
Texting All Teachers

Making a Case for Cell
Phones in the Classroom

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Texting All Teachers: Making a Case for Cell Phones in High School Classrooms

December 2010 marks the 30th anniversary of the first mobile device. In just over a quarter of a century cell phones have emerged as the most pervasive technology worldwide and according to the 2010 Horizon Report, mobile phones are “likely to have the largest impact on teaching, learning, and education.” (New Media Consortium, 2010, p.17) Yet, type the words “cell-phone and classroom” into any search engine and you will be struck by the overwhelming majority of sites advocating for the ban of cell phones in schools. Mobile phones are viewed as a nuisance by many teachers and administrators; a great deal of time and money is dedicated to justifying their decisions to keep cell phones hidden away until the final bell tolls. Instead of rejecting cell phones as an ineffectual teenage toy, that same time and money would be better spent on evaluating how this ubiquitous technology can be used as a tool to augment teaching and learning in the 21st century classroom.

Before attempting to encourage teachers to adopt a strategy that is counter intuitive to traditional classroom teaching, it is essential to acknowledge the pervasive concerns surrounding cell phone use in schools. Educators opposed to the use of m-learning technologies in the classroom tend to cite: electromagnetic radiation (EMR) exposure, distraction, inappropriate social interactions, cheating, and systemic school board policies as the primary issues for keeping cell phones outside their classrooms.

EMR Exposure

The December, 2010 edition of the BCTF’s *Teacher* magazine highlighted the growing concerns of EMR. (Waugh) An increasing number of teachers across Canada have been advocating for the ban of wireless technologies in schools as a result of the recent influx of news stories espousing the dangers of EMR. One highly publicized case in the Bluewater Region saw a dogged group of parents and teachers insisting that the Simcoe School Board ban Wi-Fi all together. (Engel, 2010) While the board voted against it, the battle to ban wireless devices rages on across Canada.

According to Health Canada's Promotion Minister, Margaret Best, exposure in Canadian schools is closely monitored and falls well below the guidelines set forth in Safety Code 6, which identifies the acceptable standards for Specific Absorption Rates (SAR). In a recent interview Best was quoted as saying, "We do not have to worry about the safety of these types of devices. Cell phone use has been deemed safe". (Artuso, 2010) Despite what Canadian authorities say, a number of researchers across the globe are assiduously investigating the possible risks of cell phone use and the dangers of EMR exposure. Some preliminary results are suggesting that extended and prevalent cell phone use can be associated with a "wide range of health concerns ranging from belly fat and thinning skin to accelerated aging, blood sugar imbalance, cardiovascular problems, erratic sleep patterns, and mood disturbances." (Cass, 2010, para. 10) However, at this point in time the results of these studies are unreliable as they lack the longevity necessary to substantiate the findings. Dr. Devra Davis, PhD and founder of Environmental Health Trust acknowledge this fact and notes, "in truth the jury is still out on the long term impacts of cell phones on health. There is no scientific basis to conclude otherwise at this point." (2010, para. 9)

So as educators, the question remains, do we stop using these technologies completely until concrete data is released, or do we adopt the recommendations offered by Dr. Ann-Louise Gittleman (2010), author of the widely acclaimed book *Zapped*, who suggests numerous ways to protect ourselves and our students as best we can against the possible risks associated with electromagnetic radiation. I would argue in favour of the latter.

Recent statistics reveal that 79% of teens own and use cell phones daily. (Brooks-Young, p.16) By arming young people with strategies they can use to avoid and mitigate the damaging effects of EMR we are equipping our students with one of the fundamental skills they need to navigate the ever-expanding digital landscape. I am not suggesting that we allow students to have cell phones on all day, every day, in every classroom, but I do purport that used selectively, and consciously, cell phones can be an invaluable technology to enhance learning in each and every high school classroom.

