

CRITICAL QUESTIONS IN EDUCATION

ISSN 2327-3607



Volume 10
Issue 2
SPRING 2019

SPECIAL THEME
ISSUE: *The Digitally Connected Academic: Public Scholarship and Activism in the Era of the Internet*

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An on-line, double-blind, peer reviewed journal hosted by
The Academy for Educational Studies

Critical Questions in Education: <https://academyforeducationalstudies.org/journals/journal/>

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** Our thanks to the cadre of scholars who serve as reviewers without whose services the journal could not exist.



Critical Questions in Education: Volume 10, Issue 2

The Academy for Educational Studies

June 1, 2019

Colleagues and Friends of the Academy:

Before getting to the story of this theme issue, a quick note as to current and upcoming Academy “goings-on.” If you haven’t yet put in a proposal for our upcoming symposium in the windy city, never fear, there is still time to do so. Proposals are due to Steve Jones by July 1. This year’s symposium interrogates the public/private tension so prevalent in educational institutions today. The Chicago symposium will take place at the beautiful Ambassador Hotel November 11-13. We hope to see there. Our 2020 Spring conference will take place February 17-19 at the Seattle, WA Renaissance Hotel. Details are forthcoming. You can find all things Academy by pointing your browser here: academyforeducationalstudies.org.

And, so, speaking of browsers, we suppose the question of contemporary communication technologies and their impact on educational matters is one of those “no-brainer” topics about which we should all be concerned given their impact on all aspects of teaching and learning. When Jameson and Julian proposed the issue, it was an easy, “yes, let’s do it.”

Maybe the best way to sum up the importance of analyzing and discussing such still-contentious communication technologies is by stealing the words of our guest editors themselves:

Considering the potential evolution of the field and ongoing public discourse about contemporary education such as education reform on various technological platforms, the aim of this special issue was to begin—and continue for many—a dialogue exploring both why and how academics should or should not leverage online platforms to share their work and engage in public conversations.

With that, we leave you to your reading...as always, enjoy.

PAX,

Eric C. Sheffield, Managing Editor

Jessica A. Heybach, Associate Editor

Critical Questions in Education

Special Theme Issue:
*The Digitally Connected Academic: Public Scholarship and
Activism in the Era of the Internet*

T. Jameson Brewer & Julian Vasquez Heilig, Guest Editors

ISSN 2327-3607
Volume 10, Issue 2
Spring, 2019

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The Digitally Connected Academic: Public Scholarship and Activism in the Era of the Internet

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Julian Vasquez Heilig, University of Kentucky*

Abstract:

Inspired by a lively discussion during the Southeastern Philosophy of Education Society's annual meeting in 2017, this special issue explores the roles, purposes, possibilities, and caveats of leveraging digital communication technologies (e.g., blogs, social media, etc.) within the academy. As scholars continue to grapple with and integrate new forms of understanding and new methods of disseminating their work, what, then, becomes the role of the public scholar? This issue explores the purposeful engagement of scholarly work and insight in new and traditional media to disseminate knowledge into the public discourse as a potential evolution of academia's mores.

Keywords: *public scholarship, technology, public discourse*

Introduction¹

This special issue of *CQIE* is dedicated to engaging with questions about what types—and to what extent—professors and instructors should engage in public scholarship across digital platforms. Academics are certainly rewarded for focusing their time and energy on publishing their work in peer-reviewed journals and writing books. However, research on peer review has found that one-third of social science and more than 80% of humanities articles are never cited (Remler, 2014). Furthermore, while the number of academic books rose by 45%, from 43,000 to 63,000 between 2005 and 2014, the average sales per title fell from 100 to 60 (Jubb, 2017). Considering that readership and citations are a proxies for impact, should academics evolve the normative conceptions of scholarship to focus additional attention on creating ancillary work derived from their published research to engage in the public? While engagement in evolving communication technologies (e.g., Twitter, Facebook, Blogs, YouTube, etc.) can serve as mechanisms by which traffic is directed towards academic journals and books, should faculty also view these platforms as neglected spaces where discourse often lacks empirical expertise? How much, how often, and to what ends should public scholarship take advantage of digital platforms?

The rise of new forms of technological communication platforms to engage in dialogue have provided ample space for individuals and organizations to promote public discourse about

1. We wish to thank Jessica Heybach and Eric Sheffield for extending the invitation to put this special issue together and for their feedback and patience during the process. We would also like to thank the contributors (and the reviewers) for their important work in expanding the discussion surrounding a phenomenon that, despite our positions, we cannot escape and ignore.

education issues (Ravitch, Vasquez Heilig, & Brewer, in press). For example, market-oriented privatization reforms have expertly leveraged the power of social media to amplify their calls for shifting control of P-20 into the hands of privatizers and profiteers. New communication technologies have provided a space where myths of “failed schools” and “bad teachers” continue to thrive in cyberspace as they often go unchallenged by academics and others with expertise on the subject (Malin & Lubienski, 2015). In fact, the unchallenged voices of pro-reform groups on social media platforms have afforded those groups the opportunity to create echo chambers of commonsensical rhetoric about the need to reform schools (Brewer & Wallis, 2015).

Considering the potential evolution of the field and ongoing public discourse about contemporary education such as education reform on various technological platforms, the aim of this special issue was to begin—and continue for many—a dialogue exploring both why and how academics should or should not leverage online platforms to share their work and engage in public conversations. There is, of course, a competing disposition that academics should not engage in new technological modes of communication—following the Luddite tradition—and while the papers that follow do not necessarily take up this position, the reader will find, we hope, a balanced compilation of perspectives that promote digital work but others that issue important warnings and caveats.

Summary of Individual Articles

The first article, written by Julian Vasquez Heilig and T. Jameson Brewer, explores the rationales for why public engagement—and digital engagement—is increasingly important in the modern policy landscape. Notably, given that advocates for marketization and privatization reforms are adept at leveraging such spaces, critical scholars should aggressively engage in those same spaces to provide factual and empirically-based solutions. The paper was presented at the 2017 annual meeting of the *Southeastern Philosophy of Education Society* conference and the lively discussion that followed was the genesis for this special issue.

Derek Ford and Petar Jandrić propose that digital spaces have, in fact, destroyed traditional conceptions of what it means to be a public intellectual. In addition to exploring the ways in which our post-truth world has reshaped how we understand our world, Ford and Jandrić implore us to work harder to develop real and authentic on-the-ground networks of insurgency as a necessary foundation for authentic public scholarship.

In the third paper, Jeff Utecht and Doreen Keller employ George Siemens’ Connectivism Learning Theory to lay out how and why academics can leverage various digital platforms. Their discussion reimagines new core literacy skills that students and professors must adopt.

Mary Quantz and Jason Buell argue that traditional education scholarship must continue to expand its reach and access to disenfranchised communities in order to address epistemic injustices. They lay out for the reader the importance of open-access journals in ensuring equitable access to knowledge and knowledge creation as a platform to address historical oversights by the academy.

The penultimate paper, written by Morgan Anderson and Gabriel Keehn, provide some important caveats and considerations surrounding the overarching discussion. That is, Anderson and Keehn navigate the challenges of using social media platforms to engage in authentic dialogue. They raise some significant philosophical limitations that cannot be ignored.

New digital spaces have exacerbated the growth of anti-intellectualism and “fake” news and presents new challenges of discerning truth. Matthew Kruger-Ross considers the reality

through the hermeneutic phenomenology of Martin Heidegger. Important to the consideration of how, when, why, and what limits we should consider in our use of technology, what remains constant is the impact that such platforms can, and do, have on our conception of democratic engagement and understanding of truth.

References

- Brewer, T. J., & Wallis, M. (2015). #TFA: The intersection of social media and education reform. *Critical Education*, 6(14), 1-18.
- Jubb, M. (2017). *Academic Books and their Futures: A Report to the AHRC and the British Library*, London, England: Author.
- Malin, J. R., & Lubienski, C. (2015). Educational expertise, advocacy, and media influence. *Education Policy Analysis Archives*, 23(6), 1-32.
- Ravitch, R., Vasquez Heilig, J. & Brewer, J. (in press). Why we're bloggers: Utilizing blogs and social media to influence education policy conversations and decisions. In A. Urick, D. DeMatthews, & T. Ford (Eds.), *Maximizing the policy-relevance of research for school improvement*, (pp. XX-XX). Charlotte, NC: Information Age Publishing.
- Remler, D. (2014). Are 90% of academic papers really never cited? Reviewing the literature on academic citations. Retrieved from <http://blogs.lse.ac.uk/impactofsocialsciences/2014/04/23/academic-papers-citation-rates-remler/>.

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Making the Case for Academia's Engagement in Knowledge: Mobilization and Purposeful Public Scholarship in Social Media

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Abstract:

To make the case for academia's engagement in knowledge mobilization and public scholarship in social media, we begin by providing a justification for the use of new technological modes for integrating scholarly endeavors. As an example, Sun Tzu's Art of War philosophy is applied to academic scholarship within the present school reform discourse and education privatization landscape. Next, we discuss how public scholarship in social media can impact aspects of the profession such as peer-reviewed work, the tenure process and commitment to community-engaged research. We conclude that public scholarship and the mobilization of empirical work into social media is an important endeavor to address the persisting lack of scholarly influence and relevance of academics in the public discourse.

Keywords: *public knowledge, public scholarship, social media*

It comes as little surprise that President Donald Trump and U.S. Secretary of Education Betsy DeVos have continued the market-oriented educational reforms that were championed by George W. Bush, Barack Obama and their Secretaries of Education (Richardson, 2017). That continuation is explicitly because of a persisting belief in the "manufactured crisis" which Berliner & Biddle (1995) argued is a political framing that the U.S. public education system is failing writ large. Furthermore, the failure narrative is being perpetuated by hundreds of millions of dollars that are being spent by foundations to sway public perception towards education privatization and private-control (Blume, 2015). Malin and Lubienski (2015) found that media outlets, stakeholders, and policymakers often get their information and soundbites originating from pro-privatization reform organizations in traditional media. Think tanks and intermediary organizations alike are also increasingly spending to sway public perception in print, online, and social media (Vasquez Heilig, Brewer, & Adamson, in press). As a result, Facebook, Twitter and other technological mediums represent new and important forums for public discourse and knowledge mobilization.

Most academics are not engaged in purposeful debates that include empirically based information in the public discourse (Berliner & Glass, 2014). Should academics refrain—or at least pretend—to not engage in the public discourse and knowledge mobilization? Central to a discussion about the role of the academic in public discourse and knowledge mobilization is defining the importance and breadth of public scholarship. Academics often must weigh the contextual intricacies of their particular institution of higher education and gauge whether they are able to balance engagement in the public discourse relative to the culture of their home institution. In some places,

it may be seen as improper to leverage the resources and platform of a faculty position in a university to engage in public scholarship, while in other institutions it may be welcomed and encouraged.

Historically, the *modus operandi* of academics has been primarily to teach, research, populate journals with articles and author books. Scholarly knowledge is then commoditized by publishers and shielded behind paywalls. Considering the current information age, and the evolving role of scholarship in the new, free technological canvas of social media, an important set of meta questions are: Is the role of an academic only to provide insights and research for the improvement of the collective good in traditional scholarly realms? Or should academics also engage scholarly work in social media to mobilize knowledge and impact the public discourse?

Also, how should academia define public scholarship? Is it op-eds, testifying at state capitols, or traditional media interviews? Does it include engagement on Facebook and Twitter and other social media platforms? Podcasts? Certainly each of these methods can be defined as some type of public scholarship in that access to the work and perspective is publicly available and more accessible than peer-reviewed journals and books. Many academics have, in response external requests, engaged in traditional modes of public scholarship such as contributing to print (magazines and newspapers), broadcast media (television and radio) and speaking to elected officials (testifying and consulting). While these forms of public scholarship are vitally important, academics should take a more proactive, rather than reactive, approach to public scholarship by participating in social media.

Art of War, Public Scholarship and Privatization

To make the case for academia's engagement in public discourse and knowledge mobilization in social media as conceptual framework, Sun Tzu's (2009) *Art of War* philosophy is applied to academic scholarship within the present school reform discourse and education privatization landscape. Sun Tzu suggested: "Appear at points which the enemy must hasten to defend; march swiftly to places where you are not expected." So, while many academics have involved themselves in traditional public scholarship interactions, most have largely avoided social media engagement for knowledge mobilization. Academics should march to such places where they are not expected.

The common discourse surrounding public education in the United States has for decades centered around negative tropes about public education specifically because it is managed by federal, state, and local democratic governance (Berliner & Biddle, 1995). This political framing was influenced by the growth of Friedmanism (Friedman, 1955), which holds that government is necessarily inefficient and that the free market is necessarily more efficient, and therefore more effective and desirable. This neoliberal framing continues to be a popular line of logic in the public discourse. It is of little surprise, then, that Secretary DeVos has escalated the market-based ideology of Friedmanism during her tenure by proposing billions for education privatization (Vasquez Heilig & Clark, 2018).

Partnered with the negative tropes about the U.S. public school system—and the neoliberal argument to turn public education over to private management by way of a free market—is the ongoing myth of failed teachers and schools (Kumashiro, 2012). Surveys conducted across the country reveal each year that parents often rate their local schools as effective but, more generally, rate the state of public education and teachers across the country as dismal (Lopez, 2010). This is largely due to the effectiveness of the privatization reformers' misinformation campaign to support

privatization as the best solution for ongoing challenges and inequities in the U.S. public education system. The success of this political framing in the public discourse is precisely why academics must counter non-empirically based privatization rhetoric with research and data. Academics have, for decades, outlined the real causes of achievement gaps—opportunity and resource inequality (Ball, 1994, 2003; Berliner, 2013; Berliner & Biddle, 1995; Biddle, 2014; Bowles & Gintis, 1976; Brill, 2011; Carter & Welner, 2013; Coleman, 1990; Coleman et al., 1966; Ennis, 1976; Freire, 1970/1992; Glass, 2008; Irons, 2002; Jencks et al., 1972; Labaree, 1988; Ladson-Billings, 2006; Orfield & Ashkinaze, 1991; Orfield & Eaton, 1996; Ravani, 2011; Rothstein, 2004) but that conversation has largely taken place in paywalled, peer-reviewed journal articles and in costly academic books.

The collective work of academics is credited by media outlets for causing some dissonance for organizations that are nodes in the privatization and private management education reform movement such as Teach For America (TFA) (Allen, 2015; Brown, 2016; Hansen, 2015; Jacobin, 2015; Schaefer, 2015; Singer, 2016; Teran, 2016). Is this ideological disruption the result of publishing scholarly work in paid-subscription journals and books, or the focus on bringing that knowledge into public spaces? We proffer it is the latter. As a result, now is the time for a discussion in the field about technological modes for integrating academic scholarship into social media to discuss alternative policy approaches that address student opportunity and resource inequality in an era of increasing private control in education.

The massive growth of for-profit and non-profit charter schools, school vouchers, and other forms of education privatization have exploded during the past two decades (Vasquez Heilig, 2013). Reform rhetoric, using what is seemingly commonsensical language, has largely gone unchallenged across traditional media and often creates policy echo chambers (Goldie, Linick, Jabbar, & Lubienski, 2014). For example, organizations that are central nodes in the education privatization cabal (TFA, Democrats for Education Reform, etc.) have long held positions as influential media contributors (Vasquez Heilig, Brewer, & Adamson, in press). And while there have been vocal challengers to pro-privatization education reform organizations, these organizations have largely enjoyed a self-created echo chamber in the national public discourse and shrugged off scholarly critiques of pervasive misinformation (Brewer & Wallis, 2015).

Sun Tzu (2009) said “You can be sure of succeeding in your attacks if you only attack places which are undefended. You can ensure the safety of your defense if you only hold positions that cannot be attacked” (p. 15). Journals, conceived of as a “battlefield,” cannot typically be attacked by non-academics since entry onto that battlefield requires, among other considerations, expert research and writing abilities. Although, we do note that as millions of dollars in research funding has flowed from DeVos’ U.S. Department of Education and billionaires’ ideological foundations (i.e. Gates, Walton and Broad), the battlefield in peer-reviewed journals has become more contested over time (Vasquez Heilig, Brewer, & Adamson, in press). Nevertheless, publishing in peer-reviewed journals is not enough—this form of scholarship must be mobilized for various stakeholder audiences in traditional and social media for a greater effect on the public discourse.

Pro-privatization and private control education reform groups have fomented misinformation through their dominance over traditional media battlefields and created echo chambers that lack empirical perspectives because academic research is typically isolated in the proverbial ivory tower. So, while the battlefields of journals are positions that cannot typically be easily infiltrated by outsiders, it is the empirical positions that can crisscross battlefields that could be more contentious (i.e. social media and journals). The problem, however, is that the contentious grounds of social media are surely not undefended battlegrounds. So, while scholars cannot have a guarantee

of succeeding in such battlegrounds, they must lean on their empirical findings as secure from purely ideological attacks as they introduce research into public spaces in social media and elsewhere.

While pro-privatization education reformers have gained significant ground in the K-12 battlefield through their dominance across the various modes of traditional media discourse, pro-privatization attacks have also crept into higher education—presenting a new contentious ground. Standardization and outcomes assessment mechanisms linked to funding, a decrease in direct state and federal funding, and the push to outsource the funding of research away from the state and into private venture philanthropic hands are increasing financial pressures in higher education (Worthen, 2018). If academics point to a lack of time as the reason they don't engage in public scholarship in social media, that is likely due to the ground lost on this new contentious battlefield as the privatization mentality has redefined—and in many cases increased—the workloads of faculty. As an academic's work centers around a broad push for grant-funded activities, funding and support for research have, in the same way of the K-12 battlefield, been shifted to private control. Furthermore, grants were historically linked to good ideas, but the largest non-governmental grant funders are now highly politicized (i.e. Gates Foundation, Walton Family Foundation) and have not historically provided funding for researchers and research that doesn't align with their ideological dispositions (Vasquez Heilig, Brewer, & Adamson, in press).

Academics hold well to the position of peer-reviewed work. But, again, the problem is bringing that work into public spaces. Sun Tzu said,

On the field of battle, the spoken word does not carry far enough: hence the institution of gongs and drums. Nor can ordinary objects be seen clearly enough: hence the institution of banners and flags. Gongs and drums, banners and flags, are means whereby the ears and eyes of the host may be focused on one particular point. (Tzu, 2009, p. 21)

Given the current technological and information age, social media represents modern gongs, drums, banners and flags. And if that is true, and considering that Sun Tzu said, “He who can modify his tactics in relation to his opponent and thereby success in winning, may be called a heaven-born captain” (Tzu, 2009, p. 18). The fact that public discourse continues to latch onto non-empirical information and political ideology propagated by education reformers (Vasquez Heilig, Brewer, & Adamson, in press) suggests that the field's satisfaction with publishing scholarly work primarily in peer-reviewed journals and books that are housed behind paywalls needs to be reexamined. Academics should not cease to publish in academic journals and books, but there is a clear need to create ancillary work from scholarly peer-reviewed publications and books that can be disseminated in both traditional and social media.

Where should a scholar engage? Sun Tzu suggested that there were six different kinds of terrain: (1) accessible ground, (2) entangling ground, (3) temporizing ground, (4) narrow passes, (5) precipitous heights, and (6) positions at a great distance from the enemy. Accordingly,

Ground which can be freely traversed by both sides is called accessible...with regard to ground of this nature, be before the enemy in occupying the raised and sunny spots, and carefully guard your line of supplies. Then you will be able to fight with advantage. (Tzu, 2009, p. 30)

Public scholarship in social media represents accessible ground because of the open access nature of the platforms. While anti-privatization activists have made some progress in occupying this ground (i.e. Badass Teachers Association), much of it has been ignored by academics. Policy circles and audiences with policymakers represent entangling ground in that it is a “ground which can be abandoned but is hard to re-occupy” (Tzu, 2009, p. 30). Gaining an audience with social media users is a long-term and exceedingly difficult task. However, once you have built an audience and have shown that educational policies should be bolstered by research findings rather than ideology, the entangled ground becomes more secure. Failure to maintain an empirical voice within that ground would open the field back up to those who would attempt to sway policymakers using ideology and, as a result, the ground would be hard to re-occupy.

Considering the current educational policy landscape, there seem to be few temporizing grounds where neither side has an advantage at making the first move. There are some narrow passes in the sense of long-held solidarity among progressive education groups (i.e. teachers associations, community-based non-profits and alliances). However, as pro-privatization education reformers expand their policy reach and oversight of charter schools and school vouchers, they are establishing their own narrow passes. Integrating academic scholarship and activism through various social media platforms enables scholars to contribute to an ongoing public conversation surrounding public education that often lacks such perspectives and stems the reinforcement of many of the myths about education that are promoted by pro-privatization reformers.

A well-known problematic challenge for engaging in social media is that conversations in many platforms often disintegrate into ad hominem, non-empirical and personal attacks that are encouraged by the semi-anonymous nature of social media. To this, Sun Tzu said, “Do not swallow bait offered by the enemy” (Tzu, 2009, p. 22) and, considering one of the five dangerous faults, one should avoid a “hasty temper, which can be provoked by insults” (Tzu, 2009, p. 24). Social media conversations are monitored by pro-privatization reformers and they often activate other supporters of education privatization to engage in online “trolling.” However, because they know that academics hold an empirical position that cannot be defeated with ideology, they, more often than not, resort to personal attacks. While it is often tempting for academics to respond to those attacks—even simply to defend oneself—the employment of Tzu’s philosophy holds that scholars ought to avoid such a “dangerous fault” and (re)focus the conversation back to empirical data and research.

Implementing Notions of Public Scholarship into Academia

As specifically discussed above, by using Sun Tzu’s ancient *Art of War* text as a conceptual framework for public scholarship examining education privatization, it is clear that the mobilization of knowledge in the public discourse can evolve from the proverbial analog to digital. The education stakeholders and citizens of today now engage in conversations about education across all borders on many social media platforms (Facebook, Twitter, LinkedIn, YouTube, etc.). As a result, we now turn to a discussion about how academics can develop and implement a purposeful public scholarship ecology into the norms of scholarly work.

The technological canvas that scholars sometime resist because of perceived time limitations is actually a conduit by which they can bridge distance and place. Creating personal and institutional technological ecologies in academia can create the connections that have never been possible in history. This approach is not a this-*or*-that proposition, but instead is a this-*and*-that proposition. Academics should continue many of the traditional ways of approaching research,

scholarship, and service (i.e. peer-reviewed journal articles and books). However, with personal and institutional technological ecologies, academics can enhance scholarly work in new ways that haven't been possible prior to this age. And it is not just publicly engaged scholars who see the opportunity. *New York Times* columnist Nicholas Kristof suggested that, “Professors today have a growing number of tools available to educate the public, from online courses to blogs to social media” (Kristof, 2014 as cited in Malin & Lubienski, 2015, p. 14). We now turn to discuss how these notions should impact several aspects of academia: the release of scholarly work, the tenure process and interaction with communities.

Release of Scholarly Work

Much of public scholarship is misunderstood as requiring work that is entirely different than the academic work that is published in journals and books. However, engagement in social spaces simply requires that scholars translate academic work into publicly digestible portions while using more accessible language that limits academic jargon. To the extent that scholars publish academic work in a LinkedIn post, the writing of a blog, or even a post on Twitter summarizing the findings, can drive traffic to articles—readers that would otherwise not go to academic journals and books for the research presented within.

Again, engaging in public scholarship is not an “either/or” proposition but an “and” proposition. Academics still need to publish scholarly work in peer-reviewed journals and books. The peer-review journal and book authoring processes are very important because these scholarly endeavors are educative experiences. The labor that goes into scholarly work— from field work, the conversations, the literature review, background work, and the collaboration with students and colleagues—is transformative. The completion of the research and writing process results in expertise about the topics in a faculty member’s agenda while also providing an opportunity to receive and provide mentoring. The edification process should not end there. When scholars publish articles and books, they should undertake a few additional steps to make their work more readily available and mobilize their knowledge. Those actions should include, but not be limited to,

- Utilizing university press release process and public relations staff to gauge whether traditional media will cover the work;
- Writing a short policy brief or executive summary about it, and sharing it with local and state policymakers, school board members, and community-based organizations; and,
- Using social media by tweeting about it, sharing as a LinkedIn article, writing a Facebook post with a live link to the article, blogging about it, sharing pdfs of the work on Academia.edu, ResearchGate, and perhaps create a podcast.

Often, when scholars publish peer-reviewed articles and books, they are quick to move on and neglect the opportunity to publicize their scholarly work beyond traditional modes. The lack of innovative knowledge mobilization has limited the impact of peer-reviewed articles and books in the public discourse. For example, research on peer review has found that one-third of social science and more than 80% of humanities articles are never cited (Remler, 2014). Furthermore, while the number of academic books rose by 45%, from 43,000 to 63,000 between 2005 and 2014, the average sales per title fell from 100 to 60 (Jubb, 2017). Considering these dismal findings, it’s incumbent on academics to find ways to mobilize knowledge beyond peer-reviewed journals and

books to make knowledge more available to the public. In sum, for the work to be more impactful in the world, make it readily available.

Altmetrics in the Tenure Process

The tradition of the primacy of research, teaching, and service are the most untouchable aspects of tenure in academia. How can the field evolve the “publish or perish” profession to include holding value for academics who engage in public scholarship and knowledge mobilization? The interest here is to address what universities have historically considered “academic” or “scholarly” work. To be sure, new career professors are expected to publish academic articles in top-tier journals to establish themselves as “academic” and “scholarly.” The consequence for failing to publish widely and teach expertly results in “perishing” from an institution, and often the profession.

Ultimately, institutions of higher education desire that their faculty are impactful in the field, yet the tenure process typically only measures traditional notions of that impact (i.e. awards, grants, selectivity of journal and book publishers, etc.) Altmetrics are evolving conceptions of academic scholarship in the midst of academia’s publish or perish paradigm. They are a contemporary, more constructivist, and perhaps visionary in its approach to measure the “impact” of research dissemination. The use of altmetrics to measure impact of scholarly work includes assessing references in bibliographic databases, Google scholar ratings, abstract and article views online, downloads, or mentions in social media and news media (Topper, Tefera, & Fischman, 2014).

Topper, Tefera, and Fischman argued that as the field creates broader-based platforms for the assessment of the impact and dissemination of scholarly research, that rigor will improve when informed by multiple dialogs with relevant publics and ultimately for the public good. To drive altmetric prestige, academics would need to make peer-reviewed journal articles more readily available online, including social media and new media platforms like Academia.edu and ResearchGate. In this way, academics would be able to increased their impact in the public space and would ultimately also be rewarded in the tenure and promotion process for their public engagement.

Public Scholarship and Communities

Here’s the reality of the education landscape—or battlefield, to draw from Sun Tzu: the top-down nature of pro-privatization reform in communities has prompted educators, students, parents, and citizens alike to question the methods and means of the reformers (Brewer, Vasquez Heilig, Gunderson, & Brown, 2018). The expansion of social media has empowered how communities organize, talk, and engage in the public discourse about schools and school reform. As a result, public scholarship in social media can be relevant and important for addressing societal inequities by focusing on engaging scholarly work in online community conversations.

There are a variety of factors that influence scholarly work. Clearly, current policy contexts, grants and personal interests—among other factors—can influence scholarly endeavors in terms of the types of research questions that scholars ask. The traditional components of academia should still influence scholarship. First, the research in the field that is submitted for peer review in journals and conferences where academics conduct scholarly work can inspire the direction of research and inform the newer, cutting-edge work on the different topics that impact education

policy. Second, the evolution of theory should also impact scholarly work. The advance of theory exposes faculty to the most recent thinking for the field to help drive scholarly activity.

However, community-engaged scholars should also stay in tune with what is happening in real time at the local, state, and national levels. Community interests and needs can and should influence scholarly work beyond the traditional processes and motivations. Incentivizing engaging in discussions with non-profit, civil rights and other community-based organizations should inspire and influence research. Despite their important and useful expertise, few academics are involved directly in conversations with non-profit, civil rights and other community-based organizations. Whether they are local organizations like IDRA (Intercultural Development Research Association) or, at the state or national level, with organizations such as UnidosUS or NAACP (National Advancement for the Association of Colored People), scholarly expertise and independence are highly desired and needed.

Educational leaders should challenge and incentivize faculty—especially faculty of color—to reach out to non-profit, civil rights and other community-based organizations for these purposes. Employing the academic skill set to investigate research questions for non-profit, civil rights and other community-based organizations to engage in knowledge mobilization in social media is a ripe area for innovation. Most academics have expert abilities to write, organize, and speak that go far and beyond particular research skill sets and topics. Acting as community-engaged public scholar allies for non-profit, civil rights and other organizations is also a potential opportunity to rapidly make empirical research available at the local, state, and national levels in the social media of community-based organizations.

