Mobilizing Curriculum Studies in a (Virtual) World: Open Access, Edupunks, and the Public Good

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Abstract

Despite societal imperatives for equity—whether espoused by nation-states or transnational agencies like UNESCO—current models of higher education are unequivocally failing to provide universal access. This paper seeks to explore the (cyber)spaces (un)occupied by higher education, specifically in the area of curriculum studies, arguing that the World Wide Web can be used to effect the democratization of education. Further, it argues for the benefits of Open Access research by means of a small-scale empirical study, the results of which indicate that making research openly accessible does not diminish the impact of research, but rather may actually increases it.

Keywords: Open Access, Open Education, curriculum studies, higher education, Web 2.0

Résumé

Malgré les impératifs sociétaux d'équité, partagés par les États-nations ou par les agences transnationales telle que l'UNESCO, les modèles actuels de l'éducation supérieure échouent de manière non-équivoque à fournir un accès universel. Cet article vise à explorer les espaces (cybernétiques) occupés ou non par l'éducation supérieure, particulièrement dans le domaine des études de cursus, défendant l'idée que le Web peut être utilisé pour mettre en œuvre la démocratisation de l'éducation. De plus, il défend les bénéfices de la recherche à libre accès par le biais d'une étude empirique à petite échelle, dont les résultats suggèrent qu'ouvrir l'accès aux recherches ne diminue pas l'impact de la recherche, mais pourrait plutôt l'augmenter.

Mots clés: Libre accès, apprentissage ouvert, études de cursus, éducation supérieure. Web 2.0

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Knowledge is a common good, just like water and air. (Daignault, 2011)

In Education, while some fields of academic inquiry have been quick to embrace the potentialities of Open Ed and Open Access (OA)¹—including wider accessibility, greater opportunities for collaboration, a broader diversity of perspectives, more creative formatting options, and sensitivity to ecological and financial sustainability—the field of curriculum studies has some catching up to do. Many current and past educators—whom some might call edupunks—have made it their *raison d'être* to make education more accessible to the masses. Coined by Jim Groom, educational technologist from the University of Mary Washington, the term edupunk connotes "an approach to teaching and learning practices that result [*sic*] from a do it yourself (DIY) attitude ("Edupunk," 2011, n.p.). *New York Times* columnist Tom Kuntz (2008) defines it as "an approach to teaching that avoids mainstream tools like PowerPoint and Blackboard, and instead aims to bring the rebellious attitude and D.I.Y. ethos of '70s bands like The Clash to the classroom." Notable historical examples include Brazilian radical educator Paulo Freire or the first American woman to win the Nobel Peace Prize, Jane Addams; more recent examples include Canadian curriculum scholars like Jacques Daignault and John Willinsky.

In the 1960s, Freire used slide projectors displaying codified pictures to teach peasants how to read, reading being a prerequisite for voting. Later, in the 1990s when he became education minister, Freire established the Central Laboratory for Educational Informatics, equipped with televisions, video recorders, sound machines, and microcomputers. Freire saw these technologies as tools for emancipation. For her part, Jane Addams established Hull House, which "reached out to immigrants, to labourers, to mothers and children, to all in an urban-industrial community who needed or wanted its educational and social programs" (Thorton & Flinders, 2004, p. 5). Her ideas were progressive; the night school she established at Hull House is considered to be the predecessor for the continuing education programs offered by many universities today ("Jane Addams," n.d.). Freire and Addams are both courageous examples of those who have used progressive technologies and formats to ensure that curriculum is not a privilege for the wealthy but a right for all. How then have current curriculum theorists fared at using progressive technologies and formats to make their own field—that of curriculum studies—open and accessible? Whom might we call edupunks?

In 1999, at the University of Quebec in Rimouski (Lévis campus), Jacques Daignault established <u>Lévinux</u>, a laboratory that experiments with developing various curricular and pedagogical strategies for integrating Open Access software into the schooling system. In a recent interview Daignault says that for him, part of the commitment to the democratization of education should include the "use of free software." Like public schooling, it works on the foundational principle of providing access to knowledge for everyone. However, as Daignault reminds us, to give access is not enough. Everyone must have a say in the goals and the ends of the institution itself. "With open access," Daignault (2011) stresses, "everyone can have access to the software and everyone can suggest, propose a new code, use the code in a new way, rearrange it, and improve the code" (n.p.). Since the establishment of Lévinux, Jacques

¹ According to the Directory of OA Journals, OA journals are ones "that use a funding model that does not charge readers or their institutions for access" and includes the right of users to "read, download, copy, distribute, print, search, or link to the full texts of these articles."

Daignault has helped to develop similar labs in Morocco and Gabon, creating labs with recycled computers and free software. Daignault's DIY, anti-corporate attitude is the personification of edupunk.

John Willinsky, another prominent Canadian curriculum scholar, is working to build the necessary online infrastructure for researchers to access knowledge within different fields of study including, but not limited to, curriculum studies.

