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Abstract: In and out of school technology uses present themselves differently. Namely, outside structures more often than not reflect distributed knowledge models, while inside structures mirror hierarchical ones. Drawing upon theoretical frames of cultural sociology and critical pedagogy, the paper aims to contrast the structures of participation outside and inside school walls. We illustrate that looking outside the classroom gives us insight into how teachers might more readily and actively engage youth in meaningful applications activity. Specifically, we use the former to inform the later. We conclude with implication for using outside technology participation to reconceptualize inside learning designs.

Introduction

Over the past year, we have witnessed various uses of web 2.0 technologies disrupting traditional structures of social participation around the world. For example, the US presidential election utilized social networking sites to leverage an historic victory (Tapscott, 2008). Protests in Iran tapped Twitter to subvert stringent political restrictions and make the world aware of their ongoing political struggles (Peralta, 2009). Bloggers in Cuba find opportunities for freedom of thought and expression of previously silenced voices (Sanchez, 2009). These scenarios illustrate the transformative potential of participation where power, knowledge, and engagement once controlled by hierarchical entities shifts to all along the social ladder.   What emerges is the ways in which technology-mediated engagements are beginning to cultivate opportunities for creating worlds that traverse traditionally hegemonic and imposed ones.

When we turn our gaze to traditional primary and secondary classrooms, technology use reflects organized and authority-driven participation structures (Hew & Brush, 2007; Cuban, 2001). Whereas in the above real world examples, participants create structural forms through recursively consuming, using, and producing knowledge, students in learning contexts use technology to find answers to adult-constructed questions or create culminating projects to recite a series of facts (Smerdon & Cronen, 2000). Although educational experts and researchers highlight the potentials for transforming participation for learning (Sawyer, 2006), current institutional structures deter alternative possibilities witnessed in the real world from permeating school walls (Klopfer, et al., 2008; Groff and Mouza, 2008; Johnson et al., 2009). Rarely do students engage in technology-mediated learning environments that foster mutually constituted ideas, knowledge, meaning, and goals. Grounded in institutional norms offer, there is little room for students to practice inquiry to create their world. As evidenced by out of school technology uses, this is antithetical to what they will encounter as they engage in real world practices.

Although these outside technology examples are not drastically changing normative structures, they are shaking and chipping away at political, cultural, and social foundations. Knowledge and participation becomes decentralized, accessible and co-constructed. Further, participants continuously negotiate and question validity of information. Single sources of authority are waning and expertise requires understanding and arguing for positionality (Dede, 2008). Yet, educational institutions continue to organize themselves in an historical world that no longer exists. The disparate structures raise critical questions for education and the legitimacy of current learning practices. What is the purpose of education? What do students need to know and how do they need to experience learning so that they can critically, collectively, and creatively engage in their world?

In this paper, we draw upon theoretical frames of cultural sociology (Sewell, 1992) and critical pedagogy (Kincheloe, 2008) to contrast the structures of participation outside and inside school walls. We aim to highlight the

ways in which outside social practice can inform technology use inside schools. This analysis intends to sharpen the lens on understanding the dispositions and insights required to authentically participate in learning and in this new world. To frame this task, we ask: What are the structures of technology-mediated participation outside of school? In these structures, what are the participants' roles? How might these inform potential roles for learners within the classroom so that they can authentically participate in shaping their futures? In the first section, we identify the process we engaged in to conduct our inquiry. Then, we provide examples of out of school technology uses. Drawing on these example, we next examine and envision possible technology-mediated classroom learning. Finally, we conclude with conceptual implications for bridging the sharp disconnect between these two worlds.

Inquiry Process (Methods)

To conduct our analysis, we began by questioning why classroom technology use has not led to significant changes in teaching and learning.   We recognized that real-world technology use differs from classroom use in fundamental ways, but found this is be generally absent in educational technology literature. In particular, recently publicized political and social activity drew our attention to how social media can be and is being used around the world to affect social change; yet, in the classroom, there is little evidence of pedagogical much less social change. To respond to this contradiction, we sought out a means to reveal differences in utilization in order to begin to conceptualize what it means to engage with social media outside as opposed to inside classroom walls. What was happening outside that was so powerful to evoke changes and attract world attention? How did social media contribute? How, then, could this understanding contribute our visions of teaching and learning with social media?

