

# *Looking to transform learning: from social transformation in the public sphere to authentic learning in the classroom<sup>1</sup>*

## Procurando transformar a aprendizagem: da transformação social na esfera pública para a aprendizagem autêntica na sala de aula

Donna DeGennaro, Tricia Kress

Graduate College of Education University of Massachusetts United States

donna.degennaro@umb.edu; tricia.kress@umb.edu

**Resumo:** O uso da tecnologia dentro e fora da escola é dramaticamente diferente. Ou seja: a utilização fora muitas vezes reflete modelos de distribuição de conhecimento, enquanto o uso dentro espelha formas hierárquicas. Com base em quadros teóricos da sociologia e da pedagogia crítica, o presente trabalho contrasta a participação da tecnologia dentro e fora das paredes da escola. Procurou-se mostrar que olhar para fora da sala de aula dá ideias sobre como os professores podem mais prontamente e ativamente engajar os jovens com tecnologias significativas e atividades mediadas. Foram, ainda, discutidas implicações para o uso da tecnologia fora da escola, de modo a reconceitualizar projetos de aprendizagem.

**Palavras-chave:** tecnologia educacional, redes sociais, processo de aprendizagem.

**Abstract:** In and out of school technology use is dramatically different. Namely, outside uses often reflect distributed knowledge models, while inside uses mirror hierarchical forms. Drawing upon theoretical frames of cultural sociology and critical pedagogy, this paper contrasts participation with technology 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 technology-mediated activity. We use the former to inform the later and offer implications for using outside technology participation to reconceptualize inside learning designs.

**Keywords:** educational technology, social network, learning process.

### INTRODUCTION

Over the past year, we have witnessed various ways in which web 2.0 technologies disrupt traditional structures of social participation. Social networking helped to leverage an historic Presidential victory (TAPSCOTT, 2008). Twitter was used to subvert stringent political restrictions and bring awareness to ongoing political struggles (PERALTA, 2009). Blogs became venues for freedom of thought and expression for previously silenced voices (SANCHEZ, 2009). Each scenario illustrates transformative participatory potential. These technology-mediated engagements become a way to cultivate opportunities for creating worlds that

traverse ones which are traditionally hegemonic and imposed.

In the above examples participants create structural forms through recursively consuming, using, and producing knowledge. Conversely, in formal learning contexts, technology use is authority driven in that students find answers to adult-constructed questions or they create projects that display facts (HEW & BRUSH, 2007). Educational experts and researchers highlight the potentials for transforming participation for learning (SAWYER, 2006); yet, current institutional structures deter alternative possibilities from permeating school walls (JOHNSON et al., 2009; GROFF & MOUZA, 2008). Rarely do students engage

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in technology-mediated learning environments that foster mutually constituted ideas, knowledge, meaning, and goals that reflect what we see in the real world examples.

The disparate structures raise critical questions for the legitimacy of current learning practices. 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 highlight outside social practices in order to inform technology use in 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?

### **Inquiry Process (Methods)**

To respond to the above contradiction, we first conceptualized the differences in what it means to engage with social media outside and inside classroom walls by raising the following questions: 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?

We then identified three types of social media (Facebook, Twitter, and blogs) commonly used both inside and outside the classroom. We searched 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 expose 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 analysis of social media use outside and inside the classroom to illustrate this contradiction.

### **Out of School – Structures of participation**

In the three instances detailed below, social media is used to simultaneously construct and consume knowledge while re/creating social worlds with a sense of collective purpose.

