Introduction

With mobile devices infused so deeply in today’s society, it makes sense to start turning our efforts as learning designers and educators to mobile learning. Brown et al. (2013) reference McCready in discussing the Millennial generation, defined as those born between 1982 and 2002 (Epstein & Howe, 2006). “Millennials developed a ‘sixth sense’ for technology; so, utilizing the new generations’ prowess for technology seems like the next step in clinical instruction” (p. 10). Although this is within the context of an iPad integration case study for clinical instruction, I believe this is seamlessly applied to learning in general. If millennials have developed a sixth sense for technology, what does that say about those born after 2002, the iGeneration or Generation Z. These students have practically grown up with a smartphone in their hands. They are expecting to use mobile devices in all aspects of their lives, so we must go to where our learners are—mobile learning. Mobile learning, as described by Sharples et al. (2009) is “the mobility of learners augmented by personal and public technology [which] contribute[s] to the process of gaining new knowledge, skills and experience” (p. 14). This is what this design document will largely be drawing from, using mobile technologies to augment learners’ mobility and mobile learning.

Through Brown et al. clinical supervision iPad integration article, they state that “by using the iPad as part of the curriculum, the program encourages students to learn in multiple modes and to incorporate technology into their own practice as clinicians-in-training” (p. 5). By introducing and supplying iPads to the students as freshmen, they had access to these devices throughout their entire graduate education. The students were learning how to learn, with technology augmenting this process. They also gained 21st century skills as defined by the Partnership for 21st Century Skills (P21) in the Institute of Museum & Library Services (IMLS, 2009) report, such as critical thinking and analyzing skills, as well as a business literacy. For example, if the students found an app that they thought would benefit their patients, they were required to fill out and submit an “iPad App Request Form” justifying how it would benefit their patient, including “evidence-based rationale” (p. 6).

Mobile learning is not as simple as providing recorded instructor lectures to learners via a mobile device. As educators and learning designers, we need to be careful that we are not “reinforc[ing] the negative effects of passive nonparticipatory learning” (Wang et al., 2009, p. 673). One takeaway from Wang et al. (2009) is to design interactive and engaging content that allows learners to be participants in their learning, and not passive consumers. Wang et al. reference studies from Wang & Kang that show “having an emotional connection is the first step in building a learning community” (p. 685). Designing to elicit that emotional connection in our learners is vital to building an engaging learning community.

Pierce (2009) also backs up Wang et al. design choice to design interactive and engaging content. Pierce looks at the relationship between social anxiety and technology and states that “teens are using socially interactive technology (SIT) to communicate with others and it appears that social anxiety is influencing this use or at least may be serving as a substitute for face-to-face communication” (p. 1369). “Those who use the Internet primarily for non-interactive purposes also tend to have fewer in-person social ties. In contrast, those who frequent interactive sites tend to maintain strong interpersonal (in-person) connections” (Zhao in

Educational Context and Learners

This design project is designed for undergraduate students at the Pennsylvania State University. The learners will largely be young adults between the ages of 18 and 25. For now, the scope of this project will be quite broad, with the potential of transforming into a more focused lesson with time. It will be embedded in any undergraduate-level hybrid course. A hybrid course is the combination of classroom learning with an online learning environment, where students spend a significant amount of less time in the classroom. Because less time is spent in a formal classroom setting, learning is supplemented with online activates, which this design document will take advantage of to integrate mobile learning. It is expected that learners have access to the university’s high speed wireless internet while on campus, and assumed that the majority of students own a smartphone, tablet, and/or laptop. If not, students will be able to check out a laptop at the on-campus IT student helpdesk.

Learning Goals

- Students will develop life and career skills, such as flexibility and adaptability, initiative and self-direction, social and cross-cultural skills, and leadership and responsibility, as defined by the P21 in the Institute of Museum and Library Services (IMLS, 2009) report.
- Students will develop Learning and Innovation Skills, such as critical thinking and problem solving, creativity and innovation, communication and collaboration, as defined by the P21 in the Institute of Museum and Library Services (IMLS, 2009) report.
- Students will develop Information, Media, and Technology Skills, such as information literacy, media literacy, and ICT literacy, as defined by the P21 in the Institute of Museum and Library Services (IMLS, 2009) report.

