

Individual Reflection Paper 2 : Mobile Device Policies in K-12 Classrooms

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Introduction

Like Wong and Looi (2011), I tend to have a positive attitude toward technologies. In my first reflective essay I wrote “The two greatest challenges to effective mobile learning integration are 1) the affordability of Internet-enabled devices and, 2) access to reliable high-speed Internet.” Our recent module on mobile learning taught me that this belief is misguided. During that module’s online discussions, I encountered classmates who are adamantly opposed to mobile phone integration in their classrooms. They either want the devices banned outright or they are grateful for existing bans at their institutions. I found this reaction baffling: Aren’t we all taking this course because of our belief in the pertinence of technologies in the classroom? It doesn’t help that my experience with mobile devices is limited since I have taught at the primary levels for the past 7 years, an age at which mobile phone ownership is low and where parents tightly control access to devices.

I am hoping to transition to middle and high school teaching in the near future, where I am eager to implement a BYOD policy and to establish a blended learning environment in my classroom. My classmates’ observations therefore gave me pause. It hadn’t occurred to me that I might be prevented from integrating mobile devices in my classroom due to school-wide device restrictions or bans. I decided to look for research regarding effective mobile device policies for K-12 environments.

Papers on mobile phone usage and policies in K-12 institutions are rare (Bedesem & Harmon, 2015). Extant research is limited in scope and sometimes predates the introduction of smartphones (Brown, 2008, for example). The largest and most recent studies I found were undertaken in China, where teaching approaches and societal attitudes toward technologies can be different from those in North America (Lemoine, Buckner, McCormack & Richardson, 2014). Despite these differences, the authors of the papers I collected all recognize the particular challenges presented by mobile devices, yet they are unanimous in concluding that bans on mobile devices in K-12 schools are

ineffective. All of the surveyed authors recommended integrating mobile devices as powerful learning tools in middle and high school classrooms.

Affordances and Challenges of Mobile Devices

For adolescents, mobile phones are indispensable extensions of themselves. Youth and adults alike may suffer anxiety when they are away from their devices (Mupinga, 2017). Much of our social lives now occur online, and for the many users who rely on the devices to coordinate their schedules, being without a device can be a disorienting and unnerving experience (Ganito, 2013). I know I would be lost without my iPhone and I generally keep it on my person at all times.

Mobile devices are acknowledged to be powerful learning tools with multiple applications in the classroom. The pedagogical affordances of mobile devices include:

- Anytime/anywhere access to enhanced and authentic learning and reference materials (Mupinga, 2017; Bedesem & Harmon, 2015; Ganito, 2013; Guinee & Mertz, 2015; Gao, Yan, Zhao, Pan & Mo, 2014; Gao, Yan, Wei, Liang & Mo, 2017)
- Student-centred learning and differentiated instruction (Guinee & Mertz, 2015; Bedesem & Harmon, 2015)
- Improved literacy and second-language acquisition skills (Guinee & Mertz, 2015; Bedesem & Harmon, 2015; Gao, Yan, Zhao, Pan & Mo, 2014)
- Improved communication between students, parents and educators (Guinee & Mertz, 2015; Kolb, 2011; Ganito, 2013; Gao, Yan, Zhao, Pan & Mo, 2014)
- Increased student engagement and empowerment (Guinee & Mertz, 2015; Ganito, 2013; Bedesem & Harmon, 2015; Gao, Yan, Wei, Liang & Mo, 2017)
- Easier data collection, analysis, and tracking (Guinee & Mertz, 2015; Ganito, 2013; Land & Zimmerman, 2015)
- Increased opportunities for collaboration and sharing (Bedesem & Harmon, 2015; Ganito, 2013; Land & Zimmerman, 2015)
- More avenues for creative expression (Bedesem & Harmon, 2015; Ganito, 2013)

- Increased productivity (Bedesem & Harmon, 2015; Ganito, 2013; Gao, Yan, Wei, Liang & Mo, 2017)
- Support for students with disabilities (Bedesem & Harmon, 2015)
- Lower purchase price to help bridge the digital divide (Guinee & Mertz, 2015)

Mobile devices can also be a source of disruption in the classroom. The most frequently cited negative aspects of mobile devices include:

