distance education through new technologies. In T. Evans, M. Haughey, & D. Murphy (Eds.), *International handbook of distance education* (pp. 217–236). Bingley, UK: Emerald Group Publishing Limited.
- Baggaley, J. (2008). Where did distance education go wrong? *Distance Education*, 29, 39–51. doi:10.1080/01587910802004837
- Baggaley, J. (2013). MOOC rampant. *Distance Education*, 34, 368–378. doi:10.1080/01587919.2013.835768
- Bayne, S. (2015). What's the Matter with “Technology-Enhanced Learning”? *Learning, Media and Technology*, 40(1), 5-20.
- Bayne, S., Knox, S., & Ross, J. (2015). Open education: The need for a critical approach. *Learning, Media and Technology*, 40(3), 247-250.
- Battalio, J. (2007). Interaction online: A reevaluation. *The Quarterly Review of Distance Education*, 8, 339–352.
- Beldarrain, Y. (2006). Distance education trends: Integrating new technologies to foster student interaction and collaboration. *Distance Education*, 27, 139–153. doi:10.1080/01587910600789498
- Bergmann, H. F. (2001). The silent university: The society to encourage studies at home, 1873-1897. *New England Quarterly*, 74, 447–477.
- Black, L. M. (2013). A history of scholarship. In M. G. Moore (Ed.), *Handbook of distance education* (3rd ed., pp. 21–37). New York, NY: Routledge.
- Bolger, M. (2009). Globalization: An opportunity for the “uneducated” to become “learned” or further “excluded”? In U. Bernath, A. Szücs, A. Tait, & M. Vidal (Eds.), *Distance and e-learning in transition: Learning innovation, technology and social challenges* (pp. 303–310). London, UK: ISTE Ltd.
- Bonk, C. (2009). *The world is open: How web technology is revolutionizing education*. San Francisco, CA: Jossey-Bass.
- Bonk, C., Lee, M. M., Reeves, T. C., & Reynolds, T. H. (Eds.). (2015). *MOOCs and open education around the*

- world*. New York, NY: Routledge.
- Brabazon, T. (2007). Mobile learning: The iPodification of universities. *Nebula*, 4, 119–130.
- Bradshaw, J. (2014, Jan 13). Ontario to launch \$42-million central hub for online postsecondary classes. *The Globe and Mail*. Retrieved from <http://www.theglobeandmail.com/news/politics/ontario-to-launch-central-hub-for-online-postsecondary-classes/article16299333/>
- Burge, E. J., & Polec, J. (2008). Transforming learning and teaching in practice: Where change and consistency interact. In T. Evans, M. Haughey & D. Murphy (Eds.), *International handbook of distance education* (pp. 237–258). Bingley, UK: Emerald Group Publishing Limited.
- Byrne, T. C. (1989). *Athabasca University: The evolution of distance education*. Calgary, Canada: University of Calgary Press.
- Canadian Council on Learning. (2009). *State of E-learning in Canada*. Ottawa, Canada: Canadian Council on Learning.
- Choi, H., Lee, Y., Jung, I., & Latchem, C. (2013). The extent of and reasons for not re-enrollment: A case of Korean National Open University. *The International Review of Research in Open and Distance Learning*, 14(4), Retrieved from <http://www.irrodl.org/index.php/irrodl/article/view/1314>
- Cleveland-Innes, M. F., & Garrison, D. R. (Eds.). (2010). *An introduction to distance education: Understanding teaching and learning in a new era*. New York, NY: Routledge.
- Cleveland-Innes, M. F., & Sangrá, A. (2010). Leadership in a new era of higher distance education. In M. F. Cleveland-Innes & D. R. Garrison (Eds.), *An introduction to distance education: Understanding teaching and learning in a new era* (pp. 227–247). New York, NY: Routledge.
- Contact North. (2012). *Online learning in Canada: At a tipping point, a cross-country check-up 2012*. Thunder Bay, Canada: Contact North.
- Daniel, J. (2012). *Making sense of MOOCs: Musings in a maze of myth, paradox and possibility*. Seoul, South Korea: Korean National Open University
- Daniel, J. & Killion, D. (2012, July 4). Are open educational resources the key to global economic growth. *Guardian Online*. Retrieved from <http://www.guardian.co.uk/higher-education-network/blog/2012/jul/04/open-educational-resources-and-economic-growth>
- Daniel, S. J. (1999). *Mega universities and knowledge media*. London, UK: Kogan Page.
- Davies, R. S., Howell, S.L., & Petrie, J. A. (2010). A review of trends in distance education scholarship at research universities in North America, 1998-2008. *International Review of Research in Open and Distance Learning*, 11(3). Retrieved from <http://www.irrodl.org/index.php/irrodl/article/view/876/1607>
- Edwards, R. (1995). Different discourses, discourse of difference: Globalisation, distance education and open learning. *Distance Education*, 4, 27–39. doi:10.1080/0158791950160206
- Edwards, R. (2008). Actively seeking subjects? In A. Pejes & K. Nicoll (Eds.), *Foucault and lifelong learning: Governing the subjects* (pp. 21–33). New York, NY: Routledge.
- Elloumi, F. (2004). Value chain analysis: A strategic approach to online learning. In T. Anderson & F. Elloumi (Eds.), *Theory and practice of online learning* (pp. 61-98). Athabasca, Canada: Athabasca University.
- Evans, T., Haughey, M., & Murphy, D. (Eds.). (2008). *International handbook of distance education*. Bingley, UK: Emerald Group Publishing Limited.
- Evans, T., & Pauling, B. (2010). The future of distance education: Reformed, scrapped or recycled. In M. F.

