

Cell phone use in a high school classroom: Three mini-cases explored

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Abstract — The ubiquitous presence of digital technologies, in this case cell phones, and the rampant overt and covert usage in high schools by adolescent 21st century digital natives has resulted in high school educators and administrators struggling to respond with appropriate practices and policies. Across three descriptive-narrative classroom incidents, focused on high school student cell phone use and a teacher's and school's responses, the authors offer reflexive critical commentary on how in the micro-context of a high school classroom the macro-discourses associated with digital technologies such as “unbridled progress”, “being competitive” and “consumption is good” play themselves out. And, as these discourses play themselves out, the myth of digital technology “neutrality” comes into question.

Keywords — 21st Century high school learners, Adolescent cell phone users, Digital technology Discourses and myths

I. INTRODUCTION: THE NEW “NORMAL” HIGH SCHOOL CLASSROOM

Men have become the tools of their tools.

Henry David Thoreau¹

If you are a mature person you may recall being easily drawn away from what was considered less than interesting classroom lectures and activities. For some of us, we imagined one fantasy or another, or we just doodled ourselves into other times and places. However, today teachers are being exposed a different type of student non-engagement. From our observations, gone are the imagination-inspired fantasies, or day-dreaming doodling among most high school students. Rather, today's high school students are transported to virtual times and spaces via QWERTY keyboards on their mobile phones.

Currently, in 2014, students are described as 21st Century Learners [1] or Digital Natives [2], [3]. Such learners are persons who have either been born into a world with ubiquitous digital technologies, or who have been socialized into it through rampant usage of said digital technologies. Yet, despite being digital savvy learners, these adolescents, in most Canadian high schools, spent six hours a day, five days a week in what may only be described as a typical 1980s designed

box-like classroom where still, more or less, in this physical setting, they are taught primarily, and traditionally, face-to-face.

Many Canadian educational governing bodies are advocating that 21st Century learners must be accommodated even in these traditional classroom spaces. Teachers are told to enable student abilities with digital technologies and the teachers' learning and teaching practices must be digitally sensitive. This positioning by schools is all good and well – theoretically. But how does this positioning play itself out in a typical high school classroom with, let us say, cell or mobile phones. What follows is an attempt to reflexively understand and comment on the increasingly wide-spread use of cell phones in a Canadian high school through three mini-cases – Case #1 and Case #2 are located in a teacher's high school classroom, and Case #3 is a focus on the school's attempt to generate a digital technology policy.

A. Cell phone encounter – case #1

Outside the classroom, the leaves shone in full fall colors. Inside the classroom, grade eleven social studies students were coming in from their lunch hour and settling into their seats. Trying to invite the students to become creatures of habit and routine, Miss T always begins with twenty minutes of class time devoted to discussions around a political cartoon, image, or quotation. She felt such a routinized opening activity was an opportunity for students to practice new or recovered terminology and concepts from previous classes. So, on this sunny fall day, thirty-eight students, a classroom assistant and a teacher settle into looking at a World War Two poster. It was then and there that this class changed – indeed, dramatically.

With the students seated, the teacher began to circulate near the front of the classroom and the resource learning assistant did the same at the back. The individual group members were chattering about the visual qualities of the poster they were studying. After several productive minutes, the teacher called the class together to share their thoughts and feelings about the poster. The students took turns speaking about the bland backdrop and how the lack of color in the background allowed for the eye to rest on the youths that were displayed boldly front and center. The class wondered about these young military persons. Meanwhile, as the class and Miss T engaged in a back and forth about the poster, she noticed the assistant's attention was drawn to one student at the back of the room. The assistant approached this

¹ H. D. Thoreau, BrainyQuote.com, Available: <http://www.brainyquote.com/quotes/quotes/h/henrydavid108059.html>, May, 2014.

young man with the intent of helping him refocus on the task at hand. The teacher could tell the assistant offered to help him catch up on ideas the class had brainstormed and were discussing. In volunteering her support, which she always did and did well, the assistant hoped that the student would, on his own initiative, stop using his cell phone and catch-up on the class conversation. With one eye on the class and another on the situation developing at the back of the room, the teacher noticed the assistant's initial attempt seemed to be disregarded by the student. His thumbs continued to openly flutter across the cell phone keypad. In her second attempt, the assistant seemed to be more direct. The teacher could hear her telling the student to put his phone away. Yet again, the assistant was ignored. Having had both her requests refused, the assistant left the student, and she approached the teacher.

