

Tablets for Institutional Army Education: Existing Skills & Expected Utility

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ABSTRACT

The Army Learning Model (ALM) advocates the use of mobile, digital devices for delivering training anywhere and anytime. An assumption of the ALM is that millennial learners have a higher level of digital literacy than older learners and that they will naturally leverage digital technologies for learning. However, precursor competency requirements for these devices are vague and there is little data on the knowledge, skills, attitudes, or usage information of users regarding tablet computers. In this project, we investigated precursor knowledge, usage, and acceptance of tablet computers by Soldiers in the Signal Captains Career Course (SCCC).

One hundred and thirty Soldiers in four sections of the SCCC were issued tablet computers at the beginning of the 20 week course. Soldiers completed pre- and post-tablet use surveys that addressed their perceived confidence, skill, and attitudes towards using the devices. Results indicate an overall positive perception with many responding that tablets aided in “completing tasks more effectively” and were generally “useful in the course.” However, despite the positive attitudes towards the devices, overall usage was moderate-to-low with most respondents reporting only weekly to monthly usage. An important caveat to this is that the program of instruction was not altered for tablet integration. The tablets were simply given to the Soldiers to use as they so desired.

These findings do not support the assumption that digitally literate learners will spontaneously leverage digital technology when learning. Usage and acceptance results indicate a strong need to properly support new technology use within the classroom. Without proper integration, tablets will likely be underutilized, especially if the user is unfamiliar with the device. We conclude that in order for mobile devices to provide benefits to institutional education, instructor support and guidance is critical. We offer actionable recommendations to enhance tablet assimilation and offer direction for future research investigating educational tablet implementation.

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INTRODUCTION

The Army Learning Concept of 2015 focuses on revamping the Army's military institutional education system. By 2015, the new Army Learning Model (ALM) will form the foundation of a paradigm shift to institutional education that focuses on flexibility and adaptability while allowing for blended and distributed learning. A key success point to establishing flexible and "on-the-go" learning relies on leveraging modern mobile technologies such as smartphones and tablets. This paper analyzes a recent year-long tablet computer pilot program at the U.S. Army's Signal Center of Excellence (SigCoE) at Fort Gordon, Georgia. Although the pilot program revealed an overall positive response to tablets in the classroom, actual usage by the Soldiers, a core component of the future ALM, turned out to be low. However, as this was an early pilot of the new concept, the execution and reception of the pilot highlighted the various areas of opportunities that exist to improve and successfully integrate the Army Learning Model into current institutional training. The limitations and successes are listed along with recommendations for improving instructional technology integration into the future of Army education.

THE ARMY LEARNING CONCEPT OF 2015: THE NEW EDUCATIONAL MODEL

The Army Learning Concept (ALC) of 2015, was conceived and published by the Army Training and Doctrine Command (TRADOC) to provide guidance that lays out the vision for the next five years of how the Army will learn and train (Department of the Army, 2011). The current document introduces the concept of the Army Learning Model (ALM), which differs from the current Professional Military Education (PME) system. The new model stresses the importance of adaptability, flexibility, and distributed learning with respect to military education. The high amount of significance placed on these attributes is related to the pace of rapid technological change, as well as lessons learned from the past decade or so of conflict. The ALM cautions that the current PME model, or "brick and mortar" style of education is "inadequate" and resistant to change (Department of the Army, 2011). The message of the ALM is clear; the Army must change its institutional training to keep pace with the world, or it will fall behind.

Fortunately, the cautionary tale from the ALM also includes a prospective solution. In addition to other changes suggested, the ALM proposes leveraging mobile, digital devices for training and education. By incorporating smartphones and tablets into a Soldier's toolkit, it provides each individual a means to connect to learning and training materials anytime, anywhere. This point-of-need, situated learning concept is considered the pinnacle of distributed and learner centric education.