Next we identified three types of social media (Facebook, Twitter, and blogs) commonly used both inside and outside the classroom. We searched the Internet and printed media for recent real world examples of how social media use helped contribute to social change. We looked first at the context: what was the situation? Who were the social actors and what were their goals? How was social media used? In what ways did social media contribute to the social actors' attainment of their goals? To aid us in making sense of the examples we chose, we turned first to cultural sociology to tease out social and cultural practices. This enabled us to identify the structures that regulated people's agency and examine how people used the technologies to apply their agency in order to transform or subvert these structures, while endeavoring toward achieving their goals.   Next, we turned to critical pedagogy to reveal how these social practices might inform what it means to teach and learn in transformative ways. Critical pedagogy focused our analysis on dynamics between power within and across social groups and knowledge construction within these social movements. It revealed processes of resistance, community building, and grassroots organizing that revolved around common goals and were facilitated or amplified, but not driven, by social media use. To extend this new knowledge into possible implications for the classroom, we searched online and in education journals to locate evidence of how social media is used for instruction. Then, we analyzed the strategies that teachers take to adopt and implement technologies. The examples show that most strategies still do not tap the technological potentials nor do they connect with the most recent research on how cognitive and social learning occurs (Sawyer, 2006; Bransford et al., 2000). In the following sections, we provide contrastive analyses of social media use outside and inside the classroom to illustrate this contradiction.

Out of School – Structures of participation

Was noted we opted to focus on three particular mediums (social networking, Twitter, and blogs) that are popular both outside and inside of schools but are used in very different ways in both locales. In all three instances detailed below, social media are used to simultaneously construct and consume knowledge while re/creating social worlds with a sense of collective purpose. In contrast, we will later see that inside classrooms, these mediums are often either used by one individual or group as a means of constructing and then disseminating information to others, or they are accessed as sites for consuming information that has been created by another. The real world uses we see in the examples below offer insight into how educators might approach applications activity differently in classrooms.

Obama Nation: Virtual Grassroots Organizing and Mobilizing the Millennial Generation

During the 2008 U.S. presidential election, for the first time, the U.S. people saw a political candidate leverage the power of social media to help create a social movement. For Barack Obama, the Democratic candidate, winning the election hinged upon the ability to maintain his constituent base while mobilizing disenfranchised, inactive, and/or unregistered but eligible voters, especially in districts which were historically known as swing districts.   While the Obama campaign employed various grassroots campaigning and fundraising tactics, the use of social media such as Myspace and Facebook was key to mobilizing one particular target demographic, the 18-29 year old voters known as the "Millennial Generation," 67% of whom use social networking sites (Kohut, et al, 2008).

According to Rock the Vote, there are 44 million voters in the Millennial Generation, representing more than one-fifth of the total electorate which rivals the much coveted senior (65+) demographic. They also are the most diverse generation in history, with 39% representing various minority groups. For the Obama camp, utilizing social networking sites enabled access to more than two thirds of Millennial Generation voters who have lived most of their adult lives plugged-in to the Internet, tend to be liberal leaning, but have been largely uninvolved in politics and absent at the polls. According to Kohut, et al. (2008), "42% of those ages 18 to 29 [said] they regularly learn[ed] about the [2008] campaign from the internet [sic]." This was more than double the number of people (20%) who claimed they received their information from the Internet just four years prior in 2004 and more than four times the number of people (9%) who received their information from the Internet in the 2000 election. Furthermore, 27% of young people claimed they received their information from social networking sites like Myspace and Facebook. Another 2% said they watched political videos on YouTube.

Not only did Barack Obama have his own Facebook page, but the campaign also utilized Facebook groups, fan pages, and events pages as means of communicating with supporters by providing news about Obama's policies and progress, links to videos and web sites, and invitations to upcoming rallies and other face-to-face activities. They also sent out alerts reminding supporters of important deadlines, requesting donations, and encouraging them to be active in their communities. By subscribing to these Facebook features, Obama supporters also automatically advertised for him, since links to the pages were then displayed on the supporters' individual sites, thereby encouraging their friends to also join. Further, the Obama camp promoted their Facebook activity in e-mail chains by providing links to the fan and group pages when contacting their registered supporters via e-mail. And finally, the Obama campaign not only provided information to and requested donations from their cyber-constituents, but they also implored them to become active on the ground in their local communities by setting up telephone chains, participating in voter registration drives, attending rallies, and distributing printed campaign information and promotional material to people in their neighborhoods. By utilizing these social media, Obama's team took the opportunity to reach out to a significant number of eligible voters who might otherwise have felt disconnected from the political arena. In a sense, the continuous stream of "personal" communication via Facebook combined with e-mail worked like a virtual door-to-door campaign, as Obama sent messages directly to individual people's Facebook pages and e-mail inboxes. By the end of the race, there were an additional 3.4 million registered young voters than there were in the 2004 election. Approximately 20 million young people (52-53% of registered young voters) cast their ballots; overwhelmingly (66%) and consistently across ethnic and gender lines, they voted in favor of Barack Obama (CIRCLE, 2008). Obama's use of social networking reached out to young voters where they were and encouraged them to authentically participate in both a virtual and face-to-face community that reached toward a common goal of heralding a new era of politics.