The <u>Public Knowledge Project</u> is dedicated to improving the scholarly and public quality of research. It operates through a partnership among the Faculty of Education at the University of British Columbia, the Simon Fraser University Library, the School of Education at Stanford University, and the Canadian Centre for Studies in Publishing at Simon Fraser University. The partnership brings together faculty members, librarians, and graduate students dedicated to exploring whether and how new technologies can be used to improve the professional and public value of scholarly research. Its research program is investigating the social, economic, and technical issues entailed in the use of online infrastructure and knowledge management strategies to improve both the scholarly quality and public accessibility and coherence of this body of knowledge in a sustainable and globally accessible form. It continues to be an active player in the Open Access movement, as it provides the leading open source software for journal and conference management and publishing. (Public Knowledge Project, n.d.)

Sites like this offer new intellectual technologies and, in turn, opportunities to "advance our understanding of curriculum design as well as to improve public access to academic knowledge" (Pinar, 2004, p. 156). Moreover, through this project Willinsky illuminates Pinar's (2004) ideas regarding the complex relationship between education and technology, including "the curriculum theorist's expertise, namely pedagogical configurations of knowledge," and in this instance, "its structural interrelationships, and its relationships with the public" (p. 156). With this in mind, we ask, how are various professional associations within the field of curriculum studies and their respective academic journals working to mobilize and disseminate knowledge using the Open Access model?

To address this question, we will now explore the cyberspace (un)occupied by the field of curriculum studies in OA, Open Content, and Open Ed environments. We will then introduce the concepts of Open Content in educational environments, and ask why the need for this paradigm shift is so pressing. Then, we trace the historical trends in educational access in general, and look at the accessibility to the knowledge advanced on the Internet, as well as by curriculum studies more specifically. We will then offer a small-scale statistical analysis of the field's use of OA journals and content. Finally, we consider the strengths and limitations of using open content, along with potential future directions for those who work and publish within the field of curriculum studies.

Opening Access to Education

Open access is not only about human rights and the greater circulation of knowledge. It is about increasing *research impact*... (Willinsky, 2006)

The inception of Open Ed is relatively recent. In 2001, the OpenCourseWare project began at MIT, and "if you go to http://ocw.mit.edu/ today, you can find the full syllabi, lecture notes,

class exercises, tests, and some video and audio for every one of the 1,900 courses MIT offers, from physics to art history," writes Kamenetz (2010). He continues, "By the end of 2009 some 63 million current students, aspiring students, alumni, professors, and armchair enthusiasts around the world had checked them out" (p. 85). MIT has since been joined by Carnegie Mellon, Rice, Stanford, Tufts, Berkley, and more than 200 educational institutions in 32 countries worldwide in posting courses online under Creative Commons (CC) licensing (Atkins, Brown, & Hammond, 2007). Just as traditional, conventional media are being circumvented by citizen journalism made possible via Web 2.0, higher education has succumbed to this same transformation within this new media landscape.

Jim Groom, educational technologist by day and self-proclaimed edupunk by night, attributes this educational revolution to "the utter irresponsibility and lethargy of educational institutions, and the means by which they are financially cannibalizing their own mission" (Kamenetz, 2010, p. 110) — we will say more about the affordability of tertiary education later. This movement, as Kamenetz (2010) predicts, may one day fulfil the broken promises of universal education. And the societal ramifications are enormous. Open Ed has the potential to bring unprecedented access to education by the masses for the masses.

The present brick-and-mortar model for educational institutions needs to make way for a new model in order for education to be truly democratic. Demand for education is vastly outstripping its supply, a case in point being Sub-Saharan Africa (Kamenetz, 2010; Willinsky, 2006). According to UNESCO, "there's no foreseeable way enough traditional universities could be physically built in the next two decades to match the demand (Kamenetz, 2010, p. viii). Open Ed on the World Wide Web, such the courses offered by MIT and an increasing amount of educational institutions around the globe, might, at least to some extent, negate the knowledge divide.

Open Ed is not possible without Open Access, the movement wherein people are sharing information and knowledge over the Internet for the public good that is both open to modification and freely distributed. Perhaps the most prolific player in the OA movement is *Wikipedia*, "the free encyclopedia that anyone can edit." According to Willinsky (2007), Wikipedians, those who have contributed their knowledge to *Wikipedia*, number over 2.9 million and have contributed some 4.6 million articles in over 100 languages. He adds,

[t]hat it is the "free encyclopedia" has contributed greatly to the fact that more people turn to it more than to any other encyclopedia, reference work, or news source. There are only a dozen more Web sites of any sort (e.g., Yahoo, MSN, Google, etc.) that people turn to more often than Wikipedia on the Internet. (Willinsky, 2007, n.p.)

Willinsky (2007) does not dismiss the controversies surrounding the accuracy of *Wikipedia*'s entries. He reminds us that, at its inception as *Nupedia*, entries were subject to a seven-step review process. After *Nupedia* proved to be an abysmal failure with only 200 articles in the first year, Wales and Sanger (*Wikipedia*'s founders) switched to wiki software, thus enabling Wikipedians to directly author and edit entries. This move proved to be the catalyst behind what has now become the world's largest encyclopaedia. Following the change to wiki software, entries surpassed 20,000 in the next 12 months (Willinsky, 2007). For Willinsky (2007), the quality of *Wikipedia* stems from "a new form of collective expertise, dynamic and semi-anonymous, but also cumulative and continually under review and open to updated citation and

² It should be noted that curriculum studies, unfortunately, is not one of those subjects.

references" (n.p.).