INSTRUCTIONAL TECHNOLOGIES IN THE CLASSROOM

Mobile devices, such as tablets, are not the first technology to promise a new revolution in the way people teach and learn. As with many previous technologies, it is vital to remember that these devices were not designed with the intention of solving educational problems (Oppenheimer, 2003). In many cases, the application to learning goals is often overshadowed by the raw functionality of new devices (Iorio, Kee, & Decker, 2012). Oppenheimer also notes that it is faulty for decision makers to assume that "technology which works outside of school, will work just as well in school." He is not alone in this thinking, as many others have cautioned against instructors "force-fitting an educational experience" to a specific technology, rather than examining how a technology may facilitate their instructional goals (Melhuish & Falloon, 2010). The authors continue that past technological innovations have largely failed to take hold in a traditionally-based educational system. Larry Cuban (1986) documents these past innovations and how they have affected the educational system, for better or for worse. His historical perspective paper looks at the phone, radio, television, and VHS (among others), and recalls how advocates of each had boasted

that, in its own time, each would be the catalyst for educational reform. Yet, despite these past promises, today's university classrooms still rely heavily on slideshow lectures with supplemental reading in the textbook. So, is there any reason to believe tablets are any different from just a technological fad?

Although previous instructional technologies in the classroom have not been well received, recent pilot tests of tablets hint of a different future for this technology. Pilot studies at Princeton and Reed College distributed tablets and asked students to report on their reactions to using the devices. Although not found to be a perfect solution, students in both reported an overall positive reception (Marmarelli & Ringle, 2009; Trustees of Princeton University, 2010). A 3-term Pepperdine University study also found similar results when utilizing tablets in the classroom. Seventy-five percent of students responded that the iPad™ was "slightly or very helpful" with respect to sharing information in class. It was also noted by students and faculty, that tablets have the capacity to be a communication, gaming, and productivity device (Bush & Cameron, 2011).

Although tablet computers have many capabilities, another Pepperdine finding revealed that the tablet has no purpose specifically, until given one by either the student or facilitator (Bush & Cameron, 2011). This is a fundamental challenge for anyone attempting to incorporate tablets into a classroom. For example, Houston Community College Southwest (HCCS) found that the iPad could be modified and fine-tuned for educational purposes (Houston Community College Southwest, 2011). The faculty from HCCS noted that the iPad provides a way for instructors to give students a range of multimedia resources that may be necessary to keep their students engaged.

Another example from Oklahoma State University demonstrated successful assimilation of tablet devices into the curriculum. The students were each given an iPad which they kept after the end of the project. Professors encouraged tablet use both in and outside of class and ensured video lectures and electronic textbooks were accessible in a tablet-friendly format. Results indicated very positive effects of this technology. Seventy-five percent of students "agreed or strongly agreed that the tablet enhanced their learning experience" and both students and faculty suggested that student performance was superior in the course due to the tablet integration (Handy, Suter, & Hooper, 2011). Pre and post-use surveys indicated that the students put forth more effort and tended to spend more time working on the course, which they attributed wholly to tablet integration. The faculty indicated that the device was a critical tool for planning assignments and promoting activities. As a result, the pilot program recommended full deployment to the rest of the university.

These case studies and pilot programs indicate the potential usefulness of tablets as educational tools. Although there are indications from previous research that mobile devices by themselves are not enough to improve learning outcomes (Naismith & Corlett, 2006; Sharples, 2007), there is little research that systematically examines the conditions or enablers that maximize the benefit of using mobile devices in the classroom.

SigCoE Pilot

The SigCoE pilot took place over the course of a year from mid-2011 to mid-2012. This pilot was aimed at getting mobile devices, specifically 10-inch tablets, into the hands of Soldiers in the classroom. Apple iPads were purchased and distributed to the Soldiers and instructors. The iPads were installed with standard productivity applications (writing, slide presentation, spreadsheet). The instructors were told to use them as they saw fit, and the Soldiers were told to treat them as if they were their own tablets and use them however they wished.

The success of this type of implementation plan relied heavily on the fact that so-called "digital natives" would embrace the new technology, leverage it in useful ways, and assimilate it into their coursework. According to Prensky (2001), digital natives, those born after approximately 1980, are able to easily adopt new technology. These learners are also more apt to acquire knowledge from information technologies, and exhibit distinct learning styles when compared to non-digital natives (Bennett, Maton, & Kervin, 2008). It would seem that those who grow up with the technology are pre-disposed to using it effectively to further their goals, both in the classroom and in their daily lives. As many of the Soldiers fall within this "digital native" generation, simply providing tablets to them could be a cost-effective way to implement the new Army Learning Concept without straining resources during times of austerity. As the digital generation comes of age, it may become less necessary for institutional support as the students may take it upon their own volition to network with each other and use the tablets in the most optimal ways.