Conclusion

The purposeful engagement of scholarly work in social media to disseminate knowledge into the public discourse is a potential evolution of academia's mores. Faculty can immediately create a larger impact of scholarly work in the public space by exploring the opportunity and challenges in making research more accessible through knowledge mobilization strategies. The field of academia can do this by incentivizing these actions to increase the impact and usability of research by means of multi-dimensional, interactive social media strategies that target a wide range of stakeholders.

As the professoriate evolves in coming years, a future-forward public scholarship and research approach for academia should explore the opportunity and challenges in making research more accessible through purposeful knowledge mobilization strategies in social media. The role of the scholar no longer needs to be oft limited to the echo chambers of the ivory tower's peer-reviewed journals and books that are typically not widely read or used. Sun Tzu argued in *Art of War* that if you fight with all your might, there is a chance of life; but death is certain if you cling to your corner. A commitment to public scholarship and the mobilization of empirical work into social media is an important endeavor to address the persisting lack of scholarly influence and relevance of academics in the public discourse.

References

- Allen, S. (2015, August 27). Is Teach For America flunking out? *The Daily Beast*. Retrieved from <https://www.thedailybeast.com/is-teach-for-america-flunking-out>

- Ball, S. (1994). *Education reform: A critical and post-structural approach*. Bristol, PA: Open University Press.
- Ball, S. (2003). *Class strategies and the education market: The middle classes and social advantage*. New York, NY: RoutledgeFalmer.
- Berliner, D. C. (2013). Effects of inequality and poverty vs. teachers and schooling on America's youth. *Teachers College Record*, 115(12), 1-26.
- Berliner, D. C., & Biddle, B. J. (1995). *The manufactured crisis: Myths, fraud, and the attack on America's public schools*. Reading, MA: Addison-Wesley.
- Berliner, D. C., & Glass, G. V. (2014). *50 myths and lies that threaten America's public schools: The real crisis in education*. New York, NY: Teachers College Press.
- Biddle, B. (2014). *The unacknowledged disaster: Youth poverty and educational failure in America*. Rotterdam, Netherlands: Sense.
- Blume, H. (2015). Backers want half of LAUSD students in charter schools in eight years, report says. *Los Angeles times*. Retrieved from <https://www.latimes.com/local/lanow/la-me-ln-broad-draft-charter-expansion-plan-20150921-story.html>
- Bowles, S., & Gintis, H. (1976). *Schooling in capitalist America*. New York, NY, : Harper Collins.
- Brewer, T. J., & Wallis, M. (2015). #TFA: The intersection of social media and education reform. *Critical Education*, 6(14), 1-18.
- Brill, S. (2011). *Class warfare: Inside the fight to fix America's schools*. New York, NY: Simon & Schuster.
- Brewer, J., Vasquez Heilig, J., Gunderson, M. & Brown, J. (2018). Chi-Town educator and community-based activism: Confronting a legacy of education privatization in the nation's windy city. *Thresholds in Education*, 41(3), 138-152.
- Brown, E. (2016, March 21). Teach For America to cut national staff by 15 percent. *The Washington Post*. Retrieved from https://www.washingtonpost.com/local/education/teach-for-america-to-cut-national-staff-by-15-percent/2016/03/21/16ff4082-efbe-11e5-85a6-2132cf446d0a_story.html
- Carter, P. L., & Welner, K. G. (Eds.). (2013). *Closing the opportunity gap: What America must do to give every child and even chance*. Oxford, England: Oxford University Press.
- Coleman, J. (1990). *Equality and achievement in education*. Boulder, CO: Westview Press.
- Coleman, J., Campbell, E. Q., Hobson, C. J., McPartland, J., Mood, A. M., Weinfeld, F. D., & York, R. L. (1966). *Equality of educational opportunity*. Retrieved from Washington, DC:
- deMarras, K., Brewer, T. J., Atkinson, J. C., Herron, B., & Lewis, J. (2019). *Philanthropy, hidden strategy, and collective resistance: A primer for concerned educators*. Borham, ME: Myers Education Press.
- Ennis, R. H. (1976). Equality of educational opportunity. *Educational Theory*, 26(1), 3-18.
- Freire, P. (1970/1992). *Pedagogy of the oppressed*. New York, NY: The Continuum Publishing Company.
- Friedman, M. (1955). The role of government in education. Retrieved from <http://www.schoolchoices.org/roo/fried1.htm>
- Glass, G. V. (2008). *Fertilizers, pills, and magnet strips: The fate of public education in America*. Charlotte, NC: Information Age Publishing.
- Goldie, D., Linick, M., Jabbar, H., & Lubienski, C. (2014). Using bibliometric and social media analyses to explore the "echo chamber" hypothesis. *Educational Policy*, 28(2), 281-305.
- Hansen, M. (2015). Losing its luster? New evidence on teach for america's impact on student learning. *Brown Center Chalkboard*. Retrieved from <https://www.brookings.edu/blog/>

- brown-center-chalkboard/2015/10/27/losing-its-luster-new-evidence-on-teach-for-america-impact-on-student-learning/
- Irons, P. (2002). *Jim Crow's children: The broken promise of the brown decision*. New York, NY: Viking.
- Jacobin. (2015, October 08). Taking on TFA. *Jacobin Magazine*. Retrieved from <https://www.jacobinmag.com/2015/10/tfa-wendy-kopp-corporate-education-reform-new-orleans/>
- Jencks, C., Smith, M., Acland, H., Bane, M. J., Cohen, D., Gintis, H., . . . Michelson, S. (1972). *Inequality: A reassessment of the effect of family and schooling in America*. New York, NY: Basic Books, Inc.
- Jubb, M. (2017). *Academic books and their future*. London, England: AHRC and the British Library. Retrieved from https://academicbookfuture.files.wordpress.com/2017/06/academic-books-and-their-futures_jubb1.pdf
- Kumashiro, K. (2012). *Bad teacher! How blaming teachers distorts the bigger picture*. New York, NY: Teachers College Press.
- Labaree, D. (1988). *The making of an American high school: The credentials market & the central high school of Philadelphia, 1838-1939*. New Haven, CT: Yale University Press.
- Ladson-Billings, G. (2006). From the achievement gap to the education debt: Understanding achievement in U.S. Schools. *Educational Researcher*, 35(7), 3-12.
- Lopez, S. J. (2010). America's views of public schools still far worse than parents'. Retrieved from <http://news.gallup.com/poll/142658/americans-views-public-schools-far-worse-parents.aspx>
- Malin, J. R., & Lubienski, C. (2015). Educational expertise, advocacy, and media influence. *Education Policy Analysis Archives*, 23(6), 1-32.
- Orfield, G., & Ashkinaze, C. (1991). *The closing door: Conservative policy and Black opportunity*. Chicago: University of Chicago Press.
- Orfield, G., & Eaton, S. (1996). *Dismantling desegregation: The quiet reversal of brown v. Board of education*. New York, NY: The New Press.
- Ravani, G. (2011, July 23). Why "no excuses" makes no sense: Revisiting the coleman report. *The Answer Sheet*. Retrieved from http://www.washingtonpost.com/blogs/answer-sheet/post/why-no-excuses-makes-no-sense-revisiting-the-coleman-report/2011/07/23/gIQAo7W7UI_blog.html
- Remler, D. (2014). Are 90% of academic papers really never cited? Reviewing the literature on academic citations. Retrieved from <http://blogs.lse.ac.uk/impactofsocialsciences/2014/04/23/academic-papers-citation-rates-remler/>
- Richardson, J. (2017). Charter schools don't serve black children well. *Phi Delta Kappan*, 98(5), 41-44.
- Rothstein, R. (2004). *Class and schools: Using social, economic, and educational reform to close the Black-White achievement gap*. Washington DC: Economic Policy Institute.
- Schaefer, P. (2015). After 25 years, teach for America results are consistently underwhelming. Retrieved from <https://nonprofitquarterly.org/2015/09/11/after-25-years-teach-for-america-results-are-consistently-underwhelming/>
- Singer, A. (2016, June 6). Teach For America fails students and recruits. *Huffington Post*. Retrieved from https://www.huffingtonpost.com/alan-singer/teach-for-america-fails-s_b_10317922.html

- Teran, S. (2016). Teach for America lays off its staff by 15%. Retrieved from <http://www.parentherald.com/articles/32030/20160327/teach-for-america-lays-off-staff.htm>
- Topper, A. M., Tefera, A., & Fischman, G. (2014). How do we know when educational research matters? Retrieved from <http://aeradivisionj.blogspot.com/2014/09/how-do-we-know-when-educational.html>
- Tzu, S. (2009). *The art of war* (L. Giles, Trans.): Nabla.
- Vasquez Heilig, J. (2013). Reframing the refrain: Choice as a Civil Rights issue. *Texas Education Review*, 1(1), 83-94.
- Vasquez Heilig, J., Brewer, T. J., & Adamson, F. (in press). The politics of market-based school choice research: A comingling of ideology, methods and funding. In M. Berends, A. Primus, & M. G. Springer (Eds.), *Handbook of research on school choice* (2nd ed.). New York, NY: Routledge.
- Vasquez Heilig, J., & Clark, B. (2018). New insights and directions: Considering the impact of charter school attributes on communities of color. *Journal of Transformative Leadership and Policy Studies*, 7(1), 3-9.
- Worthen, M. (2018, February 23). The misguided drive to measure 'learning outcomes'. *The New York Times*. Retrieved from <https://www.nytimes.com/2018/02/23/opinion/sunday/colleges-measure-learning-outcomes.html>

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The Public Intellectual is Dead, Long Live the Public Intellectual! The Postdigital Rebirth of Public Pedagogy

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Abstract

The figure of the public intellectual and the act of public pedagogy are fairly central to varieties of critical pedagogy. Public intellectuals have historically been those who speak truth to power and challenge dominant ways of thinking, and critical pedagogy argues that academics have to take up this call, leaving the ivory towers and entering the public sphere. Critical pedagogues are not alone in their concern about the retreat of intellectuals or academics from public life, yet to what extent are these notions of the public intellectual tied to a pre-digital age, and how might the digital age undermine these notions? In this paper, we argue that the digital has facilitated the death of the traditional public intellectual as the means of intellectual production have been dispersed throughout society. Turning to Paolo Virno's writing on potential and history, we examine the pedagogy of the public intellectual and present a new configuration of learning and studying that emphasizes the infinite potentiality of history and the present. Whereas most scholarship defines learning as the actualization of potential, we show that potential is never fully actualized. Such a configuration introduces the need to historically saturate political acts with meaning, which we argue is the new task of public intellectuals in the postdigital age. In order to do this, however, academics who wish to contribute to social movements must embed themselves and operate within social movements, joining the leadership of organic intellectuals and professional revolutionaries, and even viewing their own critical work not as the production of new knowledge but rather the amplification of existing knowledges generated through these struggles, shifting the educational register from epistemology to ontology, and the educational mode of operation from teaching to collective studying.

Keywords: *public intellectual, social movements, postdigital, critical pedagogy, time, actual, potential, déjà vu*

Introduction

Scholarship on, and enactments of, public pedagogy increasingly take up space in academic literature and related conversations. Academic workers in various fields—including beyond the humanities—want to make their work accessible and relatable to the public in different ways. This is likely egged on by recent attacks on higher education, which are often justified by presenting the university as bastions of elitist and detached liberals with little to nothing to offer society.

Another impetus, especially for those of us on the Left side of academia, is a desire to make our work speak to—and, in rare cases, with—social movements. Alternatively, in what we could call public pedagogy as pathology, by engaging in public pedagogy we can imagine ourselves as activists and organizers by the mere act of, say, publishing a blog post.

As an unwieldy and often under- and un-theorized term, public pedagogy doesn't adhere to one kind or set of acts or research. In their study of public pedagogy scholarship, Jennifer Sandlin, Michael P. O'Malley, and Jake Burdick (2011) found five kinds of orientations: "(a) citizenship within and beyond schools, (b) popular culture and everyday life, (c) informal institutions and public spaces, (d) dominant cultural discourses, and (e) public intellectualism and social activism" (p. 340). They locate the origins of the proliferation of dominant uses of public pedagogy in the work of Henry Giroux. Inspired by Edward Said's living scholarship that betrayed any borders between the academy and the public, "Giroux draws on cultural studies literature that focuses on popular culture as a site of socialization and an arena in which hegemony is reproduced as well as challenged" (Sandlin, O'Malley, & Burdick, p. 344).

Key here is that popular culture (including what are known as everyday life and the public sphere) is an absolutely crucial arena where critical teachers, students, and activists must intervene to disrupt the reproduction of inequality, oppression, and domination. As Giroux (2018) puts it in a recent book, pedagogy in general "is always implicated in power relations because it narrates particular versions and visions of agency, civic life, community, the future, and how we might construct representations of ourselves, others, and our physical and social environment" (p. 85). Such a pedagogy, of course, must not be limited to the school, and so we "must be attentive to how pedagogical practices work in a variety of sites to produce particular structures in which identity, place, worth, and above all value are organized in the service of the practice of freedom and justice" (Giroux, 2018, p. 85). A mobilizing figure in this project is the public intellectual, who brings light on and clarity to underlying problems and realities. Simply and popularly put, the public intellectual speaks truth to power. Noam Chomsky is a prime example for Giroux (2014), as he "trades in ideas that defy scholastic disciplines and intellectual boundaries" at the same time as he "makes clear that it is crucial to hold ideas accountable for the practices they legitimate and produce, while at the same time refusing to limit critical ideas to simply modes of critique." In other words, Chomsky works at the level of ideas to not only critique what exists but also to call for alternatives, or at least to signal where they might be found. The public pedagogy of the public intellectual is a form of teaching and instruction that is positioned away from the private and toward the public. The public intellectual is an individual who initiates or supports transformative processes, facilitating the realization of agency in the process. They do so not by organizing but by thinking, not by protesting but by writing, speaking, and teaching.

This leads us to some of the problematics of public pedagogy scholarship that Jennifer Sandlin, Jake Burdick, and Emma Rich (2017) explore in their helpful article on public pedagogy research and practice. Specifically, they interrogate the power relations inherent in both individual and collective forms of public intellectualism, how the public pedagogue and the public relate, and the ethical issues involved in locating "activist work under the umbrella of 'pedagogy'" (p. 824). Against the individualized public intellectual that Giroux calls on (the one who uses research and accessible writings like blog posts to expose and demystify inequalities), feminist and communal approaches to public intellectualism look to how the means and ends of public intellectualism can line up by seeing communities and collectives as public intellectuals in their own right. No longer the recipients of the enlightened progressive academic, the public is comprised of activists and

others who do their own teaching, exposing, and demystifying. Taken as a whole, these formulations “illustrate a vision of public intellectualism that, while potentially centering on a particular figurehead, does not locate its educational investments within an individual’s intellectual capital” (Sandlin, Burdick, & Rich, 2017, p. 826).

Sandlin, Burdick, and Rich (2017) go next to Biesta’s educational philosophy to pick at the relationship between pedagogy and the public(s). Drawing on Hannah Arendt, Biesta (2006) prefers to talk about publicness rather than the public. The latter signifies a fixed or static product while the former signals a kind of being-together, one that enables beings to act (to begin and to take up others’ beginnings). If we take publicness as our aim, then public pedagogy doesn’t *produce* a public nor does it speak *to* an already-existing public. Thus, Biesta calls for a pedagogy that works *toward* publicness, one that provides opportunities for people to truly act and be together. Finally, they pose the “problem of pedagogy,” or the problem that public pedagogy scholarship takes forms of activism and other public interventions as pedagogical rather than as political. Here they draw on Biesta’s critique of learning regimes, which individualizes education and politics. They argue that under this conceptualization “learning is always future-oriented, as learners are urged to *become* something, and to embrace an ideal of being or doing *something better* in the future” (Sandlin, Burdick, & Rich, p. 830-831). Even more fundamentally, they point out that “what we *know* as education is informed by existing, school-related cultural artifacts, practices, and beliefs, all of which are ultimately arbitrary yet operate to limit our capacity to see or even imagine new possibilities that lie beyond those institutional scripts” (p. 832). We can see the limitations of this within the article itself, as the only educational modes of operation mentioned are learning and teaching, which are themselves untheorized. The dominant framing of learning and teaching rests on a certain educational logic, or scale, running from potential to actual. The learner has the potential to actualize certain knowledges, skills, habits, politics, and so forth, and the teacher is the one who helps the student actualize these through whatever methods, from transmission to dialogue. Thus, we are left with an understanding that public pedagogy starts with a potential pedagogy that is actualized through its engagement with the public realm (whatever the coordinates of that realm may be).

In what follows, we explore the current status of the public intellectual in the postdigital age. In particular, we focus on the *pedagogy* of the postdigital public intellectual. The paper follows several steps, beginning with pedagogy. We first examine the philosophical relationship between the potential and the actual that is found in educational scholarship on studying and learning. Building on the insights of Paolo Virno’s (2015) reworking of this philosophical relationship, we present a new conception studying and learning that emphasizes the irreducible resistance of potential. We turn next to the postdigital, articulating the potentials and problematics it introduces and demonstrating how its logic corresponds to the pedagogical landscape we extract from Virno. In order to ask if and how we can reformat the public intellectual in this new arena, we appraise the responses of three public intellectuals whose careers have straddled the postdigital divide. Having laid our conceptual groundwork, we move to synthesize and propose a kind of collective digital studying in which the public intellectual moves from critique to organization, which necessitates a subordination to existing social and political struggles.

The Actual is Always Potential

Educational philosophers have turned in recent years to the educational logic of studying as an alternative and potentially oppositional logic to the logic of learning, which currently dominates the educational landscape. The most influential philosopher here is arguably Tyson Lewis, who has taken Giorgio Agamben's work to develop a rich theory of study as a form of inoperative education. Lewis (2017) turns to a distinction Agamben finds in Aristotle's writing on potentiality. Agamben (1999) finds two kinds of potential in Aristotle: generic and effective. Agamben writes the distinction as follows:

The child, Aristotle says, is potential in the sense that he must suffer an alteration (a becoming other) through learning. Whoever already possesses knowledge, by contrast, is not obliged to suffer an alteration; he is instead potential... thanks to a *hexis*, a 'having,' on the basis of which he can also *not* bring his knowledge into actuality... Thus the architect is potential insofar as he has the potential to not-build, the poet the potential to not-write poems. (p. 179)

Learning is organized around generic potential, wherein one transitions from "I can" to "I am." Here, the ends (what one can do) organizes and drives potential. This is the logic of learning described above, in which the student is defined as having the potential to achieve predetermined ways of being in the world and so must use their potential to actualize those things. Potential is *only* in the service of actualization. If a student doesn't actualize their potential, they are merely wasting it. If a teacher doesn't help the student actualize their potential, they are ineffective. It is imperative to note that when the demand of actualization reigns, potential is held captive to *what is*, because the only reason we know what the actualization of potential looks like is if that potential already exists in the world. For example, actual citizens determine our conception of what the potential citizen looks like. Studying, by contrast, embodies effective potential, or potentiality *as such*. Divorced from the command to actualize potential, the studier drifts endlessly (so long as they remain a studier, that is) between conception and action. This is an important notion because it frees the student and the world up to new unforeseen and unforeseeable pleasures, uses, forms of life, ways of knowing, and social relations (see Ford, 2016; Lewis, 2017; Zhao, 2018).

Paolo Virno (2015) gives us a different conception of potential, one that we believe has more postdigital promise than Agamben's version. Virno doesn't go to the divergence between generic and effective potential—a divergence that rests on an earlier disjuncture between act and potential—and instead, through an analysis of the *déjà vu* phenomenon, theorizes potential and act as *co-constituting agentic twins*. *Déjà vu*, it must be remembered, is an *imagined* repetition. In other words, it isn't when an event that has actually transpired before occurs again at a different, later time. Neither is it when an event *similar* to what is transpiring in the present happened at another point in the past. Instead of a concrete repetition, *déjà vu* is a chimeric repetition. It's always an uncanny phenomenon because we are *almost* certain it happened, but we are *almost* certain it didn't happen. As an event, *déjà vu* is something that both might and might not have happened.

Déjà vu isn't a problem with memory, because it is not that our memories are defective or confused. It is, however a problem proper to memory. Virno shows that *déjà vu* reveals the problematic of our thinking of the operation of memory and, more specifically, the problematic of the

domain that we assign to memory: the past. “Rather than limit itself to preserving traces of times past,” Virno (2015) remarks,

memory also applies itself to actuality, to the evanescent “now.” The instantaneous present takes the form of memory, and is re-evoked even as it is taking place...Inasmuch as it is an object of memory, the “now” is camouflaged as the already-been, and is thus duplicated in an imaginary “back then,” a fictitious “other-then.” (p. 7)

Held in the grip of our present memory, we are never able to fully or decisively suss out the now and the illusory back-then. They rather appear as heterogeneous events blocked together, disrupting any regime of certainty.

Déjà vu is predominantly framed as an act of misattribution and false recognition, as a blunder or mistake, and hence as something to be overcome or brushed aside if we want to keep our sanity (or go on learning). Déjà vu as false recognition corresponds with an epistemology of history as a series of acts that exhaust themselves. This epistemology figures that history remains in the past and, to the extent that it carries over into the now and the future, it is as a limit or a basis of what can happen (we could think of some more vulgar versions of historical-materialism here). History is an act that happens, and there’s no more to it. It’s over. This is Agamben’s logic of generic potential, in which potentiality is no more, and all we have is a past actualized actuality, its occurrence and its record of existence. Virno contends, on the other hand, that such an understanding fixes history into a static accomplished end. As such, we need an alternative epistemology of history, one that will help us grasp déjà vu differently, and in this way provides the frame to rethink the relationship between history, time, potential, and the actual. As we show later, the logic of the postdigital era corresponds with—if not rests on—this rethinking.

First, riffing on a passing and one-off remark in Henri Bergson’s essay on false recognition, Virno builds an argument that perception and memory have methodological differences. Perception, on the one hand, pins the present down as a concrete and concluded act “resolved in unambiguous given facts” (p. 14). Memory, on the other hand, confines the present “within the terms of mere potential,” which crucially means that memory always holds onto the present’s *virtual* character” (p. 14). In other words, our bodies divide experience into two. First, our senses stabilize the experience into an ordered set of characteristics (who did what, what happened, how the happening felt on what date); second, our memory destabilizes the experience into the realm of potential. Déjà vu is when both methodologies are blocked together, when the act and the virtual twist together, or, more strictly speaking, when the *specific* act and its potential, and the *specific* potential and its act twist together.

Potential is never the exhaustion of the act, never a passage from “I can” to “I am” or from “I will” to “I did,” wherein one no longer can and instead is. As he formulates it,

far from being liquidated or debased, potential reaches its very acme precisely when it persists as potential alongside the corresponding act. The difference in its nature precludes any assimilation, instead implying its independence: the possible is not cancelled out by the real, as if it were a temporary interlude, but rather represents another way of being, substantial in itself.” (Virno, 2015, p. 18)

Actualization never exhausts potential, and the phenomenon of déjà vu bears witness to the infinite surplus of each moment, act, and experience that lives on in our excessive memory in the present.

Memory has less to do with the past, then, and more to do with potential. One metaphor for and enactment of this division takes place when writing, reading, or speaking, and a word or phrase is encased in inverted commas, or scare quotes. In such a case, a recognized word is doubled, “is *used* but also *mentioned*; perceived in its actuality, and together with this remembered as something virtual” (Virno, 2015, p. 24). The actual word is communicated as is its surplus potential, and neither the actualization or the potential of the word are eliminated (see Ford, 2019).

Potential and act form the parameters of becoming as they refer to what can be and what is or has been. Thus, they seem to refer to an earlier and a later, where “potential is what which is not *yet* actual (but can become so) whereas the actual is that which is *no longer* potential (but once was). This pair expresses the articulation of earlier and later, the preceding and the subsequent, the past and present” (Virno, 2015, p. 63). Acts occur in time. Actualizations always happen at, during, or over certain definite moments. More specifically, they take place in *present time*. Potential, on the other hand, doesn’t remain *in* time, although it is thoroughly temporal. Actualization marks temporal progression whereas potential, as a steadfast not-now, envelopes the totality of time. The totality of time is therefore not a procession of accomplished acts but a derangement or disordering of what could have been and what yet could be. Memory retains both the actual and potential, the moment *in* time and time *in toto*.

Although Virno isn’t responding to Agamben, because theories of studying rely so heavily on his philosophy, it’s worth dwelling a bit on the explicit divergence. Agamben’s understanding of potentiality links potential and actualization, but Virno’s understanding institutes a solid gap between the two. Virno (2015) characteristically turns to the faculty of language to make his case here:

A faculty cannot be broken down into fractions: the capacity-to-think is not subdivided into portions, and there is no percentage of the capacity-to-speak. The single act of thinking or speech, however indistinct, always has to do with the *entire* corresponding potential. When I ask a passer-by for information, I am mobilising the faculty for language as a whole, not some narrow portion of it. Potential is indeterminate, generic, formless, and thus radically different from a potential act, because it is a *whole without parts*. (p. 84-85)

The act doesn’t bring potentiality into a moment in time, which would exhaustively realize potential. Potential as the perpetual *could be* and *is not* can never be realized, and therefore isn’t divisible. Rather, potential permanently predates and exceeds the act—whether that act took place years ago, is taking place, or will take place in the future—precisely because it is the temporal backdrop or stage of chronology. This allows for a new conception of studying. Studying here isn’t effective potential or a state of inoperativity as it is for Lewis. Because Virno cleaves potential from the actual he paradoxically provides us with a theory of studying that always co-exists with learning. This appears similar to Weili Zhao’s (2018) Daoist approach to studying, which figures studying and learning in a yin-yang movement, wherein both pedagogical modes turn over on each other, are mutually sustaining and informing. We argue, however, that the potential of study is always operative independent of the actualizations of learning.

Moreover, Virno helps us add this temporal dimension, which is necessary for the political work of public pedagogy. When potential is separated from the potential act, history remains double: there is the history of the act and the history of potential, the former having taken place in time and the latter enveloping time and enduring throughout; the infinite possibility of the alternate could-have-been. The past dominates the plane of time for both of these reasons, as accumulated

acts and unrealizable potential. Because potential haunts any act the historical moment is *unsaturated*. The *historical act* takes place within the gap between potential and act. The moment can only be saturated from outside, is filled in through the construction of the past and the future. Because historical acts are saturated externally, they depend on the agents and forces determining historical moments, not during their actualization but in their infinite potentiality. The act is a fact that takes place, and what makes the act historical is the context with which it is imbued. Thus, what makes an act historical is its relationship to a potentiality that is infinite, for there is no limit to the contexts in which we can place facts. History is birthed precisely through this infinite heterogeneity, which is only possible because the act is *not* the exhaustion of potential. The process of saturation is a necessarily collective one, particularly in the postdigital era, to which we turn next. The postdigital rapidly increases the points of saturation through the proliferation of networked technologies, which tends to individualize us (we each have to produce our own “hot take”—and fast!).

The Public Intellectual is Dead

Computers, smartphones, and all other digital devices, are based on electronic circuits which can exist in one of the two states: on/off or zero/one. These two states, combined with three mathematical operations—addition, subtraction, and negation—can describe and perform any logical operation. In the digital world, therefore, potential and act are inseparable partners. A logical unit (bit) in the state of zero, has the potential to turn to the state of one. The act of changing state does not exhaust the potential—now, at the state of one, the same bit has exactly the same potential to turn to the state of zero. This potentiality is constructed by the past (the previous states), the present (the current states), and the future (the possible next states). For as long as our bit is powered by the necessary material conditions like electricity (that some theorists of immaterial production often forget) this potentiality is also infinite. This reminder of the relationships between potential and actual at the very basis of digital technologies shows that fundamental functioning principles for digital technologies are no different from the rest of the natural and social world. However, there is a long way from isolated bits and bytes to a functioning digital device, and there is an even longer way from a functioning digital device to the complexity of relationships between philosophy, technology, and society. During the past few decades, Western societies have passed through the bedding stages of early computer development and social diffusion of computers; we then ran through subsequent stages of computerization; and we quickly left behind concepts such as e-learning and digital education. The digital or electric no longer requires the “e” prefix as it quietly resides in our cars, refrigerators, watches, and bodies. Therefore, Tim Fawns (2019) concludes:

All teaching should take account of digital and non-digital, material and social. Ideas like “digital education” are useful insofar as they encourage people to look closer at what is happening, but become problematic when used to close down ideas or attribute instrumental or essential properties to technology. (p. 142)

The digital has become invisible, and yet its ways of functioning deeply influence our lives. In this uncanny space, powered by digital logics deep under the hood, technical relations between potential and act are inseparable from human and social relations. Slowly but surely, we have arrived in the age of the postdigital (Jandrić et al., 2018).