Distraction

This past September, the Canadian Press published a quote by NDP Leader Andrea Horwath reacting to Ontario Premier Dalton McGuinty's mention of allowing cell phones in schools. "I have a son and he's distracted enough already. When he's in the classroom, he should be focusing and concentrating on his school work. Not texting, not surfing, not doing any of that stuff." (2010, para. 11) The BCTF's *Teacher* magazine article cited "distraction" and "loss of classroom control" as teachers' main objections to cell phones in class. (Kuehn, 2008) While some teachers are preoccupied by the immediate distractions cell phones bring to class, others are more concerned with the long term implications such technologies will have on overall learning. These teachers believe mobile technologies are fostering a fragmented learning style and creating a kind of ADD in today's learners. (Moon, 2010) While their ideas aren't exactly inaccurate, advocates for m-technologies and neuroscientists would suggest that the negative connotations teachers assign to this new style of parallel learning is the real problem.

In their groundbreaking work *iBrain*, Small and Vorgan explain how the brains of digital natives are being rewired by their constant exposure to technology. Young people today have grown up with a never ending stream of technological exposure. *iBrain* reveals how this digital bombardment is actually creating new sets of permanent neural network pathways in the brains of young people, at a speed unlike anything that has been seen before. As a result of this constant connectivity digital natives are "developing neural circuitry that is customized for rapid and incisive spurts of directed concentration." (p.21) In essence, when teachers argue that students are unable to focus on classroom lectures, they are right.

The important point to note is not that today's students are incapable of paying attention; in fact studies suggest the opposite. Current research consistently demonstrates that digital natives are comfortable and capable of actively engaging in 3-5 activities at one time. (Small, 2008, p.33)

So if students are in fact able to learn, what is going wrong in current classroom? Advocates of education reform would argue that the problem is not with the students but with an outdated model of education.

Our current system is based on a nineteenth century construct that grew out of the Industrial Age. Sir Ken Robinson (2010) refers to this as an agrarian, “production line” model, one designed to encourage: conformity, standardization, and linear thinking. This model no longer fits.

Many educational systems are beginning to account for the technological advances which have taken place over the past 25 years and are presenting a new model for educators. This model does not disregard the importance of the foundations of learning; instead the 21st Century Learning Model strives to make learning meaningful and relevant to each learner. It looks at new ways of making learning: interactive, personalized, collaborative, creative, and innovative. (Trilling, 2010)

What better way to engage young people in the classroom than to incorporate the technologies they are consciously choosing to use outside of school. According to the 2010 Pew Internet Study cell phones will soon replace home computers as the number one means of communication for people under 20. So, instead of sloughing off cell phones as useless teenage toys we need to regard mobile technologies as a means of focusing kids’ attention. We need to use what is already in their hands – so they too can witness the potential power of the tool they possess, rather than the simple toy it appears to be.

How do we do this? Both carefully and consciously. Every high school student should know how to use the alarm clock and the calendar functions on their cell phones. These two tools alone provide an excellent opportunity for the student to take responsibility for their learning. Alarm clocks can get them up, while calendars can be programmed to remind them of upcoming tests and assignment due dates. Students habitually forget their agendas but they never forget their cell phones.

In the classroom teachers can begin incorporating some of the other tools readily available on cell phones: calculators can be used in math class, PE teachers can have students use built-in cameras to evaluate biomechanics, ASL and ESL students alike can use video cameras to record and critique the effectiveness

and accuracy of their conversations. Special needs students can record notes verbally instead of writing. These suggestions can be implemented immediately, as none require internet access. Every cell phone has all of these features built in, even the most basic model. However, as more and more students replace home computers with smart phones the possibilities for cell phone use in the classroom grow exponentially.

Instead of having to get out of their seats to grab a dictionary, English and foreign language students can use reference sites to define unknown terms, chemistry students can use online quizzes to practice balancing equations, math students can use online games to solidify foundational skills, cooking students can create and share recipes in class wikis, students can create photo-journals of class field trips to document and share their learning experiences. Teachers can use free online polls to engage all students and assist with evaluation of lessons. The possibilities are limitless and limited only by the creativity and imagination of the teacher and students themselves. As 21st century educators we owe it to ourselves and our students to acknowledge our technophobia and personal trepidations regarding these technologies and work collaboratively, with our colleagues to look for meaningful ways to use these readily available technologies to empower our students.