However, not all researchers agree on the abilities of so-called “digital natives.” Some argue that generation alone is not sufficient to define someone as a “digital native” (Helsper & Eynon, 2010). Selwyn (2009) cautions that assuming a certain age individual will readily adopt a new technology is an overstatement and that there is more to adoption rates than simply an individual’s generation cohort. In fact, a recent survey of approximately 15,000 U.S. Army Soldiers regarding mobile device ownership found that ownership increased with age and that the majority of smartphone users are actually older (Mercado & Murphy, 2012). Interestingly, it was the youngest Soldiers who reported the lowest levels of smartphone ownership. These reports bring attention to the fact that although individuals are moving towards the digital age, a blanket assumption that an age group will embrace a technology is unsupported. Although simply providing tablets to the Soldiers and instructors at SigCoE may be the least resource intensive implementation method, previous research maintains that proper institutional support is still needed.

This pilot effort therefore represents a test-case of the hypothesis that providing technology to members of the “digital native” generation is a cost-effective way to incorporate technology into the classroom. In order to evaluate the effectiveness of this effort, the Army Research Institute was asked to observe and survey Signal officers attending the Signal Captains Career Course (SCCC) who were provided with these iPads.

METHODOLOGY

Participants

The participant pool included 130 Captains in the U.S. Army who volunteered to be participants in the pilot. Between 30 and 40 officers from each of four class flows (or sections) were observed and surveyed from the summer of 2011 through the summer/fall of 2012. Each individual SCCC class flow lasted approximately 20 weeks. All participants were males with ages ranging between 25 and 43 with a mean age of 31.5. With respect to prior experience with tablets, 29 (34%) participants responded that they are “previous or current owners” of the tablets, and 56 (66%) had never owned one ($n=85$). Of the 130 participants, data from 42 participants were excluded because they did not complete all surveys.

Materials

The SigCoE chose and distributed the iPad2™ tablet to Soldiers entering the Signal Captain’s Career Course at Fort Gordon, GA. At the time, it was the most popular and advanced tablet device marketed and had received excellent reviews regarding user experience.

Pre-Use Survey

The research team designed a pre-use questionnaire in an effort to capture factors such as technological acceptance, prior experience, usage within and outside of the classroom, and intended use. Questions relating to “ease of use” (e.g., I would find the tablet easy to use) and “usefulness” (e.g., I would find a tablet useful in my career course) were adapted from the Technology Acceptance Model (TAM) proposed by Davis (1986). The TAM was designed with the intent of predicting system use after the initial introductory period was over. The majority of these questions were used with a five-point Likert scale rating system using “strongly disagree” and “strongly agree” as the anchors. Additional questions were included based on the research focus derived from SigCoE.

Demographic/Digital Literacy Survey

The demographic/digital literacy survey collected information on previous overall computer usage. This inquired about experience with common computer functions such as spreadsheets, word processors, and e-mail, as well as video game experience, age at which computers were first used, and experience with graphical software packages.

Post-Use Survey

The post-use questionnaire addressed several indications of digital application literacy and experiences in using the tablets (e.g., difficulty in setup). Other questions addressed actual use of applications, the frequency of use (both in and outside the classroom), and use for class work, or personal tasks. These questions focused on the frequency of class work performed with the tablet, both during wait times around classes and overall use outside of class. Specifically, Soldiers were asked how often they used each of the productivity applications for tasks required for the

class (writing, organizing presentations, collaborating, developing spreadsheets or calculations). A final set of questions asked the respondents about overall experience with the tablet, in terms of usefulness and ease of use (e.g., The iPad helped me complete my tasks more effectively).

Procedure

A tablet (iPad2), wireless keyboard, and a \$50.00 gift card to iTunes were issued to each participant for use in the SCCC. The gift card was handed out to the first iteration of Soldiers so that a word processing, slideshow, and spreadsheet application could be purchased. No money remained on the gift card after the purchases were made. All subsequent classes did not receive the gift card as the applications were already installed.

Participants completed the pre-use and demographic/digital literacy questionnaires on the iPads using a secure government server. All participants were informed that they could treat the devices “as their own” for the duration of the course. At the course conclusion, all equipment was returned and wiped of all personal data.

The researchers provided Soldiers with a guided demonstration for the initial setup and were provided with some basic training on the use of the tablets. This introductory training took approximately 30 minutes. After this was over, a researcher briefed Soldiers on the data collection effort, emphasizing the use of the data from the pilot in guiding Army programs and future research. Following the briefing, researchers passed out informed consent forms along with the ARI Institutional Review Board approved privacy statements. Soldiers that agreed to participate then completed the online questionnaires. The first was the demographic/digital literacy questionnaire, after which, they navigated to and also completed the pre-use questionnaire.

