From Filtering to Freire: Critical Use of the Internet in Urban Classrooms

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ABSTRACT

Despite the lack of resources urban schools have in relation to their wealthier counterparts, it is crucial for educators to examine effective use of existing technologies for teaching and learning, in particular the use of the Internet. Drawing from autoethnographic research, this article addresses how the effective use of the Internet in American urban schools can be the means by which both students and teachers engage in critical thinking, critical consciousness, and a critical pedagogy (Freire, 2005) Through social and critical theoretical lenses, complex issues impacting meaningful use of the Internet such as classroom practices, professional development, teacher and administrator accountability, Internet filtering, and power relations within school systems, are examined.

Introduction

Despite the lack of resources urban schools have in relation to their wealthier counterparts, it is crucial for urban educators to examine effective use of existing technologies for teaching and learning, in particular the use of the Internet. The Internet, a global network comprised of thousands of smaller networks, inter-linked hypertext documents of the World Wide Web and an infrastructure to support electronic mail, has made an indelible impact on our traditional concept of teaching and learning. Because users of the Internet can be both engaged and inundated by the multitude of information encountered, it is essential that students are guided in thinking critically about the information they encounter, reading Web based information in an active, reflective, and reflexive manner. Teachers can further enhance their understanding of the perspectives and the power relationships behind the messages encountered, work toward a critical consciousness, and enact a critical pedagogy (Freire, 2005)as students apply critical thinking skills to present day issues, thus becoming agents of social change and civic engagement.

Foremost, we must not oversimplify teachers' abilities to help their students reach a new level of critical consciousness. In the current rhetoric of education, we speak of developing "21st century skills" that are said to embody critical thinking and problem solving, communication, collaboration, creativity and innovation (Partnership for 21st Century Skills, 2004). However, critical consciousness and critical thinking are not things that are acquired in lockstep fashion within a scripted curriculum. They are not born from memorizing facts or repetitious preparation for a standardized exam. Rather, critical thinking is a process that is encompassed within a complex notion of critical pedagogy. A critical pedagogical vision grounded as it is in social, cultural, cognitive, economic, and political contexts understands schooling as part of a larger set of human services and community development (Kincheloe, 2008).

To believe that we can teach critical thinking void of social and cultural contexts or power embedded relations is naïve and ultimately detrimental to students. However, with a solid foundation in critical pedagogy, students and teachers can use information on the Internet to critique existing bodies of knowledge presented to them, understand the complexity of lived experiences, and engage in inquiry, dialogic practice, and responsibility sharing. Furthermore, the effective use of Internet can aid in the shift of power from "teacher to student" to "teacher and student" working together, more specifically in terms of what is learned, how to learn, and who takes the responsibility for learning. From this perspective, students and teachers can also begin to make informed judgments about which Web based material is best suited to enhance their own learning, their own teaching,and critical thought. By doing so, we ultimately use the Internet in a way that empowers.

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Conceptual Framework

Data from this autoethnographic study is examined through a social and critical theoretical framework. Social theory which questions, explores, and explains social life works along side of critical theory, which is concerned with relations of power, dominant ideologies and discourses to give meaning to use and non use of the Internet by students and teachers. With critical insight, issues including current classroom practices, professional development of teachers, teacher and administrator accountability, Internet filtering, and power relations within school system are also explored.

Qualitative Methods

This study employed autoethnography as a method. A highlighted benefit of autoethnography is its emphasis on transparency of research methods and researcher positionality (Hughes, Pennington, Makris, 2012). The study also employs narrative inquiry. Tied closely to the notion of experience, narrative inquiry is more than story recording. It is a form of research that can serve as a powerful tool in the sharing and constructing of knowledge (O'Hara, 2010). These qualitative methods move beyond a positivistic approach, in that there is a continual consideration of the conceptual, methodological, and theoretical orientation of the project, with simultaneous consideration of the historical, linguistic, social and cultural backgrounds of both the students and teachers involved.

