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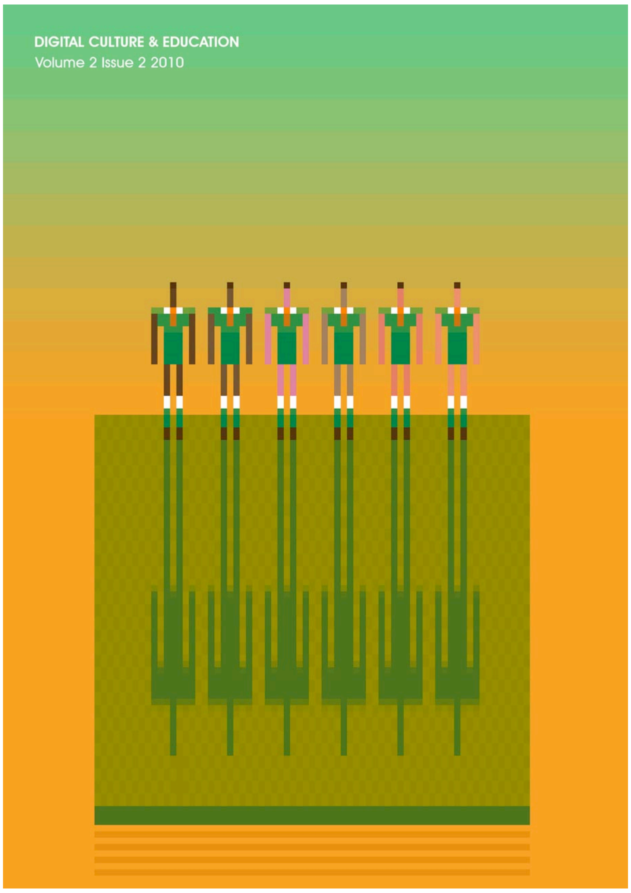

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"You should be reading, not texting": Understanding classroom text messaging in the constant contact society

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'You should be reading not texting': Understanding classroom text messaging in the constant contact society

Sarah Lohnes Watulak

Abstract

Cell phones are the most ubiquitous communication device owned by young people today, and students' text messaging during class is a common occurrence in many university classrooms. Analyzing data from a qualitative study involving 34 undergraduate students at a university in the Northeastern United States, this paper seeks to explore: Why do university students text message during class, and what does this tell us about text messaging as a new literacy practice within traditional classroom settings? Drawing on perspectives from new literacies and communication studies, I argue that texting was a meaningful practice for students as it afforded the opportunity for ongoing participation in social networks, and provided a means of exercising power within the controlled space of the classroom.

Keywords:

Cell phone, college students, mobile communication, mobile phone, new literacies, text messaging

Introduction

September 19, 2007
7:32 pm
Jocelyn has her book closed, and she comments to Leticia that she can't read in here, "I need quiet". They talk about the temperature again, and Shayla joins the conversation: "it's cold", "it's supposed to be nice out this weekend though". Prof. Martin shushes the class again—"you should be reading not texting". I look up from writing to see Prof. Martin glancing at me. A male student is texting under the table. Prof. Martin shushes them again. Many students have their books closed and put away and are talking. Shayla takes her cell out of her purse, looks at the front of it, and puts it back. Takes it out again, then puts it back.

7:39 pm
Leticia flips open her phone to read a text message. She holds it under the table, then hides it from Prof. Martin behind her book and types a message with one hand. Alla plugs her phone into the wall, and rests it on her lap while pressing some buttons. Leticia has her phone against her chest. Almost no one is reading, though some have their books open in front of them.

Students' text messaging during class is a common occurrence in many university classrooms, often to the chagrin of professors and administrators. Cell phones are perhaps the most ubiquitous communication and media device owned by young people today; the Pew Internet and American Life Project reported that three quarters of young adults (ages 12-17) own a cell phone; of these, 88% report that they send text messages using their cell phone.[1] Half of those young texters are very frequent texters, sending more than 50 text messages a day (Lenhart, Ling, Campbell, & Purcell, 2010). Of particular interest, the percentage of teens who text message daily has increased over the past 3 years (from 27% in 2006, to 54% in 2009), in contrast with daily use of other communication tools such as instant messaging and social network sites, which has remained relatively stable over the same period. These usage patterns paint a communication picture in which "the mobile phone has become the favored communication hub for the majority of American teens" (Lenhart et al., 2010, p. 2).

While there exists a movement among some educators to harness the ubiquity and popularity of mobile technologies (including cell phones) to improve learning in the classroom (e.g., Scornavacca, Huff, & Marshall, 2009), the consensus among many educators is that cell phone use in the space of the classroom poses a challenge to teaching and learning. For example, upon catching a student sending a text message during his philosophy class, a professor at Syracuse University made the controversial decision to abruptly end class and leave the room (Jaschik, 2008). A National Education Association higher education division poll of professors found that 85% supported a cell phone ban in classrooms (Gilroy, 2004, p. 57). From accounts such as these, it seems clear that while universities value technology in certain (often administrative) contexts, the new literacies in which students engage do not always overlap with practices that are valued by the institution.

However, Lankshear and Knobel (2003, p. 24) argued that teachers and researchers should be aware that "numerous influential (and powerful) literacies exist that enjoy high-profile places within contemporary everyday culture", given that college students' everyday experiences—including those with and through technology—play a role in how they engage with their learning in the classroom and vice versa (Wallace, 1966; Holland & Eisenhart, 1990). This paper draws on data from a semester-long, qualitative study of student technology practices that involved 34 undergraduate students across two courses at a mid-size, suburban, state university in the Northeastern United States, in order to describe text messaging practices in the university classroom setting, and to answer the following questions: Why do university students text message during class, and what does this tell us about text messaging as a new literacy practice within traditional classroom settings?