Near the conclusion of the 20-week course, each class flow was scheduled for tablet turn-in. Before handing in the tablets, Soldiers were directed to complete the post-use questionnaire on the tablet via a secure government server.

RESULTS

Digital Literacy

The demographics and digital literacy responses were collected from the digital literacy questionnaire, as well as responses from the pre-use questionnaire. The participants in the several classes that received tablets had an average age of 31.5 (ranging from 25-43). All of the respondents owned computers, either desktops or laptops, and some (33%) already owned a tablet of some kind. In addition, 93% of the participants owned and used smartphones. The average Soldier in these classes started using computers between age 6 and 14, and reported above average expertise with typical computer programs. Furthermore, on 7-point Likert scales, (Strongly Disagree-Strongly Agree) Soldiers reported that they thought the tablet would be easy to use ($M = 5.7$, $SD = 1.44$) and be useful for class ($M = 4.79$, $SD = 1.87$).

Post-Use Results

In addition to digital literacy, Soldiers were asked several questions pertaining to the utility of the tablet as a tool for class work. Results in Table 1 are presented for owners and non-owners of tablets. Results were kept divided in this way to account for the possibility that tablet owners would use their own device, rather than the course given one. Within the survey, Soldiers were asked to rate their level of agreement of whether or not the tablets helped them complete tasks more effectively, were useful in the course, and if they should be required for future classes. Statistical analyses were conducted investigating for differences between owners and non-owners, however no significant differences were found. Descriptive results indicated a positive trend with most responses being “somewhat agree” or higher. Despite this trend, participants generally reported not requiring the tablet for classes.

Table 1. Frequency of Opinion Responses

	Effective		Useful		Should Be Required	
	Non-Owner	Owner	Non-Owner	Owner	Non-Owner	Owner
Disagree	33%	25%	31%	20%	46%	41%
Neutral	20%	8%	13%	4%	20%	21%
Agree	46%	67%	56%	76%	33%	38%

Note. $N = 78$, 54 non-owners and 24 owners

The information presented in Table 2 also addresses use of the tablets for the SCCC. The participants were questioned about how frequently they used the issued tablets for class work. Although owners and non-owners usage was similar, almost half of all Soldiers never used their tablet for class work outside of class and only slightly over 15% of Soldiers reported at least daily use. Note that the duration of work was not addressed, although duration may be an important factor.

Table 2. Frequency of Using Tablet for Class Work by Owners & Non-Owners

	Never	Monthly	Weekly	Daily
Owners	25.0%	37.5%	16.7%	20.9%
Non-owners	50.0%	14.8%	20.4%	14.8%
Overall	42.3%	28.2%	19.2%	16.6%

Note. $N = 78$, 54 non-owners and 24 owners

Finally, some questions on the post-use questionnaire addressed the type of tasks performed with the tablet. In addition to polling participants about how frequently they used the tablet for class work, as can be seen in the first line of Table 3 (see below), a large number of the class members never performed the listed tasks with the tablet. However, it is clear that a smaller number of Soldiers did use the tablet for multiple aspects of the class on a daily, or more frequent, basis.

Table 3. Frequency of iPad Use by Type of Class Work

Type of Work	Never	Monthly	Weekly	Daily
Social Networking	39%	8%	16%	38%
Notes	36%	17%	16%	31%
Research	43%	10%	17%	30%
Spreadsheets	64%	7%	14%	16%
Presentations	44%	20%	19%	16%
Collaborating	60%	8%	17%	15%
Calculations	53%	16%	16%	15%
Papers	59%	8%	19%	14%
Disc. Forums	69%	6%	13%	13%

Note. $N = 88$. Percentage data presented

DISCUSSION

The purpose of this effort was to determine if simply providing tablet computers to Soldiers of the “digital era” was a cost effective solution for training in resident courses. We accomplished this by collecting attitudes, opinion, and usage data before and after Soldiers received the tablets to use for their classes.