- Student distraction (Mupinga, 2017; Ganito, 2013; Gao, Yan, Zhao, Pan & Mo, 2014; Aagaard, 2015)
- Classroom disruption (Bedesem & Harmon, 2015; Ganito, 2013; Gao, Yan, Wei, Liang & Mo, 2017; Kiedrowski, Smale & Gounko, 2010)
- Cheating on texts and exams (Mupinga, 2017; Guinee & Mertz, 2015; Bedesem & Harmon, 2015; Ganito, 2013; Gao, Yan, Zhao, Pan & Mo, 2014; Gao, Yan, Wei, Liang & Mo, 2017; Kiedrowski, Smale & Gounko, 2010)
- Accessing inappropriate content and sexting (Bedesem & Harmon, 2015; Gao, Yan, Wei, Liang & Mo, 2017)
- Cyberbullying (Mupinga, 2017; Guinee & Mertz, 2015; Bedesem & Harmon, 2015; Ganito, 2013)
- Decreased literacy skills (Bedesem & Harmon, 2015; Ganito, 2013)
- Sleep and mental health disturbance (Guinee & Mertz, 2015; Gao, Yan, Zhao, Pan & Mo, 2014; Kiedrowski, Smale & Gounko, 2010; Gao, Yan, Wei, Liang & Mo, 2017)
- Poorer academic performance (Gao, Yan, Zhao, Pan & Mo, 2014; Gao, Yan, Wei, Liang & Mo, 2017; Aagaard, 2015)
- Risk of theft or assault over coveted devices (Guinee & Mertz, 2015)
- School liability should confiscated devices be lost or stolen (Mupinga, 2017; Kiedrowski, Smale & Gounko, 2010)
- Privacy concerns and greater teacher scrutiny (Ganito, 2013; Kiedrowski, Smale & Gounko, 2010)

Mobile phones are indeed disruptive, just not in ways that teachers may be ready to acknowledge. They upend the traditional hierarchy of teachers as gatekeepers of knowledge, thereby eroding their authority (Ganito, 2013; Aagaard, 2015). Teachers may not know how to effectively harness the power of mobile learning to engage their students and to prevent disruption (Mupinga, 2017; Ganito, 2013) or they face vague or conflicting demands from administrators, parents and students (Mupinga, 2017). Without the tools and the guidance to effectively integrate mobile devices, teachers and their administrators give up and resort to banning the devices completely (Ganito, 2013; Kommers, 2018).

Existing policies and their effectiveness

Mobile devices are increasingly prevalent, with a majority of teens now owning one (Bedesem & Harmon, 2015; Ganito, 2013; Gao, Yan, Zhao, Pan & Mo, 2014). Nevertheless, the majority of K-12 schools prohibit such devices from classrooms (Mupinga, 2017; Bedesem & Harmon, 2015; Gao, Yan, Zhao, Pan & Mo, 2014). Mobile bans are typically instituted by educators, the expectation being that students will follow the rules while parents will act as “policy mediators” between the two parties (Gao, Yan, Wei, Liang & Mo, 2017, p. 14).

Schools have the right to ban and to temporarily confiscate devices that disrupt or negatively impact the learning environment (Kiedrowski, Smale & Gounko, 2010). All three stakeholders (students, educators, and parents) agree that banning mobile phones during tests and exams is justified (Gao, Yan, Wei, Liang & Mo, 2017). Restrictions on devices at the elementary levels are also well-supported (Gao, Yan, Zhao, Pan & Mo, 2014). Opinions thereafter diverge greatly.

Many teachers have a negative opinion of mobile devices in the classroom (Gao, Yan, Wei, Liang & Mo, 2017). Pre-service teachers and in-service teachers over the age of 50 are most likely to oppose or to be unsure of mobile phone use in the classroom, yet – surprisingly – the majority of in-service teachers are open to their integration (Bedesem

& Harmon, 2015). It is important to note that teachers tend to agree that existing bans are ineffective (Mupinga, 2017; Ganito, 2013; Gao, Yan, Zhao, Pan & Mo, 2014; Kiedrowski, Smale & Gounko, 2010)

Students are enthusiastic supporters of mobile phone use in schools (Bedesem & Harmon, 2015) and the older the student, the more likely they are to oppose bans on devices in the classroom (Gao, Yan, Wei, Liang & Mo, 2017). Students agree with limits on their use in principle, but in practice students disregard bans they perceive to be unfair or untenable (Gao, Yan, Zhao, Pan & Mo, 2014; Gao, Yan, Wei, Liang & Mo, 2017). Banning devices may also have the unintended consequence of pushing students to flout the rules in order to impress their peers (Ganito, 2013, Gao, Yan, Zhao, Pan & Mo, 2014, Kiedrowski, Smale & Gounko, 2010). This puts teachers in the difficult position of disrupting classes in the course of policing ineffective policies (Kiedrowski, Smale & Gounko, 2010).

