

Tools, Processes, Participation: Social Media for Learning, Teaching, and Social Change

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Abstract: Despite attempted pedagogical shifts toward situated learning, social constructivism, and social practice theory, we find pedagogy for social media to remain primarily situated in behaviorist or cognitivist assumptions of learning. Moreover, in an attempt to craft our own participatory pedagogies of social media, we found ourselves returning to metaphors and language rooted in ontological assumptions of objectivism. That is to say, we continually referred to social media as a tool with affordances to be leveraged for learning. In this paper we examine three understandings of social media - as we see them - in literature, pedagogy, and practice. We categorize these understandings through the psychological perspectives of behaviorist, cognitivist, and sociocultural learning theories. In so doing, we imagine new ways of both using social media for teaching and learning as well as possible language to better reflect our own ontological and epistemological assumptions of social media.

Introduction

Despite attempted pedagogical shifts toward situated learning, social constructivism, and social practice theory, we find pedagogy for social media to remain primarily situated in behaviorist or cognitivist assumptions of learning. Thinking of technology as tools seems to be a popular way to conceive of technology (Mason, 2018; Kozma, 1994; Clark, 1994), and one which has sparked vigorous debate about the efficacy and use of technology as tools for learning (cf. Clark and Kozma debate on media). While we appreciate Kozma's insistence that educational technologists move from causal research of media and learning to more pedagogic questions centering on capabilities of media to influence learning, we suggest that this framing still emphasizes assumptions of media as a tool to be leveraged, even if it is in specific service to supporting learner constructed understandings of the world.

As learning theorists who investigate social media and educational technologies, we propose that a more fruitful conceptualization would include an increasingly complex view of technology, one that aligns more clearly with sociocultural theories of learning (i.e., situated learning/cognition, social constructivism, and social practice theory). In our thinking, we see that conceiving of technology in three ways (as tools, as processes, and as participation) helps our students, colleagues, and practitioners to see the full range of promise, potential, and perils of working with, and through, technology and media. Moreover, we advocate for pedagogies predicated on assumptions of media as participatory practice, as we suggest that this allows for the fullest opportunities for social change.

The paper grew out of our earlier work in which we developed a critical social media pedagogy for civic engagement (Heath and Gleason, submitted) focused on the participatory and co-constructed possibilities for student identity formation and civic engagement. However, despite our emphasis on a conceptualization of social media pedagogy that included a more complex, nuanced view of technology, we found ourselves continually referring to social media as a tool. That is to say, while we conceived of social media as a participatory practice, we continued to utilize language and metaphors (such as "affordances" and "leverage") that perpetuated conceptions (and perhaps points to our own underlying assumptions) of social media as a tool to teach *with* (Salomon and Perkins, 2005) instead of a way of teaching *through*.

In this paper we examine three understandings of social media - as we see them - in literature, pedagogy, and practice. We categorize these understandings through the psychological perspectives of behaviorist, cognitivist, and sociocultural learning theories. In so doing, we imagine new ways of both using social media for teaching and learning as well as possible language to better reflect our own ontological and epistemological assumptions of social media.

Theoretical or Conceptual Framework

A number of related conceptual frames that are interested in how learning occurs through authentic engagement with technology for personal, relational, and societal purposes inform this work. First, connected learning theory suggests that interest-driven learning, with peers, occurs as adolescents and adults engage with networked technologies (Ito et al, 2013; Barron, 2006). Second, situated learning (or situated cognition or cognitive apprenticeship) suggests that learning happens in authentic contexts as people take on new identities through learning in practice (Lave, 1996; Lave & Wenger, 1991). Third, social media scholars have begun to explore the dimensions of learning that happen through social media, investigating its formal and informal aspects (Greenhow & Lewin, 2016; Greenhow, Robelia, and Hughes, 2009). Fourth, we are inspired and motivated to develop pedagogical practices that honor the language, experiences, and culture of our students, especially those “at the margins” who are often ignored, excluded from mainstream teacher education (Bartolome, 1984; Cammarota, 2017; Freire and Macedo, 1995; Paris, 2012). Putting these conceptual frameworks in conversation pushes us to consider the possibilities of pedagogical practice that comes as teachers, students, parents, researcher, administrators, and others work deliberately and thoughtfully to center social media-enabled participation as a method for learning, teaching, and civic engagement.