Drawing on perspectives from new literacies and communication studies, I argue that text messaging—an 'influential', 'high-profile' everyday literacy practice—was a powerful practice from the students' perspectives, particularly in the way in which it afforded students the opportunity for ongoing participation in social networks. Furthermore, these findings illustrate the tensions that may arise in the classroom when everyday literacies are constructed as not valuable and are not sanctioned by those in authority, tensions that revealed themselves particularly in relation to the classroom power structure. In this study, text messaging provided some students with a means of exercising power within the controlled space of the classroom. Finally, I suggest that moving beyond the 'moral panic' often associated with text messaging (Thurlow, 2006) allows us to recognize the importance of text messaging in young people's lives, and to investigate implications for practice. Educators and technologists who seek to integrate cell phones into the university classroom in a way that is meaningful to students, should find ways of building on students' ability to bridge spaces and places, and to create and maintain networks and relationships, via text messaging.

Background

The new literacy studies and 'new' literacies

This research is framed by the New Literacy Studies' (NLS) socio-cultural approach to understanding literacy as multiple and fluid, and rooted within social and cultural contexts. Beginning in the early 1980's, the sociocultural turn in the field of literacy was significant in that it moved away from a purely cognitive view of literacy as an attainable skill, to a view of literacy as skills embedded within practices (Heath, 1983; Street, 1984). Methodologically, this shift opened up the possibility of investigating literacy from ethnographic and qualitative perspectives, enabling literacy researchers to explore the ways in which literacies shape and are shaped by various contexts. In this vein, the sociocultural turn also "challenged the dominance of school-based and behaviorist orientations toward literacy education policy and practice" by opening the field of study to sites outside of the classroom (Vasudevan, 2010).

Street's (1984) influential contribution to the NLS framework introduced the view that literacies are always ideological: "…versions of [literacy] are always rooted in a particular world-view and in a desire for that view to dominate and marginalize others" (Street, 2003, p. 2). Thus, research in NLS often seeks to demonstrate how power and ideology unfold within a given context, and across contexts. For example, much recent work has demonstrated that the literacies that are important to students outside of school are often not valued within the classroom space for a variety of reasons, including a lack of understanding and/or training on the part of teaches and administrators, curricula driven by high-stakes testing, and a traditional emphasis on print-driven texts (i.e. Alvermann, 2008; Alvermann, Huddleston, & Hagood, 2004; Stone, 2007).

Research in the area of out of school literacies also highlights the role that educational institutions often play as gatekeepers to a single, 'correct' way of using language. As a literacy practice, text messaging has been the focus of much debate, particularly around the effects of text messaging on 'Standard English'; descriptions of text messaging in the popular media have described texters as 'addicts', which "brings txting [sic] very close to representation as a social disease that threatens the very fibre, and health, of our society and core language" (Carrington, 2005, p. 167). In contrast, research has shown that young people's text messaging is associated with positive educational outcomes in many cases; for example, Plester, Wood and Joshi (2009) found that children's use of text message abbreviations contributed to linguistic development in phonemic awareness, word recognition, and vocabulary development.

This study investigates text messaging as a literacy practice from a new literacies perspective. Firmly embedded within the socio-cultural approach to literacy as articulated by the NLS, research in the area of new literacies investigates 'new forms of literacy' (Lankshear & Knobel, 2003, p. 23), although there is some debate as to what constitutes "new" literacies. I base my work on Lankshear and Knobel's (2007, p. 7) description of new literacies as literacy practices that encompass both "new technical stuff" and "new ethos stuff"—in other words, chronologically new technologies that provide certain technological affordances, which enable new practices (values, norms, etc.) to grow up around them. In this view, the term "new literacies" is not interchangeable with the term "new technologies"; and consideration of the "new ethos stuff" allows us to situate the conversation about literacy practices in broader socio-technical contexts, as well as to attend to notions of power, ideology, and control that are central to the NLS framework.

Text messaging in the classroom provides one example of a new literacy practice that involves both new technologies in the form of text messaging (and the cell phones that provide the messaging platform), as well as new values and norms—"new ethos stuff"—arising from cell phone and text messaging use. Although digital cell phones have existed for more than a decade, they are constantly changing, adding new features and thus new affordances. At the time of this study, students owned cell phones that at minimum were capable of taking pictures, sending and receiving text messages, and exchanging voice data. At the high end, student cell phones additionally featured email, Internet browsing, and personal organizer capabilities.

While identification of the "new technical stuff" associated with current cell phone technology is relatively straightforward, recognizing the practices and values associated with cell phones requires study of technology-in-use within particular contexts. Although research in new literacies has not to date explored the literacy practices associated with classroom cell phone use in a systematic way, research in the field of communication studies points to the idea of constant contact to describe a set of values and practices underlying text messaging and cell phone use.

The constant contact society

> *Interviewer: In your class, I notice people using cell phones…*
> *Nichole: I guess like to text or something here and there. I don't know, it's addicting. Everywhere you go, everybody's cell phone, cell phone, cell phone.*

Research in communications studies shares elements in common with new literacies research, including the use of ethnographic methodologies, a commitment to viewing youth practices as powerful, and a focus on technology as embedded in social interaction. Work in this area, however, frequently looks beyond the local context to draw connections to broader societal patterns of communication and technology use. I find these connections to be a valuable consideration and contribution to our understanding of new literacies, particularly the values and practices associated with classroom text messaging.