Data sets were comprised of rich sources of empirical evidence; personal experiential reflections, observations, interviews, digital correspondence such as emails and blog posts, as well as personal verbal and written feedback. Data analysis was drawn from tenets of Grounded Theory (Corbin & Strauss, 2007) and involved a hermeneutical approach, couched in social and critical theories, with interpretation and analysis of patterns, themes, regularities/irregularities and contrasts as they relate to the central research question posed above.

An Autoethnographic Study

The third floor hallway I am walking down is dim and quiet. It is early morning and the aroma of coffee drifts out of the department offices. The halls are empty; most students are in classrooms, a few scattered throughout the corridors, walking quickly to where they need to be. "Hurry up guys. I can't give you a late pass," a dean on patrol calls to them.

It has only been a few days since school has been in session after a long winter vacation. The hallway floors are slick and clean, having been waxed over the holiday. The rising sun enters through metal barred-windows at the far end of the building, sending a beam of light down the corridor. The reflecting glow off the polished tiles reminds me of religious paintings that reference "seeing the light." Ironically, the awe inspiring light I'm about to see is that of engaged students, radiant with enthusiasm, as they research, debate, and analyze information found on the Web

From the outside of the room, I hear muffled talking, laughter and the movement of desks. As I enter, I see tenth grade girls arguing with one another, "No, that's not it. Read it again!" one says. "You're way wrong. Look, if you click here they even give you a picture of it. See?" "Alright chill!" the other replies. "I got it. Yeah, this graph thing is better."

The two students are pointing to a laptop monitor, reading through a hyperlinked document. The live links take them to additional sites, documents, charts and diagrams, all Web based. Around the room, classmates sit in pairs or in groups of three, working together at laptop computers. Beside them there are loose leaf notebooks and pens. Some students seem to disagree as to what gets written in the notebook. I watch as they playfully argue, "Nah, that ain't it!" appearing to be proving their point by referring to something displayed on the monitor. They move seamlessly from Web page to Web page, to hyperlinks to new Internet browser windows, to handwritten notes, to text book, back to Web pages. In the front of the room, projected on a small torn movie screen, is a brightly colored Web page that includes a picture of Parkland Reservoir and a picture of a water treatment plant. Above the graphics are varying styles of font and a boldface title: Is Our Water Really Clean?

I look at the Web page address which includes the name of the class I'm visiting and I know immediately that the visually appealing page with charts, photographs, and hyperlinks was designed by their teacher using a free Web-based program. As a teacher educator, I had worked with their teacher in previous years, providing professional development in the effective use of technologies that were available to her in her school building.

When referring to "effective" technology use, I am describing technology used in ways that positively impacts the learning process and use that is also a beneficial support to current teaching strategies. Effective use does not refer to technology that simply replaces more traditional methods, such as when students use repetitive drill software, use the Internet to take online practice exams, or write their work in their notebook and then spend time painstakingly typing the same work with word processing software.

Other examples of merely "replacing" a more traditional method includes the creation of PowerPoint presentations filled with text rather than writing the same information on the chalkboard, or the use of a SMART Board to merely project videos or images rather than utilizing the interactive features of the whiteboard. To be "effective" the technology must be used as a meaningful, engaging, instructional tool that aids students in collaboration, knowledge creation, and a medium for problem solving and critical thinking. For teachers, the technology must be used as a tool that supports the attainment of instructional goals in ways that a more traditional medium cannot.

Findings

When examining daily Internet use in urban schools, the radiant light seen of engaged students working in their science classroom, using the Web to investigate, question, critique and create, becomes dimmer.

Unlike the teacher in the opening scenario, many teachers are not adept at using technology in meaningful, authentic ways. Classroom teachers are provided with few opportunities to learn how to incorporate technology into their practice. The professional development made available to teachers by their districts often, if not always, focuses on Mathematics and English Language Arts (ELA), the content areas that correlate to national Common Core Standards and standardized testing. An urban middle school principal explains, "I'd love to have technology PD (professional development) for my teachers but sad reality is I got limited funds and I got to get everybody up to speed on Common Core and the teacher evaluation. So, whadda am I gonna tell ya? That's where the money's going…to that PD."