#### **Obama Nation: Virtual Grassroots Organizing and Mobilizing the Millennial Generation**

In the 2008 U.S. presidential election, then presidential candidate, Barack Obama leveraged the power of social media to help create a social movement that maintained his constituent base while mobilizing disenfranchised, inactive, and/or unregistered but eligible voters. In addition to traditional grassroots tactics, the use of Myspace and Facebook was instrumental to mobilizing and target 18-29 year old voters, 67% of whom use

social networking sites (KOHUT, et al, 2008). This group, “The Millennial Generation” represents one-fifth of the total electorate, and they are the most diverse generation in history, with 39% representing various minority groups. Utilizing social networking sites enabled access to more than 60% of voters who have lived most of their adult lives online, are liberal leaning, but largely uninvolved in politics. Forty-two percent “of those ages 18 to 29 [said] they regularly learn[ed] about the [2008] campaign from the internet [sic]” (ibid). Furthermore, 27% of young people claimed they received their information from social networking sites like Myspace and Facebook.

By using various features of Facebook, the Obama campaign readily distributed news about his policies and progress, links to videos and web sites, invitations to upcoming rallies and political activities, alerts about important deadlines, and requests for donations. Facebook features allowed Obama to expand his network through advertisements and e-mail chains by providing links to the fan and group pages when contacting their registered supporters. Obama also implored his constituents to become active on the ground in their local communities by setting up telephone chains, voter registration drives and rallies, and distributing printed campaign material to their neighbors. In a sense, the continuous stream of “personal” communication via Facebook combined with e-mail worked like a virtual door-to-door campaign. 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 reached out to young voters’ worlds and encouraged authentic participation in a virtual and face-to-face community with a common goal of heralding a new era of politics.

### **Iranian Election Protests: Distributing “citizen media” via social networking**

In June 2009, Iranian citizens protested the results of their presidential election, which many

believed was fraudulently garnered by President Mahmoud Ahmadinejad. Shortly after, the Iranian government shut down all media outlets, filtered reformist websites, heightened control over newspapers, and jailed or censored reformist media personalities (TEHRANI, 2009a). Protesters then turned to Internet sites like Twitter to quickly release bursts of “citizen media” (videos, photographs, and information) about the protests. These public and searchable tweets created an information pool which enabled people around the globe to receive and forward information via Internet and/or SMS text, thereby assisting the Iranian dissidents’ subversion of government censors. When re-tweeted (RT), these bursts of information became blasts of information that were posted by many different users simultaneously. The utility of this alternative media source for subverting censorship practices was evident in the international news coverage, which would have been nearly impossible if not for the tweeting of the Iranians.

Twittering in Iran is not widespread, with seemingly less than 100 active users (MISHRA, 2009). However, the “tweets coming out of Iran [were] retweeted an average of 57.8 times” in the days following the elections (TEHRANI, 2009b). The global reach of the tool provided an opportunity for people around the world to participate in and even facilitate the protests. Not only did people of other nations RT information, but 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, it is equally important to recognize that Twitter was just a tool in a larger movement. Iranian people had been organizing around the election for months (JOYCE, 2009). “Social networking and citizen media [were] the fruit of protests against the dictatorship” (KHYABOON in TEHRANI, 2009b). Twitter made the people’s action visible, but the people made Twitter a powerful tool for mobilization.

## **Blogging in Cuba—affording voice and reaching a global audience**

Blogs are used globally in business, entertainment, news and more, and increasingly, they are being used for social activism. In Cuba, bloggers are few but notable, simply because maintaining a blog is nearly impossible. Only 2% of Cubans have access to the Internet, and this is restricted primarily to government employees, academics and researchers. Others purchase access at hotels at US \$5 per day, which is equivalent to about one third of the average Cuban's monthly salary. The Cuban government tightly restricts the Internet and there are only a handful of non-government affiliate blogs that are written by Cuban people from inside Cuba. Yet, there is a burgeoning movement dubbed "blogostroika," an obvious allusion to the process that occurred when Mikhael Gorbachev came to power in Russia. Blogs like *Generación 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-Cubans. The audience is intended to be non-Cuban, and the purpose is twofold: 1) to afford voice for the blogger, and 2) to make the daily struggles of Cuban people living in a deteriorating communist nation visible to the outside world. *Generación Y* has existed for two years and has been receiving increased popularity and notoriety in other nations. It receives over 14 million page views a month, and its author has been featured numerous times in mainstream global media outlets.

