Open education: Walking a critical path

Catherine Cronin

National Forum for the Enhancement of Teaching and Learning in Higher Education

This is an Accepted Manuscript of a book chapter published by Brill on 30 January 2020: *Open(ing) Education: Theory and Practice,* Eds. Dianne Conrad and Paul Prinsloo. https://brill.com/view/title/56897

Suggested citation: Cronin. C. (2019). Open education: Walking a critical path. In D. Conrad, & P. Prinsloo (Eds.), Open(ing) Education: Theory and Practice. Leiden: Brill.



This work is licensed under the Creative Commons Attribution 4.0 International License.

Open education: Walking a critical path

(Chapter 1)

"There is no technology for justice. There is only justice." URSULA FRANKLIN (2016)

"If the advice of the experts worked in the past, why then are you here now? If you are here now because you were not satisfied with the results of the other way of working, why didn't we pick this way? Why not walk another road?" MYLES HORTON & PAULO FREIRE (1990)

This chapter explores justifications for and movements toward critical approaches to open education. While "open" is often framed as an unequivocal good, the deceptively simple term hides a "reef of complexity" (Hodgkinson-Williams & Gray, 2009, p. 114), much of which depends on the particular context within which openness is considered and practiced. Critical approaches to open education consider the nuances of context, focus on issues of participation and power, and encourage moving beyond the binaries of open and closed. As a starting point, I draw on Lane's (2016) analysis that open education initiatives can be considered in two broad forms. The first seeks to transform or empower individuals and groups within existing structures, e.g. by removing specific prior qualifications requirements, eliminating distance and time constraints, eliminating or reducing costs, and/or improving access overall. A second form of open education seeks to transform the structures themselves, and the relationships between the main actors (e.g. learners, teachers, educational institutions), in order to achieve greater equity. Many critical educators have planted their flags in the latter territory, advocating the use of an explicit inequality lens to support social transformation and cognitive justice. This chapter presents an argument for critical and transformative approaches to open education. After a brief overview of open education, I explore several different critical analyses of open education and then widen the lens to consider critical analyses of the networks and platforms on which many open practices rely. The chapter concludes with examples of and recommendations for critical approaches to open education.

Open education

Education is a fundamental human right, globally recognised as a foundation for peace, human dignity, social inclusion, and environmental sustainability (UNESCO, 2016). Since 1948, universal access to education has been included in global policies and initiatives, most recently as one of the 17 Sustainable Development Goals (SDGs): "inclusive and quality education for all" (United Nations, 2015). Multiple constraints and restrictions act to limit access to and engagement with this fundamental human right for many individuals and groups. These include physical circumstances, geographic remoteness, financial constraints, technological barriers (e.g. digital divide), prior achievement barriers, and/or cultural or social norms for particular individuals and groups (Brown & Czerniewicz, 2010; Lane, 2009). Open education seeks to eliminate as many of these barriers as possible, with the aim of improving educational access, effectiveness, and equality. Explicitly-named "open education" movements emerged during the latter half of the 20th century in different educational contexts and geographical locations. All can

be seen as part of a longer history of global social, political, and education movements seeking to reduce inequality. Despite this connecting thread, a precise definition of open education remains elusive. Over 35 years ago, Noddings and Enright (1983) wrestled with the challenges of openness in their consideration of "the promise of open education." Much of their analysis retains its relevance today:

Part of the problem of definition stems from the careless, if evocative, use of the term open by educators and the popular press to describe the wide variety of educational innovations which proliferated at the same time as open education classrooms were being developed. (p. 183)

More recently, the term MOOC (massive open online course) has been used to refer to explicitly connectivist projects (cMOOCs); online courses offered by universities and forprofit providers, often without any openly-licensed content (xMOOCs); and myriad hybrid models (Bayne & Ross, 2014). With the exception of the definition of open educational resources or OER (UNESCO, 2002), open education definitions continue to be diverse and often contested. Today, the qualifier "open" is used to describe access to education, resources, learning and teaching practices, institutional practices, educational policies, digital tools, the use of educational technologies, and the values underlying educational endeavours. Despite this diversity, proponents of open education tend to share a fundamental philosophy that knowledge is a common good and that its creation and access should be as open as possible.

In practice, educators who espouse open education attempt to build opportunities for learners to:

- *access* education, open educational resources, open textbooks, and open scholarship,
- *collaborate* with others, across the boundaries of institutions, institutional systems, and geographic locations,
- *create* and *co-create* knowledge openly, and
- *integrate* formal and informal learning practices, networks, and identities.