Proponents of educational reform (Christensen, 2008, Robinson, 2010, Trilling, 2010) agree that the first step towards making schools engaging and meaningful for 21st century learners is to shift away from a monolithic, teacher-centered instruction model to one that places the learner at the center. Cell phones and other student-centric technologies, rather than disrupting teachers, can disrupt the traditional classroom, and as Christensen reminds us, this kind of “disruption is a good thing.” Because of their nature cell phones offer an immediate opportunity to make learning personal and interactive, while creating possibility for collaboration in an innovative context.

Cheating

The idea of collaboration is fundamental when we seek to dispel the myth that the introduction of cell phones in classrooms will increase instances of cheating. Sir Ken Robinson (2010) offers an excellent quote on this subject; “In school we are told that there is only one answer, and it is in the back of the book, and don’t look, and don’t cheat.” He goes on to suggest what teachers often identify as cheating in the traditional classroom is widely accepted as collaboration in the real world.

If we take into consideration what neuroscience is telling us about the way students’ brains are taking in and using information, we must also acknowledge the rate at which information is being produced and disseminated. According to a recent study conducted at UC Berkley it was determined that information is the fastest growing thing on the planet; global information production has been and will continue to increase by a rate of 66% per year. (Technium, 2010, para. 9) Why then do we continue to teach and test students on their abilities to memorize and synthesize information that has been taught to them when we know that the human brain is incapable of memorizing, let alone retaining, the magnitude of information we are inundated with daily.

As educators in the 21st century we must recognize that it is beyond our scope to teach students everything, and at the same time we must accept that limiting them to what we know is not enough. Instead of testing students on what they have been told, we would be far more effective teachers if we taught students how to: access, analyze, understand, apply, create and share information. Until education shifts away from the current model of summative, standardized, one-size-fits all testing where right and wrong answers are norm, then yes, perhaps students could use technology to “cheat” but in this model, where the cheating is really taking place, is not by the students but by the teachers who perpetuate these outdated methods of assessment. To borrow a quote from Resnick and Resnick “The trick is not that teachers teach to the test but that teacher need tests worth teaching to.” (Resnick,1992)

There needs to be a shift away from assessment **of** learning to a model of assessment **for** learning. If we can reconsidered our current methods of evaluation which are summative and fact based and move instead to a model that encourages students to demonstrate their learning in a way that is personally meaningful and relevant, we will be much more successful at equipping young people with information literacy skills and the skills of creativity and innovation which are imperative to success in the 21st century. (Trilling) Cell phones are but one example of a simple, yet powerful 21st century tool that students already have in the palm of their hands; a tool that offers yet another means of enabling students to express and demonstrate their knowledge. Why deny struggling students the opportunity to express themselves in a medium they are comfortable using? I can conclude but one motive.

When discussing the failure of computers in classrooms to improve learning outcomes, Christensen notes the fundamental flaw in teachers' integration of computers into classrooms: "Teachers still instruct and computers are merely there to support what the teacher is saying. Teachers have implemented computers in the most common-sense way – to sustain their existing practices and pedagogies rather than to displace them." (85) Is this why we are consciously choosing to keep cell phones out of the hands of learners?

Inappropriate Social Interaction

In the hands of young people cell phones invite adult trepidation; incidents of: sexting, cyber-bullying, and inappropriate posting of photos and videos permeate the nightly news. The recent incident involving the use of a prominent social networking site to post video footage of the sexual assault of a young Maple Ridge teen is just one disturbing example.

I am not naive to the inherent risks associated with putting cell phones in the hands of teenagers, but it is relevant to note that to this point, young people have been left to their own devices to determine what constitutes socially appropriate behaviour with regard to technology and social media. In her work, *Teaching with the Tools Kids Really Use*, Susan Brooks-Young points out that as teachers we must "create engaging learning environments that mirror the real world. It is our role to teach them the skills

needed to be successful and ethical in those environments.” (2010, p.12) How are young people to develop appropriate communication and social skills in a digital world if teachers fail to help them develop guidelines for acceptable interactions? The expectations on teachers have not changed but the environment has.