The literature in this area points to the central role of cell phones in young people's social lives, primarily "to demonstrate and reinforce network membership" (Campbell, 2006, p. 290). In particular, the notion of constant contact describes a broad set of values and practices underlying text messaging and cell phone use. Clark (2005, p. 204) introduced the term "constant contact" to describe young people's instant messaging (IM) practices—practices that revolved around young people's craving for social interaction, and the technologies that allow them to stay in constant contact with their friends. Thurlow (2003), in his sociolinguistic analysis of young people's text messages, noted a "communicative imperative" driven by "the human need for social intercourse" at the root of his participants' social interaction via text message. In their work on SMS among Norwegian teens, Ling and Yttri (2002, p. 140) described "hyper-coordination" as involving the use of cell phones to minutely coordinate social interactions in time and space—in other words, constant contact as a "functional and instrumental activity" in teen socialization.

Constant contact can be further described in terms of the new spaces, expectations, and tensions arising from frequent text messaging. Ito and Okabe (2005, p. 138) depicted the constant back and forth exchange of messages between parties as opening up new spaces and places, specifically, "a sense of persistent social space" experienced by the participants in the text message conversation. At the same time, the social expectation of constant availability arose as one consequence of this new techno-social situation. Accessibility was seen as a positive among many teenagers. Ling and Yttri (2002, p. 150) described it as "an expression of their status [that] is cultivated and developed"; in other words, being in demand was seen as a demonstration of their popularity.

For other young people, constant contact may be a site of boundary negotiation. Ito and Okabe (2005) described how some Japanese youth in their study pushed back against the expectation for constant accessibility, in an attempt to negotiate the boundaries between public and private life. The tension between public and private is a characteristic feature of increased cell phone use in our society, as "individuals increasingly transform the public sphere into private space through mobile communication practices" (Campbell, 2006, p. 280).

Taken together, theoretical frameworks and research in new literacies and communication studies can assist in deepening our understanding of youth technology practices, and their implications for education. Constant contact was a valued communicative practice for the young people in these studies, allowing them to connect on emotional, social, and functional levels made possible by the affordances of text messaging and other asynchronous communication technologies. As we will see below, while local factors contributed to shape the classroom text messaging that occurred in this study, the practices and values associated with constant contact provided an additional lens through which to understand this new literacy practice.

Methodology

This article shares results from a qualitative study of student technology practices and the role of technology in college students' identity enactment that involved 34 undergraduate students across two courses at a mid-size, suburban, state university in the Northeastern United States. For this report, I focus on the use of cell phones in these two courses, with an emphasis on understanding classroom cell phone use as a new literacy practice. Data collection occurred during Fall 2007, and included field notes from researcher observation; transcripts from key informant interviews; and key informant technobiographies (an autobiographical narrative of their relationship to technology; see Kennedy, 2003). Data collection procedures are detailed in Table 1.

Table 1: Data collection procedures and timeline

Procedure	Frequency and Duration
Classroom observations	Fall, 2007 semester Beginning during the second week and continuing once a week until the last week of classes
Key informant interviews	Late October-Early November, 2007 One interview per student, each lasting approximately 45 minutes
Student technobiographies	Email sent mid-November 2007

	Biographies received late Nov. – early Dec.
Peer debriefing	Spring, 2008 Three, hour long group meetings while data analysis was ongoing
Member checking	Late Spring, 2008 Email sent to focal participants

During my classroom observations, I noted several aspects of student technology use, including: who used technology, what technology was being used, in what setting, and during what classroom activity. See Appendix A for a table documenting these observations of students' in class cell phone use. In addition, the key informant interviews and technobiographies (described below) provided insight into college students' everyday technology practices, and helped to expand my understanding of the technology practices that I observed during class time.

Participants and settings

The settings for this study comprised two courses in a College of Education at Springfield State, a mid-size public university in the Northeastern U.S. In total, 34 of 42 students enrolled in the 2 courses volunteered to participate in data collection. Students were not provided with monetary or other incentives in order to gain consent. Of the 34 students, 5 were selected to participate in further data collection outside of the classroom, as described below.

Springfield State. Springfield State is located in a small, suburban town in the Northeastern United States, approximately one hour by train or half an hour by car from a major metropolis. The university was founded in the early 1900s as a teachers college, and still retains a reputation for excellence in teacher education. A mid-size, public university, Springfield State enrols close to 17,000 students, of which less than 20% live on campus. The undergraduate student body is overwhelmingly female (62%) and White (58%), with Hispanic the next largest ethnic population (20%). The university offers undergraduate, masters, and doctoral programs; its undergraduate programs have a Carnegie Classification of primarily arts and sciences plus professions, with a high graduate coexistence.

Like many universities, Springfield State valued technology, and was involved in efforts to bolster infrastructure, provide training and support to faculty, move administrative processes online, and provide students with access to computer hardware and software. Wireless access was available in public gathering spaces, and in many classrooms. The College of Education's IT group, responsible for hardware and software maintenance, and providing support for the computer labs and smart classrooms, also occupied a portion of the first floor. The computer labs were available for faculty course use when reserved in advance.