Iranian Election Protests: Distributing "citizen media" via social networking
In June 2009, the world watched as Iranian citizens protested the results of their presidential election, which many believed was fraudulently garnered by President Mahmoud Ahmadinejad. Following the June 12th election the Iranian government shut down all media outlets; "several websites belonging to reformists were filtered. Security forces heightened their control of newspapers, reformist personalities were jailed, and those who were still free were barred from access to national television and radio" (Tehrani, 2009a). Protesters then turned to Internet sites such as YouTube, Flickr and Twitter to release "citizen media": amateur videos, photographs, and information about the protests. Twitter was used in real time to quickly send out bursts of information from the ground, resulting in a multiplying effect. Because tweets are public and searchable, they enabled people from around the globe to quickly receive and forward information via Internet and/or SMS text, thereby assisting the Iranian dissidents' subversion of government censors. As Tehrani (2009b) explains, "Most people tweet what they read on websites, and have also shared useful tips and information to help Iranians circumvent internet filtering and censorship. In other words tweeting helps create an information pool." By putting a hashmark (#) in front of any keyword (e.g. #Iranelection), Twitterers around the world can enable others to easily search for information on that keyword. Furthermore, when re-tweeted (RT), bursts of information become blasts of information that are posted by many different users simultaneously. The utility of this tool as an alternative media source for subverting state censorship practices was evident in the news coverage that occurred around the world, which would have been nearly impossible if not for the tweeting of the Iranian dissidents.

Yet, Mishra (2009) explains that using Twitter in Iran is not nearly as widespread as it appears in the international media. "In fact, there are less than 10,000 Twitter users in Iran (Sysomos via BusinessWeek) and less than 100 of them seem to be active" (ibid). However, the "tweets coming out of Iran [were] retweeted an average of 57.8 times" in the days following the elections (Tehrani, 2009b). What is more, the global reach of the tool provided an opportunity for people around the world to participate in and even facilitate the protests. "Iranian tweets touched

thousands around the world and it seems by following and re-tweeting people [felt] involved" (ibid). Not only did people of other nations RT information, but as a diversion tactic, many people changed the time zones in their user settings to Tehran's time zone in order to mask the origins of the original tweets emerging from Iran; others provided proxy servers to "relay Twitter content into Iran through network addresses that [hadn't] been blocked [by the government] yet" (Grossman, 2009). This global support afforded a measure of protection and voice, as well as additional international visibility, for Iranian Twitterers protesting on the ground. Still, while international media sources are touting the Iran election protests as a "Twitter Revolution," it is equally important to recognize that it was not Twitter use alone that mobilized the massive Iranian protests within two days of the election. Iranian people had been organizing around the upcoming election for months prior (Joyce, 2009). Rather than the protests being a result of the use of social networking, "social networking and citizen media [were] the fruit of protests against the dictatorship" (Khyaboon in Tehrani, 2009b). Tehrani (2009a) perhaps sums this up best by saying, "There is no doubt citizens protesting the results of the June presidential election have made efficient use of Twitter, Facebook, YouTube and blogs to 'immortalize' their movement and broadcast scenes of violence by security forces, but the centerpoint of this movement are the people and not technology."