The class moved into independent paragraph writing. The assistant told the teacher what she had just experienced with the cell phone using student. As the teacher listened, her gaze moved towards the young man. Indeed, he was still slouched over thumbing his phone. The assistant expressed how she felt awful about not being able to motivate the student to attend to the lesson. Further, she perceived his lack of acknowledgement of her as a form of disrespect. It was at that moment, the teacher just knew this episode was not characteristic of so many other times when students were disrespectfully inattentive.

The teacher approached the student consistent within her usual classroom management style. Her hope was that he would look up so that they could make eye contact. Initially, she planned to give him a disapproving look to clue him into putting the phone away. Afterwards, she could approach him and ask to speak with him in the hallway. But, as she approached they had yet to make eye contact. The teacher purposely walked with a little heavier step so that the click-clack of her high heel shoes against the hard floor would draw his attention away from the phone screen. However, he never looked up. Eventually, the teacher stopped in front of his desk and held out her hand gesturing for his phone.

He finally looked up at her and then he looked at her hand and said, "No."

In other instances when Miss T initiated a gesture like this, students were always, even if grudgingly, compliant. As such, his response rather shocked her. Still calmly she asked, "You've been asked already once today by Ms. D, and now I'm asking you. If you'd like to place the phone on my desk, or in one of my drawers, or you can place it my hand and I'll put it in a safe spot on my desk, but you'll not be distracted by it again during my class."

As if he never heard her, the student sat deeply immersed in his cell phone game. Miss T asked again for the phone.

This time he aggressively asked, "What the hell is your problem?"

Miss T replied that her problem was his cell phone as it was clearly distracting him from his school work. She told him she was saddened over the disrespect he showed to both the assistant and herself. As the entire class watched, the

teacher said she was frustrated that she was spending her time dealing with an issue over a cell phone instead of getting on with the lesson.

In another short response, he stated, "This is shit."

"You may consider it that, but this is a school policy violation and with any school policy, I will enforce it. So, you may choose to hand it over, or I will involve administration."

He still refused. Feeling her attempts at reasoning had failed, she picked up the school phone and called the front office. She informed them that a student would be joining them shortly. He needed to speak to someone about the distracting use of his cell phone during her class. The teacher asked that the administration remind him of the school rules and how to interact with teachers. As she hung up the classroom phone, he gathered his belongings and stormed out. Passing by he barked comments about how the situation was "ridiculous" and "unnecessary" and "outrageous".

In Miss T's mailbox the next morning was a letter from the classroom removed cell phone student:

Dear [M]iss T,

This letter I am writing to you is about the incident that occurred in your classroom yesterday between you and I arguing over my cellular device that was in my possession at the time. I feel quite saddened about the coarse language that was used in the way I said my words towards you. I am deeply sincerely sorry for my actions and language used towards you in our small argument over my cellular device I was using while not paying attention in your class while you were teaching us our lesson. And I am also sorry for being a very disrespectful young man towards a teacher figure like you. I am sorry once again for my action in your class. I hope you can accept my apology and I know I won't have my phone out again while you are trying to teach us lessons on that stuff.

B. Critical reflection response #1

Considering this experience with this student, we wonder, not so much about the student's assertive negative responses to handing over his phone, but the technology – the cell phone – itself as seductively at the center of his "attention" issue. Cell phones today resemble little, in both appearance and function, to what they were four or five years ago. With technological advancements, cell phones are now smaller and more powerful with high-intensity screen displays featuring photos, alarms and reminders, calendars, Facebook and Skype, Twitter, and a host of social media "apps" as well as web browsers and email besides a phone component. In appearance and function alone, these digital devices already seem to promote, if not require, almost narcissist, individualization and personalization in the user.

With invested individualizing personalization, via a proliferation of choice "apps" seemingly demanded of the cell phone user, it may be possible to propose that the cell phone #1 student, perhaps like most cell phone users, had established a mental, emotional, social and, indeed, a physical connection that is both heightened and facilitated by the actual technical and phenomenological qualities seductively embedded in the

cell phone. The phone offers hyper-mediating sensory connectivity to multiple cyber-worlds that invite a user's engagements, on many levels, which may actually colonize, for moments of varying duration, utterly and totally his or her mind and body. As reference [4] suggests, "[m]edia companies are in the business of selling human attention and it's sold in units by the thousand" (p. 71). Was the student in this case so intensely connected and alive in a created private gaming world that it utterly engulfed all his attention?