Courses. Literacy in the Content Areas met once a week for 2.5 hours in the late morning. The participating students in the course—13 women and 11 men—were juniors and seniors, preparing for certification to teach in school settings in the state. The course was required for all of the students, who represented a variety of majors: English, art education, physical education and health, history, music education, English as a Second Language, math, social studies, and biology. The professor and students made frequent use of technology in this course, including a wiki to retrieve course materials, a blog for journaling, and several in-class lab sessions demonstrating technology-supported lessons.

The second course, Developmental Reading, met once a week, in the evening, for 2.5 hours. The Developmental Reading course was required of any incoming freshman student whose score did not fall into an acceptable range on a reading placement exam. As a result, the course drew students from a wide range of backgrounds and interests not limited to pre-service education. Eight of the 10 participating students were women. Most students were the typical age for entering freshmen (18-19 years old) with the exception of a woman in her early 40s. Several of the students were non-native speakers of English. The professor made infrequent use of technology in this course. Students were asked to email weekly vocabulary words to the professor. Although a Blackboard course was available, it was only used once (for a threaded discussion).

Sampling. The selection of the university, and one of the courses, may be viewed as a convenience sample; a colleague at the university offered access to her course, as well as introductions to other colleagues. The selection of the Developmental Reading course was criteria-based; while the first course involved a high level of technology integration with older students, the second course was chosen to provide a diversity of age/year (freshman to senior) and use of technology (low to high) by the professors. Taken together, the two courses provided the opportunity to "discover, understand, and gain insight" in a setting "from which the most can be learned" (Merriam, 1997, p. 61) about the technology practices of students.

The everyday lives of the students also played a meaningful role in my inquiry. Therefore, five focal students were selected to participate in further data collection that extended outside the parameters of the courses. These measures included a one-on-one, open-ended interview using photo elicitation, and a technobiography—narrative stories of the self, which are written or elicited through interview (Ching & Vigdor, 2005). The focal student sample was selected using maximum variation (Merriam, 1997). After getting to know the courses and the students for a period of 3 weeks, I approached those who represented a range in the following criteria: gender; observed and/or self-reported variation in technology use; and attitude toward technology use in and out of the classroom.

Analysis

The data analysis explored the students' practices and perspectives regarding the use of technology in their lives as college students. For this report, the analysis focused particularly on observed and self-reported use of cell phones in and out of the classroom setting. All field note, interview, and technobiography data collected during the study were analyzed using the constant comparative method (Glaser & Strauss, 1967; Creswell, 1998), in which multiple coding passes through the data led to the emergence of broad themes and categories. The findings of this analysis are described in detail below.

Findings

Several local factors played into whether or not students chose to use their cell phones in class, including the particular classroom activity occurring at a given time, and the professor's policy on the use of technology during class. Furthermore, students' classroom cell phone use was shaped in response to a broader, societal imperative to be constantly connected. Before venturing into these areas, however, I provide a brief overview of my observations in each of the courses, to illustrate how text messaging occurred in the two classrooms during class sessions.

Overview of text messaging in two university classrooms

In Prof. Webb's classroom, I occasionally observed students on their phones during class time, text messaging or playing a game. One such occasion took place during a group activity:

> *Group 4—right front table. 7 people: 4 men, 3 women. A student is texting on his phone under the table. As Prof. Webb walks over to the table, he quickly puts the phone in pocket; his ears turn red. Prof. Webb is looking at his sheet and talks with him. 5 students at the table look at Prof. Webb as she talks to the student. Prof. Webb then talks to the student next to him. One student looks totally bored; she's not writing, just staring down at her notebook.*

However, the majority of cell phone use in this classroom occurred during class breaks. Prof. Webb usually gave the students a 10-minute break about halfway through class, and many students took their phones with them and left the room; some of them could be seen talking on their phone in the hallway. Others stayed in the room and used their phones to send text messages.

In Prof. Martin's class, cell phones were often visible during class time, sitting out on students' desks. Female students tended to leave their purses on the table, where their phones were hidden from view, but in close reach. This behavior can be explained at least in part by the fact that the classroom did not have a clock, and so students relied on their phones to check the time. (I found myself using my cell phone during the class to check the time as well; like the students, I attempted to do so surreptitiously, holding the phone under the table.)

Text messaging occurred frequently and indiscriminately during class time in Prof. Martin's class, though a greater concentration of texting took place during individual reading time, the last 30-50 minutes of every class. The excerpt at the beginning of this article occurred in Prof. Martin's class, near the end of a class session. However, there was a noticeable difference in terms of who texted during professor-led class discussions, versus those who texted during individual reading time. A core group of 3 or 4 students texted all throughout class, and the core group plus others texted during individual reading time.

To txt or not to txt: Factors shaping students' decision to text in the classroom

Despite a high incidence of cell phone ownership, not all students text messaged during observed class time. This section examines two themes that arose from the local, classroom context—the professor's technology use policy, and student engagement with the classroom activity—and a theme that points to the broader social factors that bear, consciously or subconsciously, on students' decision to text message during class.

Professor's technology use policy. A professor's policy on technology use in the classroom sends a message to his/her students as to what is deemed (by the authority figure) as appropriate behavior concerning technology use. Sometimes this message is explicit, as when a syllabus states that students are to keep their cell phones on vibrate, off, or out of sight during class. Other times, a policy (or lack thereof) may be implicit, as when a professor expresses displeasure at a certain behavior.