- Cleveland-Innes & D. R. Garrison (Eds.), *An introduction to distance education: Understanding teaching and learning in a new era* (pp. 198–223). New York, NY: Routledge.
- Feenberg, A. (1992). Subversive rationalization: Technology, power, and democracy. *Inquiry*, 35, 301–322. doi:10.1080/00201749208602296
- Foucault, M. (1985). *The history of sexuality, Vol. 2: The use of pleasure*. (R. Hurley, Trans.). New York, NY: Vintage. (Original work published 1984)
- Foucault, M. (1990). *The history of sexuality, volume 1: An introduction*. (R. Hurley, Trans.). New York, NY: Vintage. (Original work published 1976)
- Foucault, M. (1995). *Discipline and punish: The birth of the prison*. (A. Sheridan, Trans.). New York, NY: Vintage. (Original work published 1977)
- Garrison, D. R., & Cleveland-Innes, M. F. (2010). Foundations of distance education. In M. F. Cleveland-Innes & D. R. Garrison (Eds.), *An introduction to distance education: Understanding teaching and learning in a new era* (pp. 13–25). New York, NY: Routledge.
- Garrison, D. R., & Kanuka, H. (2008). Changing distance education and changing organizational issues. In W. J. Bramble & S. Panda (Eds.), *Economics of distance and online learning: Theory, practice, and research* (pp. 132–147). New York, NY: Routledge.
- Gee, J. P. (1996). *Social linguistics and literacies: Ideology in discourses (2nd ed.)*. London, UK: Taylor & Francis.
- Giroux, H. A. (2014). *Neoliberalism's war on higher education*. Toronto, Canada: Between the Lines.
- Guglielmo, T. (1998). Computer conferencing systems as seen by a designer of online courses. *Educational Technology*, 38 (3), 36-43.
- Guri-Rosenblit, S. (2009a). *Digital technologies in higher education: Sweeping expectations and actual effects*. New York, NY: Nova Science.
- Guri-Rosenblit, S. (2009b). Challenges facing distance education in the 21st century. In U. Bernath, A. Szücs, A. Tait, & M. Vidal (Eds.), *Distance and e-learning in transition: Learning innovation, technology and social challenges* (pp. 5–22). London, UK: ISTE Ltd.
- Guri-Rosenblit, S. (2009c). Distance education in the digital age: Common misconceptions and challenging tasks. *Journal of Distance Education*, 23, 105–122.
- Hamilton, E., & Friesen, N. (2013). Online education: A science and technology studies perspective. *Canadian Journal of Learning and Technology*, 39(2). Retrieved from <http://cjlt.csj.ualberta.ca/index.php/cjlt/index>
- Harasim, L. (2000). Shift happens: Online education as a new paradigm in learning. *Internet and Higher Education*, 3, 41–61. doi:10.1016/S1096-7516(00)00032-4
- Harasim, L. (2012). *Learning theory and online technologies*. New York, NY: Routledge.
- Harris, D. (2008). Transforming distance education: In whose interests? In T. Evans, M. Haughey, & D. Murphy (Eds.), *International handbook of distance education* (pp. 417–432). Bingley, UK: Emerald Group Publishing Limited.
- Harting, K., & Erthal, M., J. (2005). History of distance learning. *Information Technology, Learning and Performance Journal*, 23(1), 35–43.
- Haughey, M. (2008). Section I: Diversity in distance education: Introduction. In T. Evans, M. Haughey, & D.