If possibly yes, then this all-encompassing reality becomes problematic when a digitally-created private world trumps a public world presence required in the classroom. In this case, the evidence seems to indicate the student was totally oblivious to the cues the teacher provided inviting him to re-enter the classroom world. The student, like many cell phone users, seemed to have fallen into the personalizing magical spell that has been artfully constructed and engineered by the cell phone itself and "apps" technology companies. He no longer seemed obligated to act socially or responsibly with the presence of the teacher. Even though she was physically present to him, he seemed to feel responsible only to the virtual game on his cell phone. The teacher's frustration stems from the fact that although the student felt she was intruding into his world, he was undoubtedly intruding and disrupting her attempts to create a positive learning environment in the classroom. Still, what attention did the student owe the virtual world that he did not owe the teacher or his peers in the classroom? Was the student seduced by the ways cyberspace embodies an effect on the human experience [5]? Is there a sense in which our human bodies and our sensory orientations to and with the world are captured by the actual workings of various forms of digital information technologies?

Reference [6] notes that the human body and its relation to technologies is deeply phenomenological. As well, reference [6] distinguishes between "body one" which is our sensory body, and "body two" which is the body as mediated, informed, and shaped by our technological meta-discourses Western culture. We wonder if the cell phone student was transported between these bodies in a phenomenological or experiential sense. Was he virtually located within such an engagement that his digitally extended body became his "real" physically-dependent body? Was his body trapped within such a powerful virtual reality that the classroom world was just extraneous noise – the teacher, her assistant, and his peers? Was this the source of his violent indignation that the teacher dared to interrupt his attentiveness to the seductive virtual fantasy literally at hand on the cell phone?

C. Cell phone encounter – Case #2

Typically, the teacher stood outside of her classroom door greeting students. Upon entering the class, most students dropped their book bags, found their beverages a rightful spot on their desks, and finished the remnants of a brought-to-school breakfast.

As the second bell sounded, the students finished the last of their conversations. Miss T began class with a warm greeting. Once the formalities of the morning announcements,

updates, and reminders had passed Miss T moved into her lesson for the social studies non-academic route students.

"Ladies and gents. For homework you were asked to finish off the terminology for historical legacies and attempt the first few questions that corresponded to that unit. Today, then, we will spend the class taking up any of your questions. We'll have some class time to spend plugging away at the next series of ideas and concepts. We'll have time to play a game. Before we get started on any of that work, I'd like to return to you the last unit test on global citizenship. Most of you were quite successful on this test. As I hand them back, go through them and make note of anything you're unsure of so that we can take it up together."

Miss T began to circulate about the classroom. Her test return system was rather haphazard, and she was crisscrossing the room, giving praise to students for their efforts. However, there was one student's test that she was especially excited to hand back. This student had a difficult start to her class as he had missed the first three weeks due to an illness. He had struggled to catch up and his inability to do that was linked to some poor personal choices he had been making. These choices had essentially caused him to enter into a last-chance agreement with administration.

Miss T stopped circulating and purposely searched for his exam. There it was with as many bright stickers as she could have placed on it without making it look as if it were a sticker book. His test score was 90%.

As Miss T passed it over to him, shock and disbelief instantly shook him. He began to shuffle in his seat and show his peers sitting around him. He pushed his chair out from under his desk, stood up, and said, "Are you serious?"

Miss T reassured him that his mark was totally all him! She returned to handing out the rest of the tests, but then Miss T saw the young man take out his cell phone and start texting.

"Hey Thomas, is that a cell phone I see?"

"Miss T. Please com'on."

"Oh Tom, com'on what? I'm a little curious who you are needing to text?"

"My mom. I'm telling her my grade."

"Well, while you're at it you should mention to her that you're not supposed to be texting during class time. And she should consider taking you out to celebrate?"

Aware that Miss T was breaking the school technology policy about using cell phones in class, she let him finish texting his mother on the condition that he let her know what her reply was. And, from the back of the classroom, Tom's hand popped up. Miss T called upon the hand and Tom said, "Excellent, Miss T."