In Prof. Martin's class, where many students texted throughout the class period, there was no explicit policy against phones, either stated in the syllabus or during class. Although he did not set an expectation around cell phone use at the beginning of the semester, Prof. Martin did occasionally discipline students for texting during class, as in the following excerpt from my field notes:

> *Prof. Martin tells the students that he's going to read from* A Lesson Before Dying *by Gains, but before he starts he walks over to Leticia and says in a low, somewhat irritated voice, to put "cell phones away, no texting in class, no cells". She was on her phone, holding it in her lap. She seems to still be on the phone as Prof. Martin reads, his gaze directed down at the book. Jocelyn's eating, there's a white take-away bag and a soda on the table. Carla is texting, and her neighbour's leaning back with her hands in her lap.*

Although students texted during every class, Prof. Martin only reprimanded a student on two or three occasions during the semester. While texting was the primary technology-mediated off-task behavior, there was also quite a bit of whispering among students during class, particularly during the individual reading time. As with the texting, Prof. Martin didn't comment on every incidence of whispering. The following excerpt from my field notes recounts a conversation between Prof. Martin and myself that took place after the first class session that I observed, during which there was a high noise level throughout the last half hour of the class.

> *Prof. Martin brings up the end of class, how he wants the students to have some time for and practice with sustained reading. I wonder out loud if some of them aren't used to reading for very long, and he says he was looking up from the individual meetings and saw that some of them can go for only 35, 40 minutes tops, some of them for 45, 50 minutes. He says that it's ok if it ends up in chatter, it's not a big deal. So it's a specific decision on his part.*

I believe he chose to address the whispering in our conversation, given that an observer might view the high incidence of whispering as a result of poor classroom management. At the same time, his reasoning in this situation also illuminates his decision not to reprimand students for texting—another form of off-task behavior—in every instance.

Prof. Martin's decision may have helped to create a safe space for the development of sustained reading skills; at the same time, his decision not to establish an explicit policy against texting, and not to sanction students for every occurrence of texting during the class, may have implicitly sent a message that texting was, if not allowable, then tolerable. In our interview, Nichole, a student in Prof. Martin's class who rarely texted during class, pointed to this lack of policy as a reason for much of the observed texting:

> *Well the professor hasn't said anything about them like oh you can't have them, so I guess that's why everybody you know is on them. But in one of my other classes, my teacher oh my god, he's crazy about it. He goes, turn it off, he does not want it on vibrate, not on silent, he wants you to turn it off.*

Although the students knew that texting during class was generally not acceptable behavior—evidenced by the fact that the students who texted tried to hide it by holding their phones under the table—they continued to do so throughout the semester. Creating a classroom context in which such behavior was tolerated and therefore tolerable may have contributed to students' decisions to text during class.

In contrast, Prof. Webb had an explicit set of policies regarding technology use in her classroom. There was a clear policy against having a cell phone visible or using it during class, stated under the rules and regulations section of her syllabus:

> *No cell phones. It rings, I answer it. Mine rings, you can answer it. The only exception is for a family emergency—let me know at the beginning of class and please leave it on vibrate.*

Prof. Webb reminded students of this policy during the first several class sessions as well. Note both the specificity of the rule—your phone should be off (with exceptions) and stowed away—and the consequences for breaking the rule, the rather embarrassing (to the student) nature of which emphasizes the seriousness of the no-cell-phone rule. At the same time, the rule as stated also acknowledged that a) Prof. Webb herself was a cell phone user (like them), and had her phone with her during class, and b) underlined Prof. Webb's philosophy of treating her students as colleagues—that she was someone who could be held accountable, by the students, despite her position of power.

In practice, the no-cell-phone rule was not enforced as written, as illustrated in my field notes:

> *12:15 pm*
> *I can hear a cell phone ringing and so do others, a few students laugh (somewhat nervously), and the general room noise gets louder. After a few rings, Prof. Webb, who is walking around to the tables, asks "whose cell phone is that?" Someone says "get 'em!" … Prof. Webb continues on to another table and says distractedly "turn it off, turn it off".*

Prof. Webb did not follow through on her threat to answer the student's cell phone on this occasion, nor did she on another occasion when a cell phone rang in class. Unlike Prof. Martin's class, however, this was not taken by students as an implicit acceptance of receiving a call while in class. It was clear from Prof. Webb's reaction that she was unhappy with the situation, and this reaction made sense within the framework of expectation that she had created around cell phone use at the beginning of the semester. While students did occasionally text during class, incidences of this behavior were low; for the most part, students didn't openly challenge her authority to ban cell phone use during class.

Student engagement with classroom activity. Even with certain technology policies in place that attempted to regulate the use of technology and establish appropriate (in the professor's eyes) technology practices in the space of the classroom, it is evident from the above excerpts that some students chose to text message nonetheless. In speaking with students, it emerged that in some situations—particularly when class was 'boring'—certain students felt that their time was better spent in social interaction via technology, as a means of fitting socializing into their busy lives.