Such values comprise the rationale for the use of open educational practices (OEP) – a broad descriptor that includes the creation, use and reuse of OER, open pedagogies, and open sharing of teaching practices (Cronin, 2017). Through the use of OEP, open educators seek to acknowledge the ubiquity of knowledge across networks and attempt to facilitate learning that fosters agency, empowerment, and global civic participation.

Critical analyses of open education

Critique plays an important role within education theory as a counterpoint to oversimplistic thinking – often evident in the form of "generalisations, unsubstantiated yet dominant discourses, and questionable binaries" (Gourlay, 2015, p. 312). Open education narratives have been criticised in each of these respects, as well as for an overall tendency towards idealism and optimism. Recent years have seen a rising call for greater critical analysis of, and critical approaches to, open education. It is worth clarifying the precise definition of the term *critical* as it is used here and throughout this chapter. Firstly, "critical" refers to a process of critique on the part of educators, as described by Michael Apple (1990): Our task as educators... requires criticism of what exists, restoring what is being lost, pointing towards possible futures; and sometimes it requires being criticized ourselves, this being something we should yearn for since it signifies the mutuality and shifting roles of teachers and taught that we must enhance. (p. xii)

Beyond this disposition, however, critical analysis and critical approaches are so called because they are informed by *critical theory*, the core concern of which is power relations in society (Freire, 1996; Giroux, 2003). This use of the term "critical" is less an epistemological focus (as in *critical thinking*) than a focus on the concrete operations of power and a rejection of all forms of oppression, injustice, and inequality (as in *critical pedagogy*) (Burbules & Berk, 1999; hooks, 1994). Critical analyses of open education, then, begin by asking questions such as:

- Who defines openness?
- Who is included and who is excluded when education is 'opened', and in what ways?
- To what extent, by whom, in what contexts, and in what ways do specific open education initiatives achieve their stated aims of increasing access, fostering inclusivity, enhancing learning, developing capacity and agency, and empowering individuals, groups, and communities, if at all?
- Can open education initiatives, in practice, do the opposite of what they are intended to do?
- What does emancipatory open education look like?

Following is a short summary of three key strands of critical analysis of open education.

A foundational point in many critical analyses of open education is citing the false dualism of "open" vs. "closed," and, indeed, moving beyond a simple or deontological understanding of openness (Archer & Prinsloo, 2017) and the comfort of binaries. If open is not the opposite of closed, how then to define open education in a meaningful way? Wiley (2009, para. 6) has espoused the continuous construct: "A door can be wide open, completely shut, or open part way. So can a window. So can a faucet. So can your eyes. Our common-sense, everyday experience teaches us that 'open' is continuous." Others reject the binary as well as continuous constructs of openness, viewing openness, for example, as boundary-crossing (Collier & Ross, 2017; Oliver, 2015) or an interplay (Edwards, 2015). Acknowledging that selectiveness and exclusions are inherent in all curricula and pedagogical approaches, Richard Edwards (2015) articulates a key question: "not simply whether education is more or less open, but what forms of openness are worthwhile and for whom; openness alone is not an educational virtue" (p. 253). Recognition of this interplay of openness and closed-ness in all educational practices provides strong justification for a more critical approach, taking individual, social, and cultural contexts into account.

Another strand of critical analysis of open education focuses on the tendency toward idealism. Some open education narratives are criticised as utopian fantasies of democratisation, where the workings of systemic power and privilege around race, gender, culture, class, location, and sexuality are absent or suspended (Gourlay, 2015). In her analysis of MOOC narratives, for example, Tressie McMillan Cottom (2015a) notes that many MOOCs appear to conceive of open learners as "roaming autodidacts – self-

motivated, able learners that are simultaneously embedded in technocratic futures and disembedded from place, culture, history and markets" (p. 9), and almost always conceived as Western, white, educated, and male. Such optimistic assumptions about open education, be they naïve or intentional, serve to divert attention from structural inequalities and shift responsibility away from educational institutions. Idealistic "openness" narratives also tend to conceal the complexities of academic labour inherent in open education. The creation of open educational resources, for example, relies heavily on institutional resources and the appropriation of academic labour, yet many OER narratives fail to address the inherent tension between open, networked possibilities of abundance and the corporatised, educational institutional structures on which they rely (Winn, 2015).