Blogging in Cuba-- affording voice and reaching a global audience
      Around the world, blogs seem to be springing up everywhere. They are being used in various social spheres for various purposes related to business, entertainment, news and more. Increasingly, blogs are also being used for social activism. In Cuba, there are very few independent bloggers, but the blog activity that is occurring is notable for the simple fact that having and maintaining a blog is nearly impossible. Only 2% of the population in Cuba has access to the Internet, and this is restricted primarily to government employees, academics and researchers. Others have to purchase access at hotels at US $5 per day, which is equivalent to about one third of the average Cuban's monthly salary. The expense alone prohibits most people from accessing the Internet.   In addition, the Internet is tightly restricted by the Cuban government; as such, there are only a handful of blogs that are written by Cuban people from inside Cuba and that are unaffiliated with the Cuban government. Yet, there is a burgeoning bloggers' movement that is being called "blogostróika," an obvious allusion to the process that occurred when Mikhael Gorbachev came to power in Russia. Blogs like Yoani Sanchez's Generacíon Y (http://desdecuba.com/generaciony/) are written and published in a secretive way, are hosted outside the country, and are facilitated by other more private media (like email or text messages) with the help of non-Cuban citizens. The audience is intended to be non-Cuban, and the purpose is twofold: 1) to afford voice for the individual blogger, and 2) to make the daily struggles of Cuban people visible to the outside world. Sanchez's blog, which is officially censored in Cuba, focuses on the daily struggles of Cuban people living in a deteriorating communist nation. It has existed for two years, and while its visibility to the Cuban people is limited, it has been receiving, increased popularity and notoriety in other nations. It receives over 14 million page views a month, and Sanchez has been featured numerous times in mainstream global media outlets.
      As Hughes and Kellman (2009) explain, "The Internet in general and blogging in particular have expanded the marketplace of ideas into the global community. By encouraging discussion and collaboration, blogs contribute to rapid identification of situations that need to be addressed." While bloggers may approach the blogosphere with diverse interests and political/social goals, 71% of them share a common desire to blog in order to speak their minds (Sussman, 2009), and "bloggers believe their influence as voices for dissent around the world is growing" (Hughes & Kellman, 2009). Furthermore, although blogging is often thought about as an activity performed by an individual sitting at his/her computer, blogging can also be about fostering community and being active in creative our worlds. "Comments and follow-up posts allow for original ideas to be refined and perfected even as they are spreading around the world" (ibid). A blog with a well built following also has transformative potential in its ability to reach a large audience and mobilize people on the ground. As an illustration of this, Sanchez and other Cuban bloggers do not limit their activity to their own blogging; they are also involved in online activism intended to give voice to other Cuban people. They have recently developed the website Voces Cubanas which is dedicated to providing web space and advice for Cubans who wish to blog, express their ideas, and be their own directors and censors. The only criterion for blogging on the site is that the bloggers must live and write in Cuba.

Inside Practices
      Researchers support similarly structured uses of the aforementioned web 2.0 tools for education. In their avocations, they offer projections of how web 2.0 technologies foster learner participation, creativity, and online identity development (Greenhow, Robelia, & Hughes, 2009) and enhance transformative learning (Sawyer, 2006). However, when primary and secondary teachers adopt technologies, the classroom translations and implementations take on familiar overtones. The following examples evidence how technology use reflects traditional teaching and

learning strategies. We take examples from outside technology uses to then project alternative possibilities that are grounded in both emerging research on how people learn and critical pedagogy.

Social Networking: From laying on to transformation of

Although the number of teachers using social networking sites for learning is on the rise, teachers are quite cautious about using them. This hesitation stems from both the sites seemingly unruliness and their perceived dangers (Klopfer et al., 2008). Tools such as delicious, diigo, and Ning are open platforms that are difficult to contain. For example delicious, a social bookmarking site, affords connections to endless member bookmarks. Diigo allows multiple users to collectively annotate html texts. Ning, similar to Facebook, permits users to submit a profile, upload pictures, and add multiple forms of content. Within social networks, "friend" can communicate behind the scenes. As a result, participation and content are increasingly difficult to control. Teachers express concern, particularly given that they consciously and unconsciously taught to control students and their learning (Tobin, 2005).

Despite the inability to completely control the participation on these sites, teachers do use them. For example, teachers have students use Ning to perform linear and familiar tasks such as sharing notes, keeping schedules, or storing digital work (see Classroom 2.0). This barely scratches the surface of the intended use of the tool. Teachers report that they prescribe focused use because they worry that kids know more about the sites (fieldnotes, 2009). If teachers use these sites, they inevitably need to release their authoritative position. Instead of begin knowledge holder and content delivered; they shift content generation and learning paths to the student. Knowledge is now distributed and co-constructed within and across the social network and across participants (Salomon, 1997). As students adopt new roles, they improve their understanding and reasoning abilities as well as extend and enhance their cognitive capacity (Jenkins et al., 2006). Lee et al. (2007) asserts that learner-generated content is incredibly important for the learning of both the content creator and for other students who access it.

