Abstract

As college students become more connected with the outside world through technology, instructors are experiencing an increasing presence of cell phones, typically used for text messaging, in the classroom. Many students believe that they are “multi-tasking,” and that they are able to attend to the conversation in the classroom and the conversation with the outside world at the same time. In this article, we explore the perspectives of both students and professors regarding this issue.
In a college classroom, the students and the professor are actively engaged in a discussion of an educational topic. One student in the back of the room appears to be listening, but upon closer inspection, she is responding to a text message on her cell phone, which she has placed in her lap.

As new technologies begin to emerge in traditional settings of academia, scenarios like the one above occur more and more frequently. Because incidents like the Virginia Tech tragedy are ever present in their minds, it is understandable that administrators, parents and students feel that portable media is essential for safety and connection to the outside world (Caronia, 2008; Palfrey & Gasser, 2008; Alsop, 2008). This viewpoint is supported by a study by Kay Braguglia (2008) in which 100% of her research participants believed that they should be able to access emergency information over their cell phones during class time (p. 60). Most college professors would probably agree that in case of emergency, it is acceptable to use a cell phone in the classroom.

There are many times, however, when cell phones appear to be used for texting in situations that do not qualify as emergencies. Brendan Block (2009) shares a conversation with a student who said, “Today in class I thought of something I had to tell my mom; I texted her right then instead of writing down a reminder to call her. I am studious; I take notes; I don’t think it makes my grades suffer because of it” (p. 1). This could be an example of a student who feels the need for constant communication or, perhaps this student believes, as do many, that she can successfully multi-task and is able to attend to the conversation in the classroom while simultaneously communicating with the outside world.

Texting during a university class is a common and even natural occurrence with many students today. In a study at Hampton University, Braguglia (2008) surveyed students, over half of whom stated that they use their cell phone in some manner during every college class. According to Braguglia, "a total of 73% of students (surveyed) believe that using a cell phone during class seldom or never interferes with classroom learning" while "4.6% indicate that cell phones often or always assist them while in class" (p. 59).

Students may not understand that texting in a college classroom could be perceived as being disrespectful or disruptive to the professor or to other students. Additionally, cell phone use in a learning situation may send the message that the cell phone call or text message is more important than what is taking place in class, yet that may not be the intention of the cell phone user. Many professors express concerns that "texting during lecture is impolite, disrespectful and hampers the learning process" (Block, 2009, p. 1). For example, one university professor in New York walked out of his lecture when a student was found text messaging on the front row of the lecture hall. The professor felt justified because of his perception of the "brazen" disrespect shown by the texting student (Jaschik, 2009).

Is the common place use of cell phones in university classes a “good” or “bad” practice issue? Apparently, this is not a matter that has been ignored. For instance, in light of several high profile tragedies that have taken place on university campuses, many institutions of higher learning have of late implemented emergency contact systems and have revised cell phone policies accordingly (Bragulia, 2008). And for varied reasons, many college professors now
include cell phone policies in their syllabi (Braguglia, 2008). But why the near global opposition to in class cell phone use by professors? Conversely, why do students feel that cell phone use in class is almost a right? Following is a discussion of possible reasons why there is such a discrepancy of views.

**A Snapshot of Generations**

Perhaps looking through a generational lens will help to better focus on how different generations have such vastly different perceptions of cell phone use in a university classroom. Does the “establishment” just not “get it” or are the young too young to know? Who are the people occupying university classrooms today?

Each generation is identified by certain characteristics that illustrate their perceptions, or behaviors. The differences that exist between generations have historically been described as the "generation gap" (Palfrey & Gasser, 2008). The need for older adults to apply their experiences in guiding the current students has those using strategies that worked when they were young but are perceived as "out of date" by the current population. This is especially apropos when addressing issues involving mobile technology. For instance, some students do not necessarily understand the far reaching consequences of their digital practices, yet do not think that adults as old as their parents have the depth of knowledge to assist them (Palfrey & Gasser, 2008).

Although 95% of the Silent Generation is in retirement at this time, it is possible that a student currently enrolled in a university may have a professor from this generation as a course instructor. Members of the Silent Generation were born between 1925 and 1942. They are known for conforming to societal norms and for a noteworthy work ethic (Clarke, 1970). Cultural influences were The Great Depression, World War II, the Korean War, the post war boom era and the G.I. Bill (Fogg, 2008). This generation grew up in a relatively peaceful time where families were nuclear in composition and gender roles were initially clearly defined (Winograd & Hais, 2008). A partial list of famous members of the Silent Generation reads like a who’s who list of technological whiz kids. Some of the more famous are:

- John McCarthy - pioneer in artificial intelligence
- Gerard K. O'Neill – physicist and space station designer
- Robert Noyce - inventor of practical microchip; founder, Intel Corp
- Neil Armstrong – the first human being on the Moon
- Carver Mead - microelectronics pioneer
- Martin Cooper – the designer of the first mobile phone

The innovators of the Silent Generation paved the way for much of the technology we utilize today.

