

The Use of Cellular Phones

In Education

by

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ABSTRACT

Cell phones play a very big part in today's world, from business to education. This document is focused on the role that cellular phones are and what the future could hold for them. The main question that is looked at asks whether cell phones are more useful or distracting in education. There are many blogs, papers, and articles from educators; each one giving their own opinion about the risks and benefits of using cell phones. There is also the view from the mobile companies, who are focusing their efforts to make cell phones a tool in education. These companies have created many applications that can be used by students and educators. Cell phones do have the potential of becoming a very important tool in education; the technology and applications are there to be used. This technology is becoming more available, as well as getting cheaper and better. The main problem with the acceptance of mobile devices in education is the thought that they will just be abused, not used properly as desired by educators. For cell phones to be effective

in the learning environment, this needs to change and educators need to be retrained so that they can understand and implement this technology.

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Chapter I: Introduction

Technology is a very important part of education. Schools have been adapting technology over the years. They went from using typewriters to computers, chalkboards and posters to projectors and PowerPoint presentations.

The use of cellular phones in the schools has been a very big issue. Many schools have banned cell phones from their grounds and there are many discussions on why kids should not be allowed to have cell phones at schools. Some people say that students use cell phones to cheat on exams, to bully their peers, or as a distraction during class. Other people find that this new technology can be used as a tool in their learning. In this paper I am going to be discussing the pros and cons of the use of cell phones in education today.

The main question that I am going to try to answer in this paper is if cellular phones are actually a helpful tool in education, or if they are just a distraction.

The first patent for a wireless phone was issued to Nathan B. Stubblefield in 1908 (Wikipedia, 2009, ¶. 1). Since then wireless phones have evolved to small devices that can be carried outside the car or home. The second generation of digital mobile communication (2G) was introduced in Finland in 1993; this second generation was the first one to allow other applications like text messages, and commercial payments. Today we are in the process of changing to the (4G), or Broadband Fourth generation. There are hundreds of phones, thousands of applications and high-speed Internet access (Wikipedia, 2009, ¶. 1).

Mobile applications or Mobile Apps are different kinds software that are installed usually in smart phones and other mobile devices to help them navigate the Internet. “A mobile app may be a mobile Web site bookmarking utility, a mobile-based instant messaging client, Gmail for mobile, and many other applications” (webopedia, 2008)

Chapter II: Current Status of Technology

Right now we are at that turning point where educators are starting to see this new technology as an advantage and not as a threat. Educators are starting to utilize cell phones as a tool, but this is still not widely accepted; educators are starting changing their point of view. They have to understand that in today's world for these kids to be successful they need to learn to utilize all the resources available for them, it is not so much memorizing everything as much as knowing how to utilize their resources (cell phones) to get an answer. (The Innovative Educator, 2008)

If students have access to all this information they'll be able to cheat on tests and other assessments. I tell these teachers that in a "[Whole New Mind World](#)" we need to begin engaging in "know where" (to find it) rather than "know what" (the answer is) teaching...meaning it is more important to teach students how to access any information rather than memorize it. Ideally they'll do something with the information that is more meaningful and authentic than placing answers in a test booklet. The other big argument is about safety and that technologies such as cells can be used to coordinate fights or drug deals. Yes, this is true. This is one way they can do it, laptops are another, word of mouth is another. Perhaps one of the most popular ways of coordinating the details of a fight is communication via passing a paper note. However, educational technologist [Alan November](#) once shared an interesting observation. If students were passing inappropriate notes in school (about fights, cheating, or anything else) should schools ban paper???? Banning the tool rather dealing with the actions may not be the best option. (The Innovative Educator, 2008, ¶.1)

Sexting is another very big challenge for educators. Sexting is the misuse of cellphones to send sexually provocative pictures via text message. Because of all the legal issues this type of behavior has led to, more strict rules for the use of cellphones. Educators are trying to get parents involve in educating their adolescents on the importance of the correct use of their cell phones. In Ohio an 18 year old girl committed suicide after a nude picture of her self that she sent to a boyfriend became public. (Manzo, 2009)

Currently in middle schools and high schools the most commonly used application in cellphones is text messages. Most of the parents purchase unlimited text messages plans since it is the most used by their kids and is very affordable. This application has allowed the increase of communication between teachers and students. Some teachers have used text messages to remind students of their assignments, to take attendance, and to keep up in case they miss class. The following text is a very good example of this cases.