Wikipedia is not without its detractors. Willinsky (2007) notes studies that have both challenged and praised *Wikipedia*'s authority. He states,

...the best known of these assessments, to date, was conducted by *Nature* in 2005, finding that in comparing *Wikipedia* to *Encyclopædia Britannica*, *Wikipedia*'s accuracy was "surprisingly good" ("Wiki's Wild World," 2005). *Nature* ended up advising that "researchers should read *Wikipedia* cautiously and amend it enthusiastically," while *Britannica* went on to challenge the rigor and reliability of the *Nature* study ("Fatally Flawed," 2006). (Willinsky, 2007, n.p.)

For Willinsky (2007), *Wikipedia*'s flaw is not in its authority, but rather in its authors' selection of non-OA sources, which runs contrary to its vision.

After studying a randomly-generated sample of 100 *Wikipedia* articles, Willinsky (2007) found that only 2% of the citations referenced provided links to OA peer-reviewed journals. In studying a sub-set of these articles, Willinsky (2007) found that relevant, peer-reviewed OA journals were available in 60% of the cases, which were easily accessible via search engines such as Google Scholar. He goes on to offer guidance for Wikipedians to make better use of the OA body of scholarly knowledge, positing that doing so would increase "the authority, reliability, and educational quality of this popular encyclopaedia" (Willinsky, 2007, n.p.). Moreover, understanding the ways in which knowledge is constructed, referenced, and disseminated on open sites like *Wikipedia* has deep curricular and pedagogical implications for both teachers and students in terms of developing their digital critical literacy practices as civically engaged cybercitizens.

Tracing An Historical Trajectory of Open Ed

Open access obviously represents a break with the past in a number of ways. Yet is also speaks to the spirit of the past, to the long-term aspects of the access principle...(Willinsky, 2006).

According to Pinar (2012), one cannot understand the present without first examining the past: "Presentism—the incapacity to discern the distinctiveness of the present, its historically sedimented and socially unstable nature, its foreshadowing of things to come—denotes an inability to *be* in the present," he writes. "Only a historical sensibility enables us to 'be here now" (2012, p. 59). To avoid the temptation towards presentism, we shall regress for a moment.

In her book *DIY U*, Kamenetz (2010) traces the history of higher education from the sixth century to its present arrival at the point where technology has made possible the evolution of Open Ed. Education from the 500s to the 1800s in Europe, and later in America, was what best can be characterized as a (white, upper-class, Protestant) club for boys, in which the major activities were recitation and memorization, interspersed of course with attendance at religious activities. The liberal arts—the means by which man went from slave to free—constituted the curriculum during the 500s, which consisted of either the trivium of grammar, rhetoric, and dialectic, or the quadrivium of arithmetic, geometry, astronomy, and music (Kamenetz, 2010).

Though graduation from American post-secondary institutions has increased from 1% in the early 1800s to a little over a third of the population at present, for America, the birthplace of mass education, the prospects look rather dismal. This is made evident by President Obama's

2008 campaign during which he repeatedly called for America to once again lead the world in college attainment. And here in Canada, Quebec's Federation of College Students (FECQ) and Quebec's Federation of University Students (FEUQ) are currently protesting tuition hikes, which will subsequently limit future access for many to institutions of higher education (Grey, 2012). The opening of education from the aristocracy (those precious few who could afford it) to the meritocracy (those who 'deserve' it) may seem like a move towards the democratization of education. However, in the past, just as in the present, the supply of education vastly outstrips its demand.

A neo-Marxist interpretation of this phenomenon would suggest that the limiting of economic capital is mirrored by the limiting of social capital, in the form of education (Apple & King, 1977; Lather, 1986). More than forty years ago, Young (1971) noted the "dialectical relationship between access to power and the opportunity to legitimize certain dominant categories, and the process by which the availability of such categories to some groups enables them to assert power and control over others" (Apple & King, 1977, p. 342). According to Kamenetz (2010), this obviates the need for employers to differentiate between the haves and the have-nots, since college becomes nothing more than an elaborate and expensive mechanism for employers to identify the people who have all the social advantages in the first place and, in turn, get the highest paying jobs.

In education, the field of curriculum theorizing and development is a very old one indeed; ever since there were those with something to teach and those who wanted to learn something, there has been curriculum (Egan, 2003). Going back as far as Plato, philosophers have contemplated the role of curriculum's place in education in designing the ideal state (Thorton & Flinders, 2004, p. 1). As a formal field of study, however, curriculum studies developed concomitantly with the advent of public schooling around the end of the 19th century. This was the scene from which John Franklin Bobbitt wrote The Curriculum: A summary of the development concerning the theory of the curriculum (1918), thought to be one of the first-ever textbooks on the topic of curriculum. Bobbitt, a professor at the University of Chicago and esteemed curriculum consultant, concerned himself with the preparation of youth for their new roles in an industrialized society (Thorton & Flinders, 2004), a sentiment that perhaps has not changed much in the last century within the contexts of curriculum policy-making for the institution of public schooling. Academic journals in the field of curriculum studies started appearing in the late 1960s; notable among them were the Journal of Curriculum Studies (from the UK) and Curriculum Inquiry (a Canadian journal), both of which were first published in 1968. To date, neither of these international journals is OA, which is problematic for a plethora of reasons that will be discussed later in this paper.