Parents tend to be on the fence regarding banning. They think their child's learning may suffer if devices are allowed in the classroom yet conversely, they also wish to maintain constant contact with their children for safety and security reasons (Ganito, 2013, Kiedrowski, Smale & Gounko, 2010). Parents also tend to react harshly to the confiscation of devices for which they've paid (Mupinga, 2017).

Arguments Against Banning Mobile Devices

All of the papers discussing mobile phone policies in K-12 classrooms argued against banning the devices (Mupinga, 2017, Guinee & Mertz, 2015, Bedesem & Harmon, 2015, Ganito, 2013, Gao, 2104; Gao, Yan, Wei, Liang & Mo, 2017, Kiedrowski, Smale & Gounko, 2010). Some pointed out that schools are historically slow to adopt new and promising technologies (Ganito, 2013, Mupinga, 2017, Kiedrowski, Smale & Gounko, 2010). Mobile devices are unusual in that, unlike transistor radios and Tamadotchi pets before them, mobile devices are powerful and flexible tools with wide-ranging applications in educational settings.

Moreover, mobile device bans reveal an insular and even backwards mindset on the part of educators and administrators (Mupinga, 2017):

[E]ducation appears to be locked into a twentieth-century mentality and is attempting to limit the use of cellular telephones in the school setting, as if they were no different from any of the previously banned technologies.... [T]oday's educators must recognize that the handheld technology of cellular phones does not appear to be a passing trend but is instead becoming a staple of society.

(Kiedrowski, Smale & Gounko, 2010, p. 61)

Mobile devices are here to stay. To pretend otherwise is counterproductive. Marc Prensky (2012) asked, “Should the Digital Native students learn the old ways, or should their Digital Immigrant instructors learn the new? Unfortunately, no matter if the [Digital] Immigrants may wish it, it is highly unlikely that the Digital Natives will go back” (p.71). Banning the devices at the administrative level deters teachers from learning about effective mobile integration (Ganito, 2013, Mupinga, 2017).

Good pedagogy, in the form of authentic learning, demands that students see the links between their classroom experiences and the real world around them (Mupinga, 2017, Ganito, 2013). The failure of many schools to at least acknowledge the presence and the influence of mobile devices runs counter to this philosophy and suggests to students that their efforts inside the classroom are unrelated to situations they will face when they graduate. Banning mobile devices also eliminates a powerful learning tool, a situation Gao, Yan, Zhao, Pan & Mo (2014) liken to throwing out the baby with the bath water (p. 31)

Arguments for Mobile Device Integration

In her books, Liz Kolb (2008, 2011) advocates for showing students how to use technology effectively to better prepare them for everyday life after school. Mupinga (2017) and Kiedrowsi (2010) argue forcefully that failing to teach appropriate and responsible mobile device usage puts students at a disadvantage. “[A]t what point in their lives will the students learn how to appropriately use these tools” posits Mupinga, 2017 (2017, p. 75) if not at school?

Teaching the effective use of mobile technologies, of digital citizenship, is as important a goal as reading and writing in my opinion. The classroom can no longer remain separate from the “real world” (Mupinga, 2017; Kolb, 2008, Ganito, 2013, Gao, Yan, Wei, Liang & Mo, 2017). Educators have an important role to play by modelling appropriate mobile phone use in their classrooms – something I have done on the rare occasions my phone has rung during a lesson – a teaching opportunity that is lost in schools that ban the devices.

Initial attempts at integrating mobile devices as part of school policy have been promising, demonstrating that negative attitudes toward mobile device integration can be altered or even reversed (Kiedrowski, Smale & Gounko, 2010). Students are eager to use mobile devices. This energy could be put to constructive purposes by embracing mobile technologies in the classroom.