In the postdigital age, (digital) logic is surprisingly less “logical” than it appears. And this is a lovely example of Virno’s analysis of scare quotes, where neither the actualization or the potential of our subject—logic—are eliminated. The referent is totally suspended, it’s both actualized and totally in potential in that we’ve referenced it in such a way as to throw it into question. From newspaper articles to sophisticated algorithm studies, authors report erratic, non-logical, and sometimes downright crazy behavior of ‘logical’ computers (Peters & Besley, 2019). Furthermore, the ‘logical’ aspect of the postdigital age is just a tip of a much deeper iceberg. Currently, we are at the brink of the phase of “biologization of digital reason,” which “is a distinct phenomenon that is at an early emergent form that springs from the application of digital reason to biology and the biologization of digital processes” (Peters & Besley, 2018). In this spirit, Williamson (2019) describes “a new postdigital science of education that merges brain biology, advanced data, software and algorithms with commercial and political imperatives” (p. 82). Arguably, computers are still based on microchips, which are nothing more than huge conglomerates of electronic circuits described in the beginning of this section. Yet, when it comes to combinations of possible actions performed by microchips, and topped up by their combinations with the biological and the social world, we arrive at a messy and unpredictable postdigital reality rich with potentiality. This potentiality cannot be determined analytically, because trying to describe the postdigital reality by looking into an electronic circuit is like trying to describe the warming of Earth’s seas by looking at a kitchen pot. The micro level is useful, because it helps us understand the physical world around us. Yet, in every imaginable sense, the micro and the macro level are still too far away to explain each other. In the postdigital world, therefore, the ubiquitous presence of digital logic does not change relationships between the actual and the potential described in the previous section. In spite of putting our calculations to digital circuits, we have not surpassed the importance of deep human emotions such as *déjà vu*. In this way, the postdigital is the circuit of infinite potentiality *par excellence*.

However, the postdigital world does place our emotions, communications, and politics into new contexts; more generally, it offers very different ways of human participation in the world. This article is written by two co-authors, who are dear friends, and yet who have met only a couple of times IRL (in real life). Our professional and personal relationship has developed almost exclusively online, and yet our IRL and online encounters blend together almost seamlessly. At any moment, we can log into a social network of our preference and sign thousands of different petitions, but our signatures usually produce very little effect or no effect at all. Social uprisings, such as the proverbial Arab Spring, are now organized on phones. While digital technologies can support and bolster social struggles, this is not always the case. There are even times when people organize political events on a social media site and then don’t even bother showing up. Broadly speaking, all these developments belong to a wide definition of popular culture, which has indeed remained the main arena of social development and struggle in the postdigital age. However, the arena of popular culture has irreversibly changed. The so-called information revolution, or what we prefer to more broadly describe as the arrival of the postdigital age, has been one of the fastest technological and social changes in the history of humankind—it happened, more or less, within a single human lifetime. Further, the postdigital age rests on the educational formation of a disjunctive synthesis between the potential and actual. At this point, we can perhaps understand most simply what this educational formation means for us today. Consider the retweet. With each retweet, we add our own take to an actualized tweet. The new retweet is actualized yet still remains completely in potential, for we can take up the tweet again, deploy it in different ways and directions.

Before we reevaluate the public intellectual in this version of life, it might be useful to look into ways in which actual public intellectuals, who lived through these turbulent times, have responded to the postdigital challenge. As part of a book project, between 2012 and 2017 Petar Jandrić conducted interviews with 16 public intellectuals and asked them various questions about the position of public intellectuals and educators in the age of the postdigital network (Jandrić, 2017). We call on these now to get a first approximation of the reformatted public intellectual in the postdigital age.

We start with Henry Giroux as an entry point, for he is not only one of the founding theorists of contemporary critical pedagogy in the U.S., but also, as noted above, a prolific contributor around the research theme of public pedagogy and the public intellectual. A lot of Giroux's work has focused on the social role of teachers (e.g., Giroux, 2012). Since *Teachers as Intellectuals* (1988), however, digital technologies have transformed our social landscapes so radically that the original formulations can't remain intact. Giroux's response has taken place over a few decades, although he locates the origins in the 1990s and the explosion of the Internet and its reconfiguration of knowledge production and dissemination, which "placed all kinds of new responsibilities on the intellectuals" (Jandrić, 2017, p. 146). These responsibilities included how to not only study public problems but also how to publicize the work so it can have some kind of impact. He can't think the educator outside of the compulsion to address key social problems. Yet there is a new urgency for public intellectuals "to master digital technologies." This is urgent because of the drive "to eliminate the public intellectuals and to replace them with anti-public intellectuals" (Jandrić, 2017, p. 147). Here we can sense that Giroux has certain figures in mind—the public intellectuals. But there is another, more fundamental question perhaps: how to give intellectuals the space necessary to produce their work? And to legitimate their work? By situating their work as public pedagogy, this space and legitimation is created, and he "think[s] that information technology is absolutely essential in doing that" (p. 147).

The Internet represents an alternate public sphere, or in any case a technology that fundamentally reorders our notion of the public. Giroux locates an "enormous" potential for democracy in the Internet as it pertains to the production and circulation of alternative knowledges. He claims that "ten or fifteen years ago, many people on the left could not get published in liberal journals or with established academic publishers. All the major public and alternative spheres, rooted in print culture, refused to publish us" (Jandrić, 2017, p. 142). This has changed, and he cites *Truthdig*, *Truthout*, and *CounterPunch* as websites that publish critical and left-wing work, thereby creating "a space for a generation of theorists and public intellectuals who were once considered quite dangerous in the past, and whose work you could not find so easily" (p. 142). Giroux's own work entails facilitating the entrance of new theorists into the alternative public sphere of the Internet. Giroux's notion of the public intellectual is fairly traditional, but the postdigital context has opened up more spaces for them to breathe, exist, and find allies. In other words, the postdigital opens up the possible avenues for the teaching and learning relationship to occur.

We turn next to Fred Turner, who is amongst the most prominent of today's historians of information and communication technologies. Turner believes that "we still live with the *myths* that intellectuals are only those people who write books and say things; that they are deeply involved with culture and literature, rather than say, business and technology; that they are perforce critical" (as cited in Jandrić, 2017, p. 71). He describes such a myth as a "tremendously blinkered view," contrasting it with his own notion that "a new kind of intellectual has arisen alongside the integration of computer networks into our lives" (Jandrić, 2017, p. 71). This figure of the public intellectual writes books still, yes, but as they do so they more fundamentally build *networks*. In

other words, the role of the public intellectual isn't to speak or delegate to the masses, but rather to construct the very relations that make political action possible. As an example, Turner gives us Stewart Brand, whom he calls "a kind of latter-day P.T. Barnum, a circus master" (as cited in Jandrić, 2017, p. 71). What's notable about Brand as a postdigital public intellectual is that he doesn't begin or enter into the building of a network from the position of an expert. Instead,

when he brings networks together they start to do things and develop new languages for their joint projects. Brand himself becomes the person who can use that language and export it. He comes to stand for the circus, just as Barnum once did. (Jandrić, 2017, p. 71)

He terms them *network intellectuals*, who "are simultaneously masters of ideas and masters of social worlds" (Jandrić, 2017, p. 71), insisting that it is this latter aspect that propels the former.

From Turner we get the key idea that the postdigital public intellectual exists in, and produces, networks. The educational inflection can change here as each actualization in the network remains in potential in that it can always be recontextualized or reconfigured. The postdigital public intellectual is inextricably embedded in the social worlds—and we could very well add, social movements—that these networks produce, and that in turn produce ideas. Here we see that today's public isn't a singular figure embodied in an individual human being. They are rather a *node* through which the network expands and extends, a transmitter that propels the formulation, circulation, and development of ideas.

Paul Levinson is a prominent science fiction writer and academic, who extensively worked with prominent media theorist Marshall McLuhan. Yet, with over 500 public appearances on radio and television in various countries, he's also a kind of public intellectual. For Levinson, the network age forms a multitude of openings for one to engage with, and being a public intellectual means seizing all of these opportunities. "I have never turned down an interview request," he says, "and I never will" (as cited in Jandrić, 2017, p. 297). These apertures permeate our everyday lives, and Levinson urges us to *act* on our ideas, express them and put them out into the public. "But if I get a political idea, I immediately write about it. If you have an idea, go for it. Tweet it. Say something about it on Facebook. Write about it" (as cited in Jandrić, 2017, p. 26). The point is to flood the networks with information, perspectives, data. Don't worry if your ideas are rejected or ridiculed, because this just locks information up in the individual. The public intellectual becomes a collective being subjected to greater logics and forces, as it is no longer the academic who judges ideas but rather the movements themselves who take and leave what they need.

Andrew Feenberg, amongst the most influential philosophers of technologies who worked quite extensively with Herbert Marcuse and participated in the May 1968 uprising in Paris, shares Levinson's general idea. But he doesn't think the Left has adequately seized the possibility of the Internet. With the revolutionary movements of the 1960s and 1970s waning due to repression and economic restructuring, the Internet was born into "a largely depoliticized public sphere" (Jandrić, 2017, p. 26). While it certainly "provided new possibilities for political communication...the organizational capacity and will of the American Left was broken by then. It has not revived, witness the void left by the Occupy Movement" (author, year, p.#). What's interesting, then, is how Feenberg seems to identify the rebirth of public pedagogy and the public intellectual as latent and merely potential. He adds a crucial element in our own reconfiguration, however, by locating the problem within the *political organizations and forms* and their relationship to the Internet.

The Public Intellectual is Dead—Long Live the Public Intellectual!

Now that we have given a brief snapshot of the significant transformations public pedagogy and public intellectuals have had to undergo, adapt, regroup, or respond to, we want to articulate our own proposal. We do this by building on some of the insights generated above through these different authors, who respond to different questions and in radically different contexts. As a first, simplistic formulation, we will say that the postdigital age has killed the traditional public intellectual by replacing old relations of communication with something new.

In 1979, pop band The Buggles produced a famous song *Video Killed the Radio Star*. During the times of sharp rise in the popularity of music video, the song mourns over a “better past” when people listened to music exclusively on radio. The act of killing, of course, is a mere symbol—40 years after, radio is still alive and well. Instead, the song reflects on the fact that the arrival of (music) video has increased the relative importance of moving images in relation to music, and the act of killing symbolizes a rite of passage from one technology to another. Here, we clearly see Heidegger’s (1977) famous adage in action: “the essence of technology is by no means anything technological” (p. 4). Video and radio are not just technologies. They frame the ways we produce, circulate, and consume media and information, frames how we understand and act with the world around us, and much more—they are frames of two different feelings (in this case, of consuming music), and more generally, of two different *Zeitgeists*. Yet, neither technology killed the other; they continue to co-exist, remaining in potential.

The wheel of history never stops, and it is hardly a surprise that the 1979 song *Video Killed the Radio Star* by The Buggles was parodied in 2010 in The Limousines’ *Internet Killed the Video Star*. Three decades later, we can draw identical conclusions from the new version of the song – we are again talking about the new medium, the new world, the new *Zeitgeist*. And this new world, which we call postdigital, kills the old public intellectual and gives birth to a new public intellectual. The postdigital public intellectual arises from her predecessors’ ashes, and she requires nursing, upbringing, education, and formation. The postdigital public intellectual needs to use postdigital media and respond to the postdigital *Zeitgeist*. For instance, McLuhan famously claimed that radio put Adolf Hitler into power (McLuhan, 1964, p. 261); these days, many claim that “Donald Trump’s ‘celebrity-style’ tweets helped him win the U.S. presidential election” (Bulman, 2016). Obviously, the role of public intellectuals in Trump’s time cannot be modelled over the role of public intellectuals in Hitler’s time, and the threat of public intellectuals and academics ‘disappearing’ from traditional public life, which has become a commonplace base of today’s critiques (e.g. Fuller, 2005; Giroux, 2015), is somewhat misleading. The real question that we are exploring in this article is: where did public intellectuals go and what should they do next? The postdigital age brings about a wealth of postdigital potentialities. Thus, we should not mourn the deceased traditional public intellectual, but rejoice at the birth of the postdigital public intellectual. The public intellectual is dead; long live the public intellectual!

The postdigital public intellectual resides in an uncanny social and media space which has recently received a lot of attention under the label of post-truth. The concept, dubbed as Word of the Year 2016 by Oxford Dictionaries, means: “Relating to or denoting circumstances in which objective facts are less influential in shaping public opinion than appeals to emotion and personal belief” (Oxford Dictionaries, 2016). In this place, we do not want to delve extensively into the question of post-truth, a topic we both explored in other works (Ford, 2018; Jandrić, 2018; Dean, Medak, & Jandrić, 2019). Instead, let us take a look into consequences of post-truth media environment for public intellectuals. The popular adage, “my ignorance is just as good as your

knowledge,” fits the bill for important post-truth dilemmas such as the safety and stakes of vaccination, attitudes to global warming, and similar public issues. In the social world, however, we are not dealing with true/false categories—instead, we *produce* these categories. For example, a protest takes place. Was it a success or not? That will hinge on who successfully saturates the act. In the post-truth world, the act of saturation does not merely happen at the stage of public pedagogy—instead, it is a direct (social and political) struggle over people’s emotions, over the meanings asserted and circulating in the event and the context in which the event takes place.

In other words, history is always *unsaturated* and remains in infinite potentiality. Therefore, the postdigital public intellectual should be concerned both with fighting the struggle over the content of events (filling in events with meaning) and with organizing enough force to assert that content. In this way, action and potential are wedded together, and the problematic (at least partially) transforms from one of intellectualism to one of organizing. In a sentence, the postdigital public intellectual devises new ways to struggle over saturating historical acts, and such an intellectual does so by emerging from *within* the networks of resistance, producing new nodes in the network, and organizing the network into an actual fighting force. Yet this requires two displacements. The first displacement is from the academy to the networked struggles of our day, as one can’t effectively intervene on this terrain from a separate place. The second displacement is away from the one to the whole, as the only way to effectively intervene is as a *collective*. Individuals stand no chance in the struggle over saturation in the postdigital age.

We can turn to the 2014 Ferguson Rebellion for an example of the new form of the public intellectual. In an article on *Liberation School* released just after the Missouri Governor declared a national emergency, Gloria La Riva and Eugene Puryear (2014) struggle to frame the emerging struggle by saturating the previous actions with new meaning. Significantly, La Riva and Puryear have diverse experiences in Black and Latin American liberation struggles (among many others) are both leading members of the Party for Socialism and Liberation. The Party serves as a network that collates and aggregates these experiences to bring them to bear on new struggles of saturation. In their article, they assess the various forces, including the cops, the protest leaders working with the cops, and the diverse masses engaged in street fighting. They describe a deal between the first two actors: “The state recognizes one section of organizers as the leadership of the movement in exchange for these organizers working to minimize those expressions of anger that are outside of their pre-approved actions” (La Riva and Puryear, 2014). They re-narrate the struggle, saturating it with a new historical analysis, in order to shift the forces in favor of those fighting in the streets. “Those who have drawn the movement into a partnership with the police to coordinate ‘peaceful’ responses and set red-lines for permissible action,” they write, “are helping the system retain complete control.” “Leadership with a revolutionary outlook must state first and foremost that the people of Ferguson, and similar communities nationwide have every right to rebel against police terror and the economic terror of poverty and marginalization” (La Riva and Puryear, 2014). Here we see an intervention written from within and directed to the networked struggles fighting not only in Ferguson, but across the nation.

Thus, those of us who hope to be(come) postdigital public intellectuals must grapple not only with theory of social change (which is complex enough in its own right) but also with its practice. There is nothing new in this call: from Gramsci’s organic intellectuals, we know that theory is useless without practice and vice versa, from Lenin’s (terribly misunderstood) professional revolutionary, we know that there can be no revolutionary theory without revolutionary practice. However, while predigital public intellectuals could still get away with a strong focus on theory and open neglect of practice and could privilege the pedagogical modes of teaching and

learning, disseminating their findings and dictates to others via broadcast media, today's postdigital public intellectuals just cannot afford that luxury. In the age of the post-truth, engagement in theory *is* practice, saturating correct interpretations of historical acts is a duty, and the road to truth is a battlefield. We have to engage in collective acts of studying. In the postdigital world, dynamics between the actual and the potential have been irreversibly altered—and many of us would argue, for the worse. However, our analysis shows that the digital logic which runs our devices does not change complex dynamics between the actual and the potential, and that the postdigital society is heavily detached from technologies running under its hood. “The postdigital is both a rupture in our existing theories and their continuation” (Jandrić et al., 2018, p. 895). Video did not kill the radio star, but the new way of consuming music (enabled by video) has transformed the old way of consuming music (enabled by radio). The Internet did not kill the public intellectual, but the new ways of producing and consuming media (enabled by the Internet) have transformed the old ways of being a public intellectual (enabled by pre-digital media). In this dialectic technology is important, but so are the ways we develop and use technology. The postdigital public intellectual understands this postdigital dialectic and seeks postdigital solutions.

Our argument indicates that these solutions are less about intellectual exercises and more about social and political struggle. In the age of post-truth, it is simply not enough to produce new knowledge. It is (at least) equally important to struggle for recognition of existing knowledge, and that pushes the postdigital public intellectual towards social movements. Acting within social movements, we need to recognize the importance of digital technologies in the broadest sense. Instead of merely looking at technological affordances, or seeking easy theoretical exits through subscribing to one or another philosophical determinism, we need to understand the complexity and nuance of the postdigital reality. We need to learn how to produce digital media, develop alternative public spheres, and create spaces where people can be truly equal in inequality. We need to look beyond microchips and into the biological challenge, or what Michael Peters and Tina Besley (2019) call bio-informational capitalism. We need to build networks. While we acknowledge that a certain balance between theory and action has always been a part of the public intellectuals' life, it is fair to say that traditional public intellectuals have predominantly been beings of critique. The postdigital public intellectual is predominantly a being of organization. This helps explain the resurgence of interest in historical and contemporary revolutionary organizations, from the Black Panther Party (and its members like Assata Shakur and Huey P. Newton) to the Popular Front for the Liberation of Palestine (and its leaders like Leila Khaled). Networked technologies bring the affects of this kind of organizing closer. When we participate in acts of saturation—when we contribute to trending hashtags, appropriate memes, signal boost tweets and articles—we join in a collectivity-in-constitution that struggles over political meaning.

The communication networks in which we are constituted and through which we organize disperse the entry points for the production and dissemination of information, theories, and analysis. Yet this isn't a democratization, for those with capital are able to finance troll farms, purchase advertised posts, and so on. The act of saturating history and the present—the act of filling an event with signification—thus depends crucially on coordinated organizations. The infinite heterogeneity that constitutes an act's endless potentiality—the potentiality in which collective studying takes place—is educationally desirable but politically problematic. We need not choose between potentiality and actuality, which is fortunate given that there are so many highly funded and coordinated efforts—many of them centralized through state apparatuses—to soak the present with meaning and move on. The fact of the matter is that the present moment isn't lacking the latest theory or the most updated philosophical toolkit, and the sooner we recognize this the sooner we

can dispense with our predigital notions of public pedagogy. Networks have replaced the detached academic, who if they are to join in the new pedagogy of the public intellectual will do so not as an academic but as a node in an ever-expanding network. It is with this message, that we welcome the birth of the postdigital public intellectual into our world who, it should be clear by now, is always already a *collective* assemblage whose educational logics run along the lines of collective postdigital study, and not traditional teaching and learning.

References

- Agamben, G. (1999). *Potentialities: Collected essays in philosophy*, (D. Heller Roazen, Trans, and Ed.) Stanford, CA: Stanford University Press.
- Biesta, G.J.J. (2006). *Beyond learning: Democratic education for a human future*. Boulder, CO: Paradigm Publishers.
- Bulman, M. (2016, November 28). Donald Trump's 'celebrity-style' tweets helped him win US presidential election, says data scientist. *The Independent*, 28 November. Retrieved from <https://www.independent.co.uk/news/world/americas/donald-trump-twitter-account-election-victory-president-elect-david-robinson-statistical-analysis-a7443071.html>.
- Dean, J., Medak, T. & Jandrić, P. (2019). Embrace the antagonism, build the Party! The new communist horizon in and against communicative capitalism. *Postdigital Science and Education*, 1(1), 218-235. DOI: <https://doi.org/10.1007/s42438-018-0006-7>
- Fawns, T. (2019). Postdigital education in design and practice. *Postdigital Science and Education*, 1(1), 132-145. <https://doi.org/10.1007/s42438-018-0021-8>
- Ford, D.R. (2016). *Communist study: Education for the commons*. Lanham, MD: Lexington Books.
- Ford, D.R. (2019). *Pedagogy and politics in the “post-truth” era: Insurgent philosophy and praxis*. London, England: Bloomsbury.
- Ford, D.R. (2018). Pedagogy of the “not:” Negation, exodus, and postdigital temporal regimes. *Postdigital Science and Education*, 1(1), 104-118. DOI: <https://doi.org/10.1007/s42438-018-0009-4>.
- Giroux, H. (2012, December 19). The war against teachers as public intellectuals in dark times. *Truthout*, 19 December. Retrieved from <https://truthout.org/articles/the-corporate-war-against-teachers-as-public-intellectuals-in-dark-times/>
- Giroux, H. A. (1988). *Teachers as intellectuals: Toward a critical pedagogy of learning*. Santa Barbara, CA: Praeger.
- Giroux, H.A. (2014, May 12). Noam Chomsky and the public intellectual in troubled times. *Truthout*, May 12. Retrieved from: <https://truthout.org/articles/noam-chomsky-and-the-public-intellectual-in-turbulent-times/>.
- Giroux, H.A. (2018). *The public in peril: Trump and the menace of American authoritarianism*. New York, NY: Routledge.
- Heidegger, M. (1977). *The Question Concerning Technology and Other Essays*. New York and London, England: Garland.
- Jandrić, P. (2017). *Learning in the Age of Digital Reason*. Rotterdam, Netherlands: Sense.
- Jandrić, P. (2018). Post-truth and critical pedagogy of trust. In M. A. Peters, S. Rider, M. Hyvönen & Tina Besley (Eds.), *Post-Truth, Fake News: Viral Modernity & Higher Education*. Singapore: Springer.

- Jandrić, P., Knox, J., Besley, T., Ryberg, T., Suoranta, J., & Hayes, S. (2018). Postdigital Science and Education. *Educational Philosophy and Theory*, 50(10), 893-899.
- La Riva, G., & Puryear, E. (2014, November 17). No more illusions: Missouri cops talked peace; prepared for war. *Liberation School*, 17 November. Retrieved from <https://liberation-school.org/no-more-illusions-missouri-cops-talked-peace-prepared-war>.
- McLuhan, M. (1964). *Understanding media: The extensions of man*. New York, NY: McGraw-Hill.
- Oxford Dictionaries. (2016). Word of the Year 2016 is... Retrieved from <https://en.oxforddictionaries.com/word-of-the-year/word-of-the-year-2016>.
- Peters, M. A. & Jandrić, P. (2019). Posthumanism, Open Ontologies and Bio-digital Becoming. *Educational Philosophy and Theory*. <https://doi.org/10.1080/00131857.2018.1551835>
- Peters, M.A. & Besley, T. (2019). Critical Philosophy of the Postdigital. *Postdigital Science and Education*, 1(1), 29-42. DOI: <https://doi.org/10.1007/s42438-018-0004-9>
- Sandlin, J.A., Burdick, J., Rich, E. (2017). Problematizing public engagement within public pedagogy research and practice. *Discourse: Studies in the Cultural Politics of Education*, 38(6), 823-835.
- Sandlin, J.A., O'Malley, M.P., & Burdick, J. (2010). Mapping the complexity of public pedagogy scholarship: 1894-2010. *Review of Educational Research*, 81(3), 338-375.
- Williamson, B. (2019). Brain data: scanning, scraping and sculpting the plastic learning brain through neurotechnology, 1(1), 65-86. *Postdigital Science and Education*. DOI: 10.1007/s42438-018-0008-5.
- Zhao, W. (2018). *China's education, curriculum knowledge and cultural inscriptions: Dancing with the wind*. New York, NY: Routledge.

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Becoming Relevant Again: Applying Connectivism Learning Theory to Today's Classrooms

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Abstract

This paper will examine the eight principles of Connectivism Learning Theory and provide examples of how institutions of learning—K-12 and higher education—may think about applying them. Engaging in such work will allow institutions to take advantage of technological platforms as they exist today and into the future. While the Internet has brought with it the opportunity for a connected, collaborative learning landscape, many classrooms and academic institutions today do not take full advantage of the value this connectedness can have for their learners. Using the eight principles as a frame, this paper will offer concrete techniques for K-12 and higher education institutions to engage their learners in the collaborative learning environment of today's technologically connected landscape.

Keywords: *Siemens Connectivism Learning Theory, digital age, information age, technological platform, Internet, Wikipedia, Google, diversity of ideas, collaboration, critical thinking, literacy skills, YouTube, critical consumer, deep search, Twitter, LinkedIn*

The modern Internet is now 29 years old, yet some learning institutions have been slow to embrace these new technological platforms as a place for productive public discourse to happen. Leveraging these technologies in meaningful ways to share work, add value to the conversation, and find ways to connect to community, has potential to further all participants' learning.

The two authors of the forthcoming discussion draw from expertise from their combined 24 years as K-12 educators and an additional 20 years at institutions of higher education preparing teachers. Additionally, while one author speaks and writes nationally on topics as diverse as culturally responsive teaching, place-based education, and the edTPA, the other speaks internationally on educational technology issues and works as a private consultant for over 100 K-12 school districts across 30 plus states as well as with international schools across 20 countries. The perspective in this piece, therefore, is informed by this extensive experience with educators and students across generations and throughout a variety of educational settings.

Our work and the views expressed here aim to add tools and new best practices to both the K-12 and higher education experience, particularly in the area of helping educators and academics alike leverage online platforms successfully. The power lies not in the technology platforms themselves but in the connections they foster. Educators in both K-12 and university classrooms who take risks and embrace these connected learning technologies have potential to uncover a whole new way of learning. For the purpose of this article *learning* is defined as the acquisition of skills

and knowledge through a learners' actions and personal experiences. For learning to truly occur, learners must be active in constructing new knowledge for themselves. Therefore, *learning*, as it is discussed here, is not viewed as the product of simply being taught.

George Siemens' Connectivism Learning Theory

This paper will apply George Siemens' Connectivism Learning Theory (Siemens, 2005) to a variety of educational settings and illustrate ways in which educators and academics can and have used technology platforms to share their work and engage in public conversations. George Siemens' Connectivism Learning Theory was written on his blog, elearningspaces.org, originally in 2004. Over the next year he received feedback from other academics, and in 2005 updated the theory based on feedback from others. Today this learning theory has been adopted by institutions of learning and has created the Massive Open Online Courses (MOOC) movement. Many institutions of learning that understand the changing landscape of how people learn, where they learn, and what they want to learn, have created websites like Edx, <https://www.edx.org/>, where anyone can take a course and/or engage in public discourse around a given topic. These MOOCs create a community of learners who continue to push the conversation forward.

Siemens' Eight Principles of the Connectivism Learning Theory:

1. Learning and knowledge rests in diversity of opinions.
2. Learning is a process of connecting specialized nodes or information sources.
3. Learning may reside in non-human appliances.
4. Capacity to know more is more critical than what is currently known.
5. Nurturing and maintaining connections is needed to facilitate continual learning.
6. Ability to see connections between fields, ideas, and concepts is a core skill.
7. Currency (accurate, up-to-date knowledge) is the intent of all connectivist learning activities.
8. Decision making is itself a learning process. Choosing what to learn and the meaning of incoming information is seen through the lens of a shifting reality. While there is a right answer now, it may be wrong tomorrow due to alterations in the information climate affecting the decision.

This paper will examine these eight principles and provide examples of how institutions of learning can apply them. Engaging in such work can lead to limitless opportunities within classrooms and for students of all ages. For the purpose of this article what it means to be educated will be framed by George Siemens' eight principles. For example, being educated is not about simply knowing information or memorizing facts but rather about learners' ability to apply these eight principles in a connected world to create new meaning for themselves. Knowledge therefore is not a set of facts but rather a learner's ability to learn, unlearn, and relearn information quickly and be able to apply that new knowledge in an ever-changing information landscape. For the sake of this discussion, *learning* is the ability to discover something unknown. *Unlearning* involves critically analyzing and in some cases rejecting information or beliefs once held to be true in the presence of new information. Finally, *relearning* is the arriving at a new understanding, sometimes replacing perspectives that were once expected or believed from past experiences.

Principle #1: Learning and Knowledge Rests in Diversity of Opinions

The Internet allows anyone a voice and an opinion on any given topic. The power of opinion and the debating of facts and non-facts is at the crux of the issue of whether the Internet has truly had a positive impact on our society at large. If one is to believe that learning and knowledge rests in diversity of opinions, as stated by Siemens, then structures need to be put in place to allow for such debates to take place. It is these structures that are lacking in many online forums and communities. Online forums and communities need these procedures and protocols that would then allow for opinions to be shared in a common and civil atmosphere. What would follow, then, is an environment that would provide fact and opinion to be shared, extrapolated, and synthesized with the end result hopefully being learning and knowledge.