The notion of boredom was related to how students thought their professors should teach their college courses. First and foremost, the students in this study felt that professors should make an effort to engage students, by providing them opportunities to participate in class. John, a student in Prof. Webb's class, made this clear in describing one of his courses: "It's this really lame class where all she does is talk and doesn't even get the class involved, so why should I bother. If you don't bother...". Technology wasn't seen as necessary in order to engage the students, although they indicated that when done appropriately (both in terms of the choice of technology fitting with the material, and in terms of the professor's ability to implement the technology), it often helped. The students' views may be summed up as the following: if we're not engaged, we're bored, and when we're bored, some of us will turn to texting, the web, email, or IM. David wrote this in his technobiography, on being online in class:

> *I like being constantly connected to the Internet which is why I leave my PC on when I'm in class. I like having the ability to go find something out at any time, whether it be a movie title, who the first premier of Russia was, if the Yankees have made any good trades, or to see what I'll be doing this weekend.*

In our conversations, the students offered different scenarios for how to engage them during class. David, a student in Prof. Webb's class, liked the way in which she broke up the two and a half hour class period into different activities, including small group activities and class discussions: "[Prof. Webb] keeps it interesting... keeps my attention... keeps us moving in different things". John, too, appreciated when his professors tried different and new things, such as having the students teach parts of the class, or introducing an element like blogging into a course: "[My history class] is really cool. …he puts a different spin on things, he doesn't really teach that much, he gets us to teach. So, that's what I like". During our interview, Nichole, a student in Prof. Martin's class, described a scenario in which technology played a role in encouraging student participation in her speech course:

> *Yeah, [the professor] posts um some quotes or something, inspirational quotes and motivation, stuff like that, and we have to respond to them. And he's, we're getting graded on that. I guess it's 5% of our grade, so we kind of have to participate. But it's pretty interesting too, because we all get involved outside of the classroom, so it's good. ...It's different, I don't know, it makes you participate and stuff like that.*

Of the two courses I observed in this study, my field notes show far more instances of students engaged in off-task behavior in Prof. Martin's classroom than in Prof. Webb's classroom (see Appendix A). Prof. Webb's course provided many opportunities for students to participate in active discussions with the professor and with their fellow students, both during the weekly class meetings, in the form of large and small discussion groups, web-based activities, book group discussions, and the like; as well as through the blog, outside of class time. As David indicated above, her course was characterized by frequent changes in activity, with relatively little stand-and-deliver style lecturing. John, who was the most vocal student in terms of what he viewed as the professor's responsibility to engage his/her students, told me that Prof. Webb's course was one of his favorites that semester. Neither of these students engaged in frequent multitasking, and while it is too small a sample to draw conclusions, my observations of their behavior in a class that they found to be engaging supports their stated preferences for teaching and learning style.

By contrast, Prof. Martin's course provided relatively few opportunities for students to talk with each other about class topics. Although at least half of the class time was devoted to whole group discussion, the talk flowed through and was directed by Prof. Martin. Students rarely addressed each other directly during class time, unless they were whispering to each other during class. Toward the end of the semester, Prof. Martin set up a discussion board on Blackboard for students to respond to discussion prompts, but this did not evolve into conversation. The students were allowed to select their own books for individual reading time, rather than reading from a common book or a course textbook, which provided one venue for student input. I do not include these observations to criticize Prof. Martin's pedagogical choices for his course; however, in the context of student text messaging during class, the relative lack of opportunity for student participation should be considered when attempting to understand incidences of texting and other off-task behavior in Prof. Martin's classroom.

Constant contact. In this study, local factors including the professor's technology policy, and level of engagement with classroom activities, contributed to students' decisions to text message during class. My interviews with the focal students, as well as the focal student technobiographies, pointed to a less visible, yet potent, factor in this decision: a desire to be constantly connected. Those students who chose to text message during class often engaged in social interaction, to chat, flirt, make plans, or otherwise reach out to friends and family. As Shayla (a student in Prof. Martin's class) explained in our interview:

> *I guess like our culture is just something that, always being in contact with somebody and like that's just something that everyone is used to… …people end up texting you in class and like, what do you want to do tonight? What are you doing?*
>
> *Interviewer: Does it end up being time-sensitive stuff that you respond to?*
>
> *Shayla: Yeah, that. . . Well it's just sometimes it's just stupid stuff like, oh my God, I just saw this. It's just like stupid, … I don't know. Stuff that's just, really doesn't... it could wait but it doesn't.*

Shayla's response is illuminating on several levels. First, she made the connection to broader cultural practices and expectations for communication, using the phrase "always being in contact" without my prompting, acknowledging the constant contact ethos that played a role in shaping her actions. Second, there is a sense of urgency in Shayla's response, that even though the information being exchanged is of little value (to those outside of the conversational exchange), the timing is important. David highlights this second point, in describing a daily text message conversation initiated by his roommate:

> *My roommate texts me every single day in my 1:00 to 2:15 class, "Food?" I'll say, "Yes" everyday. And he'll say, "Where?" And it's always the same place. (Laughs). . . For some reason I text him the most, which is just stupid 'cause I can see him in five minutes.*

Similarly, John reached out to friends when not engaged in a class activity: "I'll just send a text message to like, one or two people and whoever responds, responds. I mean usually, I like the girl in my life and if she's around, she'll text back". Shayla, David, and John all point to an important characteristic of students' text messaging: the content of the message is not always as important as the act of text messaging itself, in which the creation of an alternative, digital social space allows students "to demonstrate and reinforce network membership" via the exchange of messages (Campbell, 2006, p. 290).

Discussion

Findings from this research highlight the importance of social communication among student friendship networks, and describes how some students selectively attended to social priorities when not fully engaged with the academic environment. The institutional demands of college are numerous—class schedules, homework, grades, exams, meetings, meeting deadlines, rehearsals—and need to be met in order to maintain good academic standing and remain a student at the university. At the same time, many students in this study were also committed to a part-time job, family, and a social life, all highly prioritized by the students, if not by the university. The ability to engage with the persistent social space of text messaging was particularly important to students in light of their need to balance academic and social priorities.