It is most probable a student in today’s college classroom has a “Boomer” for a professor. Boomers, born between 1946 and 1964, were defined by the popular culture of the 1960’s such as the popularization of television, the assassination of President John F. Kennedy and Martin Luther King, Jr., the Beatles, the first moon walk, the Vietnam War, anti-war protests, and the
sexual revolution (Fogg, 2008). Boomers, are known to be highly motivated workers and are typically the parents of the vast majority of students currently populating university campuses. Presidents Clinton, Bush and Obama are all Boomers. Notable Boomers in the field of technology include:

- Gordon Eubanks – microcomputer pioneer
- Steve Jobs – Apple Computer co-founder, entrepreneur
- Bill Gates – entrepreneur, chairman and chief software architect / co-founder of Microsoft Corporation
- Dave Winer – pioneering software programmer
- Paul Allen - co-founder of Microsoft
- Robert Jarvik – inventor of the first artificial heart

The Boomer generation is not only distinguished by their sheer size of number but also for their continuing contributions to modern science and technology.

It is quite possible that members of Generation X are not only students in university classrooms today, but may also be some of the younger professors teaching on college campuses. The Generation Xers are sandwiched between 80 million baby boomers and 78 million millennials and are roughly defined as anyone born between 1965 and 1980. Their cultural influences were the fall of the Soviet Union, the women’s liberation movement, MTV, grunge, the rise of home video games and personal computers, the birth of the Internet, and the dot-com boom and bust (Fogg, 2008). Generation Xers are characterized as having a high affinity for technology and as being computer and Internet proficient. Some Generation Xers who have made significant technological contributions are:

- Jeff Bezos – founder of Amazon.com
- Tom Anderson – co-founder of MySpace
- Chris DeWolfe – co-founder of MySpace
- Jonathan "Jony" Paul Ive - internationally renowned as the principal designer of the iMac, iPod, iPhone, and iPad.

Although most of the Generation Xers are in their 30s or 40s, they have already significantly contributed ideas, inventions and innovations that many of us rely on and consider an integral part of the fabric of our society.

Millennials, as Howe and Strauss (2000) refer to them, are young people born since 1982, and “are unlike any other youth generation in living memory. They are more numerous, more affluent, better educated, and more ethnically diverse” (p.4). Their cultural influences include the Internet, September 11, cell phones, Columbine and Facebook (Fogg, 2008). Children of the millennial generation have grown up with CD’s DVD’s, PC’s and various incarnations of the cell phone. They commonly have the desire to be in contact with each other and use digital media to "hypercoordinate their social lives and construct social encounters moment-by-moment" (Caronia, 2008, p.103). They are in constant contact with their parents, friends, and significant
others through their cell phones, Blackberry’s or IPhones (Elam, Stratton & Gibson, 2007). Interestingly, cell phones have been referred to "as a kind of umbilical cord" between parent and child (Caronia, 2008, p.106).

Although every generation has invested in the modern technology of the times, the Millennials are the first generation to have "spent their entire life surrounded by and using computers, video games, digital music players, video cams, cell phones, and all other toys and tools of the digital age" (Prensky, 2001, p. 1). To this group, digital media is a natural part of their life and life style (Montgomery, 2007). They are often referred to as the "Net Generation" and they actively create web sites, blog their thoughts and experiences, explore the multiple opportunities available to them through digital media and continually shape new sets of cultural practices (Montgomery, 2007).

**Can We Not Get Service or Did Someone Hang Up?**

So, back to the original concern: Why the disconnect between what professors think is appropriate and responsible use of mobile technology in a classroom setting and what students in those classrooms perceive as an activity as natural as breathing? Could the misunderstanding be as simple as the proverbial generation gap? Perhaps.

Prensky (2001) refers to individuals who were "not born into the digital world" as Digital Immigrants. He further explains that Digital Immigrants are those people that were not born in the current technology age, but were instrumental in helping to shape its direction and are comfortable in doing so. Digital Immigrants have come to technological use late in their lives but have feet in both the digital and the non-digital worlds. Immigrant professors may assign, retrieve, and grade an assignment online, but they are just as likely to print off a document and correct it by hand. Current Digital Immigrants were raised before 1982 in a different time with different cultural expectations.