As the field of curriculum studies diversified—inspired by edupunks like Freire, Dewey, Addams, Daignault, and Willinsky—so too did the field's publication of scholarly journals. While it was *de rigueur* to align curriculum with the scientific Progressivism of the day, curriculum studies gradually expanded to reflect the critical approaches necessitated by the Civil Rights, Women's Liberation, and international indigenous movements of the day (for examples, see Crocco, Munro, & Weiler, 1999; Miller, 2004; Ng-A-Fook, Noble, & Robayo-Sheridan, 2011; Pinar, 2001, 2012). Curriculum journals likewise sought to negotiate these complex socioeconomic, gendered, and racialized conversations. For example, *Transnational Curriculum Inquiry* highlights the critical approach imbued by some journals:

³ See Appendix 1 for a listing of current curriculum studies journals, their year of inception, their focus and scope, and their countries of origin.

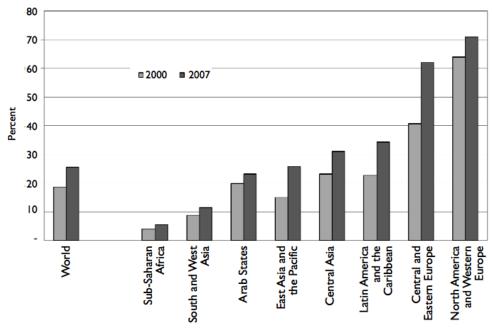
TCI encourages contributions that examine the impact of globalisation on curriculum work in relation to national and international debates on such matters as human rights, social justice, democratisation, national, ethnic and religious identities, issues of gender and racial justice, the concerns of indigenous peoples, and poverty and social exclusion. (n.d.)

It seems fitting then that journals like the Canadian Journal of Education and TCI, which by their nature are sensitive to the democratization of education, make their journals available via OA, a trend that is becoming increasing popular. Other journals within curriculum studies that are distributed freely via a forum of OA include Curriculum and Teaching, the Journal of the Canadian Association for Curriculum Studies, Curriculum Leadership, the Journal of Curriculum and Instruction, and the Journal of Curriculum Theorizing.

A Need for a New Educational Paradigm

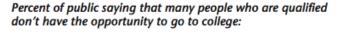
Because they look the same. It is like a dagger and a sword, they look the same and they seem to do the same thing. We think that a computer is a computer, a hammer is a hammer. That's not true. The machine, the very concept machine is an assemblage. The computer with free software that is based on recycled computers is not the same machine as one that uses commercial software on new computers. (Daignault, 2011)

At a time where the demand for education is vastly outstripping its supply, it is imperative that access to education, and more specifically, access to knowledge regarding curriculum studies, be distributed widely and freely. What might a world look like wherein technology acts as a flattener (Friedman, 2005), levelling the playing field (even somewhat) between those who traditionally have had access to education, and those who have not? Curriculum theorist William Pinar (2012) rightly cautions against an overly utopian embracement of technology in education, citing examples of it inhibiting deep thinking, undermining serious literature, causing declining scores in literacy and numeracy, and creating further social isolation. But what of the more than 70% of youth who do not have access to a tertiary education (Altbach, Reisberg, & Rumbley, 2009)? Yes, there is cause for optimism: "Globally, the percentage of the age cohort enrolled in tertiary education has grown from 19% in 2000 to 26% in 2007"; however, "the most dramatic gains in upper middle and upper income countries" (Altbach, Reisberg, & Rumbley, 2009, p. iv; see Figure 1 for gross enrolment in tertiary education by geographical region). And even developed countries are not immune: due to skyrocketing tuition fees, some 62% of Americans feel that, despite their country having the highest proportion of college graduates, many qualified individuals are being denied access to a tertiary education (The National Center for Public Policy and Higher Education, 2008; refer to Figure 2 for more details). Like any tool, however, technology, in this case in the form of open content on the Internet, functions as a double-edged sword. Indeed, like others, we posit that technology could actually effect the democratization of education.



Note: These data include all post-secondary students (ISCED4, 5 and 6)

Figure 1: Tertiary gross enrolment ratio by geographical region, 2000 and 2007. Source: UNESCO (2009)



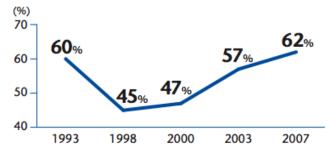


Figure 2: The percentage of the American public who believes that many qualified individuals are being denied access to college. Source: The National Centre for Public Policy and Higher Education (2008).