A third strand of critical analysis of open education advocates a greater theorisation of openness, particularly by moving beyond the dominant but limited interpretation of open as "access." An over-emphasis on removal of barriers obscures and often prevents a deeper analysis of associated relations of power (Bayne et al. 2015; Dhalla, 2018; Nobes, 2017; Oliver, 2015, Piron, 2017; singh, 2015; Watters, 2014). Knox (2013) has argued, for example, that the "open as access" approach masks underlying assumptions of instrumentalism and essentialism, potentially masking the ways in which networks, systems, and codes of open education might affect or transform the learning process. Beyond deconstructing "open as access" narratives, conceptions *of* open access also have been subject to critical analysis. Global South scholars, most notably, have highlighted how alienation and epistemic inequality arise from narrow, Global North-centric conceptions of open access (Czerniewicz, 2013), for example:

... a conception of open access that is limited to the legal and technical questions of the accessibility of science without thinking about the relationship between centre and periphery can become a source of epistemic alienation and neocolonialism in the South. (Piron, 2017, translated in Nobes, 2017)

If open education serves only to reinforce the normative universalism of Global North institutions, publications, research priorities, funding, and metrics, then efforts to "open" education may simply be exacerbating rather than challenging inequality. This is a challenge that must be faced and addressed by all engaged in open education.

Critical analyses of networks and platforms

Beyond theorising open education itself, the underlying structures and mechanics of open practice also have been the subject of critical analysis: namely, networks and platforms. The concept of the network as model and metaphor has been used widely in describing changes in society, learning, and education. Specific network constructs include networked publics (boyd, 2010), the network society (Castells, 2010), networked *individualism* (Rainie Wellman, 2012; Wellman, 2002). & and *networked learning* (Dirckinck-Holmfeld et al., 2012). In recent years, critical theorists have added nuance to, and sometimes challenged, these conceptual and analytical frameworks by exploring how power and privilege operate in networks – and the implications for individuals, institutions, and society. Broadly speaking, critiques of networked explanations of social behaviour assert that human social life cannot adequately be explained by the concepts of social ties and social capital, and furthermore, that networks can as easily exacerbate as reduce inequality. All hierarchies are not flattened.

One compelling avenue of critical analysis has highlighted the limitations of the network episteme itself (Light, 2014; Light & Cassidy, 2014; Mejias, 2011, 2013). Networks are not just metaphors, but actively organise and shape our social reality. Ulises Mejias's critical theorisation of networks includes the concept of the "paranode," defined as that which fills the interstices between the nodes of a network and resists being assumed by the network: "it is only the outsides of the network where we can unthink or disidentify from the network, from the mainstream" (Mejias, 2011, p. 49). While network logic or nodocentrism defines paranodal space as "empty," Mejias (2013) counters that the paranodal serves to "animate the network" (p. 153) and also to uncover the politics of inclusion and exclusion encoded in the network. In a similar vein, Ben Light's (2014) theory of disconnective practice, asserts that disconnection is an active part of engagement in social networking sites (SNS). In Light's analysis, disconnection is complex and contextual, enacted not only in terminating an account or opting out of engaging in a SNS, for example, but also prior to and during engagement in social networks. A prevalent reason for disengagement from networks (or, conversely, engagement in disconnective practice) is resistance to surveillance and preservation of privacy. Privacy is of enormous individual, institutional, and societal importance in an increasingly open and participatory culture in which data is persistent, replicable, searchable, and scalable (boyd, 2010) and our interactions tend to be public by default and private through effort (boyd, 2014).

As networked, participatory culture has evolved, so too has our conception of privacy. While definitions of privacy traditionally relied on spatial distinctions (public/private) and on limiting access to and control of information, more recent and complex understandings of privacy have shifted the focus to context. Helen Nissenbaum's (2010) influential work considers privacy within a *framework of contextual integrity*. According to Nissenbaum, social activity, occurring in specific contexts, is governed by contextspecific norms; among these are informational norms regarding the appropriate flow of information between parties. Contextual integrity is preserved when informational norms are upheld and violated when they are contravened. Nissenbaum's framework of contextual integrity has been adopted and further developed by many researchers, practitioners, and policy makers. Patricia Lange (2007), for example, used the framework to explore variation within a particular context, i.e. video sharing on YouTube, proposing the concepts of 'publicly private' (revealing one's identity but limiting access to content) and 'privately public' (sharing content but limiting access to one's identity) to describe individuals' nuanced behaviours in relation to privacy. And in her empirical study of teens' use of social media, danah boyd (2012) coined the term 'social steganography' to describe another variation of privacy behaviour: sharing identity and content but limiting access to meaning: "only those who are in the know have the necessary information to look for and interpret the information provided" (p. 349). These examples illustrate an important point: engaging in paranodal or disconnective practice does not demand wholesale rejection of networks, including social media and SNS (an unrealistic option for most). Rather, it entails critical questioning of the terms of engagement within networks and enactment of creative and alternative modes of being within and beyond networks.