Literature Review

Prevailing arguments on media as the message (McLuhan, 1964) and debates between media as a vehicle for information delivery (Clark, 1994) or media as an opportunity to facilitate knowledge creation by leveraging affordances (Kozma, 1994) dominate literature on teaching and learning with technology. However, we envision technology in a broader sense, aligned with scholars such as Ellul (1964), who denotes technology as a methodology, and Kline (1985), who propose that technology is a “sociotechnical systems of use” that integrates hardware, people, and various tasks that “extend human capacities” (Kline, 1985, p. 216-217).

However, emerging critical educational technology scholarship has begun to push back on these widely accepted narratives. For instance Watters (2017) critically examined who benefits from educational technology and Selwyn (2016), Stommel (2014), and Reich and Ito (2017) have criticized these conceptualizations by reminding us that technology is not neutral, and its inclusion in classrooms can perpetuate disparities in race and gender. This critical turn aligns with a shift toward socio-cultural theory in teaching and learning, which suggest that learning is not a mental reorganization; it is a social reorganization (Lave, 1996). From this perspective, knowledge is part of the organism of the social, as well as the individual (Turvey & Shaw, 1995).

For us, as teacher educators and educational technology scholars, we see this as an imperative to move beyond the purely psychological understanding of identity. Furthermore, we have conducted a brief perusal of previous years’ proceedings from SITE conferences and found a decided lack of theoretical or conceptual engagement with theories of technology, especially with respect to participatory practices and socio-culturalism. This paper aims to initiate conversation with colleagues about how to conceptualize technology for the purpose of examining our underlying assumptions about teaching and learning. However, without explicitly imagining social media as an opportunity for social reorganization, we cannot hope to engage in identity development and social change. Social media as a participatory practice should change the identity of the individual *and* the identity of society.

Warrants for Arguments

Our scholarship seeks a nuanced, complementary, and complex (socially, politically, personally) praxis based in civic engagement and social justice. However, despite our desire to anchor learning with social media in the epistemological, ontological, and pedagogical assumptions of sociocultural constructivism, we recognize that different dimensions of social media exist in this digitally mediated space.

Thus, in *Table 1*, we map conceptions of social media as tools, processes, and participation across learning theories and approaches. Each of these approaches has epistemological, ontological, pedagogical, and political implications. Each approach also may align with certain research methodologies and lines of inquiry.

The first column aligns technology as tool with behaviorist understandings of knowledge, teaching, and learning. It represents an instrumentalist version of social media; one which emphasizes skill building through a tool

with affordances which may be leveraged, that can facilitate particular responses, especially in students. The second column aligns social media uses with cognitivism, suggesting that social media can help change the mental apparatuses or cognitive systems of the mind (acknowledging the relation between individual, or self, and society, but not the full transformed social practice that we espouse). The third column imagines social media as participatory process by which learners are transformed, developing agency, identities, and literacies-- in short, as citizens of a networked world. This perspective goes beyond seeing social media as a tool to be leveraged, or a mindset to be realized; rather, it imagines social media participation to be transformative, engaging, and critical practice.