Access to information is unprecedented during this digital age, and thus a case could be made that future access to education is unimaginably infinite. Kamenetz (2010) lists the current open content heavyweights: "Google has scanned and digitized seven million books. *Wikipedia* users have created the world's largest encyclopaedia. YouTube Edu and iTunes U have made video and audio lectures by the best professors in the country available for free" (p. 81-2). It should be noted that many edupunks shun the hitherto mentioned examples of open content as

they are the creations of corporate giants such as Apple and Google, not of DIY movements espousing the punk mentality. Others like edupunk Jim Groom's friend and colleague Gardner Campbell, Director of the Academy for Teaching and Learning at Baylor University, embrace the notion of edupunk, but not its anti-corporate metaphor, insisting that is better to battle the system from within than without (Educoz, 2009, February 23). Whatever one's position, it is difficult to deny the potential of freely distributed, high quality educational material, such as the type made available via iTunes U and YouTube Edu (speaking from our personal experiences with the material). Like Campbell, we call for a moderate interpretation of edupunk, one which embraces those who make education more democratic—whether via corporate dollars or from a grass-roots level—though we examine these materials, as always, with a critical eye.

With regards to academic journals, some 20% of the nearly 2.5 million peer-reviewed articles are now OA (Harnad, 2005, as cited in Willinsky, 2007). To be sure, information should not be conflated with knowledge; but then again, is that concern any different from the one of education's emphasis on memorization and recitation that we saw in the past? Technology enables education to move beyond rote learning, especially when information is available at the click of a mouse; meanwhile, educators and learners can focus on "what knowledge is of most worth," whatever that may be for that individual, particularly since individuation of learning is a paramount goal of Open Ed.

Like Pinar's (2003, 2006, 2007) concept of a "complicated conversation," the field of curriculum as it exists on the Internet must continue to work toward providing more opportunities for its participants to access its research and in turn converse with each other. And perhaps like the edupunks, the transformation of curriculum studies "through the use of the readwrite Web is as much a cultural revolution as it is a technical improvement in knowledge" (Kamenetz, 2010, p. 128), in addition to being knowledge dissemination in the larger service of the public good. Still others take this further: on the scale of disruptive technologies, Open Ed is more than the printing press—it is the alphabet, a new way of thinking, a new meta-tool (Kamenetz, 2010). Pinar stresses that traditional classroom texts present a linear meta-narrative, laden with what Giroux (1990) calls the "cult of knowledge" (p. 363), and Vizenor (1994, in Ng-A-Fook, 2007) the literature of dominance. Nonetheless, such enthusiasm for new educational technologies cannot function, Pinar warns, as a "distraction from educationally engaging the cultural and political problems of the nation" where such technology instead represents a concealment of reality (p. 136). The implications for those marginalized by such corporate hegemonic gate-keeping cannot be exaggerated. As an example, the corporate publication of history textbooks can be a means to teach youth how to become complicit citizens with colonialism's culture of market profiting through the privatization of digital settlements-land ownership, access to resources, research, knowledge, and so forth. Digital technologies, conversely, celebrate inclusion, mass participation, and distributed expertise (Lankshear & Knobel, 2007); the very essence of the World Wide Web disrupts dominant discourses, challenging the very tenability of classical colonial (neo-liberal) epistemologies. One needs only to look to the Twitter Revolution of Egypt, or the recent blogosphere stirrings of the Arab Spring, to see this.

Parallels to social media's transformation of the political landscape are indeed being felt in education, with those who were once relegated to merely consume curriculum now being empowered to produce it and share it with the world, a direct challenge to the authoritative, capitalistic textbook industry. Take <u>Curriki</u>, for example, a not-for-profit online open curricula community with over 250,000 users and 5.6 million hits and counting (Curricki, n.d.). In a similar fashion, the <u>Khan Academy</u> has delivered over 89 million online lessons to students

around the world, its mission "providing a high quality [free] education to anyone, anywhere" (Khan Academy, n.d.).

Can the textbook industry espouse the same mission? Though these are examples from curriculum and curriculum development, there are examples from curriculum studies, though on a smaller scale. One notable example is the Canadian Curriculum Theory Project, which "provides a digital place where educators and graduate students can converse, contribute and showcase ongoing provincial, national, and transnational curriculum theory projects" (n.d.). On this site, links to various curriculum journals are provided, local, national, and international conferences, and graduate student work is shared, as well as some of the different course syllabi designed and taught within the Faculty of Education at the University of Ottawa. Creator of the Canadian Curriculum Theory Project, Nicholas Ng-A-Fook shares his past and current teaching activities and research projects with the public. However, the site does not use an open wiki platform where others could help to co-construct the knowledge shared on the current Wordpress platform. Although the public can comment on different aspects of the site, unlike Wikipedia or Lévinux, this site remains a closed online platform administered by one main administrative filter: i.e., Nicholas Ng-A-Fook. Another site is curricuwiki. Tony Whitson has established this open online platform to share and collaborate on international curriculum-related matters. The public is able to openly participate in the construction of the knowledge put forth on this site. To some extent, these sites demonstrate the capability of Open Ed to subvert the elitist and capitalist mentality of formal education, deified in the Ivory Towers by the privileged few who can afford the piece of paper it confers. In the spirit of full disclosure, we confess to being part of those few.