- Murphy (Eds.), *International handbook of distance education* (pp. 25–28). Bingley, UK: Emerald Group Publishing Limited.
- Haughey, M. (2010). Teaching and learning in distance education before the digital age. In M. F. Cleveland-Innes & D. R. Garrison (Eds.), *An introduction to distance education: Understanding teaching and learning in a new era* (pp. 46–66). New York, NY: Routledge.
- Haughey, M., Evans, T., & Murphy, D. (2008). Introduction: From correspondence to virtual learning environments. In T. Evans, M. Haughey, & D. Murphy (Eds.), *International handbook of distance education* (pp. 1–10). Bingley, UK: Emerald Group Publishing Limited.
- Holmberg, B. (1995). *Theory and practice of distance education* (2nd ed.). London, UK: Routledge.
- Hughes, B. B., & Hillebrand, E. E. (2006). *Exploring and shaping international futures*. Boulder, CO: Paradigm.
- Hülsmann, T. (2009). Access and efficiency in the development of distance education and e-learning. In U. Bernath, A. Szücs, A. Tait, & M. Vidal (Eds.), *Distance and e-learning in transition: Learning innovation, technology and social challenges* (pp. 119–140). London, UK: ISTE Ltd.
- Ice, P. (2010). The future of learning technologies: Transformational developments. In M. F. Cleveland-Innes & D. R. Garrison (Eds.), *An introduction to distance education: Understanding teaching and learning in a new era* (pp. 137–164). New York, NY: Routledge.
- Jonassen, D. H. (1991). Objectivism versus constructivism: Do we need a new philosophical paradigm? *Educational Technology Research and Development*, 39(3), 5-14.
- Kanuka, H., & Brooks, C. (2010). Distance education in a post-Fordist time: Negotiating difference. In M. F. Cleveland-Innes & D. R. Garrison (Eds.), *An introduction to distance education: Understanding teaching and learning in a new era* (pp. 69–90). New York, NY: Routledge.
- Keegan, D. (1980). On defining distance education. *Distance Education*, 1, 13–36.
doi:10.1080/0158791800010102
- Keegan, D. (1988). Problems in defining the field of distance education. *The American Journal of Distance Education*, 2(2), 4–11. doi:10.1080/08923648809526619
- Keegan, D. (Ed.). (1993). *Theoretical principles of distance education*. London, UK: Routledge.
- Keegan, D. (1996). *The foundations of distance education*. London, UK: Croom Helm.
- Knowles, M. (1985). *Andragogy in action*. San Francisco, CA: Jossey-Bass.
- Knox, J. (2013). Five critiques of the open educational resources movement. *Teaching in Higher Education*, 18(8), 821-832.
- Larreamendy-Joerns, J., & Leinhardt, G. (2006). Going the distance with online education. *Review of Educational Research*, 76, 567–605. doi: 10.3102/00346543076004567
- Laurillard, D. (2016). The educational problem that MOOCs could solve: Professional development for teachers of disadvantaged students. *Research in Learning Technology*, 24. Retrieved from <http://dx.doi.org/10.3402/rlt.v24.29369>
- Lefranc, R. (1984). The openness of open learning. *Educational Media International*, 21(3), 3–7.
doi:10.1080/09523988408548774
- Levin, J. S. (2007). *Nontraditional students and community colleges*. New York, NY: Palgrave Macmillan.
- Lewis, M. (2008). Public good or private value: A critique of the commodification of knowledge in higher education—A Canadian perspective. In J. E. Canaan & W. Shumar (Eds.), *Structure and agency in the*