This past April, as part of the PEW Internet and American Life Project, researchers found that one in three teens send an average of 100 texts per day, 3000 text messages each month. (Lenhart, Overview, para. 1) As an educator, I completely agree that texting in class is disruptive and unnecessary, but I also believe it can be curbed without having to go to the extreme of confiscating students’ cell phones. Instead of taking them away, I support Liz Kolb’s idea of creating a “social contract” with students before allowing them to bring them into classroom at all. Kolb’s social contract is “an agreement between the teacher and students about how, when, why, and where cell phones will be used in the classroom.” (2010, p.13) Rather than creating a punitive relationship with students and their cell phones, I encourage teachers to adopt a proactive, collaborative relationship with their students, working with them to determine concrete, meaningful guidelines around what is acceptable and beneficial to their learning.

Beyond the classroom, we can direct students and parents to websites dedicated to educating youth on the dangers of texting. This past September, *The National Post* alerted the public to a Canadian initiative, www.textEd.ca, an interactive site where students can take quizzes, share stories, post comments and get immediate and confidential advice in a synchronous environment. (GUM) School boards across Canada are actively creating curriculum, programs and policies to handle the increasing incidents of cyber-bullying, and websites like www.stopcyberbullying.org provide a safe online environment for students to gain invaluable information. While more and more initiatives are emerging which seek to better inform youth about the inherent risks of social technologies it is important to note that the 2010 Pew Internet Study also found that while 26% of students had experienced bullying on their cell phones, 31% had reported bullying at school.

These statistics acknowledge the need for teachers to address these issues with their students across domains. There are a number of excellent websites and books dedicated to helping teachers create classrooms and curriculum that address digital literacy and digital citizenship. A simple internet search will provide a wealth of: lesson plans, discussion topics, and video links that teachers can use immediately. A primary goal for 21st century educators must be to model appropriate interactions in both face to face and online environments in a way that promotes a respect of self, respect of others, and respect of outside limits. (Brooks-Young, 2010, p.102).

Systemic School Board Policy

In British Columbia, a common theme pervades district policies surrounding the possession and use of cell phones and other mobile technologies. Whether it is a public high school in Vancouver or a private school in White Rock the message regarding cell phone use in schools is the same:

iPods and cell phones cannot be used during class time. These items will be confiscated and sent to the principal if a student is caught using these devices during class. Students will then have to pick them up after school from the office and if this happens twice, students will not get the device back until a parent has been called and notified. (*Sir Charles Tupper*)

While many school boards have recently updated their policies to accommodate for the use of cell phones during breaks and lunch hours, all districts seem to agree that cell phones being powered on during class is not permitted. There are inherent flaws to such sweeping policies – and surprisingly, those most impacted are not the students, but rather the teachers.

While district policies are in place to promote a sense of safety and control within the school system, teachers who recognize the value of these ubiquitous technologies are forced to forgo their use, and worse still, they are required to act as technology police. The reality is, students are using their cell phones in class, and they have become so adept at texting they do not even need to see the keys. One recent US poll

asked students of schools that had cell phone bans in place if they continued to use their cell phones in class and the answer was a resounding yes. Instead of forcing teacher to control something that we cannot even see, we should have autonomy within our own classrooms to use the technologies that we deem appropriate to supporting our students learning, even cell phones.

Given their growing pervasiveness outside of the classroom, we fight an impossible battle when we tell them to lock them away. Instead, teachers and boards should work together to determine how these tools can be incorporated into the school culture in a positive way, keeping in mind that the integration of such devices needs to be aligned with expected learning outcomes as well as appropriate pedagogies that support such technologies.

Conclusion

79% of students in grade 9-12 use a cell phone outside of school every day. They quite literally have powerful tools in the palms of their hands that can radically improve their learning experience. Cell phones have the potential to personalize learning and foster learning opportunities both inside and outside of the classroom, at any time, in any place. Current research shows a technologically-driven evolution in learning has taken place and our pedagogies and practice need to reflect that shift. As 21st century educators, existing in an ever-increasing digital and mobile world, we must take the digital leap and explore how to utilize the technologies that students are already engaging with outside of the classroom and bring them in. We owe it to our students and ourselves, to personalize the learning experience and encourage innovation, collaboration, and creativity – all essential skills to be successful in a technological age. A cell phone can be much more than a casual communication device; it can be a meaningful learning tool. We make a grave error when we resist the technology that is already there, and that teenagers are eager to use.

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