

## **Text Messaging and Implications for its use in Education**

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**Abstract:** In schools across the country, digital natives born after 1980 seamlessly integrate technology into many aspects of their lives. This researcher investigated one particular method of communication referred to as text-messaging, and focused on Twitter, a relatively new form of text-messaging called microblogging, and its implications for education. Do tools like Twitter affect a student's ability to read and write? How do tools like Twitter support the formation of communities of practice? Is there a place for these tools in education? If so, how can they best be leveraged to positively impact education? Educators have found that tools like Twitter do have a place in education for both students and teachers. Text-messaging encourages students to write more and allows educators to communicate and facilitates the formation of communities of practice. Although opponents say that text-messaging encourages poor writing habits, studies have shown that students are able to distinguish between informal and formal writing.

### **Introduction**

Dewey (2001) appeared to be speaking about the current state of education when, almost one-hundred years ago, he noted:

From the standpoint of the child, the great waste in school comes from his inability to utilize the experience he gets outside... while on the other hand, he is unable to apply in daily life what he is learning in school. That is the isolation of the school—its isolation from life. (p. 46)

As in Dewey's time, schools today are in the midst of great change of which much can be attributed to technological advances occurring in our world today, including access to an abundance of information, and advances in computers, the Internet, communications, and networking.

From the debut of the World Wide Web in 1991 to the introduction of social networks and blogs 10 years later, the Internet has evolved from a mainly static medium to one that facilitates and encourages interaction and community building (Palfrey & Gasser, 2008). Users have become more than mere consumers of

information on the Web, and are now active participants and contributors, publishing content and interacting in online virtual communities. This is the world students live in today and a world that educators must acknowledge and consider.

The second-generation Web, sometimes referred to as Web 2.0 or the Read/Write Web, holds great promise and potential to transform education. This, along with the growth and maturation of other technologies including cell phones, laptop computers, and numerous other communication tools will certainly challenge the education status quo. The question is how and how much? This researcher investigated one specific form of communication—text messaging, often referred to as Instant Messaging (IM), Short Messaging Service (SMS) or microblogging, and implications of its use in education.

Although all three text-messaging technologies possess similar attributes, much of the focus was centered around one specific text messaging tool called Twitter. Milstein, Chowdhury, Hochmuth, Lorica, & Magoulas (2008) included a forward by Tom O'Reilly who stated, "The future often comes to us in disguise, with toys that grow up to spark a business revolution. Twitter is like that" (p. 1). Many businesses including Forrester Research, Comcast, CNN and Zappos are already integrating text-messaging tools into the workplace (Milstein et al., 2008). Beyond their potential impact to instruction, these tools are rapidly being adopted into the business world and students need to master its use.

## Literature Review

### *Defining Today's Students: Digital Natives*

Students are growing up in a different world—a world of ubiquitous technology. Prensky (2001), a New York author coined the term *digital native* to refer to these new learners born into a world of technology. Digital natives have at their disposal an assortment of technology tools—tools they seamlessly integrate into their daily lives. The tools of the natives include everything from electronic games, to communication devices, to computers and the Internet. They live in an always-on world and these tools are an integral part of their lives (Prensky, 2001).

Born after 1980, digital natives make up a majority of the student population today. From elementary campuses to colleges across the country, digital natives are forcing educators to rethink how they teach and how students learn in a digitally connected world. They think and act differently than students in the past who grew up without technology (Prensky, 2001). Constantly connected, they live much of their lives online, without distinguishing between online and offline (Palfrey & Gasser, 2008). Digital natives would rather instant message their friends than pick up the phone and call them (Palfrey & Gasser, 2008).

### *Communication Tools of the Natives*

Nearly two-thirds of teens today own a cell phone ("Media use statistics," 2008), and 88% have access to the Internet (Duncan, 2008). A study of 200 teens, 12 – 15 years old,

found that on average they spend 40 minutes a day instant messaging ("Media use statistics," 2008). Teens, 12 – 17 years old spend 75% of their time online sending and receiving text-messages (Lenhart, Madden, & Hitlin, 2005). Three popular forms of text-messaging include microblogging, Instant Messaging (IM), and Short Messaging Service (SMS). All three forms of communication share many of the same characteristics and can be classified as a form of text-messaging. Therefore, the term text-messaging will be used throughout this paper when referring to text-messaging as a general category. A brief description of each type of messaging service will be defined.

IM is a form of computer “chat” that allows real time text-based conversations with one or more individuals on the Internet, and is a popular form of communication among young people today (O'Connor, 2005). Users who IM, most often do so using a computer IM application, or a cell phone. IM applications like Yahoo Messenger, America Online, or GoogleTalk are often used to send and receive messages. Additionally, many cell phones today come equipped with instant messaging software and can communicate without the need for a computer or access to the Internet.