This past year, when any of my teenage students were absent from ballet class, I texted them a short but meaningful movement from class that they needed to work on for our next class.

One day three girls texted me that they were all “trapped” at school play auditions for several hours after school and didn’t know if they would make it to class on time. I quickly texted a different eight-count movement sequence to each girl that when put together would equal one 32-count/four-part movement. The girls distracted themselves by quietly collaborating, and each taught the other two her eight counts. When they came

to class, we actually got more choreography done because they arrived knowing half of the day's lesson. Most parents have bought unlimited texting for their children because it's all they do. I just made that work for our class. (Duffy, 2009)

The cell phone with out any of the applications that are available today does not really have many uses in education. The cell phone it is the base to get many application available that can be very useful to students. Like a computer the cell phone is the hardware and all the programs (applications) are the software. The computer will be nothing without the software. There are many applications that can be downloaded to the cellphones for educational purposes. Lets take a look at some of the application available for most of the smartphones like the Iphone, Blackberrys, or Palms.

Mobile Devices and Literacy

- Differentiating reading activities by allowing students to listen to audio books
- Accessing digital texts on their mobile devices so that students can read wherever they find themselves
- Connect to the internet, through either WiFi or other means, to express ideas on a blog post (i.e. through the WordPress app) or to collaborate with peers through a wiki

Mobile Devices and Numeracy

- For younger children, the utilization of apps that provide drill and practice or flash cards to develop basic mathematical skill
- Use of calculators of various forms: regular calculator, scientific calculator or graphing calculator

- Even publishers such as Pearson have apps that help students learn important concerns such as this app for the study of Algebra

Mobile Devices and Science

- Utilize mapping software such as Google Earth or Google maps in the study of physical geography or urban design/planning
- Accessing 3D apps of the human body in the study of the systems of the body
- Apps that detail the objects in space in the study of astronomy and space systems

Mobile Devices and Social Studies

- Utilize mapping software such as Google Earth or Google maps to identify important location in question
- Accessing historical maps or apps of historical artwork for the study of historical ideology and patterns of thought
- Reading historical literature such including fiction and non-fiction texts

Mobile Devices and International Languages

- There are a plethora of apps that deal with the study of various languages that are both free and come with a cost – a simple search will provide an extremely wide variety of choice

Many argue that mobile devices are a distraction and I agree. While others may argue that this distraction is not productive, I would argue that by harnessing the tools in the right way using the right apps, the distraction will be away from mundane paper and pencil tasks and toward more exciting, multi-sensory learning. (De Lorenzo, 2009, ¶.1)

I purchased a smart phone not too long ago, it has been extremely helpful when trying to stay up to date with all the school work, notifications, and assignments. I get all my emails to my phone and I can reply also from my phone. Everytime I get a message from my professors or group members, I can get the information on time and reply right away. There is also a callendar built in to my phone with a task manager, it allows me to set up all my assignments and get reminders of when they are due. It also allows me to synchronize my computer information with my phone.

My phone, a Blackberry 9000, even has a word processor that allows me to type all my papers on my phone and have them transferred to my computer via blue tooth or via email. Everytime that I have a new idea that I can use for my school projects, I can just type it in to my phone and send it to my computer. I no longer have to wait untill I get home to use my computer or scribble the ideas in a piece of paper. It has been a very useful tool for school.