Mobile learning policies should not be written without input from all stakeholders, including parents and students (Mupinga, 2017, Gao, Yan, Zhao, Pan & Mo, 2014, Kiedrowski, Smale & Gounko, 2010). To do otherwise is to risk backlash from parents and insubordination from students. Policies must “balance the rights of students and parents with the responsibility schools have to deliver learning in a safe and respectful environment” (Kiedrowski, Smale & Gounko, 2010, p. 42).

Policies must be clearly communicated and applied consistently if they are to be respected by stakeholders (Gao, Yan, Zhao, Pan & Mo, 2014; Mupinga, 2017). Moreover, K-12 students are not a homogenous group. It is reasonable to write policies

that differentiate between grade levels based on each age group's needs, abilities, and access to technology (Gao, Yan, Zhao, Pan & Mo, 2014).

Discussion

When undertaking my research for this essay, I fully expected to find a range of opinions regarding mobile device integration. I thought I would find papers advocating strongly for banning, as well as others making opposing arguments. I was shocked to find consensus on the subject: Banning mobile devices is ineffective, doing so eliminates a valuable educational tool, and bans may even do our students a disservice by failing to prepare them for the world outside of school. These results have emboldened me to advance with my plan of implementing a BYOD and blended learning approach in my own classroom.

But I'm a tech-savvy educator who has spent the last year completely re-thinking her teaching approaches and learning about inquiry-based pedagogy. I have the knowledge needed to successfully implement a mobile learning environment. What about my colleagues, many of whom have been teaching for decades and who regard mobile devices in the classroom with scepticism or outright alarm?

I believe that top-down policies forcing teachers to integrate mobile technologies are insensitive to individual teacher preferences and abilities. Policies should allow teachers to impose reasonable limits on mobile phone use – including banning them from their classrooms – when it is in the students' best interest to do so (ie: so that they can focus on a lesson). Teachers like me who wish to integrate technologies should not be prevented from doing so either. Policies should be flexible enough to recognize the teacher's ability to judge the appropriateness of mobile integration in their classrooms. Again, these policies must be discussed with students and applied fairly and consistently if they are to be respected (Gao, Yan, Zhao, Pan & Mo, 2014).

Many teachers – particularly pre-service teachers and older in-service teachers – are uncomfortable with mobile technologies in general (Bedesem & Harmon, 2015). This may be due to a lack of awareness of mobile integration approaches and a dearth of successful examples of mobile learning in their educational communities (Van Praag & Sanchez, 2015). Teachers require training in mobile device integration if BYOD policies are to be effective (Bedesem & Harmon, 2015, Ganito, 2013). Even training in constructivist pedagogic approaches – such as inquiry-based learning – would likely lead to more engaged students and less temptation to consult mobile devices (Aagaard, 2015). Encouraging educators to adopt mobile-friendly approaches requires carrots, not sticks.

Integrating mobile devices into the classroom is hard work, much of it done outside of the classroom (White, Williams & England, 2014). Instituting a mobile learning environment requires the ability to trust students to handle their devices responsibly (Ganito, 2013). The decision to welcome (or to not welcome) mobile devices into the classroom is a difficult one, requiring a loosening of control on the one hand (pro-mobile) or increased policing on the other (anti-mobile). Neither choice is easy, but that choice must be respected. Regardless, it is clear to me that school-wide bans do not work.

References

Aagaard, J. (2015). Drawn to distraction: A qualitative study of off-task use of educational technology. *Computers & Education*, 87, 90–97.

Bedesem, P. L., & Harmon, A. (2015). The Use of Mobile Phones in K-12 Education. In Z. Yan (Ed.), *Encyclopedia of Mobile Phone Behavior* (pp. 575-582). Hershey, PA: IGI Global. doi:10.4018/978-1-4666-8239-9.ch048

Brown, L. (2008). Using mobile learning to teach reading to ninth -grade students (Order No. 3330949). Available from ProQuest Dissertations & Theses Global: Literature & Language; ProQuest Dissertations & Theses Global: Social Sciences; Publicly Available Content Database. (304831964). Retrieved from <https://search-proquest-com.qe2a-proxy.mun.ca/docview/304831964>

Gao, Q., Yan, Z., Wei, C., Liang, Y. & Mo, L. (2017). Three different roles, five different aspects: Differences and similarities in viewing school mobile phone policies among teachers, parents, and students. *Computers & Education*, 106, 13-25. Retrieved from: <https://doi.org/10.1016/j.compedu.2016.11.007>