SMS is a communications protocol used to deliver short text messages, up to 160 characters, via Global System for Mobile communication (GSM) enabled mobile phones. SMS is one of the most popular communication tools, with 2.4 billion users worldwide ("Short Message Service," 2008). Roughly 90% of teenagers exchange SMS with their peers, with average message length at 71 characters (Grinter & Eldridge, 2003).

Microblogging is a relatively new Web 2.0 technology that is gaining in popularity and very similar in characteristics to IM and SMS—brief, immediate and easy to use. Microblogging can be considered a blend of blogging, text messaging and social networking all put together. Sites like Twitter, Jaiku, and Pownce allow users to setup accounts and post short text messages and Web links usually limited to 140 - 200 characters. Twitter is by far the most popular microblogging site with 3.3 million users and will be referred to most often throughout this paper. Between October 2007 and October 2008, registered users on Twitter has grown 573%. The next closest is Pownce with just over 180,000 users, and Jaiku is a distant third with just over 84,000 users ("SnapShot of twitter.com (rank #377) - Compete," 2008).

Zuk (2008) defined Twitter as an opt in instant messaging type application set in a community format and is a form of blogging that enables you to write brief text messages about your life on the go. Users on Twitter post messages called “tweets” to the Twitter website which they can choose to make public or private, enabling anyone to subscribe to and view their posts or only select individuals. Twitter was originally designed to provide a forum for users to answer the question, “What are you doing?” Because Twitter provides an easy means to post updates, users who refer to themselves as “micro-bloggers,” tend to update their sites more often than traditional bloggers (Java, Song, Finin, & Tseng, 2007).

Microblogging technology is appealing due to its ease of use, spontaneity, immediacy and portability. A distinguishing factor of microblogging networks and applications is its

ability to deliver data to interested users over a variety of channels. For example, Twitter messages can be received by users on their cell phone, through Facebook using a third party application, via email, as an RSS feed, or on their computer. With the proliferation of cell phones in the U.S., it is no wonder that microblogging has become so popular. It is interesting to note that 18 – 24 year olds make up the largest group in Twitter followed by the 25 – 34 year olds ("Media use statistics," 2008).

For some reason Twitter has not really caught on with teens below the age of 17. A mother of two teenage daughters reported that her children feel like Twitter promotes too much spam or is a type of surveillance tool rather than a form of communication (Beal, 2008). Thompson (2008) in his blog post entry dated April 01, discovered that many middle school students had never even heard of Twitter. It makes sense then that of the text messaging tools, IM and SMS are preferred by young people over microblogging (Palfrey & Gasser, 2008).

Although many teens either stay away from or don't know about microblogging sites, educators are beginning to explore how this new of tool might benefit students. Twitter has begun to capture the attention of educators as some education technology enthusiasts try to harness its potential—both as a classroom tool for students and as a way to connect education colleagues (Ash, 2008). George Mayo, a middle school English teacher at Silver Spring International Middle School in Montgomery County, Md., used Twitter to do a collaborative story writing activity with his students. Mayo's goal was to have his students collaborate online. In the end, over 100 students from six different countries contributed to the story, including students from as far away as China (Ash, 2008).

#### *Why should we teach students to use tools like Twitter?*

Zuk (2008) asserted that when writing posts to sites like Twitter, the possibilities are endless, and learning how to present ones-self is a must. Richardson (2008) stated that students who contribute to the Web whether in the form of short tweets, daily blog posts, flickr photos, del.icio.us bookmarks—everything—whether good or bad, becomes a student's personal "digital footprint." Because of this, Richardson (2008) declared that students must be educated and become sophisticated owners of their online spaces.

Garfinkel (2004) referring to the importance of instant-messaging stated, "In a future increasingly filled with instant-messaging opportunities, that's a skill that they—and you—will find vital" (p.92). In addition to formal writing, students today will need to communicate using tools like Twitter and IM. These tools require a different set of skills, language and thinking.

#### *Twitter and Communities*

Beyond being just a tool for writing and communicating, microblogging platforms may serve as a foundation for building community. Wenger (1999) offered a perspective on learning very different from what one would consider traditional. Traditional learning is generally thought of as an individual process that has a beginning and an end, and is best separated from the rest of our activities. Tools like Twitter provide opportunities for collaboration and formation of online communities. In the case of Twitter, online communities may form around work, hobby or personal interests where users' tweets focus on specific topics of interest. As an example, technology support specialist might form a

community of practice and post tweets that include troubleshooting solutions, links to websites, and news of the latest technologies.

One of the criticisms of Twitter and other microblogging tools is the volume of mundane posts that appear to have no significance (Milstein et al., 2008); however, tweets often thought of as mundane and uninteresting help to create a sense of awareness about what friends, family, and colleagues are doing (Milstein et al., 2008). Sociologists refer to this phenomenon as “co-presence,” a sense of being there with others (Milstein et al., 2008). Another term synonymously used is “ambient awareness.” Ambient awareness (Milstein et al., 2008) is the feeling of being connected to people without requiring much effort. Text-messaging tools like IM, SMS and Twitter can help to increase the sense of feeling connected and a sense of belonging.