Case Scenario

The original intention of this project was to create an “Undergraduate Toolkit for Mobile Learning”. I have since put that project on hold for now and decided to go straight to a theoretical use case of this toolkit in action. From my background in video production and being a wedding videographer, I decided to design a lesson using the aforementioned toolkit on a mock wedding videography course. To my knowledge, a course like this does not exist at Penn State (yet), but it would fit nicely in the College of Communications under the Film-Video degree, or as a general COMM course. This lesson could also stand alone as a niche lesson within a broader communications course as:

- COMM 242: Basic Video/Filmmaking
- COMM 338: Intermediate Narrative Production

1 Course information retrieved from http://bulletins.psu.edu/undergrad/courses/C/COMM/ on 12/06/2015
It could also serve as a special topics course solely on wedding videography. The whole idea of this lesson is that it is designed to be mobile-friendly so the student can access the content anywhere, anytime and on-demand.

Educational Philosophy

My education philosophy can be summed in one famous quote by William Butler Yeats. “Education is not the filling of a pail, but the lighting of a fire.” This is how I normally describe my learning philosophy in a nutshell, but what exactly does this mean? I have strong roots in play, imagination, and creation, all of which can be seen in Jenkins’ (2009) “new media literacies” (p. xiv), and I believe it takes passion and excitement to get to this point where learning becomes fuel to your fire. All through middle school and high school, I was not motivated. I was that kid that flat out did not like school. It wasn’t working for me, and now I realize that was because I was essentially trying to fill my pail with knowledge. The problem that arises from this is that a water bucket can become full, and once that bucket is full, it overflows. I was overflowing with knowledge that I didn’t understand or want to understand. It wasn’t until the latter years of my undergraduate studies in which I became excited about learning. It was partly because I had some great professors, and partly because I was getting an education in which I was truly passionate about. I was engaged. I was having fun. I was learning. Once I graduated college, I knew I wanted to pursue a master’s degree, something I never saw in my cards in high school. When you can infuse excitement, passion, and relevancy into education, that is how you create engagement in learners.

I also can’t write an education philosophy statement without quoting one of my biggest influences on how I view learning, John Seely Brown. In the Vimeo video “The Global One-Room Schoolhouse” (Connected Learning Alliance, 2012), Brown talks about play as a “kind of a permission to fail, fail, fail, again and get it right.” I feel that this is incredibly important to give students a permission to fail, to give them an environment where they feel safe to question the status quo or even the teacher’s expertise. He later says in the video that “the key part of play is a space of safety and permission.” Brown also talks about epiphanies. “If we can create one epiphany for one child, that epiphany lasts for life for that kid. Brilliant teachers are brilliant in being able to create epiphanies for kids. How do we think about that? And how do we use play as a way to amplify the chance for that to happen.”

Up until this point, I never really considered mobile learning or technology as part of my education philosophy. It was always there, sort of in the background, but never really a part of my main learning philosophy. I can now safely say that it must be acknowledged, but we must be careful to remember that technology is but a tool, a tool to augment and enhance learning. Some of the first educational tools were pencil and paper, and then books, a blackboard, a computer,
and now we have mobile devices. How important is mobile technologies? According to the Pew Research Center (2012), “81% of online teens use some kind of social media.” Lenhart and Page (2015) add that “92% of teens report going online daily — including 24% who say they go online ‘almost constantly.’” Another scholar in the field, danah boyd (2015), reinforces the power of social media. “Over the last decade, social media has gone from being a dream of Silicon Valley technologists to a central part of contemporary digital life around the world.” Young people are using their mobile devices daily and nearly constantly, accessing social media, playing games, communicating with one another.