- neoliberal university* (45-66). New York, NY: Routledge.
- Lewis, R. (2002). The hybridisation of conventional higher education: UK perspective. *The International Review of Research in Open and Distance Learning*, 2(2). Retrieved from <http://www.irrodl.org/index.php/irrodl/article/view/58/120>
- Levy, Y. (2007). Comparing dropouts and persistence in e-learning courses. *Computers & Education*, 48, 185–204. doi:10.1016/j.compedu.2004.12.004
- McAndrew, P. (2010). Defining openness: Updating the concept of “open” for a connected world. *Journal of Interactive Media in Education*, 10, 1-13.
- McLuhan, M. (1964). *Understanding media: The extensions of man*. New York, NY: McGraw-Hill.
- McKeown, L., Noce, A., & Czerny, P. (2007). Factors associated with Internet use: Does rurality matter? *Rural and Small Town Canada Analysis Bulletin*, 7(3), 1–15.
- Miller, G. E. (2010). Organization and technology of distance education. In M. F. Cleveland-Innes & D. R. Garrison (Eds.), *An introduction to distance education: Understanding teaching and learning in a new era* (pp. 26–45). New York, NY: Routledge.
- Moore, M. G. (1973). Towards a theory of independent learning and teaching. *Journal of Higher Education*, 44, 661-679.
- Moore, M. G. (2009). The bottles are new but what of the wine? Managing learning and teaching in Web 2.0. In U. Bernath, A. Szücs, A. Tait, & M. Vidal (Eds.), *Distance and e-learning in transition: Learning innovation, technology and social challenges* (pp. 395–410). London, UK: ISTE Ltd.
- Moore, M. G., & Kearsley, G. (2005). *Distance education: A systems view* (2nd ed.). Belmont, CA: Wadsworth.
- Moore, M. G. (Ed.). (2013). *Handbook of distance education* (3rd ed.). New York, NY: Routledge.
- Naidu, S. (2005). Researching distance education and e-learning. In C. Howard, J. V. Boettcher, L. Justice, K. Schenk, P. Rogers, & G. A. Berg (Eds.), *Encyclopedia of distance learning* (Vol. 4, pp. 1564–1572). Hershey, PA: Idea Group, Inc.
- Njenga, J. K., & Fourie, L. C. H. (2010). The myths about e-learning in higher education. *British Journal of Educational Technology*, 41(2), 199-212.
- Oblinger, D. G., & Oblinger, J. L. (Eds.). (2003). *Education the Net generation*. EDUCAUSE. Retrieved from <https://net.educause.edu/ir/library/pdf/pub7101.pdf>
- O’Hara, R. J. (2008). The global war on Taylorism. *Higher Education News from the Collegiate Way*. Retrieved from <http://collegiateway.org/news/2008-gwot>
- Online Learning Task Force. (2011). Collaborate to compete: Seizing the opportunity of online learning for UK higher education. Retrieved from http://www.hefce.ac.uk/media/hefce1/pubs/hefce/2011/1101/11_01.pdf
- Paechter, M., Maier, B., & Macher, D. (2010). Students’ expectations of, and experiences in e-learning: Their relation to learning achievements and course satisfaction. *Computers & Education*, 54(1), 222-229.
- Peters, O. (2001). *Learning and teaching in distance education: Analysis and interpretation from an international perspective*. London, UK: Kogan Page.
- Peters, O. (2002). *Distance education in transition: New trends and challenges* (4th ed.). Oldenburg, Germany: BIS. Retrieved from <http://www.uni->