Given the dearth of research into students' classroom text messaging from a new literacies perspective, insights from communication studies were valuable in extending my understanding of the "new ethos stuff" surrounding cell phones and text messaging, by situating text messaging within a broad, socio-technical context. Constant contact was the "communicative imperative" (Thurlow, 2003) at the heart of this new literacy practice, and was a less visible, though powerful, factor in students' classroom text messaging. Social communication was highly valued by the students in this study, and text messaging was a meaningful, valuable practice in the way it afforded students the opportunity for ongoing participation in social networks.

Our students—and many of ourselves—exist in more than one space at a time through the use of mobile technologies, giving rise to tensions between the norms of the physical and digital spaces. Indeed, these findings illustrate the tensions that may arise in the classroom when everyday literacies are constructed as not valuable and not sanctioned by those in authority (school), tensions that reveal themselves particularly in relation to the classroom power structure. In this study, from the students' perspectives, several factors related to their decision to engage in text messaging in the space of the classroom. Above, we explored the role of the professor's (implicit or explicit) policy related to cell phone use, and the students' level of engagement in the classroom activity. Both of these factors arose from the local context of the classroom, elements that were often controlled by the professor, and shaped by classroom and institutional norms for appropriate behavior in the classroom space.

At the same time, text messaging provided some students with a means of exercising power within the controlled space of the classroom. Classroom spaces rarely position students as powerful; Katz (2005) used the example of hall passes in secondary schools to illustrate the centrality of teacher control of the classroom environment, and control of communication and bodies in space, to some educational philosophies. Discussions of power as they relate to technology-in-use across contexts are supported by research in communication studies as well. Ito and Okabe (2005, p. 132) highlighted the ways in which the Japanese youth in the study used texting to test boundaries, and to create new ones: "youth messaging can undermine certain adult-defined prior definitions of social situation and place, but also construct new technosocial situations and new boundaries of identity and place". Clark (2005) found that the IM window offered teens a means for private conversation away from their parents' gaze, allowing them to gain a measure of control in contexts in which they normally had little. The teens in her study also used the affordances of IM to experiment with power, control, and identity within their peer social relationships. In this study, students exercised control through disengagement with the classroom space and subsequent engagement with the persistent social space of text messaging.

It is interesting to note that, at the time of the study, Springfield State University had partnered with an external vendor to provide academic, safety, and community applications through cell phones. Faculty were also encouraged to find ways of incorporating the academic-related software applications—such as a mobile version of Blackboard (course management software)—into their courses. As part of this program, cell phones were provided at no cost to incoming freshmen students; however, many of these students carried two cell phones, due to the cost of cancelling their existing cell phone contract.[2]

While the university embraced the cell phone and some of its technological affordances, the constant contact ethos was not valued by the university, and classroom text messaging was not regarded as an acceptable practice. Indeed, as noted in the title of this article, texting was not a sanctioned literacy practice, nor considered to be a valued form of reading, in one university classroom in which this study took place. Carrington's (2005) analysis of the popular discourse around text messaging revealed a tension between 'Standard English' and texting language, with schools and teachers often positioned as protectors of 'Standard English' and student texters as in need of being protected (from themselves, we can assume). It is no wonder that classroom text messaging elicits strong reactions from many educators and administrators, when classroom text messaging is seen as both violating both the norms of the language and the institutional norms of the classroom space. However, moving beyond the 'moral panic' often associated with text messaging (Thurlow, 2006) allows us to recognize the importance of text messaging in young people's lives, and to investigate implications for practice.

Conclusion

Although my primary goal was to situate text messaging as a new literacy practice and to understand why university students text message during class, it is inevitable that a study such as this will raise questions as to the educational implications for text messaging and cell phone use in the classroom. As noted in the introduction, proponents of m-learning seek to harness the ubiquity and popularity of mobile technologies (including cell phones) to improve learning in the classroom by "tak[ing] advantage of this available 'infrastructure'" (Scornavacca, Huff, & Marshall, 2009, p. 143). These conversations tend to focus on the cell phone technology itself—in other words, the cell phone as a learning platform. For example, Scornavacca et al. (2009) reported on the use of student cell phones as a student response system (similar to clickers) for polling and iterative quizzes in a large lecture course. However, this use of cell phones as clickers is reminiscent of Springfield State University's cell phone program; both make use of the cell phone's technological affordances without tapping into the heart of the practices or ethos that makes cell phone use a powerful practice in everyday contexts.

In the context of this discussion, the title of the Scornavacca et al. article—'Mobile phones in the classroom: If you can't beat them, join them'—also points toward current educational practice in integrating cell phones into classroom teaching and learning. The title of the article acknowledges that students use cell phones in the classroom in unsanctioned ways, and suggests that the way for teachers to 'beat' students who use phones in class is to reclaim the powerful position by finding ways of using (or co-opting) the phones for sanctioned educational purposes. However, students in this study primarily used their phones for social purposes, and valued constant contact and the ways in which the phone provided a connection to friendship networks. Many researchers who study youth literacy practices across contexts contend that there are points of intersection between young people's everyday and school-based literacies that offer opportunities for making learning relevant to their lives, as well as opportunities to address issues that might arise for youth in their everyday practices (Alvermann, 2008; Alvermann et al., 2004; Stone, 2007). I suggest that the point of intersection has more to do with the 'ethos stuff' than with the cell phone as technical platform; those who seek to integrate cell phones into the classroom in a way that is meaningful to university students should find ways of building on students' ability to bridge spaces and places, and to create and maintain networks and relationships via text message.