How Far Have We Come and Where Are We Going?

Scholarly knowledge is part of the common wealth of humanity. Learning and inquiry are impeded when scholars lack access to fellow researchers' work, and when students lack access to the work of scholars before them. (The Right to Research Coalition)

In order to capture curriculum studies' current status in the milieu of Open Ed, we conducted a small-scale statistical analysis of current journals in curriculum studies. Academic journals are, after all, the crowning jewel of a field of inquiry, the means by which its practitioners communicate to those within their discipline, and to the community at large. Our purpose was two-fold: We wanted to know what proportion of journals in the field of curriculum study were openly accessible, and whether there was any correlation between a journal's accessibility and its ranking. The methodology was simple: we noted whether these journals are currently available in OA format, and then we calculated their average search engine rankings and compared them, where available, to the journals' impact factor and rankings in the Thomson Reuters (2011) *Journal Citation Report*. Following this, we conducted a Pearson correlation to determine whether or not there was a relationship between the journal's accessibility profile (whether it was OA or not) and its ranking. Ideally our intent was to make the journal ranking score a composite of its mean search engine score combined with Thomson Reuters impact factor and ranking scores, but only two of the 14 journals analyzed were included in the 2010 ranking.

The fact that only two of the 14 journals were ranked raises another contentious issue: Why are some curriculum studies journals included in the ranking and others excluded? According to the Thomson Reuters (2010) *Journal Citation Report*, being included in the

citations listing helps librarians document the value of their library research investments, and helps researchers identify the "most appropriate, influential journals in which to publish" (n.p.). It is important to note that the two curriculum studies journals who were included in the report were for-profit and corporately owned: the Journal of Curriculum Studies is published by the Taylor & Francis Group, while *Curriculum Inquiry* is published by Wiley-Blackwell. It appears as though there are no not-for-profit journals included in the report (though not all 10,100 journals included in the report were checked). What does this say of the philosophy of such That not-for-profit journals, such as the Canadian Journal of Education, are "inappropriate" for academic research and that they cannot be considered "influential"? Further, in an age of media conglomerates where multinational corporations simultaneously own and operate media and industry interests, how can balanced editorial policies be assured? What of the researcher's study that speaks ill of certain corporate entities? Will those articles be published without editorial censorship? It seems plausible that independent, not-for-profit journals would be the only ones somewhat immune to that form of censorship. Once again, for the sake of our analysis, we had intended to calculate a journal's ranking based on a composite score of its web ranking, coupled with its impact factor ranking from Thomson Reuters. An unintended finding of the study was that only corporately owned journals receive that ranking, calling into question the ranking's very nature and purpose.

The criteria for a journal's inclusion in our analysis were the following: (1) the journal had to be one of the top 10 search engine hits in either Google.com, Bing.com, or Yahoo.com using the query "curriculum journal", (2) the journal had to be accessible in English; (3) the journal, though on a topic of curriculum, could not be subject specific (e.g., the journal *Language, Culture and Curriculum* was excluded); (4) the journal had to be a current publication; and (5) the journal had to be peer-reviewed. Clearly there are limitations to these criteria for inclusion, and thus this analysis is not meant to be exhaustive or evaluative by any means. Rather, it serves as a point of entry into the examination of curriculum studies in a world where OA is becoming increasingly popularized, and perhaps even necessitated, by the demand for a narrowing of the knowledge divide. Table 1 lists the journals meeting the inclusion criteria, their mean search engine rankings, and, if applicable, their impact factor and *Journal Citation Report* ranking.

The data revealed the following: Firstly, 43% of the N=14 curriculum journals investigated were OA while just over a half were subscription based. Secondly, there is no significant correlation between a journal's status as OA and its ranking, r(12) = -.02, p < .05. What does this say about curriculum studies' position in the terms of its accessibility? Simply put, it says that the field of curriculum studies is making a foray into OA, but there still is room for improvement. Further, a journal's decision to offer access free-of-charge does not devalue its ranking in the way that, say, free access to a designer shoe label might. This result is supported by dozens of studies that have actually found either no correlation, or even a positive correlation, between a journal's OA policy and its impact factor, such as a 2004 study by Harnad and Brody:

What this kind of analysis is beginning to reveal in the OA era is that there is indeed a "discernible difference" in terms of the frequency with which the article is cited: there is

⁴ Understandably, the query "curriculum journal" is limited; data would have presented differently using any multitude of search criteria. Further, using the .com instead of the .ca (Canadian) domain influenced the results.

a dramatic advantage in favor of the articles that their authors have made OA (Lawrence 2001; Kurtz 2004; Brody et al. 2004).

At this point, results have only been made available for computer science, astronomy, and physics, so it is not known whether this phenomenon is discipline specific. However, astonishing results of OA vs. non-OA physics journals reveals a citation ratio of 2.5-5.8 (Harnad & Brody, 2004). We suspect the same pattern will hold true for journals in other disciplines, especially for younger audiences. How many times have professors and students personally not bothered to look at a journal because either (a) they did not have to make a special trip into the university library to view a paper copy, or (b) because the university did not have a subscription to the journal on their virtual database? These occasions are too many to count. Without a doubt, this has led to the increasing popularity of OA sites such *Google Scholar* and the *Directory of Open Access Journals*.