Wikipedia is one example of this principle of Connectivism at work. Wikipedia, with its 5.6 million articles created by 33.7 million users making over 840 million edits (Wikipedia: Statistics, 2018), shows the power of learning and knowledge forming from a diversity of opinions. Because there are so many users fact checking each other's work, the review practices built by the community of users themselves work to maintain the integrity of the articles that are written. The review practices and protocols of Wikipedia, though criticized for favoring rapid turnaround, are forcing educators to reconsider the value and credibility of crowdsourced digital resources (Antonio, 2014). Rather than trying to convince students not to use crowdsourced digital resources like Wikipedia, educators can come alongside students and teach them how to use and evaluate such sources properly (Murley, 2008).

Wikipedia's good article criteria and quality scale rubric ("Wikipedia: Good Article Criteria," 2019; "WikiProject Article Quality Grading Scheme," 2016) are just two protocols that are in place to ensure the rigor and reliability of information has a common standard to adhere to. Accuracy is definitely important; however, Halsted argues that academics might put too much weight on accuracy when there are other factors at play: "While Wikipedia may have demonstrable shortcomings, it also has strengths in areas such as completeness and accessibility. These strengths appear when historical narratives in Wikipedia are compared to other sources of historical information readily available to American undergraduates" (Halsted, 2013, para. 1). Learners today are not held to the information shared and synthesized in a book or chapter. Wikipedia is not limited in its depth and breadth of any given topic. Furthermore, accurate information is important, but if it is not accessible by the learner then the information does nothing to inform the learner on that given topic. The goal, along with accuracy, should be to strive to continue to make accurate and complete information *accessible* to learners. What better place to continue this endeavor than an online encyclopedia accessible to all?

As institutions embrace this new understanding of learning and knowledge residing in diversity of opinions, it opens itself up to great possibilities both in teaching and in research:

Once the bane of teachers, Wikipedia and entry-writing exercises are becoming more common on college campuses as academia and the online site drop mutual suspicions and seek to cooperate. In at least 150 courses at colleges in the U.S. and Canada, including UC Berkeley, UC San Francisco's medical school, Boston College and Carnegie Mellon University, students were assigned to create or expand Wikipedia entries this year. (Gordon, 2014, para. 6)

To see this diversity of opinion at work one must only go so far as the talk section found in every Wikipedia article. Located in the upper left corner, the talk section of an article provides information to the community on the importance of the article, article policies, and, as the section title suggests, a place to talk, discuss, debate, and agree upon what should appear in the article itself. The procedures and protocols found in the talk section of every article provide the structure that allows the community to uphold the rigor and accuracy of the article itself. One description of the research that went into a course activity where students contributed to a section offers: “Their projects had to be researched, composed, and coded to match Wikipedia's strict protocols. Schug and her classmates wound up citing 218 scholarly legal and newspaper sources for their entry on a 1978 U.S. Supreme Court decision allowing corporate donations for ballot initiative campaigns” (Gordon, 2014, para. 3). It is within this talk section that the community’s opinions are supported by evidence and lead to productive work and results. Here community members debate, discuss, and offer citations to backup and support or debunk claims made by other community members. This is also where discussion takes place regarding whether something should be removed from an article if a claim cannot be backed up by evidence, citation, or reference.

These new systems of knowledge creation can be a useful tool for educators from all spheres to embrace, and the power to use it for public discourse is tremendous. Understanding that crowd-created content is not always automatically significantly less valid than peer-reviewed information is key to a way of thinking about this content as a potential contributor to students’ learning. It is significant that educators have an opportunity to teach and support learners in understanding the difference between peer-reviewed content and that which can be found on Wikipedia; critically analyzing this new crowd-created content is a crucial literacy skill. Educators who learn and grow from interactions with this platform, and then incorporate educating their own students about crowd-created platforms, will aid students in building an invaluable literacy skill. Such a shift would celebrate that learning and knowledge rest, at least in part, in diversity of opinion.

Principle #2: Learning is a Process of Connecting Specialized Nodes or Information Sources

When data is free and open, new discoveries are always just around the corner. A core literacy skill of today is the ability to connect information sources to get a new or more complete view on any given subject. This is explained best by the creator of the World Wide Web, Tim Berners-Lee, in his 2010 Ted Talk: *The Year Open Data Went World Wide*: “...if people put data onto the web—government data, scientific data, community data, whatever it is...it will be used by other people to do wonderful things, in ways that they never could have imagined” (Berners-Lee, 2010).

All one has to do is look at any of a host of new apps or web-based software to see this principle of the Connectivism Theory at play. The ability to connect data and information sources and make meaning from that data is what it means to learn in the information world.

One suburban school district of roughly 11,000 students in Washington State wanted to be more mindful in how to ensure voter-approved funding. To do this, they connected the information of voter data, freely released on the Internet by each county, and formatted it in Excel so that it could be uploaded to Google My Maps. Google My Maps allows a user to upload data sets that are then displayed on a map using geo-location data found in the data set. The district was interested in seeing which precincts had the highest voter turnout and the most “yes” votes for the

school district's levies. Connecting the information of voters to a map, the school district got a clear picture of where to focus their efforts in order to pass their next levy. Armed with this data, they were able to rally more yes voters in specific precincts and get their school improvement and technology levy passed.

This is just one of a host of stories that can be told when information is taken from a variety of sources and creates something new and meaningful. In educational institutions this can become a critical skill in analyzing and using the data freely available to create new and meaningful discoveries. In 2008, Don Tapscott and Anthony Williams, in their book *Wikinomics*, not only explain in depth how this new information economy employing open sharing changed the global landscape but also how the rise of the Internet has led to online users becoming "prosumers" (Tapscott & Williams, 2008). A prosumer, or someone who produces content while consuming at the same time, represents a key aspect of the new information age. The idea that everyone can and should use the data openly available to them to rethink ideas, create new data, and investigate findings in an open and collaborative format, has potential to contribute to and offer grounding for myriad lines of scholarship inquiry at higher education institutions. Additionally, connecting data and making meaning of the new picture that appears as a result of those connections represents another core literacy skill of the information age.

Principle #3: Learning May Reside in Non-human Appliances

In 2011 the world watched as Watson, the IBM Supercomputer, took on Ken Jennings, the winningest Jeopardy player of all time and Brad Rutter the highest earner in Jeopardy history. In the showdown for the ages, Jennings believed he would beat Watson: "I was pretty confident that I was going to win," says Jennings of how he felt going into the match. He continued:

I had taken some Artificial Intelligence classes and I knew there were no computers that could do what you need to do to win on Jeopardy. People don't realize how tough it is to write that kind of program that can read a clue in a natural language like English—to understand the puns, the red herrings, to unpack just the meaning of the clue...I thought, "Yes I will come destroy the computer." (May, 2013, para. 5)

In every classroom of today, educators are faced with looking at the backs of devices instead of the faces of their students. With the rise of Artificial Intelligence (AI) how do educators embrace these devices entering their classrooms and learning spaces? What is the implication when students have the power to learn on their own, aided by a device with little input from the humans running them? What is the role of the instructor in teaching students how to be critical consumers of all the content they encounter?

This article was written on a Google Doc and a large part of it is not being written by a human author, *per se*. Within a Google Doc, writers go to Tools—Voice Typing and talk into a microphone what it is they want to write. The AI built into word processors puts sentences together, analyzes the audio, and even predicts what it hears if it was not spoken correctly. Punctuation is added by simply saying "period" and a new paragraph is started by saying "new paragraph." The more the writer uses the service, the better it becomes at learning how the author writes and predicting what it is the writer is going to say or trying to convey. This power is available to every learner at every level of schooling. AI features like these also provide immense freedom to people limited by physical challenges that make the act of writing impossible for them.

This is a simple application of what is known as machine learning. With the rise of social-media and information analytics, understanding what applications are learning from the user and for the user becomes another important core literacy skill. Once people have the data from the second principle they then can call on computers to learn and find patterns within that data to help them learn and make decisions that may lead to new discoveries. Apple's iWatch gathers and presents data to its user in real time, at the same time using that data to form an image of the person's health, and, in extreme cases has been credited for predicting heart attacks before they are felt by the person wearing the watch (Hall & Apple, 2017).

At an international school in Luxembourg they are looking at using lunch data to predict the mood and learning readiness of students based on what they have chosen to eat. The school system has implemented a tap card system for transactions. This card, tied to the student's ID number, then creates a database of the child's meal choices throughout the school year. Giving teachers access to that data and adding their own input into the system on how the student behaved and performed in the afternoon, could lead to both helping students make choices about the food they eat and help teachers modify their lessons to better meet the needs of their students.

It can be tremendously helpful for all academic institutions to understand the data available to them. The data available to students and the ways they can help each other to use that data meaningfully represents another key literacy skill. Computers are learning from its users for its users, and learning to use that information to create new outcomes can be invigorating for teachers and students alike. Deeper questioning and student engagement with non-human appliances to make sense of this rapidly changing information world is key to institutions' and students' success.

Principle #4: Capacity to Know More is More Critical than what is Currently Known

In August 2010, Eric Schmidt, CEO of Google Inc., stated, "Every two days now we create as much information as we did from the dawn of civilization up until 2003. That's something like five exabytes of data" (Siegler, 2010, para. 2). A lot of debate followed this statement on what does he mean by "create" and what is meant by "information." Is a tweet or an Instagram image considered information? A multitude of information is created on the Internet each day. The quantity of the content is increasing; however, the quality of that content must be thoughtfully filtered by its consumer. This includes taking a close look at the source as well as the protocol for publication and review of the source. Because of the rise of the prosumer, there is a rapidly growing information landscape that must continually be assessed and re-assessed. Gonzalez (2004) argues because of this new information landscape, knowledge must be measured in months, not years.

"One of the most persuasive factors is the shrinking half-life of knowledge" (Siemens, 2005, p. 3). The "half-life of knowledge" is the time span from when knowledge is gained to when it becomes obsolete. Half of what is known today was not known 10 years ago. The amount of knowledge in the world has doubled in the past 10 years and is doubling every 18 months according to the American Society of Training and Documentation (ASTD). To combat the shrinking half-life of knowledge, organizations have been forced to develop new methods of "deploying instruction."

In a knowledge economy, the capacity to learn, unlearn, and relearn quickly is another core skill. What is true today may not be true tomorrow. Furthermore, the majority of the students today have grown up within this rapidly changing information landscape and need to understand how to find and use the information they have at their fingertips. Educators in all settings will benefit from understanding that, for better or for worse, search engines such as Google and Bing have become

the default research tool for learners today. No longer are databases and library archives the places students go first to learn. When information is free, open, and available, that is where learners start and in many cases end their research. This has led to frustration within the academic world as many learners today are good at “looking stuff up” but lack the deep research skills needed to find the information and critically analyze it and its source in a rigorous way. It is not that the information is not out there, but instead, there is a lack of skill to *find* the information and validate it. Educators now have the important task of teaching students how to conduct deep research utilizing all the resources available to them. This includes exposing them to content available through library databases *and* Internet searches. It also includes teaching them to evaluate all the information they do find, be it from a peer-reviewed empirical study or a *New York Times* blog. What it looks like to conduct research has changed, and the skills associated with this practice have changed along with it. Only after students have these skills to apply to an open and overabundance of information on the Internet, can the information within truly be used to know more than what is currently known.

Teaching and understanding how to deep-search the Internet using search engines is a valuable skill for students to master. Teaching research methods such as “site:” is one way to help learners not only deep-search the Internet but get a variety of perspectives on any given topic. For example, doing a search “Vietnam War site:gov” provides the U.S. government’s perspective on the Vietnam War. This is also the only perspective many U.S. students ever hear or study. However, by doing a search for “American War site:gov.vn,” students are instantly taken to a different perspective of this conflict, a perspective that very few Americans have ever studied or thought about. And yet, today, these diverse perspectives are within the reach of every learner with an Internet connection. “American War site:gov.vn” provides the Vietnam government’s perspective of what they refer to as the American war. Using “site:” in a search narrows that search to whatever domain and perspective a user seeks on that given topic. Another example might be “Climate Change site:edu,” which will return results from academic institutions within the U.S. on the topic of climate change. Extending that search to “Climate Change site:ac.za” will take the user to the perspective on climate change from academic institutions in South Africa. A list of these country domain extensions can be found in a lot of places on the Internet including one online article (“Countries and their domain extensions starting with letters A-E” 2010).

When Siemens (2005) wrote “Capacity to know more is more critical than what is currently known” (p. 8), he was not talking about knowing more of what one already knows or already thinks one knows, but rather using this wealth of information and knowledge to think critically about what they know and why they think they know it. The capacity is not to know more for the sake of knowledge, but is to know more for the sake of understanding and application.

Principle #5: Nurturing and Maintaining Connections is Needed to Facilitate Continual Learning

With the rise of the Internet and the free flow of information, the idea that learning is an individual endeavor that one undertakes alone is no longer true. With the collaborative nature of technology tools and applications today along with over four billion people connected to the Internet (“Internet Live Stats,” n.d.), there are few learning activities people undertake alone. Connectivism presents a model of learning that acknowledges the tectonic shifts in society where learning is no longer an internal, individualistic activity (Siemens, 2005).

A new era of collaboration is here. Collaborations do not just happen; a healthy collaborative environment takes work and care to create, nurture, and maintain. As companies become more global and telecommuting becomes more common, understanding these connections becomes more critical for students. Collaboration in the modern sense of the word really means not only face-to-face collaboration but also collaborating across time and space. Take Twitter hashtags as one example. One online list advertises itself as “The internet catalogue for students, teachers, administrators, and parents [with] over 20,000 relevant links personally selected by an educator/author with over 30 years of experience” (Blumengarten, n.d., para. 1). The site displays Twitter hashtags used by K-12 educators as places to collaborate, share, and learn from one another across time and space. The power of such platforms like Twitter is not in whom one follows or who follows someone but rather in the communities followed and contributed to. One example of this is the twitter hashtag #flipgridfever where teachers connect students around the world using the app Flipgrid.com. One kindergarten teacher in a rural part of Washington State uses #flipgridfever and the Flipgrid app to connect her kindergarten students with others around the world to discuss books they are reading in class, to practice number sense, and to learn about other cultures around the world. The community of educators that have formed around this one hashtag shows the power of connections when we collaborate across time and space.

A 2008 Vanity Fair interview of Steve Case, CEO of AOL in 1985, discusses how AOL approached the Internet revolution. Steve Case offered back then:

We always believed that people talking to each other was the killer app. And so whether it was instant messaging or chat rooms, which we launched in 1985, or message boards, it was always the community that was front and center. Everything else—commerce and entertainment and financial services—was secondary. We thought community trumped content. (Mayo & Newcomb, 2008, para. 48)

The true power of the Internet and what it offers to learners today is not the content that can be found through research, but rather the connections that can be created with others, the real-time collaboration that can take place, and the power of a just-in-time learning atmosphere that now exists. The website LinkedIn is a perfect example of how nurturing, growing, and maintaining connections has become a vital part of workplaces today. Surveys from just a few years ago show that 92% of recruiters use social media to find top talent. Within that, 87% cite LinkedIn as their top recruiting website (Singer, 2015). Understanding the new connected world of work is vitally important and a skill that must be taught, nurtured, and understood today. Another example of connections that help to foster continual learning is that of collaborative note taking. In a collaborative note taking scenario there is one set of class notes that everyone has access to, adds to, and studies from, including the instructor. As learners go through a class period they take notes collaboratively using a Google Doc or Shared Office 365 Word Document. The benefit to this approach is everyone is responsible for making the notes as valuable as possible for everyone else. The learning community relies on each other in the collaborative process. The instructor also has the benefit of adding to the notes, asking clarifying questions, or fixing any misconceptions before students study and review the notes.

At an International School in Bangkok, Thailand, once students were shown the power of collaborative note taking, they couldn't be stopped. They made collaborative study guides for tests, they shared the notes across time and space, and they had different class periods working on the same set of notes. All of a sudden they had a set of notes that expanded beyond the school day and

included the ideas and thoughts of hundreds of students. The power of creating, nurturing, and using this type of connected environment is essential in a global economy and within academic institutions and corporations today. The work is only as relevant as the quality of the content that is created within it. Therefore students take it upon themselves to make the quality of the content more relevant for each other. Every member of the document has equal stake in the quality of the material being created. The idea of students becoming freeloaders off other students quickly disappears as students learn and understand that everyone's participation is in everyone's best interest. Each student relies on and learns from peers with the instructors alongside. Even the students who make few contributions to the collaborative creation are able to learn by having access to a product that has varied input and that has been mediated by the instructor.

Principle #6: Ability to See Connections between Fields, Ideas, and Concepts is a Core Skill

As these principles start to build upon each other they paint a new picture of what it means to be educated and what it means to be a learner today. Principle #6 of Connectivism starts to bring the theory into focus. When these ideas begin to layer on top of each other, ways of looking at learning through a new connected lens previously inconceivable begins to emerge. The application for students, then, is that they should be asked to use an open and free information landscape and add to the creation of new content. This includes seeing connections between fields, ideas, and concepts, and creating new knowledge from them. In this scenario students may become more active participants in their learning. If it is assumed that learners today can and should be prosumers of information, then learning becomes more than a passive act. Adding value back to the information landscape for the next learner to take and apply is what it means to be a prosumer. Creating situations within learning environments where students must seek out connections between ideas and concepts and then create new meaning from those connections represents yet another core skill in today's connected landscape.

A social studies teacher in an urban school district in Washington State was upset at students for using their school-issued computers to fact check his presentation in real time. As the teacher was giving a lecture the students would interrupt him and correct him based on the quick web searches they were performing. Instead of embracing the new connected world and rethinking how this instant access to information could be used to his and his students' advantage, he decided to ban computers from his classroom.

At a university in New Mexico in 2011, professors were learning how to engage a new type of student, one that was connected and learned through connective means. One professor was frustrated that students were no longer showing up to his class. When probed further, the professor disclosed that he uploads his PowerPoint presentation at the beginning of the week and then during class he takes time to go through the PowerPoint slides. When he was asked what value students would have coming to class if he had given them all the information already in a PowerPoint, he responded "Don't they know who I am?" A little more probing revealed that students were making a copy of the PowerPoint presentation, sharing it amongst themselves as a class, adding their own notes to them, and using the PowerPoint as a collaborative class study guide. The students were already applying the principles of Connectivism without the teacher's help or even knowing it was happening.

Opening the walls of classrooms, sharing data, and allowing students the ability to see connections between fields, ideas, and concepts is not only a core skill but is the work that is done

every day globally. Peer-to-peer interaction is important, and this professor with minor adjustments in how he ran his class could have taken advantage of the connected world within which his students learned. He could still give students the PowerPoint and allow them to learn together. Then, during the face-to-face time he had with students he could encourage them to come up with clarifying questions as well as questions that could deepen the learning and continue the conversation. He could also pose questions to them based on the material he shared and help them see the connections between ideas and concepts they were studying. This would mean no or very little lecture and more hands-on problem solving and application of the concepts by students. Importantly, this shift would also allow for more conversations with students regarding what they understood and where they required more clarification. Peer-to-peer and face-to-face interaction is vital to the education process. How educators restructure that time to take advantage of Connectivism is the engaging work that has potential to truly use time with students in the best possible way. This shift has potential to aid educators in every setting to remain viable and relevant in the eyes of their digital native students.

Principle #7: Currency (accurate, up-to-date knowledge) is the Intent of all Connectivist Learning Activities

In a world that is creating as much information every two days as it did from the dawn of man through 2003 (Siegler, 2010), and the half-life of knowledge is 18 months (Gonzalez, 2004), learning how to find current and accurate up-to-date information is in itself a learning activity. Where Siemens' first principle focuses on learning from others and the opinions of others, this principle focuses on how one continues to keep knowledge current, accurate, and up-to-date in today's fast-paced information landscape. Knowing how to apply built-in search tools to search engines once again becomes a core skill that can be taught to and modeled for students. Using Google.com, for example, a student could search for "Climate Change site:gov" to get a perspective of climate change from the U.S. government. After performing the search they could then click on the tools menu found under the search bar. This creates a new menu that says "Any Time." Clicking on this new menu, a searcher can choose what time frame they would like results to be shown. As of this writing, doing just that offers over 100 web pages that have been updated by the U.S. government just on the topic of climate change within the past 24 hours. Changing the setting to the "past hour" produces 20 web page results. But what about the accuracy of these results? Many would assume that what the US Government would post about climate change would be "accurate." But is it? Especially given the current debate taking place about if climate change even exists? Further, does everyone assume epa.gov will offer the most accurate information on climate change today? Accuracy is important, and, at the same time, the diversity of opinion and the ability for multiple voices to be part of the debate and discussion is what precludes the consumer of all information to carefully evaluate its accuracy given the source as well as other variables.

The ability to access up-to-date information has never been easier, and the need for users to critically analyze that information for accuracy has never been more important. These tools and methods that bring information to users' fingertips are not new; they have been built into search engines for years and represent core skills today's researchers rely on to get current, accurate information. In 2011, Dan Russell, a search anthropologist at Google, revealed that an internal study done at Google found that 90% of Internet users did not know how to use CTRL/Command + F to find a word in a document or web page (Madrigal, 2011). The CTRL/Command + F command or "find" command does just that. It lets users search for and find what they are looking for within a

document or a particular web page. If 90% of users do not know the find function exists, then an opportunity presents itself to educate others about the vast search tools that exist within search engines today. Currency and accuracy are not only important principles of Connectivism; they are an important part of academia today. Knowing how to use these new search tools in a connected, fast-paced, always-changing knowledge environment is crucial to learning.

Principle #8: Decision-making is itself a Learning Process

The subtext of this principle includes: “Choosing what to learn and the meaning of incoming information is seen through the lens of a shifting reality. While there is a right answer now, it may be wrong tomorrow due to alterations in the information climate affecting the decision” (Siemens, 2005, para. 15). This last principle can best be summed up by the BREAKING NEWS atmosphere of today. Breaking News is constantly happening. This, in a connected information world, makes sense. Things are always changing or “breaking.” Information is being released, updated, analyzed, or created all the time. The result is a constant, shifting reality of truth. Because the alteration of information is happening so quickly people are trying to understand situations that are constantly in flux. Educators should now be challenging their students to be critical consumers of all content they encounter. This is a vital core skill.

Because of this new era, deciding who to learn from, who can be trusted, and more importantly *why* a source can be trusted are important questions one must constantly ask. Being able to make decisions about information sources is itself a learning task. Constantly evaluating sources is a core life skill of the information age.

At the same time, deciding what to learn and when to learn it, and from whom to learn it, is also a skill that needs to be honed. The site YouTube.com brings this into focus. Searching YouTube videos helps people learn precisely what they want at the moment they want to learn it. This is the just-in-time learning environment of today. YouTube might be the largest video repository on the Internet, but what really sets it apart from the competition is its search capability. YouTube is considered a search engine due to its impressive algorithms that accurately locate the content the searcher is looking for with very little effort on the user’s part. YouTube is the second most popular search engine behind Google (Blattberg, 2015) and quickly climbing towards the number one spot. When searching YouTube for the perfect video, a user must decide from whom they want to learn. That decision-making process is in itself a learning process. When choosing a YouTube video, a user takes into account many data points. How long is the video? How many other people have watched it? Does it have any “thumbs up”? Does the description match what the searcher is hoping to learn? Understanding all of this information and then choosing which video to watch is a skill practiced in order to maximize the learning.

Conclusion

Knowledge is quickly becoming measured by how fast one can *learn, unlearn, and relearn* information in today’s world. Embracing the change to a just-in-time learning environment represents immense engagement potential for educators and their students. Today’s learners, in both K-12 and university classrooms, have grown up in an information overload world, and although research is still a core skill to be taught, the skill set involved in teaching it looks quite different than it did before the Internet and its astute applications and search engine tools were widely accessible. A new subset of core literacy skills has emerged as a result. This presents an incredible opportunity

for educators. Instructors can now encourage and model connected learning environments for their students. Collaboration, both locally and globally, does not need to be limited only to in-person connections, but rather can occur across time and space.

At the same time, today's educational institutions may benefit from conversations around what it means, in the age of the Internet and intelligent online tools, to be knowledgeable and educated. Perhaps simply knowing something is not nearly as important as knowing how to learn something new in the moment one wants to learn it, and being able to apply it all in a connected, ever-changing, information landscape. Transitioning to a focus wherein educators teach students additional core literacy skills including how to practice criticality in consuming online information and its sources, how to build upon existing information, how to make connections among multiple sources of data, and how to apply the information, has potential to help classrooms and educators maintain a relevant role in their students' education.

References

- Antonio, A. (2014, March 28). Is Wikipedia really such a bad research tool for students? *Social Science Space*, Retrieved from <https://www.socialsciencespace.com/2014/03/is-wikipedia-really-such-a-bad-research-tool-for-students/>
- Berners-Lee, T. (2010). *Tim berners-lee: The year open data went worldwide*. [Video file]. Retrieved from https://www.ted.com/talks/tim_berners_lee_the_year_open_data_went_worldwide
- Blattberg, E. (2015, April 24). The demographics of YouTube, in 5 charts. *Digiday*, Retrieved from <https://digiday.com/media/demographics-youtube-5-charts/>
- Blumengarten, J. (n.d.). Cybrary man's educational websites. Retrieved from <https://www.cybrary-man.com/edhashtags.html>
- Countries and their domain extensions starting with letters A-E. (2010, June 24). Retrieved from https://www.webopedia.com/quick_ref/topleveldomains/countrycodeA-E.asp.
- Gonzalez, C. (2004, September 4). The role of blended learning in the world of technology. Retrieved from <http://www.unt.edu/benchmarks/archives/2004/september04/eis.htm>
- Gordon, L. (2014, June 14). Wikipedia pops up in bibliographies, and even college curricula. *The Los Angeles Times*. Retrieved from <http://www.latimes.com/local/education/la-me-wikipedia-20140615-story.html#page=1>
- Halsted, D. G. (2013). Accuracy and quality in historical representation: Wikipedia, textbooks and the Investiture Controversy. *Digital Medievalist*, 9. DOI:<http://doi.org/10.16995/dm.50>
- Hall, Z. Z., & Apple. (2017, December 15). How Apple Watch saved one man's life—and how it's empowering him after his heart attack. *9to5Mac*. Retrieved from <https://9to5mac.com/2017/12/15/apple-watch-saves-life-managing-heart-attack/>
- Internet Live Stats. (n.d.). Retrieved from www.internetlivestats.com
- Madrigal, A. (2011, August 18). Crazy: 90 percent of people don't know how to use CTRL+F. *The Atlantic*. Retrieved from <https://www.theatlantic.com/technology/archive/2011/08/crazy-90-percent-of-people-dont-know-how-to-use-ctrl-f/243840/>
- May, K. T. (2013, April 5). How did supercomputer Watson beat Jeopardy champion Ken Jennings? Experts discuss [Blog]. Retrieved from <https://blog.ted.com/how-did-supercomputer-watson-beat-jeopardy-champion-ken-jennings-experts-discuss/>

- Mayo, K., & Newcomb, P. (2008). The birth of the World Wide Web: An oral history of the Internet. *Vanity Fair*. Retrieved from <https://www.vanityfair.com/news/2008/07/internet-200807>
- Murley, D. (2008). In defense of Wikipedia. *Law Library Journal*, 100, 593-599.
- Siegler, M. (2010). Eric Schmidt: Every 2 days we create as much information as we did up to 2003. *TechCrunch*. Retrieved from <https://techcrunch.com/2010/08/04/schmidt-data/>
- Siemens, G. (2005). Connectivism: A learning theory for the digital age. *International Journal of Instructional Technology and Distance Learning*, 2(1), 3-10.
- Singer, M. (2015). Welcome to the 2015 recruiter nation, formerly known as the social recruiting survey. *Jobvite*. Retrieved from <https://www.jobvite.com/jobvite-news-and-reports/welcome-to-the-2015-recruiter-nation-formerly-known-as-the-social-recruiting-survey/>
- Tapscott, D. & Williams, A. D. (2008). *Wikinomics: How mass collaboration changes everything*. New York, NY: Penguin.
- Wikipedia: Good Article Criteria. (2019, February 12). Retrieved from https://en.wikipedia.org/wiki/Wikipedia:Good_article_criteria
- Wikipedia: Statistics. (2018). Retrieved from <https://en.wikipedia.org/wiki/Wikipedia:Statistics>
- WikiProject Article Quality Grading Scheme. (2016, October 25). Retrieved from https://en.wikipedia.org/wiki/Wikipedia:WikiProject_Switzerland/Assessment#Quality_scale

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Disrupting Epistemic Injustice in Education Research through Digital Platforms and Public Scholarship

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Abstract

Traditional education scholarship has historically excluded or silenced knowledges from disenfranchised communities that are deeply impacted by education research, policy, and practice, contributing to the epistemic injustice they experience. In this article we argue that research-intensive public universities should be committed to addressing epistemic injustice in education research by using digital platforms, such as fully open-access online journals for public scholarship on education, that uplift and center voices that are typically excluded from education research and discourse. We outline three principles of epistemically just practices by which a fully open-access online journals should be organized in order to promote educational equity informed by diverse contributors.