Finally, my experience with this study suggests that collaboration among researchers and practitioners in like-minded fields such as communication studies, anthropology, sociology, and media studies, may prove to be invaluable as we work toward deepening our understanding of youth technology practices and their implications for education. A multidisciplinary approach – including, but not limited to, new literacies—can provide a layered, nuanced understanding of the ways in which young people take up information and communication technologies in a variety of contexts.

Notes

[1] The terms cell phone and mobile phone are both used in research on mobile devices, with cell phone more common among researchers in the United States, and mobile phone prevalently used in Europe and Japan. I consider them synonymous terms, and given the US context for this research, will use cell phone throughout this paper.

[2] No-cost is a bit of a misnomer; the cost was, in fact, rolled into an overall tuition increase. Also, the phone that students received for free was the basic model; if students wanted a phone with more capabilities and style, they could choose to purchase an upgrade model, and many of them did.

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Appendix A

Table 2

Observations of Students' In-Class Cell Phone Use

Who?	**What?**	**Where?**	**When?**
Prof. Webb's class			
Marion	cell phone	in class	as class is wrapping up, people are leaving
Various students	cell phone	hallway	during class break
Andrew	cell phone - time?	in class	during whole group discussion
Stella	cell phone - rings	in class	while Prof. Webb leads discussion on tech mindsets in schools
Stella	cell phone - looks	in class	during book group mtg (while Prof. Webb is out of room)
John	cell phone - Tetris	in class	during break
Betsy	cell phone - texting	in class	while Prof. Webb is out of room getting coffee
Jane	cell phone	in class	showing Marion something, while Prof. Webb gets movie set up
Prof. Martin's class			
Audrey	cell phone (Treo)	In class	during vocabulary (vocab) discussion *is sitting on desk, not being used
Audrey	cell phone (Treo)	In class	during short story read-aloud

Audrey	cell phone (Treo)	out of class	leaves during a transition in activities
Audrey	cell phone (Treo)	In class	during individual reading time (IRT)
Audrey	cell phone (Treo)- looking at photos	in class	during IRT
Shayla	cell phone - looking	in class	during IRT
Shayla	cell phone - looking	in class	during IRT
Alla	cell phone - charging, ?	in class	during IRT
Alla	cell phone - showing Bill	in class	during IRT
Bill	cell phone - ?	in class	during IRT
Leiticia	cell phone - texting	in class	whole class discussion
Leiticia	cell phone - texting - Jocelyn looks on	in class	during IRT
Leiticia	cell phone - texting	in class	during IRT
Leiticia	cell phone	in class	during vocab discussion *is sitting on desk, not being used
Leiticia	cell phone - texting (read and send)	in class	during IRT
Shayla	cell phone - reading text?	in class	briefly, during vocab discussion. bag on desk.
Jocelyn	cell phone	in class	not using, but is sitting out on top of her notebook
Maria	cell phone - texting?	in class	during vocab discussion
Audrey	cell phone (Treo)	in class	not using, but is sitting on table
Shayla	cell phone- reading text	in class	during a discussion of next week's assignment
Shayla	cell phone	in class	during a transition from group discussion to individual time
Steven	cell phone	in class	during individual reading time; not at his desk, but standing in the corner
Audrey	cell phone (Treo)	in class	puts in bag an leaves room
Alla	cell phone - charging	in class	during vocab

			discussion
Bill	cell phone	in class	out on desk, not using it; during vocab discussion
Leiticia	cell phone - txting	in class	while Prof. Martin introduces a visualization activity
Carla	cell phone	in class	out on desk, not using it; during vocab discussion
Audrey	cell phone (Treo)	in class	out on desk, not using it; during discussion of their visualizations
Carla	cell phone (LG ENV)	out of class	leaves class w/ phone in hand during a discussion of poems and visualization
Audrey	cell phone (Treo) - listening to music	in class	during IRT (while Prof. Martin has music playing in the background via laptop)
Alla	cell phone - texting	in class	during IRT
Jocelyn	cell phone	in class	just sitting on desk
Carla	cell phone - texting	in class	while Prof. Martin leads discussion of typical story genres and characteristics
Shonda	cell phone - rings	in class	during small group work, and then later while Prof. Martin talks about their final
Shayla	cell phone - looks (checking time? txt?)	in class	during discussion of genres and their outlines
Jocelyn	2 cell phone phones	in class	on desk
Nichole	cell phone - looks	in class	while Prof. Martin passes out numbers for one on one meetings
Jocelyn	cell phone - check email	in class	while waiting for her conference
Shayla	cell phone - ?	in class	while waiting for her conference
Carla	cell phone - texting	in class	while Prof. Martin goes over info about the standardized reading test

Audrey	cell phone (Treo)	in class	on desk, not using
Maria	cell phone - texting	in class	while Prof. Martin leads discussion of their non-fiction reading
Steven	cell phone - polishing	in class	during discussion of note taking strategies they used while reading
Shayla	cell phone - time or text?	in class	while supposed to be reading a history article and creating timeline
Steven	cell phone - looking	in class	while supposed to be reading a history article and creating timeline
Audrey	cell phone (Treo)	out of class	left room w/ phone in hand during reading time
Steven	cell phone - answers phone call	in class	while Martin talks about vocab; takes call into hallway
Carla	cell phone - texting	in class	during vocab discussion

Biographical Statement

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