And, in an education age of accountability, with the pressure of having a restrictive, quantifiable goal of student test scores as the standard for defining learning, teachers feel the pressure of using the Internet in ways that not only narrows the curriculum but also perpetuate the status quo. Teachers frequently use the Internet for test prep, spending most of their instructional time on Web sites that host online multiple choice exams or accessing practice exams from previous years at their state's education department Website. If teachers decide to allow students to use the Web for reasons other than test prep, then the Web sites accessed contain information rarely more insightful than the perspective and content of students' textbooks.

Teachers need to keep a critical perspective in mind when seeking out information on the Internet for their students. The chosen Web content should offer an alternative to the traditional "banking method" of teaching (Freire, 2005).Too often teachers unwittingly perpetuate the status quo with curriculum that reflects "the notion of a single norm of thought and experience" which they are encouraged to believe is "universal" (hooks, 1994, p. 35). Teachers need to develop an online framework in which to explore differing viewpoints and question hegemonic grand narratives. Carefully chosen Web resources should expose students to alternative views and perspectives.

It is also imperative that teachers use the Internet to obtain Web content and information, integrating it within the curriculum in a way that requires students' to engage in higher level thinking opposed to simply summarizing the presented information or having students "receive, memorize, and repeat" (Freire, 2005, p. 72) what they have read online.

However, despite these suggestions, often the Web sites that are "allowed" to be accessed in schools are unfortunately not by the choice of the teacher, nor the student. In many K-12 school districts throughout the United States, urban schools employ a strong filtering system for those in the classroom seeking out information on the World Wide Web.

Ironically, I recently overheard a conversation between two college professors about the dreadfulness of Internet censorship in the People's Republic of China. As I listened I could only think, what about the censorship in our urban public schools? The image of America, leader of the free world, a democracy, bound by the first ten amendments of U.S. Constitution, a Bill of Rights for all citizens came to mind. With that, who could imagine censored, blocked and restricted information, in America's educational institutions? *In The Condition of Post Modernity*, David Harvey explains how the Age of Enlightenment was replaced by "a new organization of space dedicated to the techniques of social control, surveillance, and repression…the difference lies in the way state power in the modern era becomes faceless, rational, and technocratic…"(1990, p. 213). In a rational light who doesn't understand the worth of protecting our children? But in its facelessness, power in this instance clearly impedes learning, discovery and inquiry.

For over a decade I have worked in schools located in one of the nation's poorest congressional districts. One would think that given the high poverty level of the community, what greater resource is there than Internet access in all neighborhood schools for students, teachers, and parents alike, to seek out information and Web based materials that could help them in their personal, academic and professional lives?

The censorship of Web content in school buildings is a direct result of the Children's Internet Protection Act (CIPA) which was enacted in 2000. CIPA requires schools and libraries that receive funding for affordable Internet access and internal connections to address concerns about students' access to obscene or harmful content over the Internet through the use of filtering software. In theory, the CIPA makes perfect sense. In practice, another story unfolds.

For teachers, filtering content deemed "harmful" many times translates to the restriction of valuable and useful information. One high school teacher explains, "Trying to do research on the Internet in this school is a joke. Anything I think is *really* important for them (students) to read is blocked. What I do is take a screen shot of the Web page at home, save it to a flash drive and then show it with the projector. We just read it from there. Totally ridiculous, right?"

In addition to filtering, many districts have their network designed in a way that each school building has two servers or two distribution centers for Internet. One server and broadband line is for instruction and is wired to all classrooms. The other, the administrator line, is wired to all school administrator and non-instructional staff offices. The administrator side of the network is many times unfiltered, with most sites accessible except those related to social networking (i.e., Facebook, MySpace, LinkedIn) and some streaming video such as YouTube.