| | Social Media as Tools | Social Media as Processes | Social Media as Participation |
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| Assumptions about Learning (Epistemological foundations) | Learning as instrumental (behaviorist) | Learning as change in mindset (cognitivist) | Learning as social becoming; people are transformed and learn new social practices (sociocultural theories) |
| Assumptions about Learners | Learning is reinforcement, and happens through routine, standardized actions. | Learning happens through creation of an accurate internal mental map of the external world | Learning happens through agentic development of the self in relation to others in practice. |
| Assumptions about teaching | Teacher transmits knowledge to students through input and output models. | Teaching facilitates construction of “mental map.” | Teaching can facilitate student development and change through engaged, meaningful intellectual labor that involves social, emotional, and cultural change. |
| Examples from Practice (inside and outside the classroom) | <p>Teacher (or school) may use Twitter for purposes of information dissemination (i.e., broadcasting information).</p> <p>Teacher may direct students to tweet a certain number of times per day (e.g., 2 times per day), in order to achieve performance goal.</p> <p>Overall, teaching with social media involves one-way communication and interaction that is observable and measurable (i.e., number of posts, retweets, and interactions).</p> | <p>Teacher may use Facebook in order to increase student engagement (i.e., create ways for student to reorganize their own conception of subject matter).</p> <p>Teacher may use Facebook in order to increase understanding of course content through scaffolded discussion (i.e., increase exposure to diverse ideas).</p> <p>Overall, teaching with social media involves two-way (dialogic) interactions that are focused on the change in attitudes, perspectives, or concepts as a result of social media.</p> | <p>Participants develop identities, create and share knowledge, and make meaning through networked practices of Twitter.</p> <p>For example, participants use hashtags to create, curate, and share knowledge about feminism on Twitter.</p> <p>Through this knowledge creation process, participants develop particular identities (i.e., as feminists) that can be recognized by larger network (or particular community of practice).</p> <p>Overall, participating with social media envisions learning as the development of identities, competence in literate practices, and/or</p> |

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|--------------------------|--|---|--|
| | | | engagement with society or civic world. |
| Research Exemplar | <p>“In our data set, Twitter was generally used to broadcast information, which suggests a low amount of dialogue between schools and the communities they represent. This means that schools of all types did not appear to take advantage of its dialogic affordances for interaction and collaboration, and such predominantly monologic use is consistent with what has been found in previous studies” (p. 320)</p> <p>Citation: Kimmons, R., Carpenter, J. P., Veletsianos, G., & Krutka, D. G. (2018). Mining social media divides: an analysis of K-12 US School uses of Twitter. <i>Learning, Media and Technology</i>, 1-19.</p> | <p>“In sum, our hypotheses were that student course engagement and understanding would be higher during the weeks when the Facebook intervention was running, relative to when it was not. Additionally, we expected levels of course engagement and understanding to be higher in individuals who reported interacting with the Facebook materials to greater rather than lesser extent.”</p> <p>Citation: Dyson, B., Vickers, K., Turtle, J., Cowan, S., & Tassone, A. (2015). Evaluating the use of Facebook to increase student engagement and understanding in lecture-based classes. <i>Higher Education</i>, 69(2), 303-313.</p> | <p>“In this article, I explored the complex process of becoming a feminist on Twitter by describing three new literacies (information sharing, hashtagging, and live- tweeting) and how young people wove them together to author feminist identity through posting, receiving validation, and recognition for this identity.”</p> <p>Citation: Gleason, B. (2018). Adolescents Becoming Feminist on Twitter: New Literacies Practices, Commitments, and Identity Work. <i>Journal of Adolescent & Adult Literacy</i>, 62 (3).</p> |
| Critique | <p>This perspective delimits how social media can lead to knowledge acquisition or change in identity.</p> | <p>This perspective envisions cognition to be an individual affair, leading to a constrained view of relational nature of how, and what, learning can be.</p> | <p>This perspective rarely occurs in our current standardized educational context. However, we envision the potential for greater inclusion as educational activists challenge narrow definitions of learning as achievement. This framework requires a commitment to student learning as identity change and social transformation.</p> |

Table 1. Tools, Processes, Participation with Social Media

Implications

The dominant paradigm within the field of teacher education, and educational technology in general, involves a metaphor of technology that can be described as deterministic, utopian, and rooted in capitalist/post-Fordian narratives (cf. Selwyn, 2016; Friesen and Lowe, 2012; Postman, 2009). We argue that we need to explicitly consider epistemological and ontological assumptions about social media and educational technology in order to further pedagogical practices that reflect socio-cultural learning theory (i.e., learning as participation and development). Each of these theories of learning has its own attendant pedagogies. We suggest that justice-oriented

social media pedagogy aligns with the social constructivist theories of learning. In social media then, pedagogies and practices should use social media to help students develop real-world identities, make meaning, develop relations between self/society, and become connected (to others, and to histories, places, other people, etc). We further suggest that meaningful social change is unlikely to occur without those considerations, and has implications for work that emphasizes participatory practices, civic engagement, identity formation and development through social media.

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