What if we could harness that power of engagement that teenagers have for social media and their smartphones? My educational philosophy now includes tapping into these mobile devices to harness play, imagination, failure, creation and so on and creating a seamlessly mobile learning experience. Looi et al. (2010) builds on Sharples’ definition of seamless learning by saying that “seamless learning environment bridges private and public learning spaces where learning happens as both individual and collective efforts and across different contexts (such as in-school versus after-school, formal versus informal)” (p. 156). This is definitely a strong attribute related to mobile learning via mobile technologies, or as Wong (2012) describes/extends it as “mobile seamless learning” (p. E19). Another great point that Looi et al. makes is by quoting Watson: “‘We spend a lot of time trying to change people. The thing to do is to change the environment and people will change themselves’ (Watson, 2006, p. 24)” (p. 156).

To conclude, I will leave you with another idea nugget from Brown (Connected Learning Alliance, 2012). “In a world of constant change, if you don’t feel comfortable tinkering, you’re going to feel an amazing state of anxiety.” Everything around us is in a constant state of flux, and if you can’t adapt and be able to tinker with new technologies, it’s going to be a tough world.” If we are teaching our students to tinker, to play, to be curious, we are teaching them to adapt to change.
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<th>Design Principles</th>
<th>Strategies and/or resource to include in a mobile technology program</th>
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<td>1. Learning should have a personalization element to it, developed through agency and customization (Kearney et al., 2012)</td>
<td>• Learners will be sharing their created work with the class via Twitter using a custom hashtag, #psuMobileVideo101. They will also be required to analyze and comment on each other’s work via Twitter. “The process of sharing…with the larger group and narrating their visual choices can also strengthen participants’ feelings of empowerment through the facilitation of self- and collective efficacy” (Literat, 2013, p. 210). Not only will the students be sharing their work with their peers, but since it will be shared on Twitter, they will take greater ownership in their product due to the public facing element of Twitter. This will give the teenagers a sense of “meaningful participation” (Ito et al., 2013, p. 34).</td>
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<td>2. Empower students to take control of their own learning (Literat, 2013)</td>
<td>• Students will use their personal devices (iPhones, Androids) or a DSLR camera to shoot video and upload this video to a shared folder in Box. Allowing them to use devices that they will always have on their person, even when no longer in school, will provide a situated and contextualized learning experience.</td>
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<td>3. Learners need to feel that what and how they are learning is authentic; it must be contextualized and situated (Kearney et al., 2012)</td>
<td>• Learners will collaborate on Google Docs, through texting, or in tweets or Direct Messages (DMs) using Twitter.</td>
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<td>4. Learners will participate in seamless learning, blurred</td>
<td>• Students will be able to access the learning module from anywhere with an internet</td>
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|   | between formal and informal environments, spanning across space and time (Looi et al., 2010) (Wong, 2012) | connection on any type of device via WordPress (see Design Principle 6).

• Students will utilize cloud technology to save and store class documents and media, (e.g. Box and Google Drive). There are iOS and Android applications for each cloud service. |
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<td>5</td>
<td>• Students will develop and work within a learning community (Gerstein, 2013)</td>
<td>• Similar to design principle four, learners will use Slack, a team messaging application, or Yammer, a professional social networking website and application. Gerstein (2013) states that “when a sense of community is promoted in the classroom setting, learning and achievement are enhanced” (p. 269). Not only will this be used to perform classwork, but students will also be encouraged to use this to engage in non-course related discussion. As aforementioned in the Introduction, “having an emotional connection is the first step in building a learning community” (Wang &amp; Kang in Wang et al., 2009, p. 685).</td>
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<td>6</td>
<td>• Content will be created in “bite size chunks” (Martin et al., 2012, p. 47) to create full engagement and allow the user to maximize their viewing experience on-the-go.</td>
<td>• Mobile learning will be created on a state-of-the-art learning management system (LMS). For this specific example, a content management system (CMS) was used, WordPress, and the learning module was created using the Ambiance Pro and Genesis themes. Specific design decisions were used in creating bite sized chunks of learning so the learner could view on their mobile device.</td>
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References