The two tier school filtering system, in a sense, acts as a "disciplinary apparatus" that "hierarchized the 'good' and the 'bad' subjects in relation to one another" (Foucault, 1977, p. 181). Have our urban school systems determined that the teachers are "bad" or at least bad at exercising any professional judgment as to what instructional material they wish to use in their classrooms? If the fear is that students may view inappropriate material, then that is a reality-- but also one that may be addressed within classroom management strategies, discussions with students regarding what is considered appropriate material, and learning about Internet safety and Netiquette in a supposedly safe and nurturing environment of school. Instead, the message sent to both teachers and their students is; you cannot be trusted. But, what about the "good" administrators? Are they trusted and thus more deserving of more access? Not necessarily. One high school assistant principal explains, "Yeah, I guess on my line I get more (Web sites) than they do in the classrooms but really, I'm here working so late every night, all I want to do is check my (personal) email for grant information! [outstretches his arms in the air]. Most times it's blocked. But then other times it's not… (sighs)"

Moreover, extensive filtering in schools undermines the educational practice of teaching students how to responsibly use and evaluate the Internet. As teachers, we need to help our students develop skills associated with critical literacy. And, perhaps more importantly, do so ourselves. But, this need not be a "teacher as expert" scenario. Students and teachers can work together, using the Web as a resource, developing the ability to read texts in an active, reflective, and reflexive manner. By doing so, both students

and teachers can further enhance their understanding of the perspectives and the power relationships behind the messages they encounter.

And finally, the very fact that information deemed "harmful" by those outside the classroom, suggests a great starting place for students and teachers to begin discussion about the social and political forces that shape their own, at times restricted, experiences.

Conclusion: Progress and possibilities

The urban teachers I worked with are individuals that are candid, informative, insightful and above all, inspiring. When I meet with them after a long day in their schools, the mood is often low-key. However, when we begin to discuss the use of technology in their classrooms, the discussion comes alive with sharing of successes, and accessing of originally created Web sites or blogs, their students' online presentations, collaborative documents and digital stories. These teachers are the epitome of those described in an article I recently read. According to research, the use of Web 2.0 tools in K-12 instruction is being driven not from the districts, but from students and teachers. Teachers in the study cited three reasons for adopting Web 2.0 technologies; "addressing students' individual learning needs, engaging student interest, and increasing students' options for access to teaching and learning" (PRWeb, 2009).

The urban teachers I work with are well versed in their subject areas. They teach a certain discipline and with the use of technology, many of them create optimal conditions for student learning. They do not use the technology as a mere replacement for another medium nor do they use the technology as a tool to perpetuate the status quo. Instead, they use technology, the Internet and Web 2.0 tools in particular, to provide students with opportunities to research, collaborate, create, communicate, question, and problem solve.

Web 2.0 is known as the second generation of the Web. With the inception of the Web 1.0 there were either readers or writers of content; static HTML pages were created by Web developers and readers accessed pages, retrieving information via a Web address. Now the Web has allowed users to go beyond simply finding and using information. The Web has become a participatory, collaborative space in which content control and creation are vast. In secondary urban classrooms scattered throughout cities, despite limited resources teachers use free, Web 2.0 tools with their students in meaningful and empowering ways, developing traditional literacies skills as well as digital literacies.