Gao, Q., Yan Z., Zhao, C., Pan, Y. & Mo, L. (2014). To ban or not to ban: Differences in mobile phone policies at elementary, middle, and high schools. *Computers in Human Behavior*, 38, 25-32. Retrieved from: <https://doi.org/10.1016/j.chb.2014.05.011>

Ganito, C. (2013). Transparent Classrooms: How the Mobile Phone is Changing Educational Settings. In K. Beycioglu (Ed.), *Ethical Technology Use, Policy, and Reactions in Educational Settings* (pp. 142-152). Hershey, PA: IGI Global. doi:10.4018/978-1-4666-1882-4.ch012

Guinee, K., & Mertz, G. (2015). Mobile Phone Use by Middle School Students. In Z. Yan (Ed.), Encyclopedia of Mobile Phone Behavior (pp. 528-540). Hershey, PA: IGI Global. doi:10.4018/978-1-4666-8239-9.ch044

Kiedrowski, J., Smale, W., & Gounko, T. (2010). Cellular phones in canadian schools: A legal framework. *Education Law Journal*, 19, 41-62. Retrieved from <https://search-proquest-com.qe2a-proxy.mun.ca/docview/347262616?accountid=12378>

Kolb, L. (2008). *Toys to Tools: Connecting Student Cell Phones to Education*. Eugene, Oregon/Washington, DC: ISTE (International Society for Educators). ISBN: 9781564842480

Kolb, L. (2011). *Cell Phones in the Classroom. A Practical Guide for Educators*. Eugene, Oregon/Washington, DC: ISTE (International Society for Educators). ISBN: 9781564842992

Kommers, P. (2018). Introduction. In: Yu S., Ally M., Tsinakos A. (eds) *Mobile and Ubiquitous Learning. Perspectives on Rethinking and Reforming Education*. Springer, Singapore. DOI: 10.1007/978-981-10-6144-8_1

Land, S. M., & Zimmerman, H. T. (2015). Socio-technical dimensions of an outdoor mobile learning environment: a three-phase design-based research investigation. *Educational Technology Research and Development*, 63(2), 229–255.

Lemoine, P., Buckner, B., McCormack, T. J., & Richardson, M. D. (2014). The convergence of divergent roads: Comparisons of china and U.S. school systems. *New Waves*, 17(1), 80-94. Retrieved from <https://search-proquest-com.qe2a-proxy.mun.ca/docview/1684386674?accountid=12378>

Mupinga, D. M. (2017). School-wide and classroom policies on the use of mobile technologies: An exploratory study. *Journal of Technology Studies*, 43(2), 70-79.

Retrieved from <https://search-proquest-com.qe2a-proxy.mun.ca/docview/2076295198?accountid=12378>

Prensky, M.R. (2012). From digital natives to digital wisdom: Hopeful essays for 21st century learning. Corwin Press. Thousand Oaks, CA. Retrieved from: https://books.google.ca/books/about/From_Digital_Natives_to_Digital_Wisdom.html?id=nSKzj6lj0egC&redir_esc=y

Van Praag, Benjamin, & Sanchez, Hugo Santiago. (2015). Mobile Technology in Second Language Classrooms: Insights into Its Uses, Pedagogical Implications, and Teacher Beliefs. *ReCALL*, 27(3), 288-303.

Wishart J. (2018). Ethical Considerations in the Incorporation of Mobile and Ubiquitous Technologies into Teaching and Learning in Educational Contexts. In: Yu S., Ally M., Tsinakos A. (eds) *Mobile and Ubiquitous Learning. Perspectives on Rethinking and Reforming Education*. Springer, Singapore. DOI: 10.1007/978-981-10-6144-8_5

White, B., Williams, G. & England, R. (2014). Diverse Pictures of Learning: The Hidden Work of Shaping Next Generation Learning Spaces. In: Fraser, S. (ed) *The Future of Learning and Teaching in Next Generation Learning Spaces*. DOI: 10.1108/S1479-362820140000012005

Wong, L. H., & Looi, C. K. (2011). What seams do we remove in mobile-assisted seamless learning? A critical review of the literature. *Computers & Education*, 57(4), 2364–2381.