Keywords: *education research, epistemic injustice, educational equity, public scholarship, digital platforms*

Education research and scholarship has typically been confined to traditional academic journals or research organizations with particular policy agendas (Scott & Jabbar, 2014) both of which largely exclude the expertise of students, educators, and community members who are most often the subjects of research. We use “traditional” to point to scholars and systems of dominant knowledge production which silence and marginalize particular groups of people. Researchers within universities or research organizations are positioned as *the* experts on education, which has led to harmful beliefs, policies, practices, and other injustices within education.

Publishers of education research have exacerbated these injustices. Through their role as gatekeepers, they are able to define what counts as legitimate knowledge, and then restrict who can create and publish, and who can access, this knowledge. This creates unjust conditions for creating, distributing, and accessing knowledge, or epistemic injustice (Fricker, 2007). Working toward educational justice requires destabilizing and resisting epistemic injustice through expansive views of what counts as legitimate knowledge as well as who gets to participate in the creation and exchange of knowledge. Education research must build knowledge that centers the experiences and expertise of the people most impacted by education policy and practice through elevating and bringing previously silenced voices into dialogue with traditional educational researchers (Brewer, Heilig, Gunderson, & Brown, 2018).

In this article, we first draw on the concept of epistemic injustice to describe how traditional education scholarship creates and maintains hierarchical, one-way power relationships between

the subjects and objects of educational research. We then describe the communicative conditions that can create more reciprocal relationships between academia and the public and support a more just model of educational scholarship, and finally, we discuss how digital platforms afford new ways for *The Assembly: A Journal for Public Scholarship on Education*, a graduate student led, open-access journal, to build reciprocal relationships that resist epistemic injustice.

Epistemic Injustice in Traditional Education Scholarship

Epistemic injustice refers to the ways those in positions of power control knowledge production through excluding knowledges of people without dominant social capital (Fricker, 2007; Dotson, 2011). Epistemic injustice occurs in systems in which “hearers” often do not find the knowledges of disenfranchised peoples credible, focusing instead on the expertise of those who have dominated knowledge production and dissemination opportunities. Fricker (2007), identifies two kinds of epistemic injustice that inflict distinct harm on the knower, testimonial injustice and hermeneutical injustice. Testimonial injustice occurs when a speaker is denied credibility due to the prejudices of the hearer. Hermeneutical injustice occurs on a structural level and arises when one is impeded in understanding their own experiences due to a “gap in collective understanding” (Fricker, 2008, p. 69).

Mason (2011) argued that disenfranchised groups understand their experiences with injustice, but are often silenced because dominant discourses have not adopted language and knowledge that names and centers these injustices. Because of the dominant discourse and collective gaps in understanding, their experiences are often dismissed or denied by the dominant group. People in the dominant group promote dominant discourse which keeps the experiences of disenfranchised peoples in the margins or out of the discourse altogether. The purposeful, calculated ignorance evident in collective gaps in understanding make it difficult for disenfranchised groups to have their experiences seen as valid by the dominant group. Traditional scholars who are part of the dominant social group have historically contributed to these gaps in collective understanding by promoting false information, and silencing or ignoring the experiences of marginalized groups. Hermeneutical injustice often benefits traditional scholars, whose biases remain unchecked due to these gaps in collective understanding and a cycle of both testimonial and hermeneutical injustice continues.

Education scholarship is not exempt from unjust epistemic practices. Educational research, like most traditional scholarship, confines knowledge production and dissemination primarily to university-based researchers or think-tanks focused on promoting particular kinds of knowledge to influence education policy and practice (Pohlhaus, 2017). Traditional scholarship and, more recently, research conducted and produced by independent think-tanks maintain practices and structures that exclude the voices of the people being researched, often misrepresenting these groups of people and contributing to the oppression they experience in society (Welton, 1998).

Education Research and Epistemic Injustice

Education research, even critical education research, remains largely one-sided in research universities and private think-tanks, often funded by foundations with particular political goals and perspectives, maintaining education researchers’ positions as “experts” in education policy and practice (Vasquez Heilig, Brewer, & Adamson, F., in press). University tenure guidelines contribute to this one-sidedness because researchers within universities receive promotions and tenure based largely on publications in what are considered top-tier scholarly journals (Bartha & Burgett,

2015). Many of these journals are inaccessible to broad audiences because of expensive paywalls and restricted use of academic libraries. There are a growing number of peer-reviewed, open-access education research journals, such as this publication and *Education Policy Analysis Archives*, which eases the difficulty of accessing education research, but authors' use of particular kinds of academic language and highly technical methodologies prevent understanding for readers not immersed regularly in academic language (Mazenod, 2018; van Schaik, Volman, Admiraal, & Schenke, 2018).

We do not mean to suggest there is no place for the use of academic language in education research. For instance, we are writing this article for a journal with an audience that is largely within academia. Vocabulary and writing styles that can be impenetrable to one audience aids in understanding for another. We use specific kinds of academic language in much of our work depending on the audiences to whom we are writing. Education research, however, should expand to include research that is understandable and accessible to broader audiences, and this research should not harm professional trajectories of university-based researchers or bar participation from those outside traditional research institutions.

University-based education scholarship is also based in a tradition of a particular type of elitism that even excludes the knowledges of diverse scholars who have been educated in such institutions. University settings place greater value on certain forms of cultural capital, namely White, middle-class, male cultural capital, not only limiting access for students of color, in particular, but devaluing the cultural capital students of color bring to higher education (Matias, 2016). By extension, faculty of color are also underrepresented in all institutions of higher education (Espino, 2014). The National Center for Education Statistics (2018) reported that 76% of “all full-time faculty in degree-granting postsecondary institutions” were White (p. 185). When research-intensive universities are producing the knowledge often used in teacher education programs and other areas of education, this disparity in representation of faculty has grave consequences particularly for communities of color and low-income communities (Pérez Huber & Solórzano, 2015).

University-based education research provides much of the knowledge within teacher education programs, but education research that informs policy on a large scale is happening more and more through research organizations and think-tanks in the United States. Private interests have long influenced public policy, but in education, venture philanthropists have been able to influence the direction of education policy through funding of research organizations outside of university settings that focus on particular private interests (Lubienski, Brewer, & La Londe, 2016). Unlike university-based education research, which does not consistently influence education policy at the same speed and frequency, independent and private research organizations are able, through the vast resources of venture philanthropists, to produce and disseminate knowledge in ways that are attractive to policy-makers (Vasquez Heilig et al., in press). These research organizations often provide what appear to be fast, concrete solutions to the problems in education (Kumashiro, 2012), but more often benefit private interests over student needs. Like so much university-based research on education, research organizations with the influence and resources to drive education policy is also the result of unjust epistemological practices. The solutions for education that the most influential research organizations are providing currently appear in the form of increased accountability measures through standardized and privatization via charter schools and voucher programs (Saltman, 2014). These reforms, far from increasing educational equity as reformers claim, actually work to increase segregation and weaken neighborhood schools for the most disadvantaged (Rotberg, 2014; Vasquez Heilig & Holme, 2013).

Harmful Narratives in Education Research

Education research has historically failed to uplift and center voices of disenfranchised students and communities. In fact, education research regularly ignores relationships of power within education spaces, in part, because so many researchers do not value the knowledge of students, teachers, and community members who are disenfranchised within education (Gonzales, 2015). Because the majority of education researchers come from White, middle-class backgrounds, education research most often centers White, middle-class values, values that erase other identities, values, and cultures (Bernal & Villalpando, 2002). Culturally and linguistically diverse students, low-income students, and queer students experience the devaluation of their identities, cultures, and languages in educational spaces as a result (Pérez Huber & Solórzano, 2015).

Because of the unchecked biases, prejudices, and unacknowledged positionality of many education researchers (Hartsock, 1990), much of the knowledge that has been produced in dominant research communities have reinforced and contributed to deficit perspectives. For instance, these biases have resulted in assumptions about deficits of language and intellectual deficiencies (McKay & Devlin, 2016), particularly of students of color from low-income households (Matias, 2016; Zirkel & Johnson, 2016), and placing the blame for systemic injustice on the shoulders of people experiencing the injustice (Flores, 2018; Solórzano & Yosso, 2001). It is not only challenging for disenfranchised communities to contribute to education research, but the exclusionary practices of academia also make it difficult to refute the harmful narratives that do exist. Many scholars in traditional research communities have done important work to counter these narratives in order to impact lasting equitable policies and practices in education (Kumashiro, 2000; Ladson-Billings, 2006; Solórzano, 2001; Tikly, 2016), and their work has paved the way for the justice-focused public scholarship we wish to publish in *The Assembly* using digital platforms. There are other student-led open access journals, such as *The Harvard Educational Review* and *The Texas Education Review*, which have contributed greatly to both access to education research and the production of knowledge within education research. We seek to further the work of public scholarship with the primary focus of justice in education.

While traditional research has contributed to the harmful biases that we discussed previously, much of the research conducted at universities about education policies and practices fails to connect with practicing educators in classrooms (Penuel et al., 2017). Traditional education research has fostered a divide between education researchers and educators, in part, because so few educators' voices and expertise are directly represented in the research (Zeichner, Payne, & Brayko, 2015). Educators often feel that traditional education research is disconnected from the day to day realities of education practice (Penuel et al., 2017). Additionally, traditional education research, particularly in the current reform climate, devalues the professionalism and knowledge of teachers by insisting on standardized curriculum focused on improving testing outcomes (Brown, Vaquez Heilig, & Brown, 2013). It is unsurprising that educators feel devalued when much education research fails to represent teachers' expertise and to provide knowledge that feels beneficial to their practice (Santoro, 2018). Though educators spend a great deal more time with students than education researchers, educators' knowledge is not viewed as legitimate in education research and in policy reform, which is evident by the dissatisfaction teachers have been expressing in strikes across the country (Horn, 2017; Turner, Lombardo, & Logan, 2018).

Because of these realities, education research often represents a closed loop of knowledge production and consumption, produced by and for particular academic audiences. Whether in universities or private research organizations, education researchers have largely represented the interests of White, middle-class and affluent people (Bernal & Villalpando, 2002; Dumas, 2016).

Traditional scholars speak to and learn from other scholars with similar backgrounds. At universities, students disproportionately also belong to the dominant social group (McFarland et al., 2018), making it difficult to diversify higher education in order to disrupt unjust epistemic practices. Current structures of education scholarship provide few opportunities to recognize bias and collective gaps in understanding that lead to the continued oppression of disenfranchised communities and inequitable education practices.

Some education research is disrupting epistemic injustice through fields and methodologies such as critical race (Lynn & Dixon, 2013) and feminist theories (Kane & Mertz, 2012), participatory action research (PAR) and youth participatory action research (YPAR) (Cammarota & Fine, 2008), research-practice partnerships (Coburn, Penuel, & Geil, 2013), and community-based research (Guillen & Zeichner, 2018). These researchers push the boundaries of education research by including more diverse voices in their studies and by focusing on power structures that lead to inequity rather than focusing on the perceived deficits of marginalized students and communities. This work inspires us to push those boundaries even further through public scholarship using digital platforms.

Public Scholarship in Education

Increasingly, researchers are using social media platforms like Twitter to disseminate education research and much of the research is critical and focused on educational equity (Mirra, 2018; Veletsianos, 2012). Such platforms are accessible to a much wider audience than scholarly journals, which begins to address the epistemic injustice of limited access to knowledge (Alperin et al., 2018; Veletsianos, 2012). These scholars also resist using academic jargon in their public scholarship in order to engage with audiences that do not regularly encounter what is often confusing and opaque forms of written language. Some universities are beginning to recognize public scholarship as a valuable avenue for publishing research (Bartha & Burgett, 2015), which is encouraging, but public scholarship focused mainly on increasing accessibility to knowledge still maintains a one-way knowledge production model.

Researchers that are attempting to bridge academia and the public may be limited to dissemination work where academics share their own research with the public (Cantor & Lavine, 2006). Public scholars are also publishing blogs, op-ed columns, and other social media platforms to disseminate work, network with other scholars, and engage in a more public conversation about their work. Their efforts are an important step, particularly if these scholars approach education research critically, and tend to increase access to knowledge consumption, but not necessarily knowledge production. Public scholars with unchecked biases still contribute to one-way systems which often still exploit, silence, and exclude the knowledges of the communities that are being researched (Dotson, 2014), and do so to a much larger audience. In order for public education scholarship to promote educational equity, public scholarship must critically engage with and resist educational policies and practices that deny equity to all students.

Justice-Focused Public Scholarship on Education

The Center for Community and Civic Engagement defines public scholarship as “diverse modes of creating knowledge for and with publics and communities” (Nierobisz, Richey, & Walker, 2018, para. 2). Public scholarship, and its increased recognition in research-intensive spaces is encouraging, particularly in terms of greater access to knowledge. However, in order to acknowledge and address unjust epistemic practices that maintain one-way knowledge production,

public scholarship must also expand knowledge production by including and acknowledging the expertise and credibility of the knowledge of communities previously excluded from education scholarship. Public scholarship must work towards justice and the social good (Pickup & Kuntz, 2017) through examining relationships of power and oppression and working to uplift disenfranchised communities and their knowledges.

In order for epistemic injustice to be addressed and repaired, traditional scholars have to first acknowledge their contribution to epistemic violence, or the “refusal, intentional or unintentional, of an audience to communicatively reciprocate a linguistic exchange owing to pernicious ignorance” (Dotson, 2011, p. 238). Traditional scholars, either by failing to acknowledge their own positionalities and biases or actively promoting knowledge that is harmful to disenfranchised communities, have created scholarly audiences that are often unwilling to hear the knowledge of people within those communities. Acknowledging one’s own biases and positionality is not enough however. Traditional scholars also need to step away from the microphone, so to speak, and give space for disenfranchised peoples to produce and disseminate their knowledge. Traditional scholars need to promote and uplift the knowledges of a diverse groups of people who have experienced injustice (Pohlhaus, 2017).

Traditional scholars have additional resources and power from their universities and other research organizations. These scholars can and should leverage their power in those institutions to promote justice-focused public scholarship. This is scholarship that promotes “communicative reciprocal relationships” (Dotson, 2011, p. 240), or knowledge that is produced and shared by diverse groups of people within traditional research spaces and also beyond those spaces. Justice-focused public scholarship is one way in which epistemic injustice can be addressed and begin to be repaired for the communities who have been victimized by one-way, biased research practices. Justice-focused public scholarship redefines whose stories get told and who tells those stories. Making education research available on public platforms such as social media or paywall-free websites is only one initial step. Public scholarship must *be* public by giving disenfranchised peoples “a voice at the epistemic table” (Medina, 2011, p. 11).

As doctoral students in a research-intensive public university, we recognize our positionality within traditional scholarship. Rather than denying or ignoring institutional power, we believe it is important to leverage resources at the university to begin to address epistemic injustice by founding an online, open-access journal of public scholarship on education. The goal of *The Assembly* is to disrupt the systems of power that restrict knowledge production and dissemination that silence and marginalize particular groups of people (Fricker, 2007). Through an online, open-access journal, we aim to redefine education scholarship by seeking out and elevating the expertise of students, teachers, and community members who have deep knowledge of the educational issues in their unique contexts. We are leveraging online platforms to build communicatively reciprocal relationships among an assembly of communities (Dotson, 2011). These reciprocal relationships not only require speakers to have the opportunity to be heard, but to have their meaning understood and become part of a communicative exchange of knowledge (Dotson, 2011).

In order to accomplish the goal of addressing epistemic injustice through digital platforms and justice-focused public scholarship for education, we argue these efforts should be guided by three organizing principles of epistemically just practices:

1. Education research must open up space for all groups to speak, in their own voices, about their own experiences so that their knowledges become part of the collective social understanding.

2. Education research must be accessible and comprehensible to those who are most directly impacted by the research so that collective understandings can include discourse that names injustices, validating the social and educational experiences of marginalized groups.
3. Education research must engage in full reciprocal dialogue with those who are most directly impacted by research.

In the following sections, we will first describe each of these organizing principles in more detail, and then provide examples from *The Assembly: A Journal for Public Scholarship on Education* on how digital platforms afford opportunities to enact these principles. We do not provide these in order to dictate how other organizations should enact these principles, but merely as instructive examples. We expect that even these examples will be modified, abandoned, refined and reformed over time as we build understandings of epistemic justice within changing technologies and social contexts.

Organizing Principle: All Groups Speak in their own Voices

The first organizing principle is to elevate the voices of those who are most impacted by educational research by creating space for previously silenced groups to speak for themselves and in their own voices. Even in methodologies that aim to center marginalized voices, such as PAR and YPAR, the reporting is still often done by the researcher. The events and experiences are filtered through the researcher first. As a research community, we are conditioned to accept knowledge as credible and include it in collective social knowledge only when it has first been processed and reported by another researcher. In the inaugural issue of *The Assembly*, two of the seven articles were written by practicing classroom teachers, teachers whose direct knowledge of issues in education is often devalued in education research (Leat, Reid, & Lofthouse, 2015). We contend that a necessary condition for working toward testimonial justice is through the inclusion and elevation of knowledge created and reported by those who have been historically excluded or made less credible.

Dialogues

One feature of this journal that supports conversation among people with varying perspectives on educational equity issues and provides a platform for disenfranchised people to speak for themselves in “broadly accessible and distinctly personal ways” (Mommandi, 2018, p. 45) is what we call *Dialogues*. In the *Dialogues* section of *The Assembly*, in addition to traditional open calls for proposals, we invite authors from diverse backgrounds, and with rich knowledge of the impact of education policy and practice to write about an educational issue with the goal of uplifting and centering voices not often in conversation with traditional education research and researchers. The editorial board works with groups outside of academia, such as community organizations and local educators, to identify potential authors that represent diverse communities impacted by education. The *Dialogues* section destabilizes the notion that traditional research articles are the authoritative word in what is best in education policy and practice. In the inaugural issue of *The Assembly*, the *Dialogues* section contained three critical essays focused on citizenship and migration relating to schools and schooling in the United States. The authors are university professors, graduate students, and a K-12 classroom teacher and each wrote from their own unique perspectives. These

authors are in conversation with one another, with no invited authors given more weight or credibility in the publishing process, about a particular relevant educational issue with an emphasis on equitable education policies and practices.

Organizing principle: Accessible and Comprehensible Research

The second organizing principle is that research must be accessible and comprehensible. Accessible and comprehensible research provides groups with less institutional power access to this knowledge which in turn provides them opportunities to refute false or incomplete information and to have their experiences named and validated in collective knowledge production. There are two conditions required in order to achieve this organizing principle. The first is simply that the knowledge is accessible. It cannot be restricted to only those with institutional power or wealth. This restriction is typically enacted in education research through paywalls. The second condition is comprehensibility. Should one gain access to an academic article, it is often impossible to understand due to the use of language that obscures meaning or the use of highly technical methods. Research must both be accessible and understandable, especially in order for disenfranchised groups to be able to have their experiences supported and validated in knowledge production.

Open Access

The first step in promoting accessible and comprehensible research is creating a full, open-access, online journal that provides a public forum for students, parents, educators, community members, and academics to be in dialogue with each other. This platform allows interactive articles by more traditional academics as well as authors whose knowledges are not typically valued within academia, and the publications of academics will not be privileged over other publications. This both encourages traditional scholars to rethink their positions as education researchers and uplifts the knowledges of public communities. These articles also include tools to increase access to both knowledge consumption and production. Being fully digital allows us to add links within articles to background information on specific educational issues or terms, and authors can create various multimedia displays that make their findings clear and accessible to wide audiences. We also provide abstracts in Spanish for every published article and aim to include more languages in the future as our capacity grows. Through these additional supports, we can publish quality education research from an assembly of experts that is created by, and accessible to, a much wider audience than is common in traditional scholarly journals.

Timely and Relevant Research

Though there are education research pieces that remain relevant over decades, much education research that is regularly cited is often out of date and does not align with the current issues in education. Traditional research articles are typically published several years after the initial research was conducted, and the scholars may have even moved on to other projects by the time an article is published. *The Assembly* seeks to publish articles that address timely and relevant education issues that promote educational equity. Often the people best positioned to speak to these timely issues are the people working directly in education spaces. Sometimes that is a traditional researcher, but more often, the knowledge from the people directly impacted by these issues in the current climate is the most valuable in order to promote educational equity. As a result, a free, open-access digital platform creates the space to publish papers from an array of authors in a more

timely manner. Because the professional expertise of classroom teachers is essential to promoting equity in education, we published articles from current teachers in each section of *The Assembly* in our inaugural issue. Alethea Maldonado (2018) shared experiences as a secondary English as a Second Language (ESL) teacher and those of her students who include immigrants and refugees. Her essay speaks to the present context of citizenship and immigration in the United States that is vital to understanding how to better serve immigrant and refugee students in public schools. Hayley Breden (2018), a high school social studies teacher, wrote about teachers' unions and illustrates how unions can better work toward social justice goals through current examples in Denver.

Changing Traditional Article Formats

Traditional article formats generally follow a prescribed organizational pattern that is well-known in traditional research publishing, but is fairly inaccessible to the general public. For example, published research often involves complicated methodological sections that may only be meaningful to others who engage in similar methodologies. In *The Assembly*, the article format and clear writing styles also supports accessibility to knowledge. Authors with complicated methodologies place those sections in the appendix, leaving the main body of the article available for the relevant findings and information general audiences would find meaningful. *The Assembly's* submission guidelines asks potential authors to write for broad audiences regardless of whether they are submitting to the peer-reviewed section or the *Dialogues* section and, on submission, to explicitly state what audiences beyond academics, such as parents, teachers, school administrators, or community organizations, may be interested in their work and what they may gain from reading the article (Editorial Board, 2019). Asking submitters to be explicit about their intended audience not only helps authors be more intentional in writing in ways that can be understood by their audience, but also allows the editorial board to identify reviewers from those communities. While not impossible, without the reach these social media tools offer, it would be prohibitively difficult to find a unique pool of reviewers from varying communities for each article submission. The editorial board is also building a glossary with education research vocabulary that may be commonly used within the research community, but that may not be familiar to the general reader. As we publish more issues, we will add the glossary to the website. Digital platforms also allow us to include podcasts, videos, and news articles to popular media connected with the educational issues the journal publishes. These will be linked directly in the article where authors address the particular issues in order to encourage authors to acknowledge their own limitations and readers to gain information from a variety of reputable and accessible sources. We also include a "Weekly Round-Up" section which includes current events in education and maintain active social media accounts on multiple platforms.

Organizing Principle: Full Reciprocal Dialogue with those most Impacted by Education Research

The third organizing principle moves beyond including silenced voices and creating greater access to knowledge. Epistemic justice requires us as education researchers to hear and understand those who historically have been excluded from education research conversations. This means engaging in full, reciprocal dialogue as equal partners. Education research is always filtered through particular lenses of authors, which are informed by personal experiences and biases. It is important to engage with others whose experiences and knowledges may better or more fully inform equitable educational policies and practices.

Creating Conversations

In addition to accessibility of knowledge produced by diverse communities, *The Assembly* also provides readers the opportunity to respond to the pieces being published that will be included with the articles as responses are received. Typically, published scholarship is treated as a finished product. Digital platforms allow public responses to publications, encouraging authors to push and transform the research. After publication, the public can respond directly through various media tools such as blogs, comment sections, and online dialogues hosted by the editorial board through social media platforms such as Twitter. These responses provide another space where knowledges that are often ignored are seen, and where authors can hear and engage with such knowledges. The responses are moderated by the editorial board, not to silence dissent, but to ensure that dissent or differing viewpoints do not deny the experiences and knowledge of disenfranchised groups of people. We link these responses, in all of their formats, directly to the original article, allowing authors and readers to be a part of an ongoing dialogue. These platforms allow authors to continue to refine their ideas by publishing addendums or supplements that are attached to the original article. Traditionally, after peer review and publication, articles are thought of as finished products.

Beginning with the inaugural issue, every month we highlight a current topic in education on the journal website and our social media platforms. We highlight previous articles that we have published on the topic and supplement them with information on current events related to the topic, major media publications, and blog posts written by teachers and members of the community. We also post short, recorded interviews with the authors on their articles, responses from readers, and ongoing work and current experiences on the topic. For example, while highlighting teacher activism, we interviewed a researcher about her work, but also current teachers who were in the midst of, had taken part in, or were considering, teacher actions such as striking or walking out. All of these various digital media artifacts are collected together and help to create an ongoing conversation about an issue. Through digital tools, ideas can continue to be shaped and re-formed through reciprocal dialogue with an assembly of diverse communities, particularly marginalized communities who are most directly impacted by education policy and research.

Looking Forward

This work should not be seen as a replacement for traditional research. There is certainly an important role for the voice of researchers in education. Instead, a community knowledge-driven journal supplements and adds voices that have been traditionally excluded from collective understanding. In fact, the approaches used for *The Assembly* provide additional avenues for improving education research to further promote equity in education. For those of us within academia, this is a chance to do more than disseminate research. While we are aware of the structures within universities and other research organizations that contribute to epistemic injustice, we are also aware that our positionality within such an institution allows us to disrupt those structures and practices. As doctoral students who are pursuing higher degrees in order to engage in research that promotes equity in education, this journal is an opportunity for us to leverage institutional power to work towards a more encompassing approach to research and critical public knowledge. Digital platforms provide an opportunity to engage with others outside of traditional academic spheres in meaningful dialogue.

There are tensions and challenges that exist when “transforming conventional notions of research” (Schultz, 2018, p. 115) using digital platforms. Although we aim to expand notions of what it means to make valued contributions to educational research, researchers in universities are

often beholden to more traditional indicators of scholarship, such as impact factor and article citations. While alternative metrics, such as social media engagement, are becoming more widespread, it remains to be seen what, if any, effects these indicators may have on tenure review or other university-based evaluations. Beyond alternative metrics, we are also unsure of what kinds of metrics can measure justice-focused public scholarship that embodies the three organizing principles rather than simply measuring engagement. In addition to higher education institutional concerns, the diversity of authors we seek to represent in *The Assembly* requires additional support. Scholars who are well-versed in writing for traditional academic journals often need to be supported in writing for broader audiences, and scholars from outside academia need to be supported in understanding some of the conventions of academic writing expected when publishing in a scholarly journal. We are exploring a writing space that is new to education research, and as such, we are learning along with many of the authors. Though we do have access to many digital resources we would not have if we were not at a research-intensive university, our capacity as graduate students is still limited, forcing us to make difficult decisions such as only currently publishing abstracts in Spanish. However, these challenges are not insurmountable, and as we grow, both in numbers and capacity, we will be able to better represent even more diverse voices in education scholarship.

For the larger public, *The Assembly* opens previously-closed opportunities to produce and engage education stakeholders and communities with multiple knowledges. While we recognize that not everyone has easy access to internet, a much broader group of people have access to these resources via smartphone and other devices than the people with affordable and reasonable access to scholarly journals. We fully recognize that *The Assembly* is only one step in addressing epistemic injustice, but we believe it is an important step, particularly due to our commitment to center previously excluded voices and knowledges. Digital platforms, along with a commitment to epistemic justice, offer tools to reimagine the division between subjects and objects of educational research so that we may work toward justice through diverse public knowledges together.

References

- Alperin, J. P., Fischman, G. E., McKiernan, E. C., Nieves, C. M., Niles, M. T., & Schimanski, L. (2018). How significant are the public dimensions of faculty work in review, promotion, and tenure documents? [preprint]. doi: <http://dx.doi.org/10.17613/M6W950N35>
- Bartha, M., & Burgett, B. (2015). Why public scholarship matters for graduate education. *Pedagogy: Critical Approaches to Teaching Literature Language Composition and Culture*, 15(1), 31–43. <https://doi.org/10.1215/15314200-2799148>
- Bernal, D. D., & Villalpando, O. (2002). An apartheid of knowledge in academia: The struggle over the “legitimate” knowledge of faculty of color. *Equity & Excellence in Education*, 35(2), 169–180. <https://doi.org/10.1080/713845282>
- Breden, H. (2018). Democracy within democratic organizations: Why discussion and disagreement are necessary for progress in teacher unions. *The Assembly: A Journal for Public Scholarship on Education*, 1(1), 38–45.
- Brewer, T. J., Heilig, J. V., Gunderson, M. S., & Brown, J. (2018). Chi-town educator and community-based activism: Confronting a legacy of education privatization in the nation’s Windy City. *Thresholds*, 41(3), 138–153.
- Brown, A., Vaquez Heilig, J., & Brown, K. (2013). From segregated to integrated, to narrowed knowledge: Curriculum revision for African Americans from pre-Brown to the present. In J. K. Donnor & A. D. Dixson (Eds.), *The Resegregation of Schools: Education and Race in the Twenty-First Century* (pp. 27–43). New York, NY: Routledge.