- Tenth graders blog about issues presented in American literature. They make real world connections to a particular piece of literature, supporting their opinions with pictures or embedded videos within a post. Students' "voice" can be heard by a larger audience and take on new meaning as students gain a sense of ownership about their thoughts and words. A teacher clarifies, "You would not believe how much they blog. I never have to remind them to post. Even the ones that don't have a computer at home- they usually use a family member's or a friend's. The blogging has really developed their writing skills—and critical thinking. In the blog we get to discuss stuff not necessarily on the state exam. But…well, indirectly I guess it is. Real things, you know. Drug use, dropout rates, teen pregnancy. Important issues that affect their lives. (laughs, then nods) They should have a say in that."
- A Special Education class uses a Web based presentation tool, Voice Thread to review for the Global History Standardized Exam. A "thread" can consist of images, text, video and audio, or any combination of. Their teacher created a thread by using a series of pictures reflecting people, places and things associated with "topics to be covered" on the upcoming exam. For each picture the teacher created a narrated voiceover in which a question was asked. The students then answered and participated in a discussion for each of the pictures by commenting. Threads can be commented on by recording one's own voice, typing text, recording video, drawing or by calling on a phone. The commenting options lend themselves to multiple learning styles, development of emerging literacies, and the Web based hosting allows for anywhere, anytime, commenting. The discussion thread is then captured and shared with all contributors online, for free.
- Middle school students work on a group research project creating a collaborative piece about global warming using a wiki. Wiki, from the Hawaiian phrase for "quick," is a fully editable Web site that allows multiple users to create, modify and organize the content. The wiki has the ability to track changes, so who edits what and when can be reviewed as well. Interestingly, wikis allow for interaction that

is also characterized by successful communities of practice. And because of the collaborative nature of wiki use, students are able to create meaning and construct knowledge through "discussions" with their peers and teachers, and through reflection.

- English Language Learners listen to podcasts, audio or video recordings, which their teacher either saves or streams to the one computer in the back of their classroom. Podcasts can be played on any computer, iPod, iPhone or Mp3 player. The students listen to radio excerpts from a variety of stations about the same topic, analyzing the differing perspectives as they learn the skills needed to acquire a second language.
- Secondary Math students collaborate in "real time" using Google Drive to create documents, spreadsheets and presentations which can then be shared with easily from any computer with Internet access. Teacher and peer feedback is immediate and for students who do not own the expensive Microsoft Office software, Google Apps offer a free alternative.
- A group of seniors visit a social bookmarking site, accessing a list of Web resources that their teacher created. At the site they are able to share, organize, search, and manage the listed sites. The benefit of social bookmarking is that teachers can organize lists of valuable Web sites, arranged by topic or theme, for their students to review. And because of filtering in schools, the bookmarked list is available virtually, twenty four hours a day to students with Internet access.

In addition to students' use of Web 2.0 tools, teachers have managed their lack of professional development opportunities by joining together through the use of podcasts, blogs, and social networking sites. Teachers with Internet access can collaborate with educators both locally and worldwide, sharing ideas for effective practices, learning of current research, and creating knowledge around the topics that impact their professional lives as well as the lives of their students.

However, a cautionary word; integrating Web resources and Web 2.0 tools is no more effective in supporting student achievement than any other technology. It is how we use these tools that define their effectiveness and impact on teaching and learning. Web 2.0 tools are set apart from other media because many are free, easily accessible and they are the tools of emerging literacies; information, visual, critical, media, and digital literacy. They may be considered the new paper and pen, but more importantly they are a medium for developing a critical perspective.

Freire reminds us that, "It is absolutely essential that the oppressed participate in the revolutionary process with an increasingly critical awareness of their role as Subjects of the transformation" (2005, p. 127). In other words, we need to have an awareness of the structures that help to form our being. Bourdieu refers to this as habitus (1984), a continuous framework of experiences which generate us as human subjects. Habitus is our orientations, tastes, perceptions, and making meaning in and about the world. This structuring then structures our ongoing behaviors. In many ways the institutional conditions of school have contributed to a certain habitus in both student and teacher. As students and teachers, we are aware of our place in the educational hierarchy and we know the limitations imposed on us. The use of Web 2.0 tools and open content add another dimension to our once traditional roles of teacher as expert and the student as the receptacle to be filled. Web 2.0 tools offer accessible modalities for learning, constructing knowledge and reflecting on our own habitus. We need to begin by examining oppressive practices that have indoctrinated us and created our academic world; often times by our own actions, lack of action, and blind acceptance.

The Internet and Web 2.0 tools offer urban students and teachers opportunities to challenge the ideological and political nature of curriculum. Web 2.0 technologies foster collaboration, creation and dissemination of content, and perhaps most important, they serve as a medium for critically examining issues of equity and access.

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