Learner-created content does not inherently translate to deeper learning. "The lack of significant sophisticated activity by learners that involves more than consumption through social networking suggests that there is a role for teachers in supporting effective learning using Web 2.0. This role may be to ensure that learners have the technical skills to use the tools effectively and the metacognitive, synthesis and critical reflection skills to use Web 2.0 applications to support learning wherever they are" (Luckin, 2008, p. 6). Thus, the role of the teacher then is imperative, yet different. As Obama's team structured their sites for mutual participation and co-construction of political aims, they did not micromanage the emergent participation. Instead, they held steadfast to their underlying message while opening pathways for multiple voices to join in shaping the nuances of that message. The teacher still leads with an understanding of effective learning practices, but the leadership is one that builds capacity rather than imposes direction. As roles shift learning structures become emergent and unpredictable. The teacher then must learn to adapt with emergent student practices while fueling their desire to learn. Kincheloe (2001) explains, "If social progress and empowerment are possible, we must get beyond this discomfort with uncertainty" (p. 62).

As we reflect on the outside uses of social networking we begin to visualize some possible ways to do this. For example, similar to Obama's team tapping social networks to inspire a deeper understanding of the candidate, students can use social networks to form networks of learners that can leverage understanding. By inviting people to participate in conversations in the political sphere Obama's team afforded the organization of local engagement. Social networks for learning can be used to inspire students to take their critical reflections and do something that connects lesson objectives with real world action. As the networks increase or traverse local participation, youth also begin to cross social and cultural boundaries, which evoke potential for awareness of self and other. As one example, via social network sites students could be connected to multiple groups in the endeavor to explore and examine historical research. In this way, students engaged in communities of practice around socially organized learning begin to see that there are many forms of the "truth", multiple realities, multiple histories of the same events, and ultimately that problems are complex social constructions that have implications for our world (Kincheloe, 2001; Wenger, 2000). Implementations that reflect such innovation exist, but are difficult to come by. This is largely because of the impact of the policies such as high-stakes, accountability climate that continues to permeate contemporary education. Teachers hesitate to cross institutionally set barriers as they worry about losing their jobs. Teachers reproduce the status quo and stagnant as a result of very real state and federal repercussions that enforce artificial accountability. Professional decision-making and academic freedom to be truly innovative remain untapped and nearly impossible.

Twitter and tweet: Reinforcing authority vs cultivating autonomy

Similar to social networking sites, Twitter is slowly being adopted in schools; however, it is largely implemented within current practices of education. Proposed examples include disseminating homework assignments, asking students to recall information from the day's lesson, tweeting quick review notes, reinforcing daily objectives, or providing follow up questions (see Classroom 2.0). One teacher on this site notes having students read their tweets

out loud in order to inspire class discussions. Other more student-centered examples recommend that teachers ask students to create math problems so that classmates can access and answer them. Teachers on the site suggest perhaps students could pose as a literary character or an historical figure. Students could step into character and consider what life experiences this person has and how he/she might gain an interested group of followers. Twitter relations are also used to debate or engage in character dialogues. Here students use twitter to post, follow, and respond to their peers.

Looking through an evaluative lens reflective of current educational norms, the structural relationship between teacher, technology and student seems at first glance to be advantageous. In particular, Twitter allows teachers to perform quick formative assessments and motivate learners stay connected to the content. While formative assessments are important, what is being assessed is still surface recall rather than deep understanding. Understanding comes students engage in activities that are directly relevant and when content is actively applied in real world contexts (Brown, Collins, & Duguid, 1989). The above examples simply require students to recall factual knowledge and making superficial personal connections. Moreover, teachers create the purpose for tweeting and framing the content of what will students will tweet. Students passively read, post, and retrieve information; they wait for an authoritative figure to put forth next steps and expectations. Moreover, students continue to be positioned at the periphery of participation (Lave & Wenger, 1991). There are few if any occasions for students to assert their ideas, self-direct their learning, or apply their skills to real world events. The offered examples, while a start in adopting emergent technologies, are not stretching the boundaries of possibility by engaging students more actively in their learning. Instead, teachers create uses for the technology which mirror familiar offline learning.