- Cammarota, J., & Fine, M. (Eds.). (2008). *Revolutionizing education: Youth participatory action research in motion*. New York, NY: Routledge.
- Cantor, N. & Lavine, S. (2006). Taking public scholarship seriously. *The Chronicle Review*, 52(40), B20.
- Coburn, C. E., Penuel, W. R., & Geil, K. E. (2013). *Research-practice partnerships: A strategy for leveraging research for educational improvement in school districts*. New York, NY: William T. Grant Foundation.
- Dotson, K. (2011). Tracking epistemic violence, tracking practices of silencing. *Hypatia*, 26(2), 236–257.
- Dotson, K. (2014). Conceptualizing epistemic oppression. *Social Epistemology*, 28(2), 115–138. <https://doi.org/10.1080/02691728.2013.782585>
- Dumas, M. J. (2016). Against the dark: Antiracism in education policy and discourse. *Theory Into Practice*, 55(1), 11–19. <https://doi.org/10.1080/00405841.2016.1116852>
- Editorial Board. (2019). *The Assembly: A Journal for Public Scholarship on Education*. Retrieved from <https://www.colorado.edu/journal/assembly/>
- Espino, M. M. (2014). Exploring the role of community cultural wealth in graduate school access and persistence for Mexican American PhDs. *American Journal of Education*, 120(4), 545–574. <https://doi.org/10.1086/676911>
- Flores, N. (2018, May 31). Making millions off of the 30-Million-Word Gap. Retrieved from <https://educationallinguist.wordpress.com/2018/05/31/making-millions-off-of-the-30-million-word-gap/>
- Fricker, M. (2007). *Epistemic injustice: Power and the ethics of knowing*. New York, NY: Oxford University Press.
- Fricker, M. (2008). Epistemic injustice: power and the ethics of knowing. *Theoria*, 61, 69–71.
- Gonzales, S. M. (2015). Abuelita epistemologies: Counteracting subtractive schools in American education. *Journal of Latinos and Education*, 14(1), 40–54. <https://doi.org/10.1080/15348431.2014.944703>
- Guillen, L., & Zeichner, K. (2018). A university-community partnership in teacher education from the perspectives of community-based teacher educators. *Journal of Teacher Education*, 69(2), 140–153. <https://doi.org/10.1177/0022487117751133>
- Hartsock, N. (1990). Foucault on power: a theory for women? In L. Nicholson (Ed.), *Feminism/post-modernism* (pp. 157–175). New York, NY: Routledge.
- Horn, B. (2017). Striking out on their own: Lessons learned from student teaching during and after the Chicago teachers union strike. *Critical Questions in Education*, 8(2), 13.
- Kane, J. M., & Mertz, J. E. (2012). Debunking myths about gender and mathematics performance. *Notices of the American Mathematical Society*, 59(01), 10. <https://doi.org/10.1090/noti790>
- Kumashiro, K. (2000). Toward a theory of anti-oppressive education. *Review of Educational Research*, 70(1), 25–53.
- Kumashiro, K. (2012). When billionaires become educational experts. *Academe*, 98(3), 10–16.
- Ladson-Billings, G. (2006). From the achievement gap to education debt: Understanding achievement in U.S. schools. *Educational Researcher*, 35(7), 3–12.
- Leat, D., Reid, A., & Lofthouse, R. (2015). Teachers' experiences of engagement with and in educational research: what can be learned from teachers' views? *Oxford Review of Education*, 41(2), 270–286.
- Lubienski, C., Brewer, T. J., & La Londe, P. G. (2016). Orchestrating policy ideas: philanthropies and think tanks in US education policy advocacy networks. *The Australian Educational Researcher*, 43(1), 55–73. <https://doi.org/10.1007/s13384-015-0187-y>

- Lynn, M., & Dixon, A. D. (Eds.). (2013). *Handbook of critical race theory in education*. New York, NY: Routledge.
- Maldonado, A. (2018). Mi todo para los estudiantes inmigrantes. *The Assembly: A Journal for Public Scholarship on Education*, 1(1), 59–64.
- Mason, R. (2011). Two kinds of unknowing. *Hypatia*, 26(2), 294–307. <https://doi.org/10.1111/j.1527-2001.2011.01175.x>
- Matias, C. E. (2016). “Why do you make me hate myself?”: Re-teaching Whiteness, abuse, and love in urban teacher education. *Teaching Education*, 27(2), 194–211.
- Mazenod, A. (2018). Lost in translation? Comparative education research and the production of academic knowledge. *Compare: A Journal of Comparative and International Education*, 48(2), 189–205.
- McFarland, J., Hussar, B., Wang, X., Zhang, J., Wang, K., Rathbun, A.,...Ossolinski, M. (2018). *The condition of education 2018* (No. 144).. Washington D.C.: National Center for Educational Statistics.
- McKay, J., & Devlin, M. (2016). ‘Low income doesn’t mean stupid and destined for failure’: challenging the deficit discourse around students from low SES backgrounds in higher education.’ *International Journal of Inclusive Education*, 20(4), 347–363.
- Medina, J. (2011). Toward a Foucaultian epistemology of resistance: Counter-memory epistemic friction, and Guerilla pluralism. *Foucault Studies*, 12, 9-35. <https://doi.org/10.22439/fs.v0i12.3335>
- Mirra, N. (2018). Pursuing a commitment to public scholarship through the practice of annotation. *The Assembly: A Journal for Public Scholarship on Education* 1(1), 29-36.
- Mommandi, W. (2018). Introduction to Dialogues. *The Assembly: A Journal for Public Scholarship on Education*, 1(1), 46–47.
- Nierobisz, A., Richey, F., & Walker, A. (2018). What is public scholarship? Retrieved from https://apps.carleton.edu/ccce/scholarship/what_is/
- Penuel, W. R., Briggs, D. C., Davidson, K. L., Herlihy, C., Sherer, D., Hill, H. C.,...Allen, A.-R. (2017). How school and district leaders access, perceive, and use research. *AERA Open*, 3(2),1-17. . <https://doi.org/10.1177/2332858417705370>
- Pérez Huber, L., & Solórzano, D. G. (2015). Racial microaggressions as a tool for critical race research. *Race Ethnicity and Education*, 18(3), 297–320. <https://doi.org/10.1080/13613324.2014.994173>
- Pickup, A., & Kuntz, A. M. (2017). Critical inquiry, truth-telling, and the good: Problematization and reconstruction for a socially just education. *Critical Questions in Education*, 8(2), 75-81.
- Pohlhaus, G. (2017). Varieties of epistemic injustice. In I. J. Kidd, J. Medina, & G. Pohlhaus (Eds.), *The Routledge Handbook of Epistemic Injustice* (pp. 13–26). New York, NY: Routledge.
- Rotberg, I. C. (2014). Charter schools and the risk of increased segregation. *Phi Delta Kappan*, 95(5), 26–31. <https://doi.org/10.1177/003172171409500507>
- Saltman, K. J. (2014). Neoliberalism and corporate school reform: “Failure” and “creative destruction.” *Review of Education, Pedagogy, and Cultural Studies*, 36(4), 249–259. <https://doi.org/10.1080/10714413.2014.938564>
- Santoro, D. A. (2018). The moral sources of teacher dissatisfaction. In *Demoralized: Why teachers leave the profession they love and how they can stay* (pp. 15–55). Cambridge, MA: Harvard Education Press.

- Schultz, K. (2018). Reconciling the roles of “plantation owner” and university professor: negotiating the terrain of community-engaged research and action. *The Assembly: A Journal for Public Scholarship on Education*, 1(1), 6–16.
- Scott, J., & Jabbar, H. (2014). The hub and the spokes: Foundations, intermediary organizations, incentivist reforms, and the politics of research evidence. *Educational Policy*, 28(2), 233–257. <https://doi.org/10.1177/0895904813515327>
- Solórzano, D. (2001). Critical Race Theory, racial microaggressions, and campus racial climate: The experiences of African American college students. *Journal of Negro Education*, 69(1), 60–73.
- Solórzano, D., & Yosso, T. (2001). From racial stereotyping and deficit discourse toward a critical race theory in teacher education. *Multicultural Education*, 9(1), 2–8.
- Tikly, L. (2016). Language-in-education policy in low-income, postcolonial contexts: Towards a social justice approach. *Comparative Education*, 52(3), 408–425.
- Turner, C., Lombardo, C., & Logan, E. B. (2018, April 25). Teacher walkouts: A state by state guide. Retrieved from <https://www.npr.org/sections/ed/2018/04/25/602859780/teacher-walkouts-a-state-by-state-guide>
- van Schaik, P., Volman, M., Admiraal, W., & Schenke, W. (2018). Barriers and conditions for teachers’ utilisation of academic knowledge. *International Journal of Educational Research*, 90(2018), 50–63.
- Vasquez Heilig, J., Brewer, T. J., & Adamson, F. (in press). Politics of market-based school choice research: A comingling of ideology, methods and funding. In M. Berends, A. Primus, & M. Springer (Eds.), *Handbook of Research on School Choice* (2nd ed.). New York, NY: Routledge.
- Vasquez Heilig, J., & Holme, J. J. (2013). Nearly 50 years post-Jim Crow: Persisting and expansive school segregation for African American, Latina/o, and ELL students in Texas. *Education and Urban Society*, 45(5), 609–632. <https://doi.org/10.1177/0013124513486289>
- Veletsianos, G. (2012). Higher education scholars’ participation and practices on Twitter: Scholars’ participation and practices on Twitter. *Journal of Computer Assisted Learning*, 28(4), 336–349. <https://doi.org/10.1111/j.1365-2729.2011.00449.x>
- Welton, K. (1998). Nancy Hartsock’s standpoint theory: From content to “concrete multiplicity.” *Women & Politics*, 18(3), 7–24. https://doi.org/10.1300/J014v18n03_02
- Zeichner, K., Payne, K. A., & Brayko, K. (2015). Democratizing teacher education. *Journal of Teacher Education*, 66(2), 122–135.
- Zirkel, S., & Johnson, T. (2016). Mirror, mirror on the wall: A critical examination of the conceptualization of the study of Black racial identity in education. *Educational Researcher*, 45(5), 301–311.

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The Editorial Board of the Assembly: A Journal for Public Scholarship on Education also includes Rebecca Flores, Quinton Freeman, Molly Hamm, Matt Hastings, Wagma Mommandi, and María Ruiz-Martínez, who were all instrumental in establishing and enacting the founding vision for the journal.



Tweeting from the Tower: Exploring the Role of Critical Educators in the Digital Age

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Abstract

New developments in digital technologies have caused dramatic shifts in public education. The purpose of this paper is to address these tensions in order to explore the compatibility of critical pedagogy with digital scholarship. We ultimately argue that many of these new technologies, and the pedagogies they give rise to, tend to neutralize the corporeal presence of gender, race, and sexuality, among other identities that are integral to fostering dialogue that supports the process of critical inquiry and humanization.

Keywords: *educational technology, critical pedagogy, social media, higher education*

Introduction

The proliferation of digital technologies, particularly social media, has in recent years dramatically shifted the landscape of public discourse. Platforms such as Facebook and Twitter have, as is commonly argued, democratized public discourse by increasing the plurality of voices on a range of political issues through online “discussions.” Setting aside issues of parity in digital infrastructure and access to the Internet, such platforms have indeed widened the arena of public discourse.

These changes in the technological landscape, however, have given rise to new challenges for scholars working in critical traditions, particularly critical pedagogy. As both a philosophical and pedagogical school of thought, critical pedagogy vehemently rejects the “ivory tower” approach to academia, instead favoring “problem posing” alongside and *with* students toward the aim of social justice. With regard to rejecting the traditional power structure embedded in the student/teacher dichotomy through the promotion of critical dialogue, the structure of social media platforms such as Facebook and Twitter seem, *prima facie* to offer unique possibilities for academics working in the tradition of critical pedagogy to perhaps, more conveniently, engage in the type of “public scholarship” that has been encouraged by those such as Henry Giroux (Giroux, 2011), Peter McLaren (McLaren, 1998), and bell hooks (hooks, 1994). Particularly for educators, the ability to engage across multiple platforms on a variety of issues with individuals other than formal students, often in real time, arguably opens up the possibility for public scholarship in a way not previously imagined by the forbears of critical pedagogy by allowing for any individual with an Internet connection to “plug into” public discourse.

Recently, however, cultural theorists have pointed out that social media platforms frequently result in increased polarization and division between users, rather than a deepened sense of understanding between interlocutors (Bilton, 2014). Recent studies have even indicated that

online interactions can *decrease* empathy for others' viewpoints, allowing users to dehumanize those with whom they are engaging online (Lohmann, 2010). This may be perhaps most apparent in our contemporary political discourse, and the vitriolic turn on platforms such as Facebook and Twitter leading up to and since the 2016 presidential election.

If the purpose of academics engaging in this sort of “digital scholarship” is similar to the aim of most critical classrooms—to carve out the space for meaningful dialogue in order to forge new understandings for the aim of cultivating agents of change—then we argue that online platforms pose several key limitations for engaging in digital critical pedagogy. Namely, we argue that several key tenets of critical pedagogy, namely dialogue and humanization, are meaningfully compromised on digital platforms. In order to engage with other papers across this special issue by exploring the question “to what extent professors and instructors should engage in public scholarship across digital platforms,” we argue that clearly conceptualizing the strengths and limitations of online engagement must *precede* the question of *how*, *when*, or *whether* scholars ought to be *digital* pedagogues. We support the notion that academics ought to find ways to challenge the “normative conceptions of scholarship,” however, we caution that the pedagogical, epistemological, and philosophical limitations of digital pedagogies be carefully considered. Therefore, the purpose of this paper is threefold: We aim to 1) Discuss the limitations of social media as a democratic platform by outlining the ways in which power is embedded into popular online platforms; 2) Explore the ways in which the key tenets of critical pedagogy are commonly compromised on social media platforms and; 3) Assert that the most valuable work for critical educators remains embodied, sustained, and most importantly, executed IRL (in real life).

Beyond a Tool: Technology as an Axis of Power

Identifying and confronting systems of power lies at the heart of the project of critical pedagogy. Indeed, As Peter McLaren (1998) explains, “[c]ritical pedagogy is a way of thinking about, negotiating, and transforming the relationship among classroom teaching, the production of knowledge, the institutional structures of the schools, and the material relations of the wider community, society, and nation-state”(p. 441-442). Theorizing oppressive systems of power in the education system surrounding issues of race, gender, ethnocentric curriculum, and social class have all been vital to developing a robust framework for critical pedagogy. Drawing on the Frankfurt School tradition of critical theory, Latin American philosophies of resistance, and the cultural critiques of both feminist theory as well as Marxist and neo-Marxist traditions, the central project of critical pedagogy is to identify and confront systems of power to reconstruct society in a vision of social justice.

The ushering in of the digital age has presented a host of unique challenges across a variety of fields, especially education. Concerned primarily with the intellectual, emotional, and moral development of human beings, education has been particularly affected by the proliferation of digital technologies as technology continues to alter human life in new, and often unforeseen ways. Because education is a fundamentally human endeavor, educational scholars and practitioners must contend with the ways in which technology is influencing the ontology of the human subject. What it means to know, to relate to others and oneself, to engage in dialogue, and even to come of age are all rapidly changing in light of ongoing changes in technology. Due to the increasing ubiquity of technology in our everyday lives, technology is often understood as a taken for granted and unavoidable aspect of modern human life. Nowhere has this been more apparent than in public education. As scholars such as Neil Postman (1992) have argued, the ubiquity of technology has

resulted in a dearth of normative debates surrounding the role it *ought* to play in our lives, causing education scholars and practitioners to view all technology as merely a set of neutral tools.

Despite ongoing claims that education is trapped in a bygone era resistant to innovation, educational practitioners, scholars, and policy makers have been enthusiastic about infusing technology into the everyday lives of children in schools. From the widely criticized Channel One (Molnar, 1996) (Attick, 2008), to the present app-ification of teaching through the use of online applications such as ClassDojo, Duolingo, Socrative, and Edmodo, and the widespread implementation of Learning Management Systems (LMS) in higher education that provide platforms for online instruction, technology has been embraced at every level of the American educational process. Larry Cuban recognized this paradox as early as 1986 when he observed, “[f]ads, like changing dress hemlines and suit lapels, have entered and exited schools, yet these very same schools have been the targets of persistent criticism over their rigidity and resistance to reform” (Cuban, 1986, p. 5).

The recent technological restructuring of schools has served to intensify the neoliberal stranglehold on public school policy by allowing for unprecedented levels of accountancy, standardization, measurement, and surveillance. Despite this dramatic uptick in the presence of technology in schools—sometimes with technology subsuming school itself as in the case of cyber-schools or virtual schools (Miron & Gulosino, 2016)—little attention has been devoted to understanding how this constant exposure to technology is altering the way we learn and experience the world. Remaining absent from the dominant discourse surrounding technology and education are critical examinations of how modern technologies impact human subjectivity, the ways educators should address these changes, and how the influx of technology in education is the direct result of corporate influence, undermining the professional and intellectual autonomy of teachers, as well as exploiting captive markets.

While these are all examples of the ways in which discrete technologies have effects that reinforce systems of power, the Internet more broadly, and social media in particular are no exceptions. Due to the exceedingly far reaching usership of platforms like Facebook which, according to a recent study by Pew Research Center boasts approximately 1 billion users worldwide (Gramlich, 2018), issues of privacy, data mining, and even the spread of misinformation, have significant implications for the public domain. Furthermore, recent events such as the Equifax data breach of 2017 that compromised the personal information of over 145 million Americans (Halzack, 2014; Lieber, 2017), the alleged hacking of the Republican and Democratic National Committees by foreign entities during the last presidential election (Meyer, 2016), and the well-documented success of Russian “trolls” in manipulating social media platforms like Facebook and Twitter to influence political discourse all underscore the fragility of the digital infrastructures most people now rely on, on a daily basis.

A core issue lying at the center of the question regarding the ways in which scholars engage in public digital scholarship is a question surrounding the role of social media in a democratic society. Specifically, we argue that the legitimacy of social media as part of the public sphere must be examined in order to consider the ways it might be utilized as teaching and learning tool that supports the project of digitally engaged scholarship. In what follows, we draw on the concept of “digital counterpublics” in order to explore if social media can indeed function as part of the public sphere in such a way that support the project of critical pedagogy.

Social Media and the Public Sphere

We argue that a central concern for scholars seeking to utilize online platforms for critically engaged work must be considerations surrounding the limitations of such platforms as sites of public engagement. As Jürgen Habermas notes in *The Structural Transformation of the Bourgeois Public Sphere*, the public sphere “mediates between the private sphere and the sphere of public authority” (as cited in Hoskins, 2013, p. 3). He posits that it is “a discursive space where through the vehicle of public opinion puts the state in touch with the needs of society” (Habermas, 1991, p.#). The type of dynamic public life that Habermas envisioned as a necessary component of a vibrant democracy centers around sustained, embodied participation in public life.

While Habermas’ conceptualization of the public sphere offers a valuable framework for understanding life in a democratic society, scholars have rightfully shown that this theory does not fully capture the ways in which power is reified and contested in various enclaves of the public sphere. Most notably, Nancy Fraser (year) has challenged and expanded this notion of the public sphere through her concept of “subaltern counterpublics.” Drawing on Gayatri Spivak’s theory of the “subaltern” (Spivak, 1988) and Rita Felski’s concept of the “counterpublic” (Felski, 1989), Fraser argues that “subaltern counterpublics are formed as a result of the exclusions of the dominant publics and that their existence better promotes the ideal of participatory parity” (as cited in Kampourakis, 2016, p.1). In this way, subaltern public spheres support minoritized groups in carving out spaces to challenge hegemonic systems of power. Spaces such as barber shops, churches, or nightclubs catering to LGBTQ clientele are all examples of subaltern public spheres that have allowed for minoritized groups to contest dominant systems of power, and have indeed been sites of pivotal social organizing in modern history.

With the ushering in of the digital age, Fraser’s concept of the subaltern public sphere has been further amended by scholars to include the ways in which digital platforms serve as sites of political participation. For example, online social media platforms can allow for “activists, dissidents, and insurgents who make use of subaltern public spheres to defy the mainstream discourses in the public sphere” (Lee, et. al., 2018, p. 1949-1950). As such, many scholars conceptualize social media platforms as essential avenues for political contestation. On this view, websites such as Twitter function as a vital part of the public sphere, akin to Habermas’ “public square,” where individuals and groups not only participate in public discourse, but do important counter-hegemonic work. Marc Lamont Hill (2018) refers to these online platforms as “digital counterpublics” (p. 286). As Hill (2018) argues, a digital counterpublic can refer “to any virtual, online, or otherwise digitally networked community in which members actively resist hegemonic power, contest majoritarian narratives, engage in critical dialogues, or negotiate oppositional identities” (p. 286). Drawing on Fraser’s notion of “subaltern counterpublics,” where she points out the ways in which the traditional conceptualization of the public sphere à la Habermas fails to capture the ways in which minoritized groups work in various ways to contest hegemonic systems of power, and the example of the social media phenomenon “Black Twitter,” Hill argues that Twitter functions as a key mechanism by which subaltern groups politically engage on issues vital to their communities, contest master narratives, and socially organize. As Casarae L. Gibson further explains, “Black Twitter” as a Twitter sub-audience “is part of the social media-sharing site Twitter whereby Black American communities across state and regional boundaries comment on the latest popular culture, politics, and social affairs” (as cited in Gibson, 2013, p. 74). Through the mobilization of hashtags, Twitter users can effectively create sub-communities concerned with various social issues. Indeed, Twitter has been an indispensable aspect of many recent social justice movements including #BlackLivesMatter, #MeToo and #RedforEd (Hawbaker, 2019). While we do not seek to discredit

the value of these and other social movements that have been made possible through digital platforms, we argue that social media are characterized by key elements that call into question their “public” nature, and consequently their vitality as a tool for critical pedagogy. Importantly, according to Fraser (1990), “[t]he public sphere in Habermas’s sense is...conceptually distinct from the official-economy; it is not an arena of market relations, but rather one of discursive relations” (p.#). This key point, we suggest, raises concerns regarding the role of social media in the public sphere of a healthy democracy. Digital platforms such as Facebook and Twitter are deeply organized around systems of capital. In other words, social media is designed by capital to serve the interests of capital. While most, if not all, popular social media platforms are free to access with an Internet connection, the “users” are in fact the commodity of social media. Facebook’s recent public entanglement with Cambridge Analytica revealed the startling reality of the exploitation of user data (Diaz, 2018). Furthermore, we suggest that spaces such as nightclubs, churches, and barbershops—all spaces that fit squarely into Fraser’s definition of subaltern counterpublics—have traditionally been effective because they allow for evasive and subversive political organizing that importantly take place away from, and outside of, the dominant public eye. Social media platforms are—by design—characterized by, and extremely vulnerable to, surveillance and data-mining.

Further, as social media platforms are primarily concerned with customer satisfaction and not with promoting dialogue that contributes to a healthy democracy, sophisticated algorithms across all digital platforms ensure that users view content that they’ll find relevant to their interests—mainly ideas, and advertisements, that align with their worldview. Creating what Eli Pariser (2011) calls “the filter bubble,” such selective organizing of social media content results in hyperpolarized enclaves across digital platforms that impede, rather than promote, productive dialogue across groups.

Furthermore, a recent study on Twitter conducted by Demos, a bipartisan think-tank based in the United Kingdom found that this “echo chamber effect” figures most prominently among those “furthest from the political mainstream” (Cheshire, 2017, p. #). Therefore, while the notion that social media platforms can serve as digital counterpublics that allow for minoritized groups to carve out spaces for resistance, they simultaneously allow for the proliferation of misinformation and propaganda by those with antidemocratic goals. Such conditions call into question the usefulness of social media as a tool for engaging in critical pedagogy across digital platforms.

Indeed, as Judith Suissa (2016) notes, “ideas about what is educationally valuable and worthwhile cannot be detached from ideas about what forms of social and political organization are most morally defensible and desirable” (p. 771). Social media lacks key elements that contribute to a healthy intellectual environment and the sustained, embodied organizing that makes social movements successful. Deborah Meier, for instance, has argued that educative spaces have worked best “when they model the best practices of civic and intellectual life, with small classrooms serving as settings for safe but searching and honest debates” (as cited in Klinenberg, 2018, p. 87). Social media platforms, through the ways in which they contribute to the obfuscation of reality and the intentional bifurcation of groups based on their search history and previous “likes” does not promote educative experiences. If the project of education and the work of educators is, as we argue, done *in* and *for* the health of our democracy in the public sphere, we argue that the value of social media as a pedagogical tool must be re-examined. In fact, we might argue that social media in many ways contributes to the type of social isolation that makes authentic social infrastructure less robust.

As Eric Klinenberg (2018) notes, “[a]s meaningful as the friendships we establish online can be, most of us are unsatisfied with virtual ties that never develop into face-to-face relationships.

Building real connections requires a shared physical environment—a social infrastructure” (p. 42). Public schools, as a vital “palace for the people,” to use Klinenberg’s language, have the potential to support the project of democracy by bringing together heterogeneous groups to engage on relevant topics. This is not to suggest that public schools always function as idyllic spaces committed to democratic values. To the contrary, the colonizing effects of public schools and their contribution to social inequality is the premise on which critical pedagogy was founded.

Social media do, to an extent, promote a diversity of subaltern voices that may otherwise have not had a platform, elevating the possibilities for Gramsci’s notion of the “organic intellectual.” Gramsci (1971) notes, “[a]ll men are intellectuals, one could therefore say: but not all men have in society the function of intellectuals” (p. 115). Social media platforms do allow for those not backed by institutions to engage in political discourse to a degree, however a user’s influence is still greatly tempered by the ability of the individual to leverage the capital of social media, such as hashtags, in order to gain an “audience.”

Additionally, emerging research suggests that an increasing number of accounts across various social media platforms are not operated by humans at all but by “autonomous entities” known as “social bots” (Varol, et. al. 2017). These social bots, which are social media accounts controlled algorithmically by software, can serve useful purposes such as automatically distributing information at timed intervals. Increasingly, however, social bots are being utilized to “emulate human behavior to manufacture fake grassroots political support, promote terrorist propaganda and recruitment, manipulate the stock market, and disseminate rumors and conspiracy theories” (Varol, et. al., 2017, p.#). Recent estimates conclude that approximately 15% of all Twitter accounts are in fact social bots (Varol, et. al. 2017). The pollution of social media platforms with malicious software aimed at purposefully deceiving human users further complicates the Internet landscape by capitalizing on and manipulating sites’ algorithms in order to attract more “likes,” “shares,” and “views” in order to spread false and even dangerous content. The proliferation of social bots casts further doubt on the integrity of social media platforms as sites of democratic participation. Furthermore, it displays the ways in which social media still organize around the principles of capital and are ultimately proprietary, therefore potentially limiting their ability to support radical liberatory projects.

For example, the notion that technology can support democratic social movements is widely accepted and infrequently challenged. While there are examples of technology like social media platforms being utilized for political organizing such as the role technology played in protests against the Dakota Access Pipeline, Arab Spring, and even Occupy Wall Street, the limitation of technology as a liberatory tool lies in the logical conclusion of techno-rationality: the elimination of what makes us human (Brown, Guskin, & Mitchell, 2012; Ngak, 2011). While there is evidence that social media can play a role in the initial organizing of social movements, there are also indications that its impact is fleeting, because social movements require sustained, bodily presence, and a degree of risk. As Emily Dreyfuss (2017) notes with regard to protests surrounding the Dakota Access Pipeline, “[i]f social media enabled the Standing Rock Sioux to amplify their protest, its speed and ceaseless flow also allowed the world to forget about them” (p.#). In other words, on platforms like Facebook and Twitter that are predicated on what is “trending,” social movements themselves become passing trends. Criticism regarding the superficiality of online “activism” has even garnered this phenomenon its own word—slacktivism (Jones, 2016). Nolan Cabrera, Cheryl Matias, and Roberto Montoya define “slacktivism” as “an online form of self-aggrandizing, politically ineffective activism” (Cabrera, Matias, & Montoya, 2017, p.#). Henrik Serup Christensen (2011) has referred to online slacktivism as “political activities that have no

impact on real-life political outcomes, but only serve to increase the feel-good factor of the participants” (p.1). This is not to suggest that *all* online engagement by scholars fits this definition of “slacktivism,” however, we will explore the possibilities and limitations of this form of scholarly work. While gaining awareness of social issues through online platforms may be an acceptable starting point for cultivating praxis, or “action and reflection upon the world in order to change it,” it is doubtful that re-posting news articles with their accompanying hashtags or Tweeting is sufficient to reach the critical transitivity advanced by critical pedagogues (hooks, 1994, p. 14). Furthermore, we argue online interactions neutralize the corporeal presence of gender, race, and sexuality, among other identities that are integral to fostering dialogue that supports the process of critical inquiry and humanization. However, the neutralization of marginalized identities on online platforms often serves to reify hegemonic structures of power and privilege. Here, we do not mean to suggest that such limitations of the online format cannot be overcome, but instead suggest that the value of social media platforms as democratizing spaces must be approached with caution. By turning next to several key tenets of critical pedagogy, specifically dialogue and humanization, we argue that online platforms meaningfully compromise our ability as critical pedagogues to engage in the type of problem posing on social media that is required to bridge understanding and elevate critical consciousness.