"Good." Miss T returned to the lesson.

D. Critical reflection response #2

Here is another example of a student who wanted, or in his words "needed", to leave the confines of the classroom in order to become connected to another person in another location. However, in this case not only did the teacher permit his actions, she encouraged him to share with his mother his

test result. Why? In attempting to honour a fragile teacher-student pedagogic relationship, she saw a need for flexibility in applying the school's cell phone policy. She felt Tom texting his mother was a reasonable and simple enough communication use of the cell phone. And, as such, Miss T was not troubled with how the other students would react as a result of a breach in school cell phone use policy, because she believed that once they saw the communicative engagement with this student and his family that they would simply respect her position in the matter; as they proved to do.

Reference [7] notes that a true pedagogical relation between an adult, serving as a teacher, and young people, situated as learners, is a *sui generis* relationship. Simply, the unique and normative nature of a pedagogic relationship requires distinctions be made between pedagogical and non-pedagogic situations, relations, and actions [7]. Most teaching situations are fraught with choice difficulty because they often require instant action. But this action, in a moment, needs to balance that which requires distinguishing between what is pedagogically appropriate and less appropriate regarding the "self-other relationship". Reference [7] indicates this pedagogical action presumes an embodied and knowing sense of virtue referred to as a "pedagogical tactfulness". Thus, we ask how Miss T's test result cell phone case is different pedagogically from the first case student's engagement with gaming on his cell phone.

In these two case instances, we find ourselves wondering how a created virtual world, riddled with seductive forms of personal engagement, is a more desirable space for many 21st century learners than the face-to-face, physically-bounded world of the classroom? In trying to understand this phenomena, we recover the reference [4] statement that, "[e]verything that we know comes from two sources: direct real-world experience and mediated experience" (p. 71). In both cases, the students' cell phones seemingly allow them to, on one hand, become disconnected with the immediacy of the persons present in the classroom and, on the other hand, connect with those individuals absent and yet found outside classroom walls. It is as Marshall McLuhan (as cited in [8]) once proposed – that it is often the tool that comes between its user(s) and the real world. That is, an idea that in its most simplistic understanding reflects, as reference [8] notes, a concept of "dealing with reality through something else" (p. 8). Returning to reference [6], we, as human beings, have our primary physical body through which we function and participate in the world through our senses. Our second body is constructed culturally and socially. But these bodies (one and two) are placed in a strained relationship regarding which is actually "real" via the mediating use of digital technologies. The students' bodies (phenomenological or experiential bodies and physical or biological bodies) are mediated as reference [6] notes in relationship to their cell phones allowing the cell phone to actually be and become "part of [their] here-body experience" (p. 7). The idea of multiple bodied-ness becomes significant when dealing with understanding the two cases at hand. Both example students were seated in a fixed position in a physically real and present classroom. However, these

students were, through their mediated digital interactive actions, transported into other-wise virtual worlds – albeit for different purposes. The images, sounds, and messages that they were involved in became *the* "here-body experience". Reference [4] writes, "[t]he ultimate goal of virtual embodiment is to become the perfect simulacrum of full, multisensory bodily action" (p. 7).

Can cell phone digital connectivity alter how one sees self and other, the here and now, and how one perceives and wants to be perceived? From what we witnessed in the two cases so far and through informal conversations with students, it seems, that online communication, social networking, and digital technologies such as cell phone involvement is as naturally mediating to these 21st century students as doodling and flights of fancy were for their parents. As reference [4] notes, "[S]ocial power is the ability to gratify our own human needs through manipulating the quality of our relationships with various people around us" (p. 127). However, in a classroom setting the use of a cell phone as a connection transporter must have pedagogical qualities?

E. Cell phone encounter #3

It was a cool September afternoon. Miss T's colleague was waiting for her in the hallway as was their routine when they attended a school staff meeting. They met and walked into the library where tables had been arranged into group formations and along one wall was food and beverages signaling a long afternoon.

The staff meeting began with the usual formalities. The staff were updated on the first few weeks of school with enrollment numbers and reminders to sign up for committees. Then, the meeting was handed over to a digitally savvy teaching colleague. The colleague showed results from a current technology grant for studying iPod use in her classroom. For example, she was facilitating a discussion with the students while a film was running. The students used their iPods to blog in real time during a film. These blog comments were student reactions to the movie incidents as they unfolded. She stressed that the exchanges would be a living document, being re-edited, and re-visited as the class needed to explore the text and ideas present.