Chapter III: Future

After many experiments using cell phone in various schools not only in the United States but in many other countries, results were shocking. Not only the involved students and teachers were happy with the results; but parents and other teachers were very interested. (Becta, 2009)

In every case, other teachers became interested and involved, and the project teachers decided to continue using mobile phones. These champions of change have shown that, with good planning and anticipating class management and technical issues, using mobile phones can be a very productive way to augment access to tools for computing, communication and photography. As one student said 'It is good to use new technologies. It prepares us for the future, as we will be using mobile phones more and more. (Hartnell-Young & Heym, 2008)

As we can see cell phones are being successful tools for education as long as there is the correct support and knowledge about the capabilities of this mobile devices. Some concrete examples for the uses of cellphones in the future are:

- Timing experiments with stopwatch
- Photographing apparatus and results of experiments for reports
- Photographing development of design models for eportfolios
- Photographing texts/whiteboards for future review
- Bluetoothing project material between group members
- Receiving SMS & email reminders from teachers
- Synchronizing calendar/timetable and setting reminders
- Connecting remotely to school learning platform

- Recording a teacher reading a poem for revision
- Accessing revision sites on the Internet
- Creating short narrative movies
- Downloading and listening to foreign language podcasts
- Logging into the school email system
- Using GPS to identify locations
- Transferring files between school and home

(Hartnell-Young & Heym, 2008)

Cellphones will become an all in one tool, kind of like the pocket swiss knife. Cellphones will probably replace our wallets as all of our personal information is going to be recorded inside our phones. We will even be able to make payments at the grocery store with our cellphones. “it’ll be impossible to live any kind of mainstream life without a mobile. Banking, payments, shopping, access to your house and car – all will be via your virtual mobile” (Russell, 2009). With all the current applications and the advances in technology, cell phones will probably replace laptops, notebooks, books, etc.

Chapter IV: Impact Analysis

The main impact for society is that we need to change the way we view cellphones in education. Educators need to start looking at this technology as a tool and adapt the way teaching lessons are planned and thought; to fit and take complete advantage of what cellphones have to offer.

For most educators the main impact is that they will have to be retrained and learn how to use this technology.

Teachers need to experience, understand the educational value, and be comfortable with technology tools before using them to enhance teaching and learning. If we are exposing teachers to ways in to incorporate cells into the classroom, we are providing that teacher and classroom with tremendous power and access and an ability to model for students how to use a cell phone as a learning tool. (The Innovative Educator, 2008)

A solution to try to control the use of cellphones in education, could be to have all the cellphones in a school connected to the same network, the same way they do with computers. In this way the schools can monitor what students are doing with their cellphones and control the type of information that they have access to while at school. This may easily be possible since most cellphones now come with wi-fi capabilities.

References

- Becta. (2009, January 25). *Emerging Technologies for learning*. Retrieved December 6, 2009, from Becta:
http://emergingtechnologies.becta.org.uk/index.php?section=etr&catcode=ETRE_0001&rid=14128
- De Lorenzo, R. (2009, November 15). *The Powerful Combination of Mobile Devices And Learning Apps*. Retrieved December 4, 2009, from The Mobile Learner:
<http://themobilelearner.wordpress.com/author/rdelorenzo/>
- Duffy, J. (2009, September). Phones Keep Pupils on Their Toes. *Letters*. NorWalk, CT, USA: District Administration.
- Hartnell-Young, E., & Heym, N. (2008, March). *Cell phones- Time to Lift the Ban on Mobiles in the School Setting*. Retrieved December 6, 2009, from Open Education:
<http://www.openeducation.net/2009/02/08/cell-phones-time-to-lift-the-ban-on-mobiles-in-the-school-setting/>
- Manzo, K. K. (2009). Administrators Confront Student Sexting. *Education Week*, 28 (35), 8.
- Russell, B. (2009, June 18). *Mobile Phones in 10 Year's Time*. Retrieved December 5, 2009 from MobHappy: <http://mobhappy.com/blog1/2009/06/18/mobile-phones-in-10-years-time/>
- The Innovatiove Educator. (2008, May 12). *The Value of Using Cell Phones to Enhance Education and Some Concrete Ways to Do So*. Retrieved November 3, 2009 from The Innovative Educator: <http://theinnovativeeducator.blogspot.com/2008/05/value-of-using-cell-phones-to-enhance.html>
- webopedia. (2008, December 23). *Mobile Application*. Retrieved December 6, 2009, from webopedia: http://www.webopedia.com/TERM/M/mobile_application.html

Wikipedia, the free encyclopedia . (2009, December 4). *Cell phones*. Retrieved December 4, 2009, from Wikipedia, the free encyclopedia : http://en.wikipedia.org/wiki/Cell_phones