Twitter provides presence and according to Hanumara and Coyle (2008), presence is important in work groups, social networks and especially families. It gives one a sense of being there. In addition, microblogging tools create a sense of connection—connection to friends, people who have the same interests, teachers, mentors, and even to experts in the field.

#### *What the Critics are Saying*

Text-messaging tools with all its popularity and promise do have its critics, especially in the area of education. To overcome text length limitations of text-messaging, users have developed their own form of shorthand, code or jargon. This raises concerns with many educators including former teacher and now author Jacquie Ream, who feels that this type of communication is destroying the way our kids read, think, and write (Shaughnessy, 2008). She contended that it is too easy, too simple, and this type of communication using acronyms and shorthand does not require critical thinking skills or analysis. According to Ream, text messaging is destroying the written word, and she believes students today need to do more writing, not in the form of instant messages, but well thought out essays (Shaughnessy, 2008). They need to know how to construct a sentence and an essay. Additionally, they need to know how to use punctuation properly. O’Connor (2005) reported that the more students use tools like IM the less they are able to separate formal and informal English. In other observations on student writing, Friess (2003), noted that although students seemed to communicate scholarly thoughts, they did not seem to know it’s “y-o-u,” not “u.”

Other concerns expressed are spacing of words, or lack thereof, use of all lowercase letters, abbreviations, acronyms, and emoticons. Clear writing is clear writing no matter what the medium (Goldstein & Gardner, 2005). Some critics argue that sites like Twitter, an instrument of non-stop peer contact, do little to encourage students to explore the universe of knowledge brought to the their fingertips through the Internet (Bauerlein, 2008). Bauerlein (2008) implied that given the choice between exploring all the knowledge of the Web versus communicating with their friends and accessing their music, students would choose the later.

#### *What Proponents are Saying*

Other research seems to dispute the negative impact of micro-messaging in education. According to Petrillo (2006) referring to a quote by Dr. Beverly Plester, a research psychologist and professor at Coventry University who said, “Newer research shows a stronger causal relationship between text abbreviations and literacy skills.” Plester argued that text messaging provides more exposure to the written word, which positively relates to greater literacy attainment (Petrillo, 2006). A 2003 report by The Commission on

Writing (College Entrance Examination Board, 2003) stated that E-mail and IM provides writers with an immediate and much larger audience than traditional letters and notes, and that educators need to tap into these tools that students already use to create and share writing.

Instant-messaging may have an indirect impact on writing by simply motivating students to write more, and to put their thoughts and feelings into words. (Helderman, 2003). According to Helderman (2003), over 50% of teenagers 17 and younger have access to the Internet outside of school and send email or instant messages at least once a week. Another point to ponder is whether or not text-messaging is an evolution of the English language and a literacy in and of itself (O'Connor, 2005).

Some teachers are using instant messaging shorthand to help students spark ideas and creativity. Ms. Forgarty, a sixth-grade teacher from Houlton, Maine, supports student's use of IM lingo if it helps them to get their thoughts and ideas down on paper quicker (Lee, 2002). Gloria Jobobs, a doctoral student studying teenagers and instant messaging pointed out that students have a fluency with online writing, and she believes this will help their overall writing skills (Helderman, 2003).

## **Conclusion**

Henry Pence (2007) stated, "The Web is morphing towards a new model, based on social interaction" (p. 347). The world is rapidly changing and advancing, and this generation of students has to deal with this change, and they have to do it largely on their own. How are schools going to respond (Pence, 2007)? Wenger's theory of social learning (Wenger, 1999) and his research on communities of practice (Wenger, 1998) provide a good starting point for education to begin and challenge long held assumptions that learning is largely an individual process. Technology provides a vehicle to foster the development of communities, where learning is infused with social interactions among students, with teachers, and with others who have traditionally been considered outside the traditional structure of the school.

Text-messaging tools provide an effective means of teaching students important 21<sup>st</sup> century skills. Further, tools like Twitter can help to foster the development of communities of practice among students and among teachers. Twitter and other text-messaging tools help to motivate and encourage students to do more writing and to express themselves through their writing. Additionally, microblogging tools help to support other learning models including Wenger's (1999) social learning theory by enabling and encouraging interactions between students. In a rapidly changing world students will need to understand and master the use of 21<sup>st</sup> century technology tools to effectively communicate and collaborate together.

Students need to be effective communicators not only from a formal standpoint, but also an informal one as well. This includes the ability to compose a term paper or essay for History or English class utilizing formal writing skills, and communicate efficiently using short text messages. Educators need to understand that literacy is not limited to only

typographic literacies, but includes digital literacies as well. Both require different skills, each specific to its intended audience. Beyond mastering traditional writing skills, students will also need to understand and master tools like Twitter and IM. These are the tools of the 21<sup>st</sup> century; the tools that will help to transform the ways teachers teach and students learn.

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