As she finished, the murmurs of staff members became more audible as most seemed to have an opinion over the use in classrooms with digital technologies. An administrator stepped up and he opened with the statement that digital technologies had leaped into the school's classrooms, and teachers in the school needed to have a conversation about technologies generally and their usage specifically. How were teachers using and monitoring technologies in their teaching and learning practices? What should be acceptable and unacceptable uses of information and/or social media technologies in school? It became clear that the colleague's iPad research in her classroom was used to bring to the whole staff's attention, as a diverse staff, it was a conversation about the use of technology in a high school environment.

As the administration team stood together at the front of the library, they each took turns explaining how they were

going to facilitate the conversation. They suggested that the necessary outcome was for teachers to develop a digital device policy. Other schools in the district had, according to the administration, done so already. The administration explained that they had researched other technology-in-school policies and had selected a few examples to hand out. As the policies were circulating, teachers were asked to form groups of eight to ten. As Miss T turned to her colleagues sitting beside her and they each gave a knowing look – they knew now why the extra sandwiches had been provided.

In Miss T's group, the members looked blankly at each other for a while before a teacher expressed how it has become useful for some students to learn with specific computer software on a laptop. She spoke about how most students use the Internet now to find research information for projects. Another staff member spoke up and noted how he has observed students using digital technology during class to text each other, to play games, to job hunt, to watch YouTube clips, and he suggested that these incidents could be controlled through a policy. He viewed these digital technologies as being distracting to legitimate student learning. As the group continued to discuss, a few ideas became apparent, and it was agreed that: (1) a technology policy is probably a good thing; (2) technology could be useful in projects and in research, so teachers should support student use of assistive devices; (3) teachers should not be opposed to what type of device is being used as long as it adds pedagogic value to the students' work; (4) as most devices have multiple functions, teachers believe it is difficult to place restrictions on the kinds of technologies, and (5) teachers must continuously question what is deemed as proper or improper use of digital technologies by students.

A piercing whistle by the administrators brought the staff to attention. The administrators suggested every group share their thoughts. A group at the front of the room began and stated that students should not have the ability to use any digital devices other than a laptop. They argued that if teachers allowed cell phones and other devices that were smaller in size that cheating would occur and that the students would become distracted. This group had not yet finished reporting their ideas when faint sounds from those in disagreement became louder.

What had begun as an invitational data gathering activity had developed into a heated discussion as evident by the numerous crimson faces dotting the library. There were obvious oppositions forming between those who saw limited or no use of digital devices in the classroom versus those who saw it as strongly student pedagogically beneficial. A lead administrator attempted to rein the staff back in, and she called to the staff to settle down. It became evident that this was not an issue that the staff could agree on in one conversation. The administrators' final suggestion was to have staff members send emails to administration regarding their thoughts on the matter. The staff meeting went on to the next agenda item.

On Friday of that week, there was an impromptu announcement calling all teachers to the staff room over the lunch hour. The lead administrator announced that she had read and taken into consideration all email-thoughts about a

technology policy. As such, and to expedite matters, the administration had created a policy. The staff listened as she read the new technology policy. It became apparent the policy would allow an individual classroom teacher to establish the boundaries and parameters around any use of digital devices in their classrooms. Students were permitted to use any electronic devices if their teacher encouraged the use of such devices to facilitate learning. If teachers did not encourage such usage, and if a student was found using such a device, consequences were established to reflect the degrees of misuse. Upon first violation, the student's digital device is confiscated by the teacher for the remainder of the class or day. A second violation requires the staff member to take the device to the office where upon pick up the student would have a meeting with administration. A third, and/or any other subsequent violation, would allow the office to contact the student's parent or guardian, who would come to the school to obtain the device. However, the policy firmly established that students could use their personal electronic devices, without question, during specific times of the day – before school, during lunch, and after school.

The staff members were asked to notify students of this policy. Staff were to begin enforcing individual policy preferences on the following Monday. Hard copies of the policy had been left in staff mailboxes. Without any discussion and no closing remarks, the administrator left the lunchroom.

Subsequently on Monday: "Hey Miss T, Mr. B lets us use our cell phones, iPods, iPads, and laptops in class ... whenever we want. Why don't you?"