Using the Tablet

By course end, both owners and non-owners found the tablet to be a beneficial and easy to use asset to their class. However, when asked about frequency of tablet use at SCCC, both groups' responses fell largely within the weekly to monthly range. It may be that previous tablet owners did not use the provided tablet as much, as they may have preferred to use their own. To account for this, we kept the responses from the two groups, owners and non-owners, separate. Yet, both groups yielded similar results regarding frequency of use. Additionally, because the devices were only issued for 20 weeks, Soldiers may not have invested too much time and effort in them. Soldiers were aware that they had to return the iPads at the end of the course, so they may not have fully invested effort in the devices. This runs counter to the conclusions drawn from Handy and colleagues (2011) that reported that allowing the students to retain ownership led them to more fully integrate and personalize their tablets. Participants in that study found this beneficial as they used the issued tablets for class, social media, gaming, and as a result, always had the tablets with them (Handy, Suter, & Hooper, 2011).

Some of the most immediate questions pertaining to the adoption of tablet computers are addressed in Table 1. The first was whether the tablet enabled Soldiers to complete course tasks more effectively, and it is clear that prior owner responses tended to fall on the "agree" end of the spectrum in comparison to the non-owners (67% to 46%). The same edge is apparent when asked about the usefulness of the tablet (76% vs. 56%). Overall, approximately half the respondents agree that the tablet is useful and helps them to complete tasks effectively. Yet, when asked whether they thought that tablets should be required for the course only 38% of prior owners and 33% of non-owners agreed. It is possible that Soldiers saw the inclusion of tablets in the course as a helpful, but ultimately unnecessary addition in the course. The lower responses to this question could have also resulted from their low integration into the curriculum. The course, as the Soldiers took it, was designed without tablets in mind, so it follows that the Soldiers would not consider them as required or necessary.

Actual Use

When asked about the frequency of use of tablets for class work, a relatively large number of owners and non-owners reported never using the tablets or using them only monthly. Most notably, more than half of owners and non-owners reported either never using the tablets for class work or using them only monthly. However, as Table 3 shows, about one quarter to one third of the sample used the tablets on a daily basis for networking, note taking, and research. This indicates that even within the limited framework of the pilot project, some were finding the tablets to be useful for some aspect of class work.

Although the iPad was developed as a consumer device, trainees in the SCCC saw the potential benefits and educational opportunities of using the device as a learning tool. The results indicate that Soldiers have a reasonably positive view of the usefulness of the device for their course. Yet, most do not feel the devices should be required for the course nor did they use the devices frequently.

Based on the cost of these devices and the infrequency with which they were used, it does not appear that simply providing them to Soldiers is a cost-effective way to incorporate this technology into resident classrooms. It is clear that the "digital natives" did not embrace the tablets as some research suggests they should have. Because a large part of the new ALM concept focuses on leveraging these devices, it is important to know how to successfully incorporate them into Army training and education.

RECOMMENDATIONS FOR FUTURE TABLET INTEGRATION

When a new technology or device is unveiled, the companies producing them try to create hype in order to sell their new product. When that advertising hype is successful, institutions who want to be "cutting edge," will try to adopt the product even before they fully understand its true potential. Organizations and individuals need to see beyond the hype, and look for devices that are effective in promoting long-term learning (Sharples et al., 2009). As we have learned with the release of previous technologies, the technology itself will not cause fundamental and continual change and improvement in education (Melhuish & Falloon, 2010). Rather, instructors and instructional designers

must take time to experiment with the technology to determine how to best leverage those new capabilities for training and education (Iorio, Kee, & Decker, 2012).

The findings of the present research make it clear that if the Army is to invest in mobile devices for training, it must do much more than simply procure the technology if it is to see a return on this investment. Although mobile devices have a number of capabilities that were not previously available in educational computing devices (e.g., GPS, accelerometers, touch screen interfaces), prior research on the use of other technologies in the classroom provides some useful guidelines for the incorporation of these new devices into the learning environment. Recommendations for doing this are listed below.

According to Iorio, Kee, & Decker (2012), three primary factors influence adoption: functional skills in operation (ease of use), the ability to apply the technology in meaningful ways (applied skills), and the ability of the community to support the user/adopter. With these factors in mind, we present recommendations for future tablet integration.

Functional Skills

Functional skills are those that allow the user to navigate the device easier and with more efficiency. Examples of basic functional skills include navigating the tablet interface, adjusting settings, locating applications, and sending and receiving files.