Beyond these complex and contextual reconceptualisations of the concept of privacy, is the extent to which suppression of privacy lies at the heart of the business models of most digital and social media platforms. The concepts of "platform capitalism" (Srnicek, 2016) and "surveillance capitalism" (Zuboff, 2019) lay bare these new business models as directly reliant on the appropriation of data and the convergence of surveillance and profit. Corporate and platform surveillance practices track and monetize our locations, our connections, and our every click (Zuboff, 2019). The challenge for educators, and particularly for open educators, is clear. Many of the tools and platforms we use to engage in social connection and open educational practices, tools intimately woven into our personal and academic lives, embody values stemming from libertarian, neoliberal beliefs – designed to allow and encourage some behaviours and prevent others (Gilliard & Culik, 2016; Marwick, 2013).

In summary, critical analyses of open education, networks, and platforms present a set of critical lenses –epistemological, theoretical, social, political– with which to examine existing forms of, and conceptualise new approaches to, open education.

Critical approaches to open education

Critical approaches to open education vary considerably by scope, location, and specific intention, but all address issues of power and offer ways to reconceptualise and reframe (open) education in ways that are both participatory and emancipatory. This section briefly describes a few examples.

Open pedagogy is a key pillar of critical approaches to open education. DeRosa and Robison (2017) and Rosen and Smale (2015) frame their definitions of open pedagogy and open digital pedagogy, respectively, as versions of critical digital pedagogy. Critical digital pedagogy focuses on the potential of open practices to create dialogue, to deconstruct the teacher-student binary, to bring disparate learning spaces together, and to function as a form of resistance to inequitable power relations within and outside of educational institutions (Stommel, 2014). Examples of open pedagogy include working together with students to: use, adapt, and create OER; edit Wikipedia; engage in conversations beyond institutional boundaries; contribute to local, global, and disciplinary communities and projects; and ask critical questions about openness. A recent definition of open pedagogy by DeRosa and Jhangiani (2018) eloquently summarises the tenets of critical approaches to open education:

"Open Pedagogy," as we engage with it, is a site of praxis, a place where theories about learning, teaching, technology, and social justice enter into a conversation with each other and inform the development of educational practices and structures. This site is dynamic, contested, constantly under revision, and resists static definitional claims. But it is not a site vacant of meaning or political conviction.

Beyond open pedagogy, we also consider critical approaches to developing *open courses*. MOOC development at the University of Cape Town (UCT), for example, is grounded in a social inclusion perspective (Gidley, Hampson, Wheeler, & Bereded-Samuel, 2010). Critiquing the elite, neo-colonialist, closed, and broadcast mode of many institutional MOOCs, UCT developers have conceptualised MOOCs as an intentional *process* rather than a *product* – acknowledging the importance not only of access, but also of participation and empowerment (Czerniewicz & Walji, 2017). UCT MOOCs such as "Education for All" and "Introduction to Social Innovation" are embedded in a theoretical approach to openness that focuses on inclusive content development, enables engagement with

learning in multiple ways (not solely online), and liaises with and empowers local communities (Arinto, Hodgkinson-Williams, & Trotter, 2017; Czerniewicz & Walji, 2017).

Openness is contextual, but it is also personal and continually negotiated (Cronin, 2017); thus, it is important to consider critical approaches to open education on an individual level also. The creation and enactment of open, networked identities on various platforms is considered a necessity by many as education institutions and wider society "become enmeshed with digital practice and culture" (Hildebrandt & Couros, 2016, para. 5). Such enmeshing is not uncomplicated, however. Educators who use OEP, for example, typically create and enact open, networked, "Resident" digital identities (based on White & Le Cornu's (2017) Visitor/Resident typology), leaving myriad traces of their social and scholarly engagement on the web (Stewart, 2016). Critical approaches to openness can prompt us to acknowledge, and even facilitate, less obvious avenues of openness, however. In the context of increasing surveillance, the use of anonymity may be seen as fostering freedom from the commodification of the social. Indeed, anonymity, conceptualised as "constellations of partial unknowability, invisibility and untrackability" (Bachmann, Knecht, & Wittel, 2017, p. 243), can be considered socially productive and adding value to networked experience (Light & Cassidy, 2014). And what of the many educators who use open tools to curate resources for themselves and their students and develop their own and their students' digital literacies, but without making themselves openly visible online? Such individuals would be classified as "Visitors" in the Visitor/Resident continuum, i.e. engaging on the web without leaving a social trace (White & Le Cornu, 2017). By not creating open, networked identities themselves, these individuals might not be considered "open educators." And yet, educators making such strategic choices educate and empower students about issues such as digital identity, surveillance, and privacy. These strategies align with critiques of networks by Light (2014) and Mejias (2011, 2013), i.e. paranodal, disconnective practice as both resistance and pedagogy.