F. Critical reflection response #3

Miss T knows there are many classroom benefits to using digital technologies; yet, she held value in face-to-face methods of education. Miss T often found herself conflicted about what to do in her classroom regarding her learners and use in the classroom of digital technologies. Her core assumption regarding student learning, in the early 21st century, is simply that students were born into a ubiquitous digitally mediated world and, as such, most of these adolescents understand digital technologies usage as a (birth) "right". To engage with self, others, or the world without such devices probably seems archaic, useless, and unnatural to these 21st Century learners. However, the case of policy making seems to indicate that the administration adhered to the 21st Century learner assumptions regarding technologies. Still, Miss T noted that staff were never engaged by any evidence regarding digital technology advantages in the classroom – no statistics, no academic readings, no information on 21st Century learners, or digital learning, or the 21st Century learner's brain, and so on. Voice only seemed to be given to those who whole-heartily supported the idea of no restriction inclusion of all and any student personal digital devices. Still, the policy on the surface seemed to provide for some common practices structure, but the language in the policy actually permitted individual teachers to determine what is deemed acceptable or not, or appropriate or inappropriate student technology use. However, what the

policy actually did was declare that digital technologies exist and, therefore, inherently like most progressive technologies must be deemed both good and useful. Such is a current meta-truth propagated by digital technology producers, sellers, and advocates. Such positioning empowered by a pro-digital technologies policies extolling such virtues could be used to manipulate, bully, convince, or win over those resistant teachers who limit or refuse technologies usage in their classrooms.

Perhaps this shift in advocacy power by school administrations for unlimited student use of digital technologies is due in part to the politics of school boards wanting to show consumer parents their child's school is digital technology progressively friendly. As Miss T is coming to understand perhaps, again, such policies are not so much about how educators compete with this apparent invasion of personal-oriented digital technology devices, but rather what are the ethical – indeed, pedagogically ethical – choices educators need to consider in an age increasingly driven by ubiquitous mediating technologies that claim inherently to be good and worthwhile?

II. A CONCLUSION OF SORTS: A MEANING MAKING ATTEMPT

The dominating progressive presence of the natural sciences, the globalizing capitalistic-driven marketplace, and the accompanying hyper-rapid technological developments have transformed the 20th and now the 21st Century's political, military, economic, media, governmental, cultural, and communication landscapes. Our history, as a tool conceptualizing, generating, and using species has taken us from the Stone Age to the Digital Age. Our future must certainly be framed by tools we currently can only dream of.

So, what may be learned from three mini-cases involving Miss T's classroom and her school? Writ-small in Miss T's classroom and school, within these simple narratives of student cell phone use and technology policy making, there is a playing out of a need, by an educator, to understand the writ-large impact consequences of choices that mediate human relationships involving powerful digital technologies that carry with them cultural meta-narratives that such digital technologies are essentially "progress" – and with all scientific and technological progress – it is, always, inherently good, right, and true.

The lesson here in these three mini-cases is to pose the possibility of questioning the assumption that digital

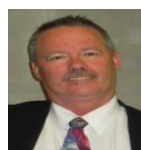
technologies, as "naturally" progressive tools, are inherently autonomous and overwhelmingly neutral. Marketplaces sell this assumption. 21st Century persons buy this assumption and in doing so feel empowered as being in control of their lives and their worlds. Yet, in these mini-cases brought forward here, it may be that these Digital Natives have taught us that we, as human beings, are gifted as technological artifact producers. However, as technology consumers, we have not been attentive to the ways in which technical artifacts, through their non-neutral usage, actually mediate and alter our very essence of what it means to be "human". The students in Miss T's classroom are technological artifact users just as she is. However, Miss T seems conscious that there are differences in how we all, as technology users, have been mediated by a technology's double gestures of connecting yet disconnecting persons as producers and consumers of realities. These mini-case narratives challenge us all to understand how we might explore pedagogically the ever-increasing post-human mediating qualities of the spaces between what is produced and who is consumed. Seemingly the students and administration in Miss T's school are so busy using and pushing digital technologies, that critical consciousness about that usage is not a priority. Perhaps writing this text, as old-fashioned as that technology is, is an attempt to invite students, staff and administrators into a thoughtful and critical inquiry journey regarding what it means when one, via digital technologies, becomes both connected and disconnected.

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