- Make time for pre-training. Many instructors/facilitators just do not have the time to learn how to use a new instructional technology (Cuban, Kirkpatrick, & Peck, 2001). The burden should not be levied on them to find time, as their “to-do” list is likely already quite long and they will most certainly feel overwhelmed.
- Set aside training time with a tablet expert to pre-train faculty on the basics of tablet usage to increase faculty confidence in using the device (Gaede et. Al., 2003).
- Discuss troubleshooting. As with any new technology, tablet users will encounter issues. The course leadership should layout the proper procedure for troubleshooting a technology related problem. For example, students may first try online resources or asking a fellow student for solutions, followed by asking the instructor, or finally asking the help support center.

Applied Skills

Applied skills pertain to the usefulness of the instructional technology in relation to the specific tasks or course work. In other words, applied skills connect the functional aspects of a technology to meaningful, student learning outcomes.

- Focus on applied skills. Although it is important to know what the tablet can do, the initial focus should be on how exactly it can aid an instructor in conveying specific learning objectives (Iorio, Kee, & Decker, 2012). These applied skills, or practical skills, are vital to achieving meaningful and desired outcomes (Quinn, 2011).
- Remember that the tablet is a tool. Instructors (and students) should only leverage the tablet when it is beneficial to use in the learning environment. It is important to realize that the utility of a tablet for training depends on the software that is available. This means that it may be necessary to develop custom software to support the training objectives of a particular course.
- Utilize the tablet to complement teaching best practices. Facilitators can design “events that increase the visibility of emerging technologies alongside best teaching practices” (Iorio, Kee, & Decker, 2012).

Community/Institutional Support

Community support relates to creating a learning environment where students and instructors feel comfortable and confident in using devices. This is accomplished by supporting each other during the integration process and ensuring that the technology is used only in appropriate contexts, rather than being forced into lessons.

- Provide time specifically for course development. Course faculty ranked “course development time” as being the most beneficial when helping them use instructional technologies more effectively (Gaede et. al., 2003). Integrating new technology in the classroom by an instructor or course developer simply takes time, among other resources (Cardenas, 1998).
- Engage in the world in which students live. Although hard evidence of a “digital native” generation is unsupported, the world is becoming more connected and networked than ever before. As smartphone sales are now measured in the billions globally, it is important for educators to know what students are using in

their daily lives, and leverage it in the classroom to help meet the demands of “today’s networked society” (NMC, 2007).

- Establish goals for new technology use (Achacoso, 2003). All levels of stakeholders should have clear goals, both short and long-term, of what is desired from the new technology implementation. What do the students, instructors, and institutions want to gain from integration? Additionally, evaluation and appropriate metrics should follow to track goal success.
- Provide appropriate network support. To fully support mobile devices, ensure that students and instructors have wireless network access both in and out of the classroom.
- Make it their own. As seen with the current study, users may “like” a piece of technology (in this case, the issued iPad), but unless it is theirs, they may not invest time and effort into using it. Smartphone and tablet users tend to download specific applications and link e-mail and social media accounts to their devices. This blurs the line between academic and personal use, which can be largely beneficial, as indicated in the Oklahoma study (Handy, Suter, & Hooper, 2011). These users then integrate the tablet into their daily lives and always have it with them which facilitates anytime, anywhere distributed learning opportunities.
- Make it collaborative. Learning to use and implement a new instructional technology, such as the tablet, should be a group learning process. Ensure there are ways for experienced users to share helpful hints or tablet best practices with those who are less comfortable using the devices (e.g., a living document wikipage, class discussion time, a weekly e-mail that compiles hints, or a FAQ page on a forum). One of the chief complaints of the students in the Oklahoma pilot was that there was no easy way to find what useful applications and programs other students were having success using (Handy, Suter, & Hooper, 2011).

CONCLUSION

The present research makes it clear that for the Army or any organization to achieve a significant return on this investment, it must do much more than simply procure the devices. Research on the use of mobile devices is still limited and has only begun to demonstrate the potential for these devices. Pilot studies, such as this one, help to provide guidance for the Army as it looks to adopt mobile technology in classrooms. As Sharples (2007) so aptly puts it, “...the way a technology is used cannot be determined until it is actually used by real people in real settings.” The assumption that Soldiers, as “digital natives,” will use and adopt a new technology appropriately and effectively is simply not the case and usage and acceptance results from this research effort indicate a strong need to properly support new technology use within the classroom. Without proper integration, tablets will likely be underutilized, especially if the user is unfamiliar with the device. Future research is needed to determine how best to incorporate tablet computers in classrooms and how to support students in using them to their fullest potential.

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