Critical Pedagogy and Social Media

Although critical pedagogy has been the object of ongoing critique (Ellsworth, 1989), it remains a vibrant tradition for scholars and educators seeking social change. With intellectual roots in social reconstructionism, “[c]ritical pedagogy is an educational philosophy that chooses to work for change” (Ellsworth, 1989, p. 100). The notion of radical humanization—both of oneself and others—through authentic dialogue lies at the heart of critical pedagogy.

While critical pedagogy is not a monolithic tradition, there is little disagreement surrounding the role of dialogue in promoting the realization of critical transitivity that supports radical action. As explained by Antonia Darder, Marta Baltodano, and Rodolfo D. Torres (2003):

The principle of dialogue as best defined by Freire is one of the most significant aspects of critical pedagogy. It speaks to an emancipatory educational process that is above all committed to the empowerment of students through challenging the dominant educational discourse and illuminating the right and freedom of students to become subjects of their world. (p. 15)

For Freire, dialogue is necessary for students and teachers in reaching a deeper understanding of the oppressive forces that shape social relations, or *conscientization* (Freire, 1998). Conscientization, defined by Darder, Baltodano, and Torres (2003) as “the process by which students, as empowered subjects, achieve a deepening awareness of the social realities that shape their lives and discover their own capacities to re-create them,” requires an ongoing process of human interaction and contestation (p. 15). Technology, through its infiltration into nearly every aspect of our daily lives is itself a system that shapes students’ lives and limits, defines, or restructures the possibilities they imagine for affecting change on their surroundings. Because it has become the central medium of communication, technology has come to redefine how we negotiate meaning with one another. The more we use technology to engage with one another, the greater the challenge for critical pedagogues in fostering authentic dialogue. As bell hooks (1994) notes, “[t]o engage in dialogue

is one of the simplest ways we can begin as teachers, scholars, and critical thinkers to cross boundaries, the barriers that may or may not be erected by race, gender, class, professional standing, and a host of other differences” (p. 130). However, technologically mediated interactions undermine authentic dialogue through its dehumanizing effects. One indicator that such interactions result in the objectification of others is the proliferation of online bullying, particularly among young people. Online bullying can take many forms. According to Rachel Lohmann (2010), cyberbullying can be defined as “willful and repeated harm inflicted through the use of computer, cell phones, and other electronic devices” (para. 3). Lohman (2010) argues, “cyberbullying is an easier way to bully because it doesn’t involve face to face interaction” (para. 5). A recent study reveals that 70% of students report seeing instances of online bullying frequently. Additionally, 81% of young people believe that cyberbullying is easier to perpetrate than face to face bullying. Cyberbullying and Internet trolling are made possible due largely to the ways social media *dehumanize* our interactions. Sherry Turkle (2015) argues that in the absence of a “physical presence to exert a modulating force,” (p. 262) these dehumanizing interactions are made easier. Interestingly, Freire notes that, “[t]o deny the importance of subjectivity in the process of transforming the world and history is naïve and simplistic. It is to admit the impossible: a world without people” (Freire, 1998, p. 50). A “world without people” might be currently unimaginable, but technology and social media certainly allow us to move in and out of dialogic spaces where the human element is muted. While cyberbullying might be an extreme example, it underscores the dehumanizing potential of online interactions and therefore warrants scrutiny for those working in the tradition of critical pedagogy.

The more students and teachers grow accustomed to technologically-mediated social relations, the greater the demand on those working in the tradition of critical pedagogy to explore the effects technology has on the ability of educators to foster authentic dialogue and student agency. For example, with the proliferation of social media our students, particularly at the university level, spend more time engaging in asynchronous, technologically mediated “conversations” than ever before. The often uncritical “sharing” of news articles without regard to validity or authenticity, as well as the ways in which sites like Facebook tailor news based on users’ previous “likes” contributes to dialogic echo-chambers where users are more likely to be exposed only to content that reflects their own beliefs (Pariser, 2011). In the concluding section, we want to examine some specific cases that we believe illustrate more clearly some of the inherent limitations of social media in terms of public discourse and educational scholarship.

Social Media and Public Spaces: Illustrations and Implications for Digital Scholarship

Imagine yourself in an ideal public square, where people are openly discussing issues of relevance to their respective communities, exchanging ideas about how to improve those communities and address issues that affect them all, attempting in good faith to convince others to see their points of view, genuinely listening to the points of view of others, and so on. In such a setting, genuinely educational experiences can take place, worldviews can be expanded, and alliances forged, though of course none of these are guaranteed. Now further imagine that some unknown percentage of the people that you interact with are, in reality, automatons with pre-programmed scripts and modes of engagement, unable to authentically respond to or even hear you or anyone else. Imagine that some other unknown percentage of people that you interact with are paid by third parties to engage you on specific topics of conversation so as to change your behavior in other areas of your life. A third unknown percentage of people in this public square are actually taking covert surveys designed as conversations, the results of which they will later sell or use for their own purposes. Other groups are simply listening to the conversations of the discussants and

collecting data on what is being discussed, by whom, and with whom. Some individuals are there to keep tabs on others, and to track specific topics of discussion that have been deemed by other third parties to be undesirable or dangerous. Many of the loudest actors in this square are simply avatars for large corporations and other moneyed interests, and they are given various means of amplifying their own voices and chosen topics of discussion. Finally, imagine that the entire public square is governed by an invisible set of rules that dictate how likely you are to encounter another given individual, set the bounds for what is acceptable to discuss and what is not, and even render entire groups of individuals nearly invisible to you because they have been deemed irrelevant based on your own past history of conversations and interactions, all of which have been collected and stored by the public square. Additionally, everyone in the square has the ability to make it such that they never have to interact with or even see other individuals with whom they disagree or who they simply do not like.

We do not feel that we are significantly exaggerating when we say that the situation just described is relevantly analogous to the one that individuals find themselves in when they are engaged on social media.¹ While a space like the one we have just described might not render it entirely impossible to have genuinely educative and important sociopolitical discussions, it is difficult to see why anyone, particularly educators who are interested in authentic and open dialogue, would affirmatively choose or defend this arena as a worthwhile one in which to attempt those types of conversations. And though it is critical that we as scholars interrogate concepts such as authenticity and dialogue, we submit that it is difficult to conceptualize any plausible definitions of those terms whatsoever that would make our hypothetical public square amenable to their actualization. When we take into account the commitments of critical pedagogy discussed above, it seems to us that the social media space at best makes genuine dialogue incredibly difficult and at worst makes it unthinkable. The structure of the space of social media is entirely unlike the more traditional public spheres discussed earlier, and attempts to draw analogies, direct or indirect, between social media spaces and a church or bar are fundamentally misguided.

Perhaps no recent episode has more clearly illustrated the fundamental stakes of academics attempting to change hearts and minds via online dialogue than the social media saga of far-right conspiracy theorist Alex Jones. While detailing the history and rise of Jones, a notorious conspiracy theorist and racist, would take us much too far afield here, what is notable is that his ultimate banning from virtually all important social media platforms (Twitter, Facebook, Youtube) was in many quarters hailed as a victory for public discourse, a sign, however, small, that social media could to at least some degree self-regulate, and naturally filter out the most corrosive and detrimental political actors and messages (Nicas, 2018). It is tempting, particularly for academics and leftists who would attempt to utilize social media for the purpose of genuinely affecting the political realities of contemporary American society, to view this development in those terms. That is, to conceptualize the banning of Jones as in some sense progress (or at least hope) for online discourse via social media. In a perverse way, Jones provided hope for leftists on two fronts, first because his banning could be viewed through this hopeful lens as healthy for the future of online “public” discourse, and second because he was able to assert such a demonstrably large political influence both on individual people as well as the American political milieu in general. The thought here roughly is that “if he can do it, why can’t we?” In this sense, the Jones affair is illustrative in multiple ways of two of the great hopes for left-academic engagement on social media.

To our minds, the major version of the academic leftist argument for engagement through social media that the Jones affair taps into is the idea that social media is in some sense a truly (or

1. Indeed, we have oversimplified significantly in some ways, leaving out the fact, for example, that the entire public square in the analogy would also be privately owned and driven by a profit motive.

at least imperfectly) democratic public sphere, where there is or can be a genuinely open exchange of ideas, and that it is our responsibility as public intellectuals to engage in this new public sphere, with the ultimate goal of effecting leftist political and social change. There are numerous studies that look at the emergence of publics and political movements across various sociopolitical contexts, and many of them take the ultimately sanguine view that social media either already is or could become a nearly ideal expression of the Habermasian vision of the public sphere (Choi & Cho, 2017; Hoskins, 2013; Shirky, 2011). We contend that this view of social media is reliant on deeply flawed assumptions about the form and structure of social media itself, and that, as currently constituted, social media platforms hold little promise for effective leftist discourse and political development, perhaps particularly when that discourse originates from academics.

With respect to the argument that social media platforms are in at least some minimal sense inherently public, and therefore pregnant with liberatory potential, we argue that this conceptualization of the issue both fundamentally misinterprets the basic structure of social media as well as the driving motivations of those who exert control over those platforms. It is in some sense definitional that all major social media platforms, including Facebook, Twitter, Reddit, and so on are not public in any traditional sense, being entirely privately owned and run as corporate entities. While this may initially seem like a minor point, it reveals a number of more serious underlying issues when it comes to considering the possibilities of public discourse on these platforms. For example, while there are certainly cases of social media platforms seeming to purge malignant actors from their spheres of discourse, such as the example of Alex Jones (it is, we should note, an open question whether or not this would even be a feature of a truly public space of discourse) it is critical to note that the mechanisms by which this discursive filtering is accomplished are generally entirely automated and are as likely to “accidentally” catch entirely innocent and honest interlocutors in their digital nets.

Another recent illustrative example of this process was the so-called “adpocalypse” that descended on Youtube content creators in late 2017. In what would turn out to be a precursor to the banning of Alex Jones from YouTube, the platform undertook a large-scale recalibration of its advertising algorithm. This was done, in large part, to appease advertisers who were unhappy with their products being advertised before or within videos that contained hateful imagery or speech (the main target were groups of explicitly racist and neo-nazi channels that had had major advertiser’s products inadvertently displayed at beginnings of their videos). The monetization of YouTube content is a large topic, but for our purposes what is important is that advertising dollars, which are correlated to the number of views a given video receives, are an important source of revenue for content creators on the platform, and enable smaller channels to continue producing videos and gain wider audiences. This is not something that is controlled by an individual or even a group of individuals who work for YouTube. Rather, advertisements are assigned to videos based on algorithms that track the typical audience, number of viewers, and the like for specific channels and types of videos. For example, a popular fitness YouTuber is more likely to have advertisements for shoes or nutritional supplements appear on their videos than a popular political channel. This is an entirely automated process, and until recently was one that largely operated in the background and served to provide supplementary income for YouTube content creators. However, once the algorithm was adjusted so as to deny advertising revenue to channels that proffered hate-speech or bigoted symbology (e.g. swastikas, hoods, etc.) a number of interesting side-effects developed, examples that serve to illustrate the actual goals of social media, as well as the inherent barriers to genuine discourse that are built into their business models. While the adjusted algorithm did indeed cut traffic and revenue for the explicitly racist and bigoted channels, it also caught up entirely unrelated channels in the net (Dunphy, 2017). For example, a popular leftist political podcast, *The*

Majority Report, had its advertising revenue entirely cut off for months because of videos that they had done exposing and critiquing far right internet personalities. While the intention of these videos was to demonstrate the inconsistencies and absurdity in the objects of their critique, the algorithm, which is inherently incapable of detecting things like sarcasm or parody, only recognized certain key terms and symbols (e.g. “nazi” or “white power”) and tagged the videos as hate-speech, and marked the entire channel as “not advertiser friendly.” This resulted in a number of leftist channels having to shutter completely, and others coming very near to having to do the same. The only survivors were channels that had built up an independent network of private supporters or outside sources of funding, and the policy ultimately affected as many antiracist and antifascists channels as it did explicitly racist and fascist ones (Grind & McKinnon, 2019).

The point of these examples is not that this or that specific content creator was affected, but what this case tells us about why social media platforms behave in the ways that they do. What drove YouTube to alter its advertising algorithm, and what ultimately drove Twitter and Facebook to ban Alex Jones, was that the presence of these controversial figures and ideas on their platforms had become more financial trouble than they were worth. YouTube did not ban or remove explicitly racist or bigoted content before their large advertisers complained about that content because that content generated views, clicks, and ultimately dollars for the platform, and Twitter behaved similarly with Alex Jones. Being private corporations, the fundamental imperative of which is to maximize profit at all costs, social media platforms have no incentive whatsoever to encourage or discourage any specific type of discourse or content so long as their bottom lines are not affected. It was at the exact moment, and only at that moment, when Alex Jones became a financial liability rather than an asset that he was removed from these platforms. Social media is neither biased toward liberatory discourse or toward right-wing bigotry, but only toward generating profits for its owners. It is in the interest of social media companies to court controversy to generate clicks and traffic precisely up to the point when it becomes toxic to their brand identity. As Google CEO Eric Schmidt once remarked, “[t]he ideal is to get right up to the creepy line and not cross it” (Naughton, 2017). To echo the point made above, these platforms are not simply neutral tools to be used on equal footing by various parties in the grand war of ideas, but rather specifically designed and tailored profit centers which are meant to generate wealth for the small group of individuals that have ownership stakes in them. Rather than being public squares, these are highly regulated private domains built for capitalists by capitalists. Indeed, Twitter CEO Jack Dorsey recently inadvertently made this exact point, during an interview regarding the company’s approach to political speech and censorship. After denying any inherent bias toward or against any particular, Dorsey claims that “So the main thing that we’re focused on is how we stay transparent with our actions and continue to be impartial – *not neutral, but impartial*” (as cited in Feinberg, 2019, p. #). What Dorsey is, perhaps subconsciously, revealing here is that the first commitment of social media platforms is not to any ideal of openness, publicity, or discourse, but rather to their own proprietary algorithms and the false image of impartiality that those algorithms afford them.

The question that we as critical pedagogues need to ask ourselves is whether or not public discourse should be governed by algorithms at all. Once again, the issue at stake here is not one of critical educators and academics taking cues from the right over how to engage in the arena of social media, but rather about whether or not a medium that has the particular features of current social media platforms (i.e. impersonality, a profit motive, a preponderance of bad faith actors, a bias toward ideological bubble creation, etc.) can ever truly be thought of as a public square in the ways that matter. That is, given the way social media platforms are structured, the demonstrable

ways that they have behaved when it comes to addressing political speech, and their inherent motivations, it seems that there is little reason to think that critical educators can or ought to look to these platforms as areas of genuine liberatory discourse.

Conclusion

Our goal in this discussion has not been to argue that social media platforms can never in any circumstance support genuinely educative discursive engagements. Of course, even in circumstances not conducive to connection and education, people will find ways to make due. Rather, what we hope to have shown is that these platforms are at the very least structurally and conceptually hostile toward those types of engagements, and make authentic dialogue much more difficult than it ought to be, and indeed than it is in other embodied contexts.

Ultimately, it seems to us that much of the motivation behind calls for academics to engage politically or otherwise via social media boils down to a kind of techno-fatalism about our world and the way things are in it. Social media is seen as the inevitable future of political discourse and its asynchronous, disembodied structures are already making direct inroads into education. While we acknowledge that educators and academics must respond to the changing socio-cultural contexts in which they operate, and that ignoring potential tools at our disposal in our large-scale educative and political projects is an intellectual and political mistake, we also argue that these tools must be evaluated soberly and critically. If social media is indeed the inevitable future of education and discourse, we must at least enter that future with a clear-eyed view of the structural and philosophical limitations that exist in those spaces. It is to that goal that we hope to have contributed here.

References

- Attick, D. (2008). Consumption is the message: Television advertising and adolescents. In Boyles, D. *The corporate assault on youth: Commercialism, exploitation, and the end of innocence* (pp. 53-58). New York, NY: Peter Lang.
- Bessi, A. & Ferrara, E. (2016). Social bots distort the 2016 US presidential election. *First Monday*, 21(11), 1-14.
- Bilton, N. (2014, August 6). Don't fight flames with Flames. *The New York Times*. Retrieved from <https://www.nytimes.com/2014/08/07/fashion/social-media-arguments-cant-win-propositions.html>
- Brown, H., Guskin, E., & Mitchell, A. (2012, November 28). The role of social media in the Arab uprisings. *Pew Research Center*. Retrieved from <https://www.journalism.org/2012/11/28/role-social-media-arab-uprisings/>
- Cabrera, N.L., Matias, C.E., Montoya, R. (2017). Activism or slacktivism?: The potential and pitfalls of social media in contemporary student activism. *Journal of Diversity in Higher Education*, 10(4), 400-415.
- Cheshire, T. (2017). Social media echo chamber causing political tunnel vision, study finds. *Sky News*. Retrieved from <https://news.sky.com/story/social-media-echo-chamber-causing-political-tunnel-vision-study-finds-10755219>
- Choi, S.Y. & Cho, Y. (2017). Generating counter-public spheres through social media: Two social movements in neoliberalised South Korea. *Jaynost: The Public*, 24(1), 15-33.
- Christensen, H.S. (2011). Political activities on the internet: Slacktivism or political participation by other means? *First Monday*, 16(2), 1-9.

- Cuban, L. (1986). *Teachers and machines: The classroom use of technology since 1920*. New York, NY: Teachers College Press.
- Darder, A., Baltodano, M., Torres, R.D. (2013). Critical pedagogy: An introduction. In Darder, A., Baltodano, M., Torres, R.D. *The critical pedagogy reader* (pp.1-20). New York, NY: Routledge.
- Diaz, J. (2018, March 6). Facebook scandal's lesson: Your persona is a commodity. *San Francisco Chronicle*. Retrieved from <https://www.sfchronicle.com/opinion/diaz/article/facebook-scandal-s-lesson-your-persona-is-a-12777786.php>.
- Dreyfuss, E. (2017, January 24). Social media made the world care about standing rock – and helped it forget. *Wired*. <http://www.wired.com/2017/01/social-media-made-the-world-care-standing-rock-helped-forget/>.
- Dunphy, R. (2017, December 28). Can Youtube survive the adpocalypse? *New York Magazine*. Retrieved from <https://nymag.com/intelligencer/2017/12/can-youtube-survive-the-adpocalypse.html>.
- Ellsworth, E. (1989). Why doesn't this feel empowering? *Harvard Education Review*, 53(9), 297-324.
- Feinberg, A. (2019, January 17). Jack Dorsey has no clue what we Wants. *Huffington Post*. Retrieved from https://www.huffingtonpost.com/entry/jack-dorsey-twitter-interview_us_5c3e2601e4b01c93e00e2a00
- Felski, R. (1989). *Beyond feminist aesthetics*. Cambridge, MA: Harvard University Press.
- Ferrara, E. & Yang, Z. (2015). Quantifying the effect of sentiment on information diffusion in social media. *PeerJ Computer Science*, 1(26) 1-16. <https://doi.org/10.7717/peerj-cs.26>.
- Fraser, N. (1990). Rethinking the public sphere: A contribution to the critique of actually existing democracy. *Social Text*, 25/26,56-80.
- Friere, P. (1998). *Pedagogy of freedom: Ethics, democracy, and civic courage*. New York, NY: Rowman & Littlefield Publishers.
- Gibson, C. L. (2013). Social media: A vital tool in teaching contemporary Black American protest. *The Midwest Quarterly*, 73(1), 386-409.
- Giroux, H. (2011). *On critical pedagogy*. New York, NY: Bloomsbury.
- Gramlich, J. (2018). 5 facts about Americans and Facebook. *Pew Research Center*. Retrieved from <http://www.pewresearch.org/fact-tank/2018/04/10/5-facts-about-americans-and-facebook/>
- Gramsci, A. (1971). *Selections from the prison notebooks of Antonio Gramsci*. New York, NY: International Press.
- Grind, K. & McKinnon, J.D. (2019, January 8). Facebook, Twitter turn to right-leaning groups to help referee political speech. *The Wall Street Journal*. <https://www.wsj.com/articles/facebook-twitter-solicit-outside-groups-often-on-the-right-to-referee-political-speech-11546966779>
- Habermas, J. (1991). *The structural transformation of the public sphere: An inquiry into a category of bourgeois society*. Cambridge, MA: MIT Press.
- Halzack, S (2014, September 8). Home Depot hit by a cyber breach. *The Washington Post*. Retrieved from https://www.washingtonpost.com/business/economy/home-depot-hit-by-cyber-breach/2014/09/08/7b614982-3799-11e49c9febb47272e40e_story.html?utm_term=.b52af82003c5
- Hawbaker, K.T. (2019, April 30). #Metoo: A timeline of events. *The Chicago Tribune*. Retrieved from <https://www.chicagotribune.com/lifestyles/ct-me-too-timeline-20171208-htmlkstory.html>

- Hill, M. L. (2018). Thank you, Black Twitter: State violence, digital counterpublics, and pedagogies of resistance. *Urban Education*, 53(2), 286-302.
- hooks, b. (1994). *Teaching to transgress: Education as the practice of freedom*. New York, NY: Routledge.
- Hoskins, G. T. (2013). Meet the Habermases: Charting the emergence of a social media-enabled public sphere in new democracies. *The International Journal of Technology, Knowledge, and Society*, 9(1), 25-39.
- Jones, A. A. (2016, October 31). Challenging slacktivism: Activism on social media is not enough. *Huffington Post*. Retrieved from http://www.huffingtonpost.com/entry/challenging-slacktivism-activism-on-social-media_us_5817c2dbe4b09b190529c8ae
- Kampourakis, I. (2016). Nancy Fraser: Subaltern counterpublics. *Critical Legal Thinking*.
- Klinenberg, E. (2018). *Palaces for the people: How social infrastructure can help fight inequality, polarization, and the decline of civic life*. New York, NY: Crown Press.
- Lee, P.S.N., Clement, Y.K. So, Lee, F, Leung, L, & Chan, M. (2018). Social media and politics partisanship – A subaltern public sphere’s role in democracy. *Thematics and Informatics*, 35(1), 1949-1957.
- Lieber, R. (2017, October 16). How to protect yourself after the Equifax data breach. *The New York Times*. Retrieved from <https://www.nytimes.com/interactive/2017/your-money/equifax-data-breach-credit.html>.
- Lohmann, C. R. (2010, November 15). Taking on cyberbullying. *Psychology Today*. Retrieved <https://www.psychologytoday.com/blog/teen-angst/201011/taking-cyberbullying>
- McLaren, P. (1998). Revolutionary pedagogy in post-revolutionary times: Rethinking the political economy of critical education. *Educational Theory*, 48(4), 441-442.
- Meyer, J. (2016, October). Russia hack of U.S. politics bigger than disclosed, includes GOP. *NBC News*. Retrieved from <https://www.nbcnews.com/new/us-news/russia-hack-u-s-politics-bigger-disclosed-includes-gop-n661866>
- Miron, G. & Gulosino, C. (2016). Virtual schools report 2016. *National Education Policy Center*. Retrieved from <http://nepc.colorado.edu/publication/virtual-schools-annual-2017>.
- Molnar, A. (1996). *Giving kids the business: The commercialization of America’s schools*. Boulder, CO: Westview Press.
- Naughton, J. (2017, January 8). Tim Wu: The internet is like the classic story of the party that went Sour. *The Guardian*. <https://www.theguardian.com/technology/2017/jan/08/tim-wu-interview-internet-classic-party-went-sour-attention-merchants>
- Ngak, C. (2011, October 13). Occupy wall street uses social media to spread nationwide. *CBS News*. Retrieved from <https://www.cbsnews.com/news/occupy-wall-street-uses-social-media-to-spread-nationwide/>
- Nicas, J. (2018, September 4). Alex Jones said bans would strengthen him. He was wrong. *The New York Times*. Retrieved from <https://www.nytimes.com/2018/09/04/technology/alex-jones-infowars-bans-traffic.html>.
- Pariser, E. (2011). *The filter bubble: How the new personalized web is changing what we read and how we think*. New York, NY: Penguin Books.
- Postman, N. (1992). *Technopoly: The surrender of culture to technology*. New York, NY: Vintage Books.
- Shirky, C. (2011). The political power of social media: Technology, the public sphere, and political change. *Foreign Affairs*, 90(1), 28-41.
- Spivak, G. (1988). Can the subaltern speak. In Nelson C. & Grossberg, L. *Marxism and the interpretation of culture* (pp. 271-316). Urbana-Champaign, IL: University of Illinois Press.

- Suissa, J. (2016). Reflections on the counter in educational counterpublics. *Educational Theory*, 66(6), 769-786.
- Turkle, S. (2015). *Reclaiming conversation: The power of talk in a digital age*. New York, NY: Penguin Books.
- Varol, O., Ferrara, E., Davis, C.A., Menczer, F., & Flammini, A. (2017). Human-bot interactions: Detection, estimation, and characterization. Proceedings of the Eleventh International AAAI Conference on Web and Social Media (pp.280-289). Retrieved from <https://aaai.org/ocs/index.php/ICWSM/ICWSM17/paper/view/15587/14817>.

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On the Lived Experience of Truth in an Era of Educational Reform: Co-responding to Anti-intellectualism

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Abstract

The severity of the challenges made to traditionally and historically accepted understandings of truth, what is true, what is false and “fake,” and even what is real, continues unabated in American public discourse. Nevertheless, the primary argument in this paper does not aim to identify the causes of the breakdown of representation (i.e. in the Trump administration, within the education reform movement) and the correspondence-based conceptions of truth. Instead, the focus is on discussing the hermeneutic phenomenology of Martin Heidegger and offering a conceptualization of truth as lived and experienced. Challenges to truth are to be understood not as an attack on the foundations of Western rationality, but as built into the presuppositions that inform the taken for granted representational understanding of truth. Democracy requires a space whereby a multitude of ideas can flourish alongside one another. Truth as aletheia, a more pragmatic and phenomenologically-attuned conceptualization of truth, can serve as a way forward in honoring this key tenet of democracy. The results of this reflective analysis of truth as aletheia is a broadened description and tentative definition that can offer new insights for living into a more democratically-driven future than can reductive, correspondence-based conceptions of truth.

Keywords: *Truth, Aletheia, Martin Heidegger, phenomenology, educational reform*

Martin Heidegger is most often known and referenced for his fundamental ontology of Da-sein. This analysis is the primary aim of his most famous work *Being and Time* (1927/1962) and continues to exist as an inspiration for many Continental philosophers who appreciate his project to raise anew the question of the meaning of being. Indeed, in his analysis of the ontological structure of Da-sein he names and describes various concepts and existential terminology that many take to be his most influential. For example, Andrew Feenberg, who first introduced me to Heidegger’s philosophy as a graduate student, argued that it is perhaps Heidegger’s concept of world as a meaningful totality or context that is his most important contribution to modern philosophy (Feenberg, 2012). What is less appreciated from and beyond *Being and Time* is Heidegger’s interpretive account of truth as *aletheia*.

In what follows I begin to unpack and think through an unfinished thread from an earlier research project (Kruger-Ross, 2016), specifically an account of truth as *aletheia*. My doctoral work retraced Heidegger’s conceptualizations of world, attunement (*Befindlichkeit*), and Enframing/Positionality (*Ge-stell*) as they might inform and transform a phenomenology of “being a teacher” while neglecting the powerful analyses of language and truth provided in *Being and Time*.

However, given the oddly public interest in the relationship between Heidegger and National Socialism with the recent publication of the Black Notebooks, it may be helpful to note that I specifically address this concern in Chapter 2 of the earlier project. Even a tentative reflective analysis of truth as *aletheia*, or the interplay between unconcealment and concealment as first described by Heidegger, was beyond the ontological analysis of teaching I originally took aim at a few years ago. Truth as unconcealed and concealed names a fundamental grasping of how truth is experienced, as at once bringing an understanding to the light while also acknowledging the shadow. A simple visual example is helpful. An object (e.g., a coffee cup, a book) is visible from only one perspective or angle, but there are always perspectives and angles that remain hidden, that cannot be seen or remain concealed. In short, Heidegger argues (and Greek philologists have begrudgingly agreed) that truth as *aletheia* (as the interplay between unconcealment and concealment, revealing and concealing) exists *prior to* any understanding of truth as correlation, as one logical proposition representing the meaning of another.