Digital Natives, on the other hand, are individuals born since 1982 and arrived in a global society surrounded by technology and digital literacy (McHale, 2008). They are the Millennials, and they are fluent users of technology such as cell phones, Facebook, videogames, YouTube, and the Internet. They own portable devices that enable them to do research, check the weather, play word games, find out statistics about a specific geographical location, and communicate with friends and family in other cities or countries.

It is possible that instructors who speak an outdated language (that of the pre-digital age), may struggle to teach a population that speaks an entirely new language (Prensky, 2001). How do all stakeholders in modern day university classes negotiate traditional practices of classroom discourse with the more modern expectation of full engagement of all participants, possibly with the use of mobile technology?

The descriptions of Digital Immigrants and Digital Natives may be insightful, but, in point of fact, many Boomers go above and beyond technological expectations. They have lived the evolution of many modern technological innovations and are not timid about trying out new iterations. For instance, in our own university, professors are making use of Second Life to
engage students in fully online courses. Others are using Flip Camcorders to help students self-evaluate presentations. It is not unusual for professors to teach their course fully online using Tegrity, Skype and Windows Live programs. Professors also use different kinds of audience response systems to make their lessons more interactive. So why the aversion to including mobile devices as another technological tool?

Perhaps the issue is control. Professors can design and implement courses that fully integrate technology, however, the use of this technology is controlled by the professor. When students use cell phones, control is much more difficult. How do professors know students are using their mobile devices for an appropriate task and how do they know if a student is just using the technology for entertainment? This is probably one of the challenging issues surrounding allowing cell phones in the classrooms.

Professors have genuine concerns about their students using cell phones in the classroom. Often mobile devices are used as distractions and are distracting. Many students claim that they can “multi-task” and pay attention in class while texting, however, the literature does not support this (Bledsoe, 2009). At University of California at Los Angeles (UCLA), a study of 20 year olds found that while it is possible to multi-task on simple concepts, tasks that were more difficult or complex required a participant’s full attention and were adversely affected by multi-tasking. By using Magnetic Resonance Imaging (MRI), researchers examined brain activity and function while their participants were performing their tasks. This provided a visible outcome to support their conclusions (Wolpert, 2006). Bergvik (2004) concluded that cell phone disturbance could be a consequence of a cognitive overload on the cell phone user. Managing the two concurrent tasks of interacting on the phone and with the local setting simultaneously could be problematic. The outcome could be that the phone user may give precedence to one of the interactions, and fail to respond and act properly to the other.

There is another critical question that needs to be asked: Are our lessons engaging enough to keep our students attention? Much has been written about the apparent need to “entertain” our students now in order to keep their attention. If this is true, we, the Silent generation and the Boomers are to blame. We brought them television shows like Sesame Street, The Electric Company and School House Rock. We purchased personal computers for them and bought Reader Rabbit and Math Blaster computer games. Do our students find our lessons engaging or are our lectures boring them to tears? If we want to engage them in authentic practices that pertain to the real world, perhaps we need to incorporate such everyday technologies as a cell phone into our instruction.

**Staying Connected**

First and foremost, we need to have an honest conversation. Before a semester begins, professors need to share their understandings, feelings and expectations about using cell phones in class. Are there appropriate times when students may use their cell phones, for instance in order to search for pertinent information? Are there times when using a cell phone is considered rude and disrespectful, perhaps during a professor’s lecture or a peer’s presentation? We owe it to students to lay the ground rules for what we consider appropriate practices with mobile
devices. Professors not only impart knowledge to their students, they also model what professionalism looks like in the field. If speech, dress, and manners are important to know in a profession, so is appropriate use of technology.

An even more effective way to address concerns about cell phone usage in the classroom is to include students’ suggestions for a comprehensive cell phone policy. In one professor's classroom, students generated a list of appropriate behaviors in a classroom setting. Use of cell phones in the class was included on the list. The students then signed the list as an agreement of the policies. Students consequently took responsibility for their own actions, and the professor gained insight into what the students were thinking and recognized the value of open communication. This strategy is similar to the activity of having children develop their own classroom rules in elementary school, a practice recommended by early childhood professionals (Warner & Lynch, 2004; Epstein, 2007; Nelsen, Lott, & Glenn, 1997).

Again, the key is communication--continuous communication. As sure as technology will evolve, new technologies will make their way into our university classrooms. What is considered “professional” will change. There is no final ruling, but there will always be a need for thoughtful communication about the benefits of new technologies in our society and the usefulness of bringing these new technologies into our classrooms.
References