- oldenburg.de/fileadmin/user_upload/c3l/master/mde/download/asfvolume5_4_ebook.pdf
- Peters, O. (2008). Transformation through open universities. In T. Evans, M. Haughey, & D. Murphy (Eds.), *International handbook of distance education* (pp. 279–302). Bingley, UK: Emerald Group Publishing Limited.
- Perraton, H. (2000). *Open and distance learning in the developing world*. London, UK: Routledge.
- Pittman, V. (2013). University correspondence study: A revised historiographic perspective. In M. G. Moore (Ed.), *Handbook of distance education* (3rd ed., pp. 21–37). New York, NY: Routledge.
- Rachal, J. R. (2002). Andragogy's detectives: A critique of the present and a proposal for the future. *Adult Education Quarterly*, 52, 210–227. doi: 10.1177/0741713602052003004
- Rabiee, A., Nazarian, Z., & Gharibshaeyan, R. (2013). An explanation for Internet use obstacles concerning e-learning in Iran. *International Review of Research in Open and Distance Learning*, 14(3), 361-376.
- Rumble, G. (Ed.) (2004). *Papers and debates on the economics and costs of distance and online learning*. Oldenburg, Germany: GIS. Retrieved from http://www.uni-oldenburg.de/fileadmin/user_upload/c3l/master/mde/download/asfvolume7_ebook.pdf
- Saba, F. (2013). Building the future: A theoretical perspective. In M. G. Moore (Ed.), *Handbook of distance education* (3rd ed., pp. 49–65). New York, NY: Routledge.
- Sáiz, F. B. (2009). Online learners' frustration: Implications for lifelong learning. In U. Bernath, A. Szücs, A. Tait, & M. Vidal (Eds.), *Distance and e-learning in transition: Learning innovation, technology and social challenges* (pp. 519–528). London, UK: ISTE Ltd.
- Sandlin, J. A. (2005). Andragogy and its discontents: An analysis of andragogy from three critical perspectives. *PAACE Journal of Lifelong Learning*, 14, 25–42.
- Schlosser, L. A., & Simonson, M. (2010). *Distance education: Definition and glossary of terms* (3rd ed.). Charlotte, NC: IAP.
- Selwyn, N. (2009). Challenging educational expectations of the social web: A web 2.0 far? *Nordic Journal of Digital Literacy*, 4, 72–85.
- Selwyn, N. (2011). 'Finding an appropriate fit for me': Examining the (in)flexibilities of international distance learning. *International Journal of Lifelong Education*, 20, 367–383.
doi:10.1080/02601370.2011.570873
- Shale, D. (2010). Beyond boundaries: The evolution of distance education. In M. F. Cleveland-Innes & D. R. Garrison (Eds.), *An introduction to distance education: Understanding teaching and learning in a new era* (pp. 91–107). New York, NY: Routledge.
- Simonson, M. (2012). MOOC madness. *Distance Learning*, 9, 103–104.
- Sims, R. (2008). Rethinking (e)learning: A manifesto for connected generations. *Distance Education*, 29(2), 153–164. Doi:10.1080/01587910802154954
- Storr, R. J. (1966). *Harper's university: The beginnings*. Chicago, IL: University of Chicago Press.
- Spronk, B. (2001). *Globalisation, ODL and gender: Not everyone's world is getting smaller*. Cambridge, UK: International Extension College.
- Stahl, G., Koschmann, T., & Suthers, D. (2006). Computer-supported collaborative learning: An historical perspective. In R. K. Sawyer (Ed.), *Cambridge handbook of the learning sciences* (pp. 409-426). Cambridge, UK: Cambridge University Press.