While we cannot readily untether participatory culture, software platforms, and corporate interests, development of digital literacies (broadly conceived) can promote critical awareness of issues such as algorithmic bias, surveillance, and privacy for all engaged in education. The conceptualisation of digital literacies continues to expand rapidly with recent work in the areas of *web literacy* (Caulfield, 2017), *critical digital literacies* (Alexander et al., 2017; Brown et al., 2016), *critical data literacies* (Hinrichsen & Coombs, 2013; Pangrazio, 2016), *digital citizenship* (Almekinder et al., 2017; Couros & Hildebrandt, 2017), *critical digital citizenship* (Emejulu & McGregor, 2016), and literacies of *participatory culture* (Jenkins et al., 2015). All include critical reflection on the ways in which networks and platforms foster connection as well as surveillance, inequality, and even "epistemic enslavement" (Mejias, 2011). Fostering the development of digital/web literacies may range from teaching and modelling digital identities and literacies to teaching *about* digital literacies without interacting with students on the open web. Whatever the method, this is complex work, as acknowledged by Maha Bali (in Alexander et al., 2017):

The role of higher education, and educators, is to work on nurturing digital literacies across the curriculum, taking into account the inequalities of access to opportunities to develop digital literacies before and outside of higher education, and keeping in mind the intersectionality of incoming students and how their priorities within digital literacies will differ. (p. 21)

A key to critical approaches to open education is to develop critical digital/web literacies and to foster agency on the part of all learners and educators regarding whether, how, and in what contexts they *choose* to be open. In other words, using Edwards' (2015) framing, all should have the capacity and agency with which to manage their own personal interplay of openness and closedness.

Conclusion

As noted at the start of this chapter, Lane (2016) outlined two broad approaches to open education: empowering individuals and groups within existing structures and transforming the structures themselves in order to achieve equity. Critical approaches to open education focus on the latter, seeking to reframe open education to be participatory and emancipatory, as well as being more accessible. Those advocating critical approaches to open education seek to expand access, including the concept of access, but also to further justice.

What I do need are specifics about how this moment is not like those other moments, those old moments of educational expansion that were shaped by powerful white interests, wealth, and racism to expand access without furthering justice. (McMillan Cottom, 2015b)

Critical approaches to open education require that we ask difficult questions about power and participation. In addition to specific questions related to openness (see p. 5), we also must ask: Who is in our classrooms and institutions, and why? Who is not in our classrooms and institutions, and why not? Who is excluded and who may be silenced by systems, policies, and practices which skew attention and rewards toward white, male, privileged, Global North experiences and priorities? In the words of Audrey Watters (2014): "We need an ethics of care, of justice, not simply assume that "open" does the work of those for us."

The work of critical open educators, researchers, and advocates is individual, collective, and multi-layered: decentering Global North epistemologies; furthering personal and institutional understanding of intersectional inequality; challenging traditional power relations, within and beyond classrooms and institutions; connecting with/via formal and informal learning spaces (digital and physical); recognising that resistance to openness is a personal, and possibly radical, choice; and ongoing self-reflection. Critical approaches to open education represent intentional efforts to transform structures, in all contexts, to achieve greater equity.

References

- Alexander, B., Adams Becker, S., Cummins, M., & Hall Giesinger, C. (2017). Digital literacy in higher education, part II: An NMC Horizon project strategic brief. Volume 3.4. Austin, TX: The New Media Consortium. https://cdn.nmc.org/media/2017-nmc-strategic-briefdigital-literacy-in-higher-education-II.pdf
- Almekinder, A., Bryant, E., Caines, A., Lukens, K., Marksbury, N., Narashimhan, A., ... Spohrer, J. (2017). Digital citizenship + Liberal Arts = Students empowered for life. *EDUCAUSE Review*. https://er.educause.edu:443/articles/2017/6/digital-citizenship-liberal-artsstudents-empowered-for-life
- Apple, M. (1990). Foreword. In S. G. O'Malley, R. C. Rosen, & L. Vogt (Eds.), *Politics of education: Essays from Radical Teacher*. Albany, NY: Statue University of New York Press.
- Archer, E., & Prinsloo, P. (2017). Some exploratory thoughts on Openness and an ethics of care. In D. Singh & C. Stückelberger (Eds.), *Ethics in higher education: Values-driven leaders for the future*. Geneva: Global Series Globethics.net. <u>http://uir.unisa.ac.za/handle/10500/21903</u>
- Arinto, P. B., Hodgkinson-Williams, C., & Trotter, H. (2017). OER and OEP in the Global South: Implications and recommendations for social inclusion. In C. Hodgkinson-Williams & P. B. Arinto, *Adoption and Impact of OER in the Global South*. Cape Town and Ottawa: African Minds, International Development Research Centre & Research on Open Educational Resources. https://doi.org/10.5281/zenodo.1043829
- Bachmann, G., Knecht, M., & Wittel, A. (2017). The social productivity of anonymity. *Ephemera: Theory and Politics in Organization*, *17*(2), 241–258. http://www.ephemerajournal.org/sites/default/files/pdfs/contribution/17-2editorial.pdf
- Bayne, S., & Ross, J. (2014). *The pedagogy of the Massive Open Online Course: The UK view*. Heslington, UK: The Higher Education Academy. https://www.heacademy.ac.uk/knowledge-hub/pedagogy-massive-open-online-coursemooc-uk-view
- Bayne, S., Knox, J., & Ross, J. (2015). Open education: The need for a critical approach. *Learning, Media and Technology*, 40(3). https://doi.org/10.1080/17439884.2015.1065272
- Beetham, H., & Sharpe, R. (2010). Digital literacy framework. http://jiscdesignstudio.pbworks.com/w/page/46740204/Digital%20literacy%20framework
- boyd, d. (2010). Social network sites as networked publics: Affordances, dynamics, and implications. In Z. Papacharissi (Ed.), *Networked Self: Identity, Community, and Culture on Social Network Sites* (pp. 39–58). New York, NY: Routledge. http://www.danah.org/papers/2010/SNSasNetworkedPublics.pdf
- boyd, d. (2012). Networked privacy. *Surveillance & Society*, *10*(3/4), 348–350. http://library.queensu.ca:80/ojs/index.php/surveillance-andsociety/issue/view/Open_Dec2012
- boyd, d. (2014). *It's complicated: The social lives of networked teens*. New Haven, CT: Yale University Press.
- Brown, C., & Czerniewicz, L. (2010). Debunking the 'digital native': Beyond digital apartheid, towards digital democracy. *Journal of Computer Assisted Learning*, *26*(5), 357–369. https://doi.org/10.1111/j.1365-2729.2010.00369.x
- Brown, C., Czerniewicz, L., Huang, C.-W., & Mayisela, T. (2016). *Curriculum for digital education leadership: A concept paper*. Commonwealth of Learning (COL). http://oasis.col.org/handle/11599/2442

- Burbules, N. C., & Berk, R. (1999). Critical thinking and critical pedagogy: Relations, differences, and limits. In T. S. Popkewitz & L. Fendler (Eds.), *Critical theories in education: Changing terrains of knowledge and politics*. New York: Routledge.
- Castells, M. (2010). *The rise of the network society* (2nd ed., Vol. 1). Hoboken, NJ: Wiley-Blackwell.
- Caulfield, M. (2017). *Web literacy for student fact-checkers*. self-published. https://webliteracy.pressbooks.com/
- Collier, A., & Ross, J. (2017). For whom, and for what? Not-yetness and thinking beyond open content. *Open Praxis*, 9(1), 7–16. https://doi.org/10.5944/openpraxis.9.1.406
- Couros, A., & Hildebrandt, K. (2017, June 5). What kind of (digital) citizen? [blog]. http://educationaltechnology.ca/2804
- Cronin, C. (2017). Openness and praxis: Exploring the use of open educational practices in higher education. The International Review of Research in Open and Distance Learning, 18(5). <u>http://dx.doi.org/10.19173/irrodl.v18i5.3096</u>
- Czerniewicz, L. (2013, April 29). Inequitable power dynamics of global knowledge production and exchange must be confronted head on [blog]. http://blogs.lse.ac.uk/impactofsocialsciences/2013/04/29/redrawing-the-map-from-access-to-participation/#more-10331
- Czerniewicz, L., & Walji, S. (2017). MOOCs, community orientation and reclaiming the social justice agenda. In *GO-GN*. The Open University, UK. <u>http://go-gn.net/webinars/webinar-moocs-community-orientation-and-reclaiming-the-social-justice-agenda/</u>
- DeRosa, R., & Jhangiani, R. (2018). Open pedagogy. In Open pedagogy notebook (CC BY 4.0). http://openpedagogy.org/open-pedagogy/
- DeRosa, R., & Robison, S. (2017). From OER to open pedagogy: Harnessing the power of open. In R. S. Jhangiani & R. Biswas-Diener (Eds.), *Open: The philosophy and practices that are revolutionizing education and science*. London, UK: Ubiquity Press. <u>https://www.ubiquitypress.com/site/chapters/10.5334/bbc.i/</u>
- Dhalla, A. (2018, May 7). The dangers of being open [blog]. https://medium.com/@amirad/the-dangers-of-being-open-b50b654fe77e
- Dirckinck-Holmfeld, L., Hodgson, V., & McConnell, D. (Eds.). (2012). *Exploring the Theory, Pedagogy and Practice of Networked Learning*. New York, NY: Springer New York. http://link.springer.com/10.1007/978-1-4614-0496-5
- Edwards, R. (2015). Knowledge infrastructures and the inscrutability of openness in education. *Learning, Media and Technology, 40*(3), 251–264. https://doi.org/10.1080/17439884.2015.1006131
- Emejulu, A., & McGregor, C. (2016). Towards a radical digital citizenship in digital education. *Critical Studies in Education*. <u>https://doi.org/10.1080/17508487.2016.1234494</u>
- Franklin, U. (2016). Quoted in Meredith, M. *All problems can be illuminated; not all problems can be solved*, 9th Berlin Biennale for Contemporary Art. http://bb9.berlinbiennale.de/all-problems-can-be-illuminated-not-all-problems-can-be-solved/
- Freire, P. (1996). Pedagogy of the oppressed. Harmondsworth, UK: Penguin.
- Gidley, J. M., Hampson, G. P., Wheeler, L., & Bereded-Samuel, E. (2010). From access to success: An integrated approach to quality higher education informed by social inclusion theory and practice. *Higher Education Policy*, *23*(1), 123–147. https://doi.org/10.1057/hep.2009.24
- Gilliard, C., and Culik, H. (2016, May 24). Digital redlining, access, and privacy. *Common Sense Education* [blog]. https://www.commonsense.org/education/privacy/blog/digital-redlining-access-privacy
- Giroux, H. A. (2003). Critical theory and educational practice. In A. Darder, M. Baltodano, & R. D. Torres, *The critical pedagogy reader* (pp. 27–56). New York, NY: RoutledgeFalmer.

- Gourlay, L. (2015). Open education as a 'heterotopia of desire'. *Learning, Media and Technology, 40*(3), 310–327. https://doi.org/10.1080/17439884.2015.1029941
- Hildebrandt, K., & Couros, A. (2016). Digital selves, digital scholars: Theorising academic identity in online spaces. *Journal of Applied Social Theory*, 1(1). http://socialtheoryapplied.com/journal/jast/article/view/16
- Hinrichsen, J., & Coombs, A. (2013). The five resources of critical digital literacy: A framework for curriculum integration. *Research in Learning Technology*, *21*(1). https://doi.org/10.3402/rlt.v21.21334
- Hodgkinson-Williams, C., & Gray, E. (2009). Degrees of openness: The emergence of OER at the University of Cape Town. *International Journal of Education and Development Using Information and Communication Technology*, 5(5), 101–116. http://ijedict.dec.uwi.edu/viewarticle.php?id=864
- hooks, b. (1994). Teaching to transgress: Education as the practice of freedom. New York, NY: Routledge.
- Horton, M., & Freire, P. (1990). *We make the road by walking: Conversations on education and social change*. Philadelphia, PA: Temple University Press.
- Jenkins, H., Ito, M., & boyd, d. (2015). Participatory culture in a networked era: A conversation on youth, learning, commerce, and politics. Cambridge, UK: Polity Press.
- Knox, J. (2013). Five critiques of the open educational resources movement. *Teaching in Higher Education*, *18*(8), 821–832. https://doi.org/10.1080/13562517.2013.774354
- Lane, A. (2009). The impact of openness on bridging educational digital divides. *The International Review of Research in Open and Distance Learning*, *10*(5). http://dx.doi.org/10.19173/irrodl.v10i5.637
- Lane, A. (2016). Emancipation through open education: Rhetoric or reality? In P. Blessinger & T. Bliss (Eds.), *Open education: International perspectives in higher education*. Cambridge, UK: Open Book Publishers. http://www.openbookpublishers.com/htmlreader/978-1-78374-278-3/contents.xhtml
- Lange, P. G. (2007). Publicly private and privately public: Social networking on YouTube. *Journal of Computer-Mediated Communication*, *13*(1), 361–380. https://doi.org/10.1111/j.1083-6101.2007.00400.x
- Light, B. (2014). *Disconnecting with social network sites*. London, UK: Palgrave Macmillan UK. //www.palgrave.com/gp/book/9781137022462
- Light, B., & Cassidy, E. (2014). Strategies for the suspension and prevention of connection: Rendering disconnection as socioeconomic lubricant with Facebook. *New Media & Society*, *16*(7), 1169–1184. https://doi.org/10.1177/1461444814544002
- Marwick, A. E. (2013). Online identity. In J. Hartley, J. Burgess, & A. Bruns (Eds.), *Companion to new media dynamics* (pp. 355–364). Malden, MA: Blackwell. https://www.academia.edu/26435230/Online_Identity
- McMillan Cottom, T. (2015a). *Intersectionality and critical engagement with the internet* (SSRN Scholarly Paper No. ID 2568956). Rochester, NY: Social Science Research Network. http://papers.ssrn.com/abstract=2568956
- McMillan Cottom, T. (2015b). Open and accessible to what and for whom? [blog]. https://tressiemc.com/uncategorized/open-and-accessible-to-what-and-for-whom-reflections-on-icde-2015/
- Mejias, U. A. (2011). Towards a critique of digital networks for learning. *Progressive Librarian*, *34/35*, 46–49. http://www.progressivelibrariansguild.org/PL_Inl/contents34_35.shtml
- Mejias, U. A. (2013). *Off the network: Disrupting the digital world* (Vol. 41). Minneapolis, MN: University of Minnesota Press. <u>https://www.upress.umn.edu/book-division/pdf/off-the-network</u>

- Nissenbaum, H. (2010). *Privacy in context: Technology, policy, and the integrity of social life*. Stanford, CA: Stanford University Press. <u>http://www.sup.org/books/title/?id=8862</u>
- Nobes, A. (2017, December 8). Must we decolonise open access? Perspectives from Francophone Africa [blog]. http://journalologik.uk/?p=149
- Noddings, N., & Enright, D. S. (1983). The promise of open education. *Theory Into Practice*, *22*(3), 182–189. <u>https://doi.org/10.1080/00405848309543059</u>
- Oliver, M. (2015). From openness to permeability: Reframing open education in terms of positive liberty in the enactment of academic practices. *Learning, Media and Technology,* 40(3), 365–384. https://doi.org/10.1080/17439884.2015.1029940
- Pangrazio, L. (2016). Reconceptualising critical digital literacy. *Discourse: Studies in the Cultural Politics of Education*, 37(2), 163–174. https://doi.org/10.1080/01596306.2014.942836
- Piron, F. (2017, September 19). Qui sait? Le libre accès en Afrique et en Haïti. http://www.laviedesidees.fr/Qui-sait.html
- Rainie, L., & Wellman, B. (2012). *Networked: The new social operating system*. Cambridge, MA: MIT Press.
- Rosen, J. R., & Smale, M. A. (2015). Open digital pedagogy = Critical pedagogy. *Hybrid Pedagogy*. http://www.digitalpedagogylab.com/hybridped/open-digital-pedagogy_ critical-pedagogy/
- singh, s. (2015, June 27). The fallacy of "open" [blog]. https://savasavasava.wordpress.com/2015/06/27/the-fallacy-of-open/
- Srnicek, N. (2016). *Platform capitalism*. Cambridge, UK: Polity Press.
- Stewart, B. (2016). Collapsed publics: Orality, literacy, and vulnerability in academic Twitter. *Journal of Applied Social Theory*, 1(1). http://socialtheoryapplied.com/journal/jast/article/view/33
- Stommel, J. (2014). Critical digital pedagogy: A definition. *Hybrid Pedagogy*. http://www.digitalpedagogylab.com/hybridped/critical-digital-pedagogy-definition/
- UNESCO. (2002, July 8). UNESCO promotes new initiatives for free educational resources on the Internet. http://www.unesco.org/education/news_en/080702_free_edu_ress.shtml
- UNESCO. (2016). *Education for people and planet: Creating sustainable futures for all*. Paris, France: UNESCO. http://en.unesco.org/gem-report/report/2016/education-people-andplanet-creating-sustainable-futures-all/page#sthash.WPPWZzsa.ytg88C7J.dpb s
- United Nations. (2015). *Transforming our world: The 2030 agenda for sustainable development* (No. A/RES/70/1). New York, NY: United Nations. https://sustainabledevelopment.un.org/post2015/transformingourworld/publication
- Watters, A. (2014, November 16). From "open" to justice #OpenCon2014 [blog]. http://hackeducation.com/2014/11/16/from-open-to-justice
- Wellman, B. (2002). Little boxes, glocalization, and networked individualism. In M. Tanabe, P. van den Besselaar, & T. Ishida (Eds.), *Digital cities II: Computational and sociological approaches* (pp. 10–25). Berlin, Germany: Springer. <u>https://doi.org/10.1007/3-540-45636-8_2</u>
- White, D., & Le Cornu, A. (2017). Using 'Visitors and Residents' to visualise digital practices. *First Monday*, *22*(8). <u>http://firstmonday.org/ojs/index.php/fm/article/view/7802</u>
- Wiley, D. (2009, November 16). Defining "open" [blog]. http://opencontent.org/blog/archives/1123
- Winn, J. (2015). Open education and the emancipation of academic labour. *Learning, Media and Technology*, 40(3). https://doi.org/10.1080/17439884.2015.1015546
- Zuboff, S. (2019). *The age of surveillance capitalism: The fight for the future at the new frontier of power*. London: Profile Books.