As it may already be clear, an analysis of truth can quickly become complex and abstract. This must be so, however, for our lives as human beings are wrapped up within, constituted even, our understanding of truth. Yet, if we recall that phenomenology, both as a methodology and philosophical perspective, is grounded in the lived experience of human beings we needn't be too worried. Phenomenology aims to return to the nature and character of the lived experience of a particular phenomenon *as it is experienced*. Heidegger (1927/1962), in his opening descriptions of phenomenology as a method in *Being and Time*, writes that the phenomenological maxim "to the things themselves" is more accurately described as "to let what shows itself be seen from itself, just as it shows itself from itself" (p. 30). This confounded play with words does not need to be read as obtusely as it often is. Phenomenological work begins and ends with understanding experience, as it is experienced. What is like to be a novice teacher in a New Orleans "charter" school? How do people of color experience the curriculum? How do immigrant parents experience their relationship to the neighborhood school? With phenomenology, the familiar becomes strange; we cannot forget though that the strange remains familiar as it is grounded in our lived experience.

I begin first with an introduction and overview of Heidegger's understanding of truth as *aletheia* as it is situated within the larger arc of this thinking before more fully addressing the transformation in the traditional distinction of truth. This overview is no doubt incomplete but can offer a sketch of the necessary background needed before I turn to a number of examples to explore how truth as *aletheia* might occur in at least two contexts, the classroom and in the educational reform movement. A final summary and notes for further thinking follow.

If we, the general public, were better able to grasp a phenomenologically-grounded understanding of truth, we might, I believe, be able to survive the dramatic challenges to our democratic institutions in the midst of educational reform. Unpacking and analyzing simple binaries such as true/false and right/wrong from the stance of truth as *aletheia* transforms and stretches these reductive understandings of truth. Truth, as the interplay of concealing and unconcealing, may, for example, be better grasped as hermeneutical circles that include many more possibilities rather than simple continuums between binaries. In this writing, I analyze this path of thinking in such a way that a non-philosopher or phenomenologist will be able to think differently about lies and truth in their everyday lives. Democracy forces us to live in a lived experience of true and false—of MSNBC, Fox News and between. We should have descriptions of how all of these lived experiences of "truth" can co-exist. It is my hope that this manuscript corresponds to this kind of description.

The Post-truth Era?

Nearing the end of 2018, some news organizations (and scholars as well) have named our current time as the domain of “post-truth.” The “post-” prefix is an explicit reference to postmodern thinkers such as Jean-François Lyotard, Michel Foucault, Jacques Derrida, and Richard Rorty and their destruction and deconstruction of Truth. I reserve Truth, capitalized, to indicate the conceptualization of a singular Absolute Truth, determined either by faith in a larger or more powerful being (e.g., God or gods) or the powers of the rational or scientific mind. When truth, lowercase, is named I am acknowledging space for multiple accounts of or cases of truth, but these should always be contextualized within the sentence, paragraph, or argument.

In the narrative of contemporary thinking, periods of time and therefore thinking and also conceptualizations of truth can be structured into three parts: the premodern, modern/modernity, and postmodern. Truth in premodern time was whatever was determined by religion or those who spoke for and interpreted religion for large groups of people. The God or gods were primarily responsible for what was seen as True and not True. Modernity, the period of time between the late 19th and early 20th centuries, represented the height of scientific thinking and methodologies, of humankind’s ability to examine and identify the truth of nature and culture. The perspective was that human beings were able to appropriate and utilize the tools of science, tools as in conceptualizations as well as various technical instruments, to uncover and determine Truth once and for all. These methods were to prove what is true and false in both the natural and the human sciences. Postmodern scholars, largely working after World War II, argued that truth is constructed and can only be understood as correct within particular cultures or contexts. Instead of referencing Truth, humans should be considering truths (plural) as they (truths) are historically and socially situated.

Given this historical background, it may seem reasonable or even pertinent that the Oxford Dictionaries Word of the Year for 2016 was “post-truth.” The Oxford editors define post-truth as “relating to or denoting circumstances in which objective facts are less influential in shaping public opinion than appeals to emotion and personal belief.” In the analysis I am offering here post-truth could reasonably be seen as resulting from earlier understandings of truth. If humankind has, according to postmodern scholars, transitioned from taking Truth to be whatever a deity says it is to the results of scientific experiments and is now the result of social construction and agreement, does not post-truth follow logically? From one Truth defined by the gods, to Truth determined by the scientific methods, many truths that are only true within historical contexts, to there is no such thing as truth? Have we regressed? Have we moved beyond truth?

Michael A. Peters (2017), in a special introduction to an issue of *Educational Philosophy & Theory*, offers a cautionary tale about how to think and conduct our work in what may be a “post-truth” world for those concerned with educational scholarship and practice,

In the era of post-truth it is not enough to revisit notions or theories of truth, accounts of “evidence,” and forms of epistemic justification as a guide to truth, but we need to understand the broader epistemological and Orwellian implications of post-truth politics, science and education. More importantly, we need an operational strategy to combat ‘government by lying’ and a global society prepared to accept cognitive dissonance and the subordination of truth to Twittered emotional appeals and irrational personal beliefs. Rather than speaking truth to power, Trump demonstrates the enduring power of the lie. (p. 565)

While it is difficult to offer any sort of “operational strategy” that Peters calls for, reframing conversations around truth with a greater phenomenological sensitivity may help others “understand the broader...implications of post-truth politics, science and education.” Phenomenological thinking and methodologies challenge human beings to account for the *experience* of phenomena. Specifically, phenomenology offers a conceptual strategy, bracketing, that allows for a different kind of thinking and reflection that opens new possibilities for action where there were seemingly none.

The argument in this manuscript is phenomenological to the core and this can be summarized as follows: Regardless of whether or not Truth is Truth, or many truths in various contexts, there remains an ongoing exploration of how human beings *experience* these conceptualizations of truth. To this end, and this is what I believe is one of the key distinctions offered by Heidegger’s account of the interplay of the unconcealing and concealing nature of truth, it matters more *how* human beings experience truth than *whether or not there is* such a thing as truth that could be empirically, ontologically, or logically (pre)determined. While this may sound radical, it is simply the result of a phenomenological bracketing. We are setting aside the debate regarding T/truth, from premodernity to so-called post-truth, to focus on *how truth is experienced by human beings first and foremost*. A brief example may offer clarity and context.

Research and public dialogue surrounding educational and school reform offers a fertile context for exploring this alternative conception of truth. Specifically, conversations about charter schools and other free market-driven schooling options are particularly useful. Schools in post-Katrina New Orleans have served as a testing ground for large scale system reform, that is, by converting publicly funded and administered schools into charter schools run by independent contractor-operators. This experiment, while overshadowed by recent efforts by Secretary of Education Betsy DeVos to champion alternative schooling models, has largely been viewed positively by the media. New York Times Opinion columnist David Leonhardt (2018), for example, writes favorably about the success of the charter school overhaul in New Orleans. In a September 2018 *Washington Post* article Carol Burris indicates that the story of the “success” of charter schools in New Orleans post-Katrina is not quite as clear or straightforward. As to the success of the transformed system, Burris references Douglas Harris and Matthew Larsen’s (2018) recent policy brief on the matter: “high school graduation rates and college outcomes all improved for students who attended school in New Orleans post-Katrina.” However, Burris concludes, “It is true that outcomes are up. The important question to ask is *why* the improvements occurred.” Before jumping to the *why*, however, it is still worth pausing to clarify the *what*. As the journalist acknowledges, the graduation rates and college outcomes did increase and is no doubt true, *in a sense*. Borrowing from Heidegger’s later analyses of technology, the statement made by Harris and Larsen is “correct,” but is it True? On the face of it, the statement is experienced as a revealing or unconcealing, that the charter schools were successful. What is ignored, overlooked, and rendered mute are the many other truths the statement conceals, covers, or hides.

This example may resonate with individuals in many ways: as a parent, academic staff member, or as a community member. Depending on these perspectives, and there are quite a few more, there are multiple ways and compartments that can unconceal a covered over or ignored truth. How do poor families experience the truth of this seemingly obvious successful experiment in schooling? How might an investor or investment firm experience this truth? What of the experience of an ill-prepared teacher? These questions indicate how different groups of people might experience the truth of the general media opinion, but this does not even begin to approach the question of how each experiences the charter school experiment as a whole. Regardless of any grasping toward the Truth of the matter, rarely is one’s experience of the truth taken into account.

This is the contribution of phenomenology, highlighting and emphasizing lived experience. We turn now to Heidegger's particular phenomenology of the experience of truth.

Truth in Heidegger's Thought

Heidegger is often described as a prominent existential philosopher, a title and description he rejected throughout his life (see, for one example, Heidegger's letter to Jean Beaufret that was later published as "Letter on Humanism" (1946/1998). While existentialism is aimed at unpacking and exploring the nature of existence, and, arguably, *human* existence, Heidegger saw his thinking as engaging in phenomenological questioning, in philosophy. In this regard, Jean-Paul Sartre is more appropriately described as an existential philosopher than Heidegger. Heidegger's various inquiries into being, temporality, metaphysics, technology, and art, to name only a few, are consistently focused on getting at or grasping the particular phenomena under examination. It is also the case that many areas of study have drawn inspiration from Heidegger's writings from technology to literature, yet these are best understood as inspired by rather than denoting a "Heideggerian" approach to, for example, art or design.

Heidegger is most well-known for his 1927 text *Being and Time* and also shorter lectures and essays on technology, dwelling, and art. What is less recognized is Heidegger's interpretive reading and account of truth as *aletheia*. In fact, many thinkers get lost and therefore dramatically misinterpret Heidegger along the way by presupposing a representationalist account of truth. All philosophers want to be read and understood on their own terms and Heidegger more so than all others. For Heidegger, truth, *understood as a phenomenon*, is worthy of phenomenological inquiry (Nicholson, 2015). While his primary work on truth is often referenced in his 1930 essay *On the Essence of Truth* (that was given as a lecture three years after the publication of *Being and Time*), truth also receives treatment in Section 44 of *Being and Time* and later becomes fundamental in Heidegger's thinking of being. Specifically, the later Heidegger shifts from speaking and writing about the *meaning* of being to the truth of being. Understanding Heidegger's phenomenological grasp of truth as *aletheia* is the task of the following section.

Truth as *Aletheia*

Our everyday understanding of truth is commonsensical. This everyday approach to truth is often described as representational or correspondence-based, but the meaning is the same if not identical. Truth as correspondence/representation names the relationship between words or phrases and a particular state of things in reality. Thus, the exclamation "It is sunny!" is said to be true if we check outside to confirm that it is, indeed, sunny. The state of affairs (seeing sunshine outside) corresponds to the verbal exclamation. Or, put differently, the words adequately represent what is named (that it is sunny). This account of truth can also be applied to social interactions and relationships. For example, we can consult Harris and Larsen (2018) to determine if there was an impact on student test scores due to the New Orleans charter school initiative. According to their policy brief showcased on their website, they claim "The reforms increased student achievement by 11-16 percentiles." Therefore, we can affirm the truth of the impact. Yes, Harris and Larsen are reporting "the truth."

Or are they? Representationalist/correspondence-based theories of truth have been under attack for decades within philosophy, yet its dominance in the everydayness of lived experience is undeniable. Witness the cries of "fake news" from the Trump administration toward any news

media personae or outlet that publishes a story or statement that is unfavorable of the administration or its policies. Climate scientists' findings are rendered mute and news organizations regularly post transcriptions of elected officials with detailed annotations unpacking and contextualizing the words to get at the "truth" of the matter under discussion. *The Washington Post's* Fact Checker, which was last updated on February 3, 2019, reports that "In 745 days, President Trump has made 8,459 false or misleading claims" (para.1). Is truth dying? Or is it already dead?

In *On the Essence of Truth* Heidegger (1930/1998) conducts a phenomeno-ontological deconstruction of the representationalist theory of truth that is the foundation of the history of philosophy, logic, and metaphysics. This destruction, as Thomson (2005) notes, is pursued not in the spirit of the critic or nihilist, but rather in an attempt to uncover and analyze the concept or idea in question. The representationalist approach, or the correspondence theory, is and has been understood as common sensical for so long that it is often considered illogical to question it. Put simply, a propositional statement is uttered that, should it be considered "true", marks an adequate representation of a state of affairs. "The pen is on the table" is a true statement once it is confirmed that my pen is indeed on the table. Put differently, if a statement corresponds to the way things are at a given moment, the statement is evaluated as true. The representationalist/correspondence theory of truth then informs the foundational structure of language and grounds the ability of human beings to communicate. An example from the classroom is easy to name; consider the common assessment tool of the "True or False" exam question.

Through his analysis into the essence of truth Heidegger uncovers a more primordial, in Heidegger's jargon, meaning of truth in the Greek word *aletheia*. *Aletheia*, translated as unconcealment, is best grasped as the interplay between the unconcealing/revealing and concealing of a phenomenon. (It may be helpful to imagine this unconcealing and concealing in relationship to a physical being or entity, but for our purposes it is worth emphasizing that we are engaged in a reflection on the lived experience of a phenomenon which does not necessarily have a physical existence). For Heidegger, the representationalist/correspondence approach is only partially correct. When we grasp truth as what is revealed or unconcealed (as represented), we are only partially correct because we must also, in order to honor truth as *aletheia* and as *lived or experienced*, consider what remains concealed or hidden. This interplay between unconcealing and concealing is ongoing and is never completed for there are always elements that remain concealed while others are simultaneously unconcealed. Heidegger also uncovers additional insights such as "untruth" that while remarkable and insightful, must be left unaddressed in this analysis. Obviously, grasping or understanding truth as *aletheia*, while a fruitful ground for further thinking, complicates communication and traditional understandings of language. This complication was referenced earlier in how various groups and individuals may or may not experience the "truth" of school choice "success."

Harman (2007) situates *aletheia* specifically as an interplay between concealedness and unconcealedness:

Things are not just visible phenomena, but are partly hidden from view. We never gain an exhaustive understanding of things, but can only gradually draw them out of concealment by degrees, and this process never comes to an end. The Greek word for truth, *aletheia*, seems to point toward the same idea, since it means to draw something out of forgottenness. (p. 174)

Heidegger does not believe that truth as certainty, represented, or correspondence is incorrect, only that it is grounded in a more fundamental and prior understanding of truth as *aletheia*, or unconcealment *and* concealment. While student achievement data rendered via test scores may represent a particular truth, it is inherently and fundamentally incomplete or partial. A colleague recently commented that the construction of statistical models are also a good example of this. If you do not have a variable, then concealment occurs in the unexplained variance.

Instead of adopting a traditional understanding of truth as certainty or correctness (correspondence), Heidegger wants truth to be approached as a phenomenon that is formally indicated. In formal indication, we gesture toward a phenomenon without gripping the idea or the language too firmly so that the phenomenon can show itself as itself (a transformation of the phenomenological method, to be sure). If we take Heidegger's originary meaning of truth as the constant and neverending interplay of unconcealing and concealing seriously, however, we must be mindful of too quickly misunderstanding Heidegger (1) when he uses the word truth and (2) as offering a representational theory of existence when he is more interested in formally indicating the "truth" of a particular phenomenon under inquiry. Polt (1999) writes: "Heidegger does affirm that there is truth, and he does hold that some interpretations (including his own) are better than others— but no interpretation is *final*. Heidegger is a relentless enemy of ahistorical, absolutist concepts of truth" (p. 5).

In Heidegger's work, we can see the interplay of concealing and unconcealing of truth as *aletheia* in its relationship to formal indication as it shows itself in historical and contextual interpretation. His radical phenomenology of truth is often overlooked or misunderstood in postmodern scholarship and philosophical inquiry. Gordon and Gordon (2006) argued that a lack of engagement with Heidegger's thinking on truth "impoverishes contemporary thinking and life" (p. 4). They find that some postmodern scholars and philosophers, including Jean-Francois Lyotard and Jacques Derrida, read and gain only superficial insights from Heidegger's writings on truth as *aletheia*. After presenting and discussing Heidegger's reflections on the unconcealing and concealing character of truth, Gordon and Gordon offer a compelling critique to key postmodern thinkers who, they argue, misinterpret, misappropriate, or neglect altogether Heidegger's work on truth as *aletheia*.

***Aletheia* as Lived**

Van Manen (1990) noted that "phenomenological research is the description of the experiential meanings we live as we live them." Therefore, following an overview of Heidegger's interpretive account of truth as *aletheia* rather than as representation/correspondence, in this section we will apply *aletheia* to a few examples to illuminate the possibilities made available. I first offer two examples from my own classroom before turning to concluding thoughts and a final vignette from the broader social realm. It is my hope that in offering these examples a more thorough account of truth as it is lived will be made available.

There is one cautionary note. Many of the metaphors that I will call upon to help bring into definition Heidegger's interpretation of truth will rely on sight, on the capacity of human beings to see. One of the critiques of the representationalist/correspondence-based theory of truth has been its over reliance on visual metaphors to inform its understanding. This overreliance comes at the expense of other senses such as hearing and touch and, more importantly, has contributed to the elimination of alternative voices from philosophical inquiry including women and minorities (as well as within conversations surrounding educational reform).

However, I draw inspiration from Maurice Merleau-Ponty's (1945/1962) work in *Phenomenology of Perception* where he argues that seeing as perceiving is more than a simple sensing with the eyes. Seeing/perceiving is more accurately a naming of the use of the totality of senses as a bodily comportment within the world. Thus, in using visual metaphors I am not, I hope, saying that truth is only informed or impacted by vision or sight, or that truth as *aletheia* is only accessible or knowable via human seeing. For example, in an ongoing inquiry I am exploring the distinction provided by *aletheia* with aural spatiality. This reservation named, we turn to the first example.

Heidegger's (1977) thinking makes its first appearance in one of my graduate courses on the social and cultural implications of educational technologies in *The Question Concerning Technology*. Heidegger's account of modern technology as Enframing and his distinctions of bringing forth and standing reserve, while providing the philosophical groundwork for the remainder of the course, does not address truth as *aletheia* at any length. Students begin to notice early in our class discussions that the way that we talk about Heidegger's ideas don't necessarily align with representative truth. My answers to student questions typically begin with "You're partially correct" or "That's almost right, but you also have to consider..." Inevitably a shortened introduction to truth as *aletheia* occurs where I roughly sketch out this underappreciated element of Heidegger's thinking.

To demonstrate the concept, sometimes even before I try to describe it in semi-philosophical language, I glance around the classroom and ask to borrow a student's water bottle or coffee cup nearest me. Placing the bottle in the center of the room on the table, I ask students to describe to me what they see, from their perspective. I purposefully choose students sitting on opposite sides of the room for their descriptions and press them to account for their descriptions of what they *cannot* see. "Of course you are able to see the lettering on *this side* of the bottle, but how can you *know* what is on the other side? Do you really know?" Sometimes the student might respond, "Well, I could always ask someone on that side of the room." Yes, indeed! At this point, I shift the discussion back to truth as *aletheia* and note that the interplay of unconcealing and concealing is happening right before their eyes all the time and they were not even aware of it. "What do we do with truth now?" is often asked about now. First, we account for, recognize, and confirm the interplay of concealing and unconcealing inherent in truth as *aletheia*. Then, we open our minds and bodies to gathering as many "truths" as we can while acknowledging, as Polt remarked, the unconcealing/concealing of truth never ends.

A second example that can contextualize the abstract nature of truth as *aletheia* I call triangulation. This term will be all too familiar to qualitative researchers as well as other scholars who utilize mixed-methodologies in their research (see, for example, Bogdan & Biklen, 2006, or Cohen & Manion, 2000). Within research methods, it is believed that utilizing multiple data sources can assist in accurately accounting for and describing the object of study, usually human behavior or experience. In practice this might look like conducting face-to-face interviews with research participants, while also completing on the job observations, and collecting demographic data via a survey. The transcripts from the interviews, the researcher notes from observations, and the participant provided data on the surveys would then serve to triangulate the phenomenon and thus facilitate the answer to a particular research question. If we take this idea of triangulation and use it to further illuminate truth as *aletheia* we might be better able to ground this idea.

An additional real world educational reform example will help. Over the past few decades in Chile the number of voucher-based schools and students enrolled in non-public schools has steadily increased. For reference, Portales and Vasquez Heilig (2015) note that,

The system has grown steadily, increasing its enrollment throughout the years to a point where about 93% of all students are now included in the voucher system, with the roughly 7% of remaining students attending private-paid independent schools that do not receive vouchers. (p. 196)

Portales and Vasquez Heilig continue to describe the Chilean voucher implementation with specific attention paid to the ways that educational administrators respond to school choice. The truth of voucher programs is based on a market-driven assumption: that increased competition between private and public schools will ultimately create better schools. While quantitative data and feedback might at first reveal/unconceal that schools are doing better (increased student achievement, greater effectiveness), truth as *aletheia* would encourage us to pause and take account of what is also concealed or hidden.

What is missing or not reported in the first wave of data that “proves” success? For one, after more careful research into the lived experience of school administrators, Portales and Vasquez Heilig (2015) have shown that “in practice, a universal market system appears to enhance stratification relative to economic conditions in a community, student test scores and behavior,” (p. 216). This finding runs directly counter to the traditional argument that voucher programs can be an equalizer for disadvantaged students. In fact, these truths seem to be at odds with one another. How can they both be true? Considering both of these perspectives (or unconcealings) together, we might be able to develop a more accurate or whole and complete truth/*aletheia* of the encounter.

Is it Really all just Relative?: Final Thoughts and Future Directions

The critique of relativism is often lobbed at postmodern scholars, as well as anyone who challenges or questions belief in Absolute Truth. Philosophers and other thinkers who elect to utilize phenomenology or phenomenological methodologies are also charged with a bias of relativism because of their focus or reliance on lived experience. This is also a charge aimed towards education reform friendly researchers that presuppose that quantitative studies are the *only* studies important in the discourse about whether reform “works” or not. The *Stanford Encyclopedia of Philosophy* defines relativism as: “the view that truth and falsity, right and wrong, standards of reasoning, and procedures of justification are products of differing conventions and frameworks of assessment and that their authority is confined to the context giving rise to them,” (Baghrarian & Carter, 2017, para. 1). Is it really all just relative? I do not believe so, but the critical point for the argument at present is that this designation is not a necessary condition for the argument. The question of how truth is experienced remains regardless of whether truth is relative or truth is Absolute. This does not mean, however, that considering truth as *aletheia* is an unproductive or frivolous endeavor.

An additional example of how this analysis can contribute to a greater understanding of what has been contextualized as the “post-truth political era” is helpful and warranted. Brewer, Vasquez Heilig, Gunderson and Brown (2018) have recently described the failures and misinformation surrounding the privatization of schools in Chicago. The authors describe in detail the ways that teachers and community activists have distinguished, responded to, and challenged public school privatization in Chicago. For market-based privatization school reform initiatives to make sense they must presuppose that education, teaching, learning, and curriculum, to name but a few educational phenomena, can be treated as any other commodity. However, as this is one unconcealing of truth, there remain corresponding concealed accounts that activists in Chicago have been able to indicate, uncover, and exploit to the benefit of public education. One such account

narrated by Brewer et al (2018) includes how teachers and community-based activists have reaffirmed the power of organizing, union membership, and participation as a common and foundational unconcealment of truth. They note forcefully that,

Community-based activists have called upon education reforms to refocus on inequality rather than privatization and private-control of education. They are seeking to move the discourse concretely from choice to equity. They are asking questions such as: Why does one child have the opportunity to learn a world language and the other does not? Why does one school have debate teams, robotics clubs, social emotional support and the other does not? Separate and unequal education is about access to resources and opportunity, not how many different schools are available. (Brewer et al, 2018, p. 147)

These questions expose or bring into unconcealment truths typically concealed by traditional rhetoric surrounding school reform and privatization. By changing the conversation, new unconcealings can be revealed and new pathways or possibilities imagined and realized.

In this same way, the Trump administration and Trump himself have sought to emphasize the concealing character of truth (as *aletheia*) to the detriment of its unconcealing/revealing character. If Heidegger's interpretive account of truth as *aletheia* is to be taken seriously, then truth, *as it is lived and experienced*, must be acknowledged as always in fluctuation, constantly and consistently bouncing back and forth between unconcealing and concealing, an ongoing interplay, that we must come to terms with in our everyday lives. On this account and within this context, the Trump administration's "lies" or misdirecting/misleading statements are transformed into concealments—concealments that are always already co-related to the unconcealing nature of truth as *aletheia*. This is not a flaw in the systematic understanding of truth; it is co-constitutive of truth as *aletheia*.

How does a democracy account for, define, and survive the education reform movement and leaders who so irascibly engage in exploiting the concealing character of truth as *aletheia*? Indeed, can it move beyond simply surviving to thriving? The rejection of academic and intellectual life is nothing new for the United States. Over fifty years ago Hofstadter (1963) diagnosed and contextualized the problem or challenge to American society. Rather than creating or drafting "fact checking" websites evermore, perhaps it is time to consider truth as experienced, as *aletheia*.

References

- Baghrarian, M. & Carter, J. A. (2017, Summer). Relativism, *The Stanford Encyclopedia of Philosophy*, Edward N. Zalta (Ed.), Retrieved from <https://plato.stanford.edu/archives/sum2017/entries/relativism/>
- Bogdan, R. C. & Biklen, S. K. (2006). *Qualitative research in education: An introduction to theory and methods*. Boston, MA: Allyn & Bacon.
- Brewer, T. J., Vasquez Heilig, J., Gunderson, M. S., & Brown, J. (2018). Chi-town educator and community-based activism: Confronting a legacy of education privatization in the nation's windy city. *Thresholds in Education*, 41(3), 138-153.
- Burris, C. (2018, September 4). The real story of New Orleans and its charter schools. *The Washington Post*. Retrieved from: <https://www.washingtonpost.com/education/2018/09/04/real-story-new-orleans-its-charter-schools/>.

- Cohen, L. & Manion, L. (2000). *Research methods in education*. New York, NY: Routledge. (5th edition).
- Feenberg, A. (2012). *Between reason and experience: Essays in technology and modernity*. Cambridge, MA: MIT Press.
- Gordon, H. & Gordon, R. (2006). *Heidegger on truth and myth: A rejection of postmodernism*. New York, NY: Peter Lang.
- Harman, G. (2007). *Heidegger explained: From phenomenon to thing*. Chicago, IL: Open Court.
- Harris, D. N. & Larsen, M. F. (2018). What effect did the New Orleans school reforms have on student achievement, high school graduation, and college outcomes? *Education Research Alliance Policy Brief*, Tulane University.
- Heidegger, M. (1927/1962). *Being and time*. (John Macquarrie and Edward Robinson, Trans.). Oxford, England: Blackwell.
- Heidegger, M. (1930/1998). On the Essence of Truth. In W. McNeill (Ed.). (J. Sallis, Trans.). *Pathmarks* (pp.136-154). Cambridge, UK: Cambridge University Press.
- Heidegger, M. (1946/1998). Letter on Humanism. In W. McNeill (Ed.). (J. Sallis, Trans.). *Pathmarks* (pp.239-276). Cambridge, UK: Cambridge University Press.
- Heidegger, M. (1977). *The Question Concerning Technology and other essays*. (William Lovitt, Trans.). New York, NY: Harper Perennial.
- Hofstadter, R. (1963). *Anti-intellectualism in American life*. New York, NY: Random House.
- Kruger-Ross, M. (2016). An inquiry into the question of Being in teaching: World, Attunement, and the danger of Enframing. Unpublished doctoral dissertation. Simon Fraser University, Burnaby, BC, Canada.
- Leonhardt, D. (2018, July 15). How New Orleans is helping its students succeed. *The New York Times*. retrieved from: <https://www.nytimes.com/2018/07/15/opinion/columnists/new-orleans-charter-schools-education-reform.html>.
- Merleau-Ponty, M. (1945/1962). *Phenomenology of Perception*. (C. Smith, Trans.). New York, NY: Humanities Press.
- Nicholson, G. (2015). Truth as a phenomenon. *The Review of Metaphysics*, 68(4), 803-832.
- Peters, M. A. (2017). Education in a post-truth world. *Educational Philosophy & Theory*, 49(6), 563-566.
- Polt, R. (1999). *Heidegger: An introduction*. Ithaca, NY: Cornell University Press.
- Portales, J., & Vasquez Heilig, J. (2015). Understanding universal vouchers and urban public schools in Santiago de Chile: Educational administrators' responses to choice. *Multidisciplinary Journal of Educational Research*, 5(2), 194-237.
- Thomson, I. (2005). Heidegger and the politics of the university. *Heidegger on ontotheology: Technology and the politics of education*. New York, NY: Cambridge University Press, 78-84.
- van Manen, M. (1990). *Researching lived experience: Human science for an action sensitive pedagogy*. Albany, NY: State University of New York Press.

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