Considering how citizens of Iran disseminate information and media through Twitter, inciting a social movement, we begin to glean possibilities to situate authentic student learning. One teacher who came closer to such applications of Twitter asked students to follow political figures for current events (Classroom 2.0). Yet this can be taken a step further. In following a political figure, what questions arise for students? What more do they need to learn about these questions in order to form an opinion about them? What solutions, ideas, and actions do students think are warranted in relation to the problem? How does the issue affect them, their families, their school, and the larger community? Twitter can be a tool that supports student-generated inquiry questions and that mobilizes students to take a stand and make local and global connections. In releasing the teacher-controlled structure, students find opportunities to shape the learning trajectory as they activate agency in his/her own world. The do this as they continue ask critical questions associated with their worlds. Who generates this knowledge? Who is the authority? Do I agree with this information? What further questions do I have about the topic or for the expert? Twitter acts as a mediator between student as novice and student as authority. They use others' tweets as to quickly attain and share information with their peers and with a broader world by tweeting what they are working on or any new information they find. The emergent form supports authentic learning as they seek answers to their developing questions and construct a supportive position of their own (Scardamalia & Bereiter, 2006). In examples such as this students see themselves as part of a larger world and experience real world scenarios, both are important factors for authentic learning (CTGV, 1990). Apart from traditional forms of "imparted" knowledge, this structure of learning aims to makes students simultaneously aware of themselves, their surroundings, and how they can be liberate themselves from passively buying into cultural and social norms (Friere, 1970). In short, there is tremendous potential for knowledge construction that moves beyond the boundaries of traditional roles where the teacher is the knowledge holding authority and the students are passive recipients of that knowledge. In this constructive and collaborative knowledge-learning culture, the teacher becomes a researcher and learner alongside the students.

Blogging: moving from simple transfer of practice to new forms of engagement

Blogs are one of the easiest technological innovations for teachers to adopt because they have little associative technical skills necessary for their use. Teachers easily grasped the concept of this tool. A blog, after all, is a journal, which is a popular support for learning in any discipline. These written accounts have become common not only for reading, but also for math, science, and history. Teachers use blogs in ways that they would use these journals. For example, blogs become online diaries that can be anonymous and closed or named and open (Kajder, & Bull, 2003). When closed, teachers utilize this tool to have students reflect on stories that they have read, identify how they relate to a literary character, relate to an historical figure, or write steps they used to solve a math problem. The teacher reads responses determining if students have met certain factual or systematically set learning standards. The teacher might comment on the entry just as one might make comments in the borders of a handwritten journal. When blogs are open to larger communities, the audience expands. In this case, teachers, peers, and potentially parents and community members comment on student blogs.

The bulk of these ideas are best practices attributed to offline learning. While they might also be best practices online, the affordances that blogs offer for innovative potentiality are not tapped. These current educational applications for blogging are more or less simple transfers of face-to-face learning. If there is little difference between

the offline and online activity, what then we might ask, aside from motivating kids by tapping tools they use outside the classroom, is the learning benefit of such a tool? One answer is that the distinction is that electronic posts become an accessible trail of student entries. While this is a valuable way to trace the progress of student learning, one wonders whether it promotes deep understanding and transformative learning. Blogs help make thinking visible (Collins, Brown, & Holum, 1991) so that teachers find ways to assist students in becoming more critical (boyd, 2007), learning to self-manage and cultivating their metacognitive practices (Palincsar & Brown, 1984; White & Fredrickson, 1998). Further, the multimodal capabilities of this platform provide students alternative ways to express their thinking. Multiple modes for expression enhance memory and representation of understanding (Schwartz & Heiser, 2006). Despite the possibilities, there is a lack of evidence that blog-mediated learning is taking advantage of making learning more authentic to the students (Luckin et al., 2008).