- Sumner, J. (2010). Serving the system: A critical history of distance education. *Open Learning: The Journal of Open, Distance and e-learning*, 15, 267-285.
- Swan, K. (2005). A constructivist model for thinking about learning online. In J. Bourne & J. C. Moore (Eds.), *Elements of quality online education: Engaging communities* (pp. 13-30). Needham, MA: Sloan-C.
- Swan, K. (2010). Teaching and learning in post-industrial distance education. In M. F. Cleveland-Innes & D. R. Garrison (Eds.), *An introduction to distance education: Understanding teaching and learning in a new era* (pp. 108–134). New York, NY: Routledge.
- Szücs, A., Tait, A., Vidal, M., & Bernath, U. (Eds.). (2009). *Distance and e-learning in transition: Learning innovation, technology and social challenges*. London, UK: ISTE Ltd.
- Taylor, J. C. (1999). Distance education: The fifth generation. *Proceedings from the 19th ICDE World Conference on Open Learning and Distance education*. Vienna, Austria.
- Thorpe, M. (2009). Perceptions about time and learning: Researching the student experience. In U. Bernath, A. Szücs, A. Tait, & M. Vidal (Eds.), *Distance and e-learning in transition: Learning innovation, technology and social challenges* (pp. 457–472). London, UK: ISTE Ltd.
- Tracey, M. W., & Richey, R. C. (2005). The evolution of distance education. *Distance Learning*, 2(6), 17–21.
- Twigg, C. A. (2001). *Innovations in online learning: Moving beyond no significant difference*. Troy, NY: Center for Academic Transformation, Rensselaer Polytechnic Institute.
- Verduin, J. R., & Clark, T. A. (1991). *Distance education: The foundations of effective practices*. San Francisco, CA: Jossey-Bass.
- Vrasidas, C. (2000). Constructivism versus objectivism: Implications for interaction, course design, and evaluation in distance education. *International Journal of Educational Telecommunications*, 6(4), 339-362.
- Vrasidas, C., & Glass, G. (2002). A conceptual framework for studying distance education. In C. Vrasidas & G. Glass (Eds.), *Current perspectives on applied information technologies: Distance education and distributed learning* (pp. 31–56). Greenwich, CT: IAP.
- Wedemeyer, C. (1971). Independent study. In L. C. Deighton (Ed.), *The encyclopedia of education* (Vol. 4, pp. 548–557). New York, NY: Free Press.
- Wedemeyer, C. (1981). *Learning at the back door: Reflections on non-traditional learning in the lifespan*. Madison, WI: University of Wisconsin Press.
- White, D., Warren, N., Faughnan, S., & Manton, M. (2010). Study of UK Online Learning. Retrieved from http://www.hefce.ac.uk/media/hefce/content/pubs/2010/rd1710/rd17_10.pdf
- White, P., & Selwyn, N. (2012). Learning online? Educational Internet use and participation in adult learning, 2002 to 2010. *Educational Review*, 64, 451-469. doi:10.1080/00131911.2011.626123
- Woodley, A. (2008). But does it work? Evaluation theories and approaches in distance education. In T. Evans, M. Haughey, & D. Murphy (Eds.), *International handbook of distance education* (pp. 585-608). Bingley, UK: Emerald Group Publishing Limited.
- Xin, C., & Feenberg, A. (2006). Pedagogy in cyberspace: The dynamics of online discourse. *Journal of Distance Education*, 21(2), 1-25.
- Zawacki-Richter, O., Bäcker, E. M., & Vogt, S. (2009). Review of distance education research (2000 to 2008): Analysis of research areas, methods, and authorship patterns. *International Review of Research in Open*

and Distance Learning, 10(6). Retrieved from

<http://www.irrodl.org/index.php/irrodl/article/view/741/1461>

Zhu, C., Valcke, M., & Schellens, T. (2009). Cultural differences in the perception of a social-constructivist e-learning environment. *British Journal of Educational Technology*, 40(1), 164-168.

ACCEPTED MANUSCRIPT

Highlights

- Our views on online education are a product developed through the history of distance education
- adopting online education does not naturally increase the accessibility of university education
- Increasing the accessibility of university education is a complex and multi-dimensional problem