Table 1. *Curriculum Journals, Their Accessibility, and Their Rankings.*

		Mean Search	h engine query u Google.com	Yahoo.com	Bing.com	Impact Factor / Ranking in the Category
	OA	Engine Rank	_		Ü	of Education & Educational Research
Journal						(Thomson Reuters, 2010)
Curriculum Journal	No	1.67	1	3	1	N/A
Journal of Curriculum and Instruction	Yes	2.67	4	1	3	N/A
Journal of Curriculum Studies	No	4.00	2	6	5	2010 Impact Factor: 0.480 Ranking: 126/184
Journal of Curriculum and Pedagogy	No	4.00	8	2	2	N/A
Journal of Curriculum Theorizing	Yes	4.67	6	4	4	N/A
Curriculum Inquiry	No	5.67	5	5	7	2010 Impact Factor: 0.980
Curriculum Leadership Journal	Yes	7.00	7	8	6	Ranking: 57 / 177 N/A
Journal of the Canadian Association for Curriculum Studies	Yes	7.00*	3	11		N/A
Nigerian Journal of Curriculum Studies	No	7.50*		7	9	N/A
Transnational Curriculum Inquiry	Yes	8.00*			8	N/A
Curriculum and Teaching	Yes	9.00*	9			N/A
Journal of Curriculum and Supervision	No	9.00*		9		N/A
International Journal of Curriculum and Instruction	No	10.00*		10		N/A
Teachers Learners and Curriculum Journal	No	10.00*	10			N/A

^{*}Indicates that the average was based on less than three of the search engine rankings.

Possibilities and Limitations for Curriculum Studies in a (Virtual) World of OA

What of the duality of Open Ed's possibilities for both emancipation and domination? In truth, our world is in peril if we continuously substitute the natural world for the decontextualized world of cyberspace, thus losing our connection with *terra firma*, which grounds us in our precarious place on the planet. We endanger ourselves when, with anthropocentric whimsy, we naively assume that technology will solve all of our problems, from disparities in educational attainment, to global warming, poverty, or even world peace. According to Jameson (2009), "Globalization can be understood ... as the hegemony of a certain kind of free-market capitalism, in line with American interests in the world, *or as the celebration of difference occasioned by the democratization of forms of communication* (Smits, 2011, p. 57; emphasis added). The dualism of globalization is what gives birth to the dualism of OA paradigms. The freedom to use Open Ed to individuate one's education is the same freedom that imprisons us to experience education as merely a projection of itself in Cyberspace. But since we project our identities into Cyberspace, aren't we, therefore, truly projecting truths of ourselves? But we digress.

The way Kamenetz (2010) sees it, there are basically two options: "fundamentally change the way higher education is delivered, or resign ourselves to never having enough of it" (p. ix). Let us recall sub-Saharan Africa and, to a lesser extent, even America, where nine out of 10 dream of a college diploma, but only a third actually possess one (Kamenetz, 2010). In the global market at large, consumers are demanding flexibility, individuation, and a greater variety of choices. Prescient higher educational institutions, what Kamenetz calls edupreneurs, will facilitate the unbundling of services, such as those envisioned by Open Ed pioneer Alec Couros at the University of Saskatchewan:

Students of the future could be free to assemble personal learning networks that include mentors, colleagues, media sources, books, and collections of links. The existing system will be challenged to come up with new forms of accreditation, transfer credits, and certification so that the value of this work can be recognized by potential employers and others. (Kamenetz, 2010, p. xiii)

Open Ed and OA afford many possibilities to expose the delusions of liberal democratic education. The hegemonies that currently limit economic capital in turn limit the social capital conferred by educational attainment. The substantive task before educators is to use the distributed expertise available through the Creative Commons and in turn decentre higher education, and the research conducted from within in it, from its privileged position, flowing instead into the networked public margins of Cyberspace. And we in curriculum studies, with our commitment to conducting research that serves the public good, certainly ought to.

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Appendix 1: Curriculum studies journals, their accessibility, year of inception, focus and scope, and host country or organization.