Even if teachers utilize blogs as a unique and innovative learning support, they might find students reluctant to fully buy into using them. Students assert an inability to envision blogs as authentic learning tools that connect to a larger world (Luckin, et al., 2008). Given the powerful uses of blogs by users in the outside example above, it is interesting that students see them as less powerful. The difficulty in envisioning such potential might be the way that students are viewing learning within the school walls. Students unconsciously draw upon these models to make connections between what might be powerful within current learning structures. Kincheloe (2001) posits that within traditional learning environments, kids are covertly (and sometimes overtly) taught that their voices don't matter. When achievement in school hinges on a child's ability to repeat someone else's (i.e. teacher's or test-maker's) knowledge on tests, kids learn that what they think has no bearing on how they perform in school, and often, free thinking can hurt their chances of high achievement (Kincheloe, 2008). Yet, when we look outside the classroom and consider reconceptualizing learning structures, new possibilities for this tool come into focus. As illustrated in the blogging example from Cuba, we see the ways in which this technology becomes a medium for giving collective voice to those unheard. Blogging may be a more legitimate form of classroom learning if students were able to use blogs to create networks of youth across the country and the world. By organizing networks to strengthen the individual and collective voices of youth, blogging has the potential for enabling students to see their voices as important. Through a youth network where students can legitimately participate in conversations with peers in various geographical locations, learners can actively construct ideas around political, historical, or scientific issues. Cross-cultural sharing will motivate learners to argue their points (Andriessen, 2006), negotiate meaning (Brown and Campione, 1994), and deeply understand issues in local and global contexts. Another opportunity in blogging comes as we imagine how the struggling reader becomes motivated when his or her words and thoughts are the driving force of the knowledge constructed with others his or her age. The act of reading becomes purposeful because it is done for real world applications rather than pleasing the teacher so to speak. Students could read similar works of fiction, research comparable inquires, or study analogous phenomenon by crossing local boundaries to explore concepts and ideas. Youth feel empowered to engage with a global audience, an audience of similar age, which offers multiple points of view on any of the given learning engagements. The global audience of youth created knowledge brings learning alive, authenticates it, and opens a broader worldview.

Conclusion

The examples under the two overarching above categories (social media use inside and outside classrooms) illustrate a relationship between technology use, structures, and authority/power. Beyond the walls of the classroom, where structures are political, economic, cultural, legal, etc., social media are increasingly being used: a) in a constructivist manner for social transformation by pushing back on or subverting the structures in place; and b) organically and non-hierarchically from the bottom up, not from top down. We also find evidence that we are no longer living in an age where there are clear boundaries between producers and consumers of information. Bruns (2008/2009) has termed this concept "produsage." In the world of produsage, we are all producers, consumers, and distributers simultaneously; hierarchy structures become flattened. McLaren and Jaramillo (2007) describe this shift in education as moving from a relationship of power-over (teacher over student) toward a relationship of power-to (teacher affords students agency toward social participation). In social media use outside the classroom, power-to is the norm; individuals and groups coalesce to subvert, challenge and destabilize current structures. In pushing on the boundaries of current societal structures, technologies and social participation work together to shape a more democratizing and transformative world. If we apply these notions to technology use in education, we are forced to rethink the very purpose of education and the roles of teachers and students as they are currently envisioned. Under these new notions gleaned from the outside world, teachers and students alike are producers, consumers, and distributers of knowledge concurrently. Knowledge is constructed together rather than imparted by the teacher. Teachers become knowledgeable guides in the learning process, as students and teachers engage in community

knowledge construction activities. Education is no longer simply the production of products for the consumption of teachers or even another public audience; education is a means of shaping the world.

Social media tools offer particular value in supporting and scaffolding the learning process; however, in order to truly integrate this technology into learning we must consider alternative classroom organizations and learning designs. We must consider the resources available, the social and cognitive support afforded, and ask ourselves: in what ways is our learning design with and through technology allowing students more authority in the learning process? Are we inspiring students to ask deeper questions, think critically about the content, and apply knowledge to the real world? Are our designed practices with technology supporting what we know about effective engagement and authentic understanding or do these designs simply repackage the ways that we have been teaching all along? To reach this ideal, rather than trying to apply technology to "traditional" models of teaching, we can utilize real world models to envision new ways in which learning begins, emerges, and connects to the surrounding community. Kellner and Kim (2009) offer an alternative: learning should emerge directly from students' lifeworlds. When people pose questions about issues that they have identified as salient in their communities and then investigate and respond to these issues, learning becomes transformative, since they are 1) invested in learning and creating new knowledge, and 2) empowered to use that knowledge to affect social change in their communities. It is obvious from the out of school examples that this type of critical media pedagogy is already being applied around the world. Learning activities designed in this manner "facilitate simultaneously individual development and social formation for a more egalitarian and just society" (Kellner & Kim, 2009, p. 616). Within this framework, learning (in general and with social media) becomes a matter of engaging students in dialogues that help them to articulate more fully their intuitive understandings of real world experience (Jenkins et al., 2006). As students move in and out of applications, social action, and community needs, they work toward organizing the larger picture, negotiating details, collaborating with their peers and teachers, and testing solutions within a global community.

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