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). Although blogging is often thought about as an activity performed by an individual sitting at his/her computer, it is also about fostering community and being active in our worlds as readers can comment and refine ideas as they are distributed around the world. A blog with a well built following can also reach a large

audience and mobilize people on the ground. For instance, the author of *Generación Y* and other Cuban bloggers do not limit 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 provides web space and advice for Cubans who wish to blog. The only criterion for blogging on the site is that the bloggers must live and write in Cuba.

## **Inside Practices**

Researchers advocate similar web 2.0 activity to foster learner participation, creativity, and online identity development (GREENHOW, ROBELLIA, & HUGHES, 2009) and inspire transformative learning (SAWYER, 2006). However, when K-12 teachers adopt technologies, classroom implementations take on familiar overtones. The following examples evidence how technology use reflects traditional pedagogy, and how it might be thought of differently.

## **Social Networking: From laying on to transformation of**

A number of teachers cautiously use social networking sites for learning. Students use Ning to perform linear and familiar tasks such as sharing notes, keeping schedules, or storing digital work (see Classroom 2.0). This measured use likely stems from both the sites' seemingly unruliness and their perceived dangers (KLOPPER et al., 2008). Within social networks, "friends" can communicate behind the scenes, and participation and content are increasingly difficult to control. The fear of losing control results in transposing old learning structures onto new innovations.

In contrast, as we consider how Obama's team tapped social networks to inspire a deeper understanding of the candidate, we can envision how students can use social networks to form networks of learners to leverage understanding. By inviting voters to participate in conversations in the political sphere Obama's team catalyzed constituents to organize local engagement. This translated into active, rather than controlled, participation. Similarly, social networks for

learning can inspire students to be actively involved in their learning. As one example, via social network sites students could be connected to multiple groups in the endeavor to explore and examine historical research; youth can begin to cross social and cultural boundaries, which evokes potential for awareness of self and other. Students engaged in socially organized learning communities 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). They can connect critical reflections and lesson objectives to real world action. Furthermore, shifts do not need to equate to surrendering control. Obama’s team structured their sites for mutual participation and co-construction of political aims; they did not micromanage the embryonic participation. Instead, they held steadfast to their message while opening pathways for multiple voices to help shape that message. Similarly, the teacher still leads with an understanding of effective learning practices, but the leadership is one that builds growing learner capacity. Roles shift and learning structures continuously emerge. The teacher adapts with changing student practices while fueling and empowering the learner.

### **Twitter and tweet: Reinforcing authority vs. cultivating autonomy**

Twitter also takes a familiar shape in school adoptions. Proposed examples include disseminating homework assignments, asking students to recall information, tweeting quick review notes, reinforcing daily objectives, or providing follow up questions (see Classroom 2.0). Other examples, consist of having students read their tweets out loud in order to inspire class discussions, asking students to create math problems so that classmates can access and answer them, suggesting that students pose as a literary character or a historical figure, or debating or engaging in character dialogues. These examples translate into students using twitter to post, follow, and respond to their peers. In these examples, Twitter allows teachers to do quick formative assessments and motivate learners. Yet, these

assessments center on surface recall rather than deep understanding that arises as students engage in relevant activities based in real world contexts (BROWN, COLLINS, & DUGUID, 1989). Students simply recollect factual knowledge and make superficial connections, while teachers create the purpose for and frame the content of what students will tweet. Students passively read, post, and retrieve information; they wait for an authoritative figure to put forth next steps and expectations. Teachers then position students at the periphery of participation (LAVE & WENGER, 1991).

