CHAPTER 15

MOBILE LEARNING INSTITUTE:

A FACULTY PROFESSIONAL DEVELOPMENT INITIATIVE¹

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Abstract

The Mobile Learning Institute is a year-long faculty professional development initiative, co-sponsored by a center for teaching and learning and an academic unit at a medium-size, private school in Southern California. This pilot initiative provided a select group of faculty members, including new and senior faculty and program chairs and directors, an opportunity to explore the use of iPads and educational apps and their academic benefits. The institute’s three primary objectives include: 1) Helping participants gain confidence in operating their iPads; 2) Educating participants about different mobile learning examples and opportunities; and 3) Equipping participants to become content creators, not just consumers. This institute represents a strategic and sustainable movement toward wider adoption and utilization of iPads at the university.

Keywords: faculty professional development, mobile learning institute, teaching, learning

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Mobile Learning Institute: A Faculty Professional Development Initiative

The dramatic proliferation of mobile devices on college campuses has not translated into widespread adoption or innovation in teaching and learning. In 2014, close to 90% of college students surveyed indicated they owned a smartphone, and about half owned a tablet (Dahlstrom & Bichsel, 2014). However, most college faculty have not embraced mobile devices as relevant and engaging teaching and learning tools. The majority of faculty (67%) believe that in-class use of mobile devices is distracting, with over half (55%) banning or discouraging their use (Dahlstrom & Brooks, 2014). This finding is consistent with studies about faculty’s resistance to technology or failure to adopt technology in higher education (Brinkerhoff, 2006; Kotrlik & Redmann, 2009). Some of the major barriers identified include the lack of institutional and administrative support, inadequate training and experience, resistant attitudinal or personality factors, and limited resources.

Mobile Technology and Faculty Professional Development

In recent years, centers for teaching and learning (CTLs) in an effort to increase faculty adoption of technology have begun offering focused technology training, such as institutes and bootcamps (Johnson, Wisniewski, Kuhlemeyer, Isaacs, & Krzykowshi, 2012; Kukulska-Hulme, 2012). Grounded in principles of andragogy and transfer of learning, these professional development opportunities assist faculty in learning not just the why but also the how of technology integration in teaching and learning contexts.

In this paper, we will share an example of a faculty professional development opportunity called the Mobile Learning Institute (MLI). This joint initiative between the Office of Innovative Teaching and Technology (ITT), part of the Center for Teaching, Learning, and Assessment (CTLA), and the School of Behavioral and Applied Sciences (BAS) at Azusa Pacific University (APU) provided a select group of BAS faculty an opportunity to explore the use of iPads and educational applications (apps) and their academic benefits.

This year-long initiative addressed the unique needs of teaching and administrative faculty. For teaching faculty, this institute served as an important learning community to collectively rethink and reimagine how courses can be enhanced with mobile technology, with the ultimate aim of
producing better learning outcomes for students. For administrative faculty, this institute provided practical strategies and skills on how to leverage mobile technology, with the goal of improving productivity with daily and departmental tasks. What impact participating in the institute had on faculty was measured mostly via anonymous survey conducted after every training session, in which faculty indicated their level of knowledge, confidence, and satisfaction with their iPad use. In the survey, there are also open-ended questions, asking them about what are the most important takeaways and what they plan to implement in their teaching and administrative practices.

The success of the MLI and similar faculty development initiatives often depends upon the strategic partnership between a CTL and an academic unit, whereby there is buy-in not only from faculty but also from leadership (Kukulska-Hulme, 2012). At APU our office designed and facilitated the year-long training around mobile technology. The dean, in turn, hand-picked about two dozen faculty, most of whom were department chairs and program directors, and purchased iPads for all of them. In return faculty participants were expected not only to attend most of the training sessions but also to apply what they learn in their work. Besides being in leadership roles within their school, these participants were also influential faculty on campus, serving on different committees and participating in various campus-wide initiatives. We knew that having them onboard with mobile technology would be a win not just for their school but also for the larger campus. As a result of the dean’s role and involvement in the MLI, all 24 participating faculty fulfilled the attendance requirement (attending at least 5 out of the 8 scheduled training sessions and meetings throughout the year).