Journal Title (ordered from oldest to newest)	OA?	Start Year	Focus & Scope	Host country / organization
Curriculum Inquiry	No	1968-	"Curriculum Inquiry is dedicated to the study of educational research, development, evaluation, and theory. This leading international journal brings together influential academics and researchers from a variety of disciplines around the world to provide expert commentary and lively debate. Articles explore important ideas, issues, trends, and problems in education, and each issue also includes provocative and critically analytical editorials covering topics such as curriculum development, educational policy, and teacher education."	Canada Ontario Institute for Studies in Education, University of Toronto
Journal of Curriculum Studies	No	1968-	"Journal of Curriculum Studies publishes original refereed contributions on all aspects of curriculum studies (including those derived from historical, philosophical, comparative and policy-related investigations), pedagogic theory, teacher education and development, assessment and evaluation, and the present state of schooling. In keeping with its international character, Journal of Curriculum Studies especially welcomes articles which extend the perspectives of curriculum beyond national boundaries."	Editorial board: International
Curriculum and Teaching	Yes	1986-	"Curriculum and Teaching [] is an international, refereed, review journal which publishes original contributions dealing with major issues in curriculum theory and practice. The journal uses a balanced and comparative perspective to consider curriculum design and development, evaluation, curriculum models, comparative studies in curriculum, innovation and policy, planning, and educational administration."	Editorial board: International
Curriculum Journal	No	1990-	"The Curriculum Journal is essential reading for all professionals wishing to influence future directions in education for the better. The official journal of the British Curriculum Foundation, it provides a much-needed forum for debate, publishing research into curriculum structure, organization and development in primary and secondary schools and further education. The Curriculum Journal is written for teachers and head teachers, advisors, managers and academics. It features articles on the whole curriculum, cross-curricular issues, assessment requirements and new approaches to teaching and learning. It also takes a regular look at curriculum developments in other countries, putting recent events in the UK into an international context."	United Kingdom British Curriculum Foundation

Curriculum & Teaching Dialogue	No	2002-	"Curriculum and Teaching Dialogue is the journal of the American Association of Teaching and Curriculum (AATC). An important historical event in the development of organizations dealing with the scholarly field of teaching and curriculum was the founding of the AATC on October 1, 1993. The members of the AATC believed that the time was long overdue to recognize teaching and curriculum as a basic field of scholarly study, to constitute a national learned society for the scholarly field of teaching and curriculum (teaching is the more inclusive concept; curriculum is an integral part of teaching the "what to teach" aspect)."	USA American Association of Teaching and Curriculum
Journal of the Canadian Association for Curriculum Studies	Yes	2003-	"The Journal of the Canadian Association for Curriculum Studies (JCACS) is an open-access journal of the Canadian Society for the Study of Education (CSSE) that is published semi-annually. As the one domain of educational discourse that originated from and is particular to education, curriculum studies is here understood broadly—not simply as a consideration of mandated programs of study, but as a theorization of those complex structures within which teaching and learning occur.	Canada Canadian Association for Curriculum Studies
Journal of Curriculum and Pedagogy	No	2004-	"The Journal of Curriculum and Pedagogy is dedicated to the study of curriculum theory, educational inquiry, and pedagogical praxis. This leading international journal brings together scholars from a variety of disciplines as a means to expand perspectives on educational phenomena, from schools and cultural institutions to sites and concerns beyond school and institutional boundaries. The journal publishes articles that explore historical, philosophical, gendered, sexual, racial, ethnic, linguistic, autobiographical, aesthetic, theological, and/or international curriculum concerns and issues. Each issue also includes an arts-based educational research article and a guest-edited Perspectives section developed by leading scholars. A book and media review section also appears in the second issue of each volume."	Editorial board: North American
Curriculum Leadership	Yes	2004-	"Curriculum Leadership aims to provide comprehensive coverage of issues concerning school education leaders in Australia and New Zealand, while also aiming for a broad international perspective. [] The journal takes up issues and trends relating to primary and secondary education. Core subject areas are curriculum policy, leadership and management, technology, pedagogy, the teaching profession, and assessment. Vocational and careers education at the secondary school level are covered, as well as the transition from school to work and higher education. There is also some coverage of early childhood education, particularly in terms of the transition to school."	Australia and New Zealand

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Transnational Curriculum Inquiry	Yes	2004-	"TCI (Transnational Curriculum Inquiry) is the journal of the International Association for the Advancement of Curriculum Studies (IAACS), which is constituted to support a worldwide (but not uniform) field of curriculum studies. TCI is a site for scholarly conversations about curriculum work within and across national and regional borders and welcomes contributions from anyone interested in advancing curriculum studies as an academic and professional field of study. [] TCI encourages contributions that examine the impact of globalisation on curriculum work in relation to national and international debates on such matters as human rights, social justice, democratisation, national, ethnic and religious identities, issues of gender and racial justice, the concerns of indigenous peoples, and poverty and social exclusion. A specific aim of TCI is to examine the interrelationships between local, national, regional and global spheres of curriculum work."	International Association for the Advancement of Curriculum Studies (IAACS) Editorial board: International
Journal of Curriculum and Instruction	Yes	2007-	"The <i>Journal of Curriculum and Instruction</i> is a peer-reviewed, OA journal that provides a forum for the dissemination of articles focused on research, practice, and related issues relevant to teaching and learning in the preK-12 environment."	USA East Carolina University
Journal of Curriculum Theorizing	Yes	2008- (online version)	"Journal of Curriculum Theorizing is an interdisciplinary journal of curriculum studies. It offers an academic forum for scholarly discussions of curriculum. Historically aligned with the 'reconceptualist' movement in curriculum theorizing, and oriented toward informing and affecting classroom practice, JCT presents compelling pieces within forms that challenge disciplinary, genre, and textual boundaries."	USA Bergamo Conference on Curriculum Theory and Classroom Practice