Alternatively, in Iran, protester tweets mirrored immediate experiences during a political event. When applied to education, Twitter can support student-generated inquiry questions and mobilize students to form an opinion. For example, if following a political figure, what questions might arise for students? How do political issues affect them, their families, their school, and the community? They can ask critical questions associated with their worlds: Who generates this knowledge? Do I agree with this information? By using twitter as a mediator of knowledge construction, students take a role in learning as they quickly attain and share information with their peers and a broader world. They add to a body of knowledge as they seek answers to developing questions and construct a supportive position of their own (SCARDAMALIA & BEREITER, 2006). Students see themselves as part of a larger world and experience real world scenarios; both are important factors for authentic learning (CTGV, 1990). They simultaneously become aware of themselves, their surroundings, and how they can liberate themselves from passively buying into cultural and social norms (FRIERE, 1970). 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. Here, the teacher becomes a researcher and learner alongside the students.

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

Teachers seem to easily adopt blogs because they are easy to use, both technically and

conceptually. A blog, used as a journal, is a popular support for learning in language arts, but also for math, science, and history. Teachers use blogs that can be anonymous and closed or named and open (KAJDER, & BULL, 2003). When closed, students can reflect on stories that they have read, relate to a 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, the audience expands to include comments of not only teachers and schoolmates, but also peers, parents and community members. 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, are the benefits of such a tool aside from motivating kids by tapping their social tools? One response is that electronic posts become an accessible trail of student entries. While this is a valuable way to trace the progress of student learning, the question of whether it promotes deep understanding and transformative learning remains. 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), and multimodal capabilities of blogs provide students with alternative means of expression and tools to enhance memory and representation of understanding (SCHWARTZ & HEISER, 2006). Despite possibilities, there is lack of evidence that teachers take advantage of blogs to design and inspire authentic student learning (LUCKIN et al., 2008).

Outside the classroom, new possibilities for this tool come into focus. In Cuba, we see the ways in which blogs are media for giving collective voice to those unheard. In a classroom, students could use blogs to create networks of youth across the country and the world. By organizing networks of youth voices, blogging has the potential for enabling students to see their voices as important. Through a youth network students can legitimately

participate in conversations with peers in various geographical locations; they can actively construct ideas around political, historical, or scientific issues. Cross-cultural sharing will motivate learners to argue their points (ANDRIESEN, 2006), negotiate meaning (BROWN & CAMPIONE, 1994), and gain a deeper understanding of local and global issues. Furthermore, we can imagine how the struggling reader becomes motivated when his or her words and thoughts are the driving force of the knowledge constructed with his or her peers. The act of reading becomes purposeful, done for real world applications. Students could read similar works of fiction, research comparable inquires, or study analogous phenomenon by crossing local boundaries to explore concepts and ideas. Youth can engage with a global audience of similar age, which offers multiple points of view on any of the given learning engagements. This brings learning alive, authenticates it, and offers a broader worldview.

## CONCLUSION

Inside and outside technology use illustrate different relationships 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. Within classroom walls, authority and hierarchies more often than not endure. We bring forward this dichotomy as evidence which suggests that we are no longer living in an age where there are clear authoritative boundaries. Participation transcends simply production and consumption; we are now engaged in produsage (BRUNS, 2008/2009). As we become producer, consumer, and distributor 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). Outside the classroom, power-to is the norm with social media.

Individuals and groups coalesce to subvert, challenge and destabilize current structures. Participants push boundaries as technologies and social action work together to shape a more democratizing and transformative world.

The shifting structures seen in the world, force us to rethink the purpose of technology use and the current roles of teachers and students. We see that teachers and students alike are producers, consumers, and distributors of knowledge concurrently. 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 information; education is a means of shaping the world. In order to truly integrate technology into learning then, we must consider alternative classroom organizations and learning designs. We must ask ourselves: in what ways is our learning design with and through technology allowing students to be more active 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 they simply repackage how we have been teaching all along?

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Out of school examples show that this type of critical media pedagogy is being applied around the world. When we design learning activities in this manner we “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. Learning begins, emerges, and connects to the immediate and surrounding community. When people learn directly from their lifeworlds, they are more likely to 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. Using real world examples to reconceptualize in class technology use helps us begin this process and redesign learning.

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