In the next three sections, we will provide a more in-depth exploration of the MLI curriculum created using iTunes U and the resulting projects completed by the faculty participants. The MLI curriculum consists of three learning objectives delivered over six sessions.
While the curriculum is delivered over the course of a semester, the institute is anchored around three primary learning objectives. Through the year-long institute, participants learned how to: 1) operate their iPads with confidence, including finding and evaluating apps; 2) glean ideas and insights from exemplary mobile learning models, including efficacy studies; and 3) curate and create content for use in teaching context. Faculty participants who completed this professional development opportunity not only gained knowledge and hands-on skills with their iPads and related apps but also developed a personalized plan for using their iPads in their teaching and administrative contexts.

Helping Faculty Gain Confidence as iPad Users

We began our curriculum with instruction and exercises that focused on gaining confidence as iPad users. Participants came into the institute with varying levels of proficiency. Some had experience with iOS devices, and others had never owned a tablet before. Anticipating this knowledge gap, we began with basic instructions on setting up the iPad. This included having users create or sign in with an Apple ID, logging onto the campus wireless network, and downloading enterprise apps. Out of the box the iPad includes a quick start guide. Pointing to the iPad user guide provided by Apple helped participants learn how to navigate and organize their new device. We also demonstrated multitasking gestures and settings to fast
track effective use of the device. For example, most participants were not familiar with the iPad four- and five-finger pinch and swipe gestures, so switching between apps became cumbersome. Learning about this feature made switching between apps much quicker and easier, improving overall productivity. To help participants get better oriented to other device functionalities, we included links to the iPad and iOS user guides in the iTunes U course.

There are over 1.5 million apps in the Apple App Store, organized around categories and focused on certain demographics. For example, if you search by top free apps, the result shows various games and social apps for different age groups. While looking at the most popular apps might be a good place to start for the average user, we wanted our faculty participants to focus on apps that had educational value. We recommended getting started with apps such as iTunes U, iBooks, Notability, Explain Everything, and Google Apps. We also directed them to the iTunes Collections within the Education category (e.g., Teacher’s Starter Kit, Digital Literacy & Citizenship, etc.), which contained curated lists of apps for different disciplines. Because of the nature of the iTunes App Store (submitted content from developers), there can be multiple apps that essentially do the same thing, and similarly, the same app might be available in free and paid versions. Our session focused on providing faculty strategies for filtering and finding relevant apps. In addition to providing a list of recommended apps, we also encouraged faculty participants to share and recommend apps to their peers.

Once faculty participants became comfortable operating their device and finding relevant apps, our attention focused on other issues. One common issue many participants inquired about was connecting their devices to the classroom projector. We discussed the two primary ways: 1) VGA/HDMI adapter for wired connection and 2) Apple TV for wireless connection. In addition, we addressed issues related to managing storage on their iPad by showing them ways to optimally use their limited storage space (e.g., keeping photos and videos on Google Drive). A third issue relates to transferring files between their iPad and laptop. Instead of having to physically connect their iPad to their laptop, we showed them how to use cloud storage such as Google Drive to move files between their devices. Issues such as connecting to a projector, managing storage, and transferring files might seem basic, but we found that without addressing these issues upfront, participants were not able to progress to thinking about pedagogy.
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Exposing Faculty to Exemplary Mobile Learning Models

One of the most effective ways to increase faculty adoption of mobile learning is to expose them to exemplary models. In the MLI iTunes U course, faculty participants are introduced to a handful of nationally recognized mobile learning initiatives from different universities, including Abilene Christian University, UC Irvine Med School, CSU Northridge, and Ohