



# The problem of the web: Can we prioritize both participatory practices and privacy?

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## ABSTRACT

This paper is a critical case study tracing the professional history of a self-professed open educator over more than two decades. It frames the narrative of an individual as a window on the broader arc of the field, from early open learning as a means of widening participation, through the rise of the participatory web at scale, to the current datafied and extractive infrastructure of higher education. It outlines how the field of online education has changed, as the web and the social and societal forces shaping use of the web have shifted. Through these lenses of change, the case study explores the dilemma facing open and participatory education at this juncture: that the current structure of the web threatens privacy, higher education governance structures, and the spirit of open, participatory sharing. The paper explores the problem of the web as one without direct solutions but does consider ways that educators might mitigate their open practice in more critical directions.

**Keywords:** open education, participatory learning, teacher education, digital literacies, data literacies, the web

## INTRODUCTION

How can open education practices be sustained on a web that is increasingly extractive and predatory? This paper is a critical case study that outlines and interrogates the pedagogical practices of the author as an open educator and Assistant Professor of Online Pedagogies and Workplace Learning, during the period leading up to and spanning the COVID-19 pandemic. It traces my professional journey from practitioner and scholar of open courses to scholar of datafication, while exploring broader shifts in the fields of digital and open pedagogies during the COVID-19 pandemic and the decade immediately preceding it. More, it raises the question of what datafied educational technologies mean for open and participatory educational practice.

This is not a personal narrative, but rather the story of a changing field told through the lens of one educator's professional trajectory. The core premise of the paper is that two important and potentially contradictory patterns of change intersect in what Cronin and MacLaren (2018) call open educational practice (OEP). These two axes of change are, first, relational participatory practices that utilize the infrastructure of the web to engage learners in knowledge abundance (Eye, 1974), and second, the enclosure of the platforms on which those practices occur, by proprietary and often data-extractive corporate entities. While neither axis of change is new, the paper posits that the two are beginning to converge in educator practice in ways that create conflict and are difficult to address let alone resolve.

OEP include an expansive range of educational approaches that utilize the web and incorporate elements of relational and often collaborative or sharing-focused practice. OEP has roots in open scholarship (Anderson, 2009) and networked participatory scholarship (Veletsianos & Kimmons, 2012), though prior to the pandemic, pedagogical OEP focused on teaching appeared to be building momentum (Couros & Hildebrandt, 2016; DeRosa & Robison, 2015; Weller, 2014) and centering equity (Bali, 2017). At the same time, the digital technologies that underpin OEP have become powerful, datafied infrastructural realities in higher

education over recent decades (Perrotta & Williamson, 2018). The systems those of us in higher education rely on for scholarship and teaching and learning are digitally-dependent yet increasingly opaque both to students and to educators (Stewart, 2020a). Reliance on digital and datafied systems has, additionally, been accelerated due to the COVID-19 pandemic, as institutions around the world turned to online learning platforms at scale.

At the intersection of these phenomena, the paper explores what these colliding shifts mean for open education, in terms of OEP and, specifically, the open web in the classroom. This paper explores how practices of participation are critically undermined by spaces of surveillance, making it difficult for educators to engage in OEP in ways that prioritize trust and privacy. I intend the narrative as a way of posing a problem that I am being forced to confront in my own practice, at this juncture. As we emerge from the pandemic-centered online 'pivot' and the emergency remote teaching period (Bozkurt et al., 2020), I am curious about how the field of open education and OEP has changed, and where open educators are situated within the broader global conversation about online learning. I worry about how educators can continue to center open digital practice in our work, even as digital platforms become increasingly extractive. And I am interested in making visible the emergent forces we as educators are working with and against, in trying to develop equitable and participatory open digital classrooms. With race and gender biases built into algorithmic decision-making increasingly evident (Benjamin, 2019; Noble, 2018) and pervasive digital surveillance now translating educational experiences into behavioral data for extraction (Erickson, 2018), I believe open education has a reckoning on the horizon. I also believe that this tension between participation and privacy is neither individual nor institutional, but structural: the result of multiple shifts and trends in online education over recent years. I trace some of these shifts and changes here, through my own history in the field, as a way of reflecting on and making visible the forces that have shaped not just my own work, but those with whom I have shared this time and this particular nexus of practices and passions.

## OPEN EDUCATION AND THE PROBLEM OF THE WEB

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I have been engaged in open and digital learning for nearly a quarter of a century. I began—rather accidentally—during my Master of Education, just before the turn of the millennium. I had been teaching high school English for a few years when I chose to return to school to study. I landed a part-time role with the Office of Open Learning at my Eastern Canadian university, supporting faculty and students in navigating the entirely-text-based platform upon which their new online master's program was delivered. The experience was an introduction to distance education framed in learner-centered principles of open learning (Hannafin et al., 1994; Fraser & Deane, 1997), with focus on increased access, self-determination, and flexibility of delivery mode. In the process of learning to be an open and digital educator, I learned that digital technology as an end in itself was not the focus of my work (Stewart, 2013), even though the tools were an obvious learning curve for all of us involved in my faculty development workshops. Rather, this early foray into open education introduced me to a concept of open and online learning grounded in adult education and constructivist learning theory and led me to a career pathway that has approached open and online practices as a means of extending educational goals. My work ever since has tried to address issues raised by the web, engaging in questions of what the technologies of our given time and culture mean for what it means to know and to educate, particularly within the context of contemporary higher education institutions.

One of the key threads of the M.A. thesis I wrote during this period traced some of the previous cultural shifts in power and knowledge that occurred when past communications revolutions took place. Socrates lamented the loss of memory to writing. In medieval Europe, the monastic culture—and the all-encompassing authority—of the Catholic Church suffered irrevocably when the printing press made not just hand-copying but the whole idea of knowledge AS copying obsolete. And the hand-wringing—evergreen from the 1990s through the present day—about the terrible things happening to our children because of digital technologies? I noted that they read a lot like Cervantes' *Don Quixote*, published in two volumes in 1605 and 1615, wherein the protagonist buries himself in his books so deeply that, from so little sleep and so much reading, loses his wits and his capacity to distinguish real from imaginary. He then, of course, became an icon for all the generations after who saw in his story the possibilities of literary imagination and format. The ways in which new technologies inevitably usher in loss and create outcry, while also opening new ways of seeing, is a

longstanding theme in my work—and in that broader problem of the web—that we will revisit later in this case study.

The idea of knowledge or information abundance underpins my thinking on openness, particularly in relation to higher education and teaching. Following Weller (2011), I frame abundance as the proliferation of available information in contemporary society, amplified though not circumscribed by the digital era and its unprecedented capacity for individuals to create and share content. That sharing process was popularly conceptualized at the time under multiple, as the read-write web or Web 2.0 (O'Reilly, 2005). The exchanges of content and ideas that this networked infrastructure enables, blurring consumption and production, have been theorized variously as produsage (Bruns, 2007), and—in relation to education in particular—as participatory culture (Jenkins, 2006) and participatory literacies (Rheingold, 2010). As an active Web 2.0 era blogger, I began to design this participatory framework into my work as an educator, initially supplementing face-to-face classes with a learning management system (LMS) to enable student discussion threads and reflective sharing. Eventually, I introduced students to blogging and to public sharing of content, encouraging them to navigate the knowledge abundance of the web not only as consumers of ideas, but as contributors, sharing their own (selected) works.

Through blogging, as an individual and educator, I became familiar with a side of open education that focused more on content and licensing, rather than widening access and participation. Blogging introduced me to open licensing and creative commons (CC) licenses specifically, as I built networked ties with other writers who shared my interests if not necessarily my geography. Some of my blogger peers wrote about their CC licenses and hosted choral conversations the content side of open education in their comments sections. Through this ambient immersion in a broad, networked educator community, I chose, ultimately, not to copyright my blog, but to license it openly. I already understood that putting my writing on the open web meant that it might sometimes be used without attribution, whatever control I tried to exert. I owned my own blog domain, and the very structure of blogging—with dates and a long-term record of each post—meant that I already a postmark staking and dating the words I had put into the world. But with my CC license, I liked the fact that supporting the fledging world of open licensing meant that I was contributing to a rethinking of ownership focused on an open knowledge commons (Hess & Ostrum, 2007), and to an infrastructure supporting the development of that commons.

I was formally introduced to open educational resources (OER), or what UNESCO (2002) defined as

“learning, teaching and research materials in any format and medium that reside in the public domain or are under copyright that have been released under an open license, that permit no-cost access, re-use, re-purpose, adaptation and redistribution by others.”

I incorporated CC and open licensing into my teaching, as part of inviting students to create and publish on the web. I never developed the expertise on the open content side of the field that many of my colleagues did, nor did I ever make licensing a central part of my courses or classroom work. Nonetheless, like many engaged in early OEP and blogging, I openly licensed my blog, and considered it an ethical responsibility to introduce students to the concept and practice of licensing whenever I invited them to share work publicly on the web.

## THE PARTICIPATORY ETHOS

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The core of my work in online education, however, through this first decade of the 21<sup>st</sup> century and until about 2016, was focused not on content but on the participatory practices and networks that the web made possible. The ethos of participation, was, for me, central to the “new literacies” that Lankshear and Knobel (2004) emphasized for making use of digital tools within knowledge abundance. The ways in which people could connect and share ideas online multiplied in those early years of the new millennium, and the practice of engaging online became mainstream. The proliferation of free blog platforms led to unprecedented self-publishing, and the rise of camera-enabled phones combined with platforms such as YouTube and Instagram meant that images and videos could be easily shared. Social network platforms, particularly Facebook and Twitter, became commonplace means of communication and interaction in much of the world, though China in particular restricted these platforms and developed its own. Online self-presentation and participation in

networked interactions became a common feature of contemporary life. I found genuine value and connection in my own networked participation, particularly in the web of relationships built through comments on my blog, which leaked out from that space into Twitter relationships, Facebook connections, and even face-to-face meetings through conferences and intentional travel. As a former teacher at high school English and academic writing, I was aware of Graves' (1994) work on authentic audiences and their value for writing instruction. Though I was no longer teaching writing, I was cognizant of how much encouragement and motivation my blog audience had provided in my own development as a writer and thinker, and how my own learning had been profoundly enhanced and amplified by my participation in networks of others who were writing and thinking aloud, online. It was with that value and that participatory ethos in mind that I began to design my courses more and more around student engagement with other students' work, and with online publics more broadly.

In 2007-2008, I managed a partnership project that brought classes of junior high students together with the local university and provincial Archives, researching local histories, digitizing local historical artifacts, and combining their learning and digitized images in blogs, lesson plans, and other OER that could be freely created and shared. Because each student was assigned different topics, differentiation was relatively easy to accomplish, and most students were motivated by producing work for real-world community audiences. The project encouraged students to contribute to knowledge abundance, and, in both process and product, built ties between them and their local communities and institutions. However, the project did not scaffold a communications infrastructure between students in the various classes, nor did we enable visible constructive communications between them and their audiences. I realized after the fact that this limited the extent to which the project served as a fully participatory or Web 2.0 experience for students (Stewart, 2010). While for seventh graders, this decision made logical sense and ensured the project a relatively simple approvals process with school boards and families, the realization led me to design significantly more peer communications into my subsequent work with Bachelor of Education (B.Ed) and Master of Education (M.Ed) students. I wanted to model how networks of communication could be fostered both inside and beyond class walls, and have students engage meaningfully with OER and open practice, so that they—and their eventual students—could know it was within their power to contribute to a commons of knowledge abundance.

## THE MOOC ERA

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Perhaps the most significant model, for me, though, of the participatory power of opening education came from my experience with early massive open online courses (MOOCs). Though the term MOOC came to refer primarily to large courses offered by elite universities (Pappano, 2012), often for free or for a small certificate fee, they originated as a participatory phenomenon in Canadian higher education in 2008. The term was actually coined during one of my partner's educational podcasts, in reference to a course offered by the University of Manitoba that Siemens (2006) and Downes (2012), the instructors, chose to open to their own educational networks. While MOOCs became primarily means of delivering educational content at mass scale, these initial offerings, often distinguished as cMOOCs (Downes, 2012) for their grounding in connectivist theory (Siemens, 2006) and their Canadian roots, were more focused on learner experience than on content delivery. They not only made course materials openly available but encouraged participants to share their responses to core course ideas on the open web and collated these distributed responses as part of the course experience that other participants could engage with. Some had elements of lecture or convened topics, but they tended to be highly interactive and focused on fostering emergent knowledge and connections among participants. I participated in some of these early cMOOCs, and was among the first to research the distributed, participatory model for learning that they represented (Stewart, 2010).

While cMOOCs differed from my own higher education courses in their informality and lack of assessment responsibilities, as well as their open nature, they changed the way I approached my courses, forever. cMOOCs made visible to me the ways in which the web could be used to scaffold a shared and distributed learning experience and made clear to me that learners will engage in things they care about. They gave me a model for what truly participatory, learner-driven course experiences could be. They leveled up my commitment to making my own courses participatory, particularly in classes explicitly focused on teaching

teachers about technology, because for me the central benefit of using technology in teaching was the chance to integrate the participatory aspects of the web.

Since my first experience of early cMOOCs, I have consistently tried to design for some element of that kind of distributed audience in my own classes, so learners' contributions to the course are structured to be part of other learners' experience of the course. Student contributions to knowledge abundance—even if within an LMS rather than on the open web—serve as part of the course material for each other's learning. Thus, student work is an ongoing part of the curriculum for other students, and students are asked to engage with and even formatively assess each other's work. This "community as curriculum" (Cormier, 2010) model has enabled me to build online and blended courses that not only feature elements of participatory engagement but support the development of class communities. Learners are able to get a sense of each other, even if we do not share physical space. Wray's (2011) RISE (reflect/inquire/suggest/elevate) model has proven valuable for helping to structure student peer comments, as it overtly scaffolds both critical and supportive feedback, giving the educators in my courses practice in formative feedback as well as opportunities to view the coursework from an assessment perspective. While courses that are closed to outside audiences cannot operate on the same distributed model that MOOCs did, students could be encouraged to be audiences, peer reviewers, and even just supporters of each other's work. Making student work visible and encouraging students to be each other's audience means that my course assessments focus on application, reflection, presentation, and creative interpretation of course ideas, rather than direct mastery. My OEP practice, however, does not require students to make all assignments visible to others: choice is often built into assignments at a variety of levels, including topic, modality of expression, and level of visibility. Most students have spent significant hours in their careers on assignments that are only even seen by a single teacher, and so introducing the ideas of distributed, choral audiences and participatory feedback has tended to be relatively popular among learners in my non-MOOC courses.

Less directly, cMOOCs influenced my teaching and my OEP by introducing me to the community of inquiry (CoI) framework for education, and specifically what Garrison et al. (2000) call presence in online education. The CoI focuses on collaborative and critical engagement through discourse and reflection, and the presence model specifically frames online education as having three key elements: cognitive presence, teacher presence, and social presence. In the aftermath of my cMOOC experiences and research, I became focused on trying to scaffold online social presence opportunities for students, in the interest of fostering collaborative and critical learning communities even in the absence of face-to-face social cues. This aligned with my research into networked participation more generally. In online networks, humans rely on identity profiles and practices to understand each other and make decisions about who to engage with and how. Institutional structures and norms tend not to be designed to foster networked identities or individuated contributions, but online and open practices focused on social presence not only engage students in a given experience but also build their digital literacies more broadly. Like many of my networked educator colleagues, I have drawn on the idea of social presence to encourage students to stand out, to engage interest, or to express some aspect of their individual humanity in the work they contribute to the commons of knowledge abundance within their courses.

## THE SOCIAL MEDIA ERA

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I have tended to approach this commons of knowledge abundance from a relatively platform-agnostic perspective, as I have developed the pedagogical side of my OEP. Initially, I used both LMS platforms and open source blog platforms to foster student participatory engagement, as well as face-to-face active learning strategies. However, I gradually incorporated social media as well, with particular focus on Twitter. I was hesitant to use Facebook for educational purposes, primarily because—in the era prior to the development of Facebook groups—it required students to mutually friend each other in order to see each other's posts. Additionally, because Facebook has always demanded users' real names, it would have been difficult for student Facebook users to start second accounts and using primary accounts would have represented an incursion of student/professional lives into spaces often populated by extended family and personal connections. I steered clear. But Twitter did not require students to follow each other in order to see each other's posts, and disposable accounts solely for class purposes could be created if so desired. From the time

I'd begun using Twitter actively, in 2008, it had been a space rich in educational conversation. There were many educational hashtags around which regular, open chats were organized, enabling educators interested in similar topics to communicate, and many educators on the site were also blogging at the time and opening their ideas for comments.

I had found educational Twitter a space of earnest community and genuine professional learning (Stewart, 2018), as well as a space that fledgling educators might consider using with their own students. Thus, I designed my technology-focused courses in particular to give my students a scaffolded introduction to Twitter, as a participatory proof-of-concept. I sometimes created hashtags specifically for class use, and also scaffolded student participation in existing open Twitter chats with larger groups of educators. Additionally, I used my own Twitter account to promote student blog and—later—podcast and video work, with express student permission. As an early adopter with a reasonably-sized educational following, I was able to generate an audience for student work among the networks I engaged in, thus giving students a taste of the kind of networked participation available to them as active educational thinkers on social media. I am deeply grateful both to the fellow educators who modelled this practice for me, and to those who offered my students their attention and care over the years.

My use of Twitter with students was informed and shaped by my scholarship during that period. I returned to graduate school in 2010 after a decade's hiatus, with the intent of researching the participatory networks I was engaged in and their implications for the academy and higher education. Ultimately, my Ph.D became a study of academic Twitter, and the ways influence and reputation were shaped on that platform (Stewart, 2015). Thus, as both a scholar and practitioner of Twitter, with extensive grounding in the literature on the topic in addition to lived experiences, I felt capable of speaking frankly with students about risks, benefits, and issues of digital identity related to Twitter use as an educator. I was able to share cautions and caveats of participating in Twitter chats under their own identities, as well as the ways in which doing so could enable them to build digital presence as an educator and network that to their own benefit. My focus was never to convince them to become Twitter users, but rather to give them hands-on opportunities to understand participatory networks and their educational possibilities, and thus to make informed choices about their own practices and pedagogies.

## **WEAPONIZATION, ENCLOSURE, AND DATAFICATION**

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Nonetheless, the foundations of the participatory culture Jenkins (2006) had outlined in 2006 were shifting. Twitter expanded and became an increasingly tactical and weaponized space (Tufekci, 2017) during the course of my 2013-2014 study (Stewart, 2015). I began to witness the use of hashtags not just to coordinate conversation but to direct public opinion, even within the academic communities I was studying. Initially, within my own research and on visible hashtags like most of that concerted, networked effort represented efforts by marginalized individuals to band together to exert pressure on existing power systems, but by mid-2014 the full capacity of social media to pile on, silence, and weaponize harm was made visible in the orchestrated campaign of online abuse known as #Gamergate.

This weaponization of social media—and media more broadly—only continued over ensuing years. Due to my own embeddedness in Twitter norms beyond those grabbing negative headlines, I felt capable and competent in continuing to shepherd students into a critical navigation of safe educator practices in that space. But critical analysis of technological affordances and cultures became a central part of my teaching of digital tools and OEP, from 2014 onward. I also increasingly introduced students to forms of participatory practice that didn't rely fully on corporate platforms, including digital artifact creation and podcasting. While I was never a DIY techie in terms of open source software or servers, #Gamergate and the callout culture that ensued (Stewart, 2015) served to make me increasingly cautious about corporate ownership of open platforms and spaces, as it became clear that Twitter users were not in control of the site's behavioral norms. Blogging and its culture of participatory commenting and network-building had been part of a distributed era of online participation and knowledge abundance, whereas the rise of commercial social media shifted the locus of control for participatory engagement to commercial platforms.

The scale of this shift to commercial and corporate control took me by surprise. I was not prepared for the fact that corporate platforms not only moved to monetize online education, but to take *over* so much of what

they touched. In 2013, I first heard the term 'enclosure' in reference to the issue of platforms constraining the open infrastructure of the web by design, and for profit. The idea of enclosure of commons is not a new one: it has its origins in the post-feudal enclosure of English agricultural common land, thus depriving commoners of previously existing right of access and privileges of use. The idea of the web—or cyberspace, in more military terms—as a global commons has also circulated over recent decades (Stang, 2013). Audrey Watters, one of the key critics and thinkers in the educational technology field in that era, warned that Stanford's MOOC platform/startup Coursera and then-fledgling textbook portal Chegg were "on the web, but not *of* the web." (Watters, 2013, *The Portal and The Anti-Platform*, para 5). Rather than enable open exchange of hyperlinks and communications, these platforms enclosed content and limited access. And rather than market themselves to individual users, they and other edtech platforms and start-ups increasingly marketed at the institutional level, so that higher education became a patchwork of intersecting digital systems, all collecting data.

My work has come to focus particularly on data and datafication, over recent years (Stewart & Lyons, 2021). Datafication is, in essence, the pervasive patchwork of digital systems through which every click and trace we engage in can be used to track and surveil us in ways that are seldom transparent (Lupton & Williamson, 2017). Datafication transforms the act of digital engagement into online quantified data, which then presents our worlds and selves back to us "in machine-readable formats" (Williamson et al., 2020, para. 2). The kinds of social, pedagogical, and administrative actions that were once invisible in higher education are rendered trackable through the incursion of these systems. This means these actions can in turn be monitored, analyzed, optimized (Shilova, 2017), as well as packaged and sold as part of what Zuboff (2019) calls 'surveillance capitalism.'

## THE OPEN PAGE

In the midst of this encroaching patchwork of enclosure, I became conscious of the reality that my pedagogical OEP and emphasis on participatory learning approaches demanded that students also learn critical literacies about the web and the technology industry. This awareness was likely part of what Castañeda and Selwyn (2018) frame as a rise in critical perspectives on digital technology use in higher education over the 2013-2018 period, as well as a direct response to the weaponization of the platforms I was accustomed to deploying in my participatory efforts. If I was going to introduce my students to digital classroom tools and social media, I felt it was only ethical to ensure they could engage as critical and informed users. Starting in about 2014, I increasingly focused on digital literacies in my blogging and speaking within higher education circles, as well as in my education classes. As I became more aware of the datafied infrastructure enclosing OEP and higher education, I began to include data literacy elements as well. I attempted to interrogate my own privacy practices and realized that on both personal and professional levels, I had little sense of where to begin. Moreover, I realized that that was not an accident, but part of the design of contemporary digital-dependent culture: I, like my students, had become accustomed to clicking "yes" to data collection in exchange for access to things I needed in a given moment. I polled students in my B.Ed and M.Ed classes, and learned they, too, tended to be minimally concerned about privacy in their own practices. When I facilitated discussions about data and privacy, though, they were generally open to the idea of a responsibility to their students or future students regarding the surveillance and privacy issues that digital classroom tools pose.

The Open Page project emerged from a nexus of pedagogical efforts to teach digital and data literacies in meaningful ways. The project, hosted on my Faculty of Education webpage as well as via a YouTube channel, is a showcase of student-generated videos, podcasts, and attendant lesson plans and guidelines. Each of the videos and podcasts focuses on different digital classroom tools, and outlines their educational uses, terms of service (TOS), and differentiated learning possibilities. It is a response not just to datafication but to what I perceived as a broad need for educators—at all levels of teaching—to build their own critical literacies around classroom tools and platforms, and to access quick, educator-focused information about specific tools and what risks and opportunities they represent at the classroom level.

The Open Page emerged out of a class project that asked groups of B.Ed students to critically evaluate different platforms of their own choosing, presented to classmates as a "tool parade." As a class presentation series, the assignment was open by default, but limited: students initially presented for each other as

audience, but in an ephemeral way. The first time that I tried this assignment with students, in 2018, I recognized that a great deal of work had gone into the presentations and that they could offer value beyond the walls of our class. In keeping with my OEP inclinations to foster distributed audiences for student work, I asked students if I could extend their audiences for their presentations by recording some as exemplars for future iterations of the assignment. Students expressed an interest in sharing some of those exemplars with their own Associate teacher-mentors in K-12, and it occurred to me, in discussion with the students, that my own faculty colleagues might benefit from OER resources that took up the tool parade purpose. Eventually the idea of an open, online showcase of tools–by educators, for educators–developed, that would allow students to contribute to knowledge abundance while building their own critical assessment capacities and data literacies in assessing TOS.

I hired students to research, script, and shoot the initial videos in the series, based on the model used in the initial classroom assignments but condensed for optimal YouTube presence. Each video was a four-five minute overview of a specific platform, presented from an educator’s point of view and exploring specific classroom uses for the tool while also reviewing the TOS and any data risks posed. The videos were designed to be light-hearted but informative, and to visually reinforce the information being delivered through the student-written scripts. My student team were full partners in the development of the videos and the management of the overall project (Johnston & Stewart, 2020), and even coordinated the participation of my faculty colleagues in filming later videos in the series. Our goal was to have various educator voices–from preservice teachers through faculty development colleagues and both precarious and tenured faculty–represented in the series, as one of the key points of the overall project was that *all* educators are on a similar learning curve with regard to classroom tools and data literacies.

The project was more than the video series. While the videos were intended to be stand-alone digital artifacts made available to educators at all levels, they were also the core of my curriculum for the next year’s service learning course in Online Pedagogies and Workplace Learning. That course was produsage-focused (Stewart, 2020b), drawing on the model of the videos to scaffold full-class student production of a podcast and OER series on different classroom tools, using the same analytic format. Students in the Service Learning class not only learned from the videos on The Open Page site–and from the active mentorship of the student video team, who served as research assistants for the service learning classes–but contributed their podcasts and OER about their chosen tools to The Open Page. They prepared and released social media communications about their podcasts, using hashtags and engaging with the open educator community, and designed workplace learning workshops on their specific tools for presentation in local schools. While some of these presentation plans were ultimately cut short by the COVID-19 pandemic, some students did get the opportunity to deliver professional development opportunities to teachers in local school boards, while others presented online to peers and had the opportunity to invite open educators to their sessions.

## NO GOING BACK

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The Open Page was designed, ultimately, to be a lesson for educators about the enclosure of the web via digital classroom tools, while also serving as a means of learning about and using classroom tools in participatory and differentiated ways. The project–particularly its student podcast production phase–was generously supported by the Office of Open Learning at my institution, who provided both equipment and technical expertise and mentorship for my students. The project felt, for me, like a culmination of multiple arcs and axes of my own journey as an open educator, weaving together participatory, student-led produsage with increasing access to workplace learning and digital/data literacies for preservice teachers. I felt as if I were merging my open work and my teaching in a coherent way, perhaps for the first time.

And perhaps for the last. The Open Page was, admittedly, a project of the pre-pandemic era, when digital platforms and tools were seldom central to most educators’ ideas and experiences of the classroom, even though datafied systems were more pervasive than many of us recognized. This, of course, changed suddenly in the spring of 2020. By the close of that year, the vast majority of educators had experienced entirely online class delivery of some form or another, often with far more emphasis on synchronous learning and content coverage than on participatory methods or OEP.



This post-pandemic reality left me wondering how to re-engage in the open, participatory pedagogical practices I have been developing with students for the past two decades, and even whether re-engagement is the right approach. What does the open web mean to students whose experience of online education has already been formed by practices that are—often—the antithesis of my own? Can I successfully scaffold OEP, now that almost all of my students come into my courses expecting “online” to mean Zoom or video content, devoid of explicit social presence cues? What do datafied educational technologies mean for the open and participatory educational practice that I value? What does it mean to invite students to connect with each other and with networked publics using platforms that disdain their privacy and reinforce the “click yes to continue” culture they already swim in? As I struggle to take stock of my courses, my institution, and my field more than two years into the pandemic, I am confronted by a reality that disheartens me. The faculty development efforts I was part of during the pandemic made clear to me that the core messages of my two decades of open, participatory, pedagogical work—including more than 40 keynotes across multiple continents, and significant workshops and sessions with colleagues—had had limited impact on most educators’ approach to pedagogy or technology. As I designed my 2022-23 courses, I recognized how outdated even some of The Open Page OER had become, in just over two years. And I wondered, along with other critical practitioners of digital technologies (Castañeda & Williamson, 2021) and OEP, at my own capacity and that of other educators to continue to develop and maintain an informed, critical but relational perspective on digital tools’ specific affordances and privacy risks.

The pandemic made clear how the participatory ethos that for me is at the core of OEP is being undercut at every turn by platforms trying to enclose higher education’s use of the web for their own profit, and sell us techno solutions (Morozov, 2013) to problems that their datafied tools make visible. Public higher education is increasingly underfunded and under resourced, yet academic publishing maintains an expensive stranglehold (Thompson, 2021) on formalized academic knowledge, in spite of the existence of the web. Increasingly digital platforms look to establish that same kind of predatory enclosure relationship. Globally, the pandemic offered online proctoring companies—which are designed for pedagogically outdated if technologically “innovative” online surveillance of online testing—huge growth and profit opportunities, with proctoring projected to reach \$1.5 billion in profits by 2028 (Business Wire, 2022). That \$1.5 billion will be higher education sector money, passing through the sector to benefit corporate interests, not institutions or—arguably, from my pedagogical position—learning. Even OER leaders like Lumen Learning appear to have recently turned over or “flushed” hosting of some of their free course content or “community courses” to the platform Course Hero, on which students are incentivized to share content that is not openly licensed.

The problem of the web is that it does not have an inherent ethos. The web made the open sharing infrastructure of participatory learning possible. It also makes weaponized pile-ons, bots, fraud, and social media doxing possible. And it makes very large fortunes for some, often at the expense not just of higher education’s increasingly limited budgets, but of any concept of human flourishing that does not end at a bottom line.

Thinking about Don Quixote during my M.A. twenty-some years ago, I came to think about digital technologies as cultural objects, that lead to loss, gain, outcry ... and change. Having lived through the shift from print culture to digital culture, I have weathered significant change and outcry—much of it parallel to the moral panic that has regularly surged, evergreen, around kids on screens these past few decades—but little of that has resonated with me. My own deep embeddedness in the participatory culture of Web 2.0 led me to frame screens not as blank sites of consumption but as spaces of contribution and produsage, full of capacity for connection to others. I still believe in that potential, but increasingly I am concerned that in our focus on screens we have failed to see the *real* threat that digital systems pose, which is one of pervasive corporate technocratic authority and loss of privacy. Following Tony Bates in his post framing the selling of children’s data from edtech tools as a perversion of the internet and a human rights violation (Bates, 2022), I worry that perhaps society mounted the wrong outcry entirely about the web. On the whole, we have slept as our societal and educational infrastructures have been encroached on, enclosed, and reduced to profit tallies. To the extent that this is true, what does it mean to engage in the digital participatory work to which I have given the last two decades of my life?

The core message of The Open Page is that the web's participatory infrastructure is still possible and meaningful to engage with, so long as one keeps a critical eye on the surveillance and data elements that are inherent to digital learning. I believe that to be, largely, still true, even as enclosure looms. But I also believe that critical digital literacies are central to educators' capacity to develop and employ that critical eye. My work with preservice and practicing teachers increasingly focuses on what (Bali, 2016) frames as the 'why, when, whom, and for whom' questions that represent digital literacies, rather than the 'what and how' of digital skills or technical proficiency. My job title at my current institution is now Associate Professor of Online Pedagogy and Workplace Learning, and I consider it my responsibility to explore the changing landscape of educational technologies with my current and future classes. I believe I can still design ways for learners to build connection, social presence, and moments of emergent knowledge using the web, though cautiously. In the course of my teaching, I talk about data and privacy issues, and try to bring students onto platforms that do not mine and sell data, at the very least. I design flexible options for students' platform usage in my classes and try to model good critical practices for teaching and learning within this contemporary information ecosystem.

My perspective is that online pedagogy and the web are increasingly, to paraphrase Haraway (1991) speaking about the cyborg and its roots in the Enlightenment, a polluted inheritance. Haraway's (1991) cyborg is an ironic myth, one that has guided my own journey with and approach to digital technologies from those first days in my master's degree. My goal remains a pedagogy that enables both connection and privacy. I choose to go forward with irony and caution front of mind, continuing to work with the polluted web as well as its inheritance of openness and the knowledge commons. Like the cyborg, a partial creature that is unfaithful to its origins, may those of us who value OEP, and participatory possibilities find ways to work within datafication while finding ways to undermine the relations and logics of data and enclosure.

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## REFERENCES

- Anderson, T. (2009). *Open scholarship* [Paper presentation]. Open Access Week 2009, Athabasca University.
- Bali, M. (2016). Knowing the difference between digital skills and digital literacies, and teaching both. *Literacy Now*. <https://www.literacyworldwide.org/blog/literacy-now/2016/02/03/knowning-the-difference-between-digital-skills-and-digital-literacies-and-teaching-both>
- Bali, M. (2017). *Curation of posts on open pedagogy*. <https://blog.mahabali.me/whyopen/curation-of-posts-on-open-pedagogy-yearofopen>
- Bates, T. (2022). *The perversion of the Internet: Scraping and selling children's data from ed tech tools*. <https://www.tonybates.ca/2022/05/29/the-perversion-of-the-internet-scraping-and-selling-childrens-data-from-ed-tech-tools/>
- Benjamin, R. (2019). *Race after technology: Abolitionist tools for the new Jim Code*. Polity. <https://doi.org/10.1093/sf/soz162>
- Bozkurt, A., Jung, I., Xiao, J., Vladimirschi, V., Schuwer, R., Egorov, G., Lambert, S. R., Al-Freih, M., Pete, J., Olcott Jr., D., Rodes, V., Aranciaga, I., Bali, M., Alvarez Jr., A. V., Roberts, J., Pazurek, A., Raffaghelli, J. E., Panagiotou, N., de Coëtlogon, P., ..., & Paskevicius, M. (2020). A global outlook to the interruption of education due to COVID-19 pandemic: Navigating in a time of uncertainty and crisis. *Asian Journal of Distance Education*, 15(1), 1-126.
- Bruns, A. (2007). Prodsusage: Towards a broader framework for user-led content creation. In *Proceedings of the 6<sup>th</sup> ACM SIGCHI Conference on Creativity & Cognition* (pp. 99-106). <https://doi.org/10.1145/1254960.1254975>
- Business Wire. (2022). *The worldwide online proctoring industry is projected to reach 1.5 billion by 2028*. <https://www.businesswire.com/news/home/20220623005577/en/The-Worldwide-Online-Exam-Proctoring-Industry-is-Projected-to-Reach-1.5-Billion-by-2028---ResearchAndMarkets.com>

- Castañeda, L., & Selwyn, N. (2018). More than tools? Making sense of the ongoing digitizations of higher education. *International Journal of Educational Technology in Higher Education*, 15, 22. <https://doi.org/10.1186/s41239-018-0109-y>
- Castañeda, L., & Williamson, B. (2021). Assembling new toolboxes of methods and theories for innovative critical research on educational technology. *Journal of New Approaches in Educational Research*, 10(1), 1-14. <https://doi.org/10.7821/naer.2021.1.703>
- Cormier, D. (2010). Community as curriculum. In D. Araya, & M. A. Peters (Eds.), *Education in the creative economy: Knowledge and learning in the age of innovation* (pp. 511-524). Peter Lang.
- Couros, A., & Hildebrandt, K. (2016). Designing for open and social learning. In G. Veletsianos (Ed.), *Emergence and innovation in digital learning: Foundations and applications* (pp. 143-162). Athabasca University Press.
- Cronin, C., & MacLaren, I. (2018). Conceptualizing OEP: A review of theoretical and empirical literature in open educational practices. *Open Praxis*, 10(2), 127-143. <https://doi.org/10.5944/openpraxis.10.2.825>
- DeRosa, R., & Robison, S. (2015). Pedagogy, technology, and the example of open educational resources. *EDUCAUSE Review*. <http://er.educause.edu/articles/2015/11/pedagogytechnology-and-the-example-of-open-educational-resources>
- Downes, S. (2012). cMOOCs. <https://www.downes.ca/post/58676>
- Erickson, K. (2018). The future of network effects: Tokenization and the end of extraction. *Medium*. <https://medium.com/public-market/the-future-of-network-effects-tokenization-and-the-end-of-extraction-a0f895639ffb>
- Eye, G. G. (1974). As far as eye can see: Knowledge abundance in an environment of scarcity. *The Journal of Educational Research*, 67(10), 445-447. <https://doi.org/10.1080/00220671.1974.10884676>
- Fraser, S., & Deane, E. (1997). Why open learning? *Australian Universities' Review*, 40(1), 25-31.
- Garrison, R., Anderson, T., & Archer, W. (2001). Critical thinking, cognitive presence, and computer conferencing in distance education. *American Journal of Distance Education*, 15(1), 7-23. <https://doi.org/10.1080/08923640109527071>
- Graves, D. H. (1994). *A fresh look at writing*. Heinemann.
- Hannafin, M. J., Hall, C., Land, S. M., & Hill, J. R. (1994). Learning in open environments: Assumptions, methods, and implications. *Educational Technology*, 34(8), 48-55.
- Haraway, D. (1991). A cyborg manifesto: Science, technology, and socialist-feminism in the late twentieth century. In D. Haraway (Ed.), *Simians, cyborgs, and women: The reinvention of nature* (pp. 149-182). Routledge.
- Hess, C., & Ostrum, E. (2006). *Understanding knowledge as a commons: From theory to practice*. MIT Press. <https://doi.org/10.7551/mitpress/6980.001.0001>
- Jenkins, H. (2006). *Confronting the challenges of participatory culture: Media education for the 21<sup>st</sup> century*. [http://henryjenkins.org/blog/2006/10/confronting\\_the\\_challenges\\_of.html](http://henryjenkins.org/blog/2006/10/confronting_the_challenges_of.html)
- Johnston, S., & Stewart, B. (2020). The Open Page: A case study of partnership as open pedagogy. *International Journal of Students as Partners*, 4(2), 81-89. <https://doi.org/10.15173/ijsap.v4i2.4182>
- Lankshear, C., & Knobel, M. (2004). *New literacies: Changing knowledge & classroom learning*. Open University Press.
- Lupton, D., & Williamson, B. (2017). The datafied child: The dataveillance of children and implications for their rights. *New Media & Society*, 19(5), 780-794. <https://doi.org/10.1177/1461444816686328>
- Morozov, E. (2013). *To save everything, click here*. Allen Lane.
- Noble, S. U. (2018). *Algorithms of oppression: How search engines reinforce racism*. NYU Press. <https://doi.org/10.15713/ins.mmj.3>
- O'Reilly, T. (2005). *What is Web 2.0: Design patterns and business models for the next generation of software*. <http://oreilly.com/web2/archive/what-is-web-20.html>
- Pappano, L. (2012). The year of the MOOC. *The New York Times*. <https://www.nytimes.com/2012/11/04/education/edlife/massive-open-online-courses-are-multiplying-at-a-rapid-pace.html>
- Perrotta, C., & Williamson, B. (2018). The social life of learning analytics: Cluster analysis and the 'performance' of algorithmic education. *Learning, Media and Technology*, 43(1), 3-16. <https://doi.org/10.1080/17439884.2016.1182927>
- Rheingold, H. (2010). Attention and other 21<sup>st</sup> century social media literacies. *Educause Review*. <https://er.educause.edu/articles/2010/10/attention-and-other-21stcentury-social-media-literacies>

- Shilova, M. (2017). The concept of datafication: Definitions and examples. *Apiumhub*. <https://apiumhub.com/tech-blog-barcelona/datafication-examples/>
- Siemens, G. (2006). *Knowing knowledge*. Lulu.com
- Stang, G. (2013). Global commons: Between cooperation and competition. *European Institute for Security Studies*. [https://www.iss.europa.eu/sites/default/files/EUISSFiles/Brief\\_17.pdf](https://www.iss.europa.eu/sites/default/files/EUISSFiles/Brief_17.pdf)
- Stewart, B. (2010). How not to do a Web 2.0 project. *Journal of Curriculum & Pedagogy*, 7(2), 47-50.
- Stewart, B. (2013, April 10). *How NOT to teach online: A story in two parts*. Hybrid Pedagogy. <https://hybridpedagogy.org/how-not-to-teach-online-a-story-in-two-parts/>
- Stewart, B. (2015, April 13). *In public: The shifting consequences of Twitter scholarship*. Hybrid Pedagogy. <https://hybridpedagogy.org/in-public-the-shifting-consequences-of-twitter-scholarship/>
- Stewart, B. (2018). Identity at the core: Open and digital scholarly leadership. In A. Zorn, J. Haywood, & J. M. Glachant (Eds.), *Higher education in a digital age* (pp. 139-156). Edward Elgar.
- Stewart, B. (2020a, November 10). *Why higher education needs data ethics*. Inside Higher Education. <https://www.insidehighered.com/blogs/university-venus/why-higher-ed-needs-data-ethics>
- Stewart, B. (2020b). The Open Page project: Putting digital learning principles into practice for pre-service educators. *Journal of Teaching and Learning*, 14(1), 59-70. <https://doi.org/10.22329/JTL.V14I1.6265>
- Stewart, B., & Lyons, E. (2021). When the classroom becomes datafied: A baseline for building data ethics policy and data literacies across higher education. *Italian Journal of Educational Technology*, 29(2), 54-68. <https://doi.org/10.17471/2499-4324/1203>
- Thompson, A. (2021). Academic publishing is broken. *Scientists for labor*. <https://www.scientistsforlabour.org.uk/post/academic-publishing-is-broken>
- Tufekci, Z. (2017). *Twitter and tear gas: How social media changed protest forever*. Yale University Press.
- UNESCO. (2002). *Open educational resources*. <https://www.unesco.org/en/communication-information/open-solutions/open-educational-resources>
- Veletsianos, G., & Kimmons, R. (2012). Networked participatory scholarship: Emergent techno-cultural pressures toward open and digital scholarship in online networks. *Computers & Education*, 58(2), 766-774. <https://doi.org/10.1016/j.compedu.2011.10.001>
- Watters, A. (2013). *Coursera, Chegg, and the education enclosure movement*. <http://hackeducation.com/2013/05/08/coursera-chegg>
- Weller, M. (2011). *The digital scholar: How technology is transforming scholarly practice*. Bloomsbury Academic. <https://doi.org/10.5040/9781849666275>
- Weller, M. (2014). *The battle for open: How openness won and why it doesn't feel like victory*. Ubiquity Press. <https://doi.org/10.5334/bam>
- Williamson, B., Bayne, S., & Shay, S. (2020). The datafication of teaching in higher education: Critical issues and perspectives. *Teaching in Higher Education*, 25(4), 351-365. <https://doi.org/10.1080/13562517.2020.1748811>
- Wray, E. (2011). *RISE model*. <http://www.emilywray.com/rise-model>
- Zuboff, S. (2015). Big other: Surveillance capitalism and the prospects of an information civilization. *Journal of Information Technology*, 30(1), 75-89. <https://doi.org/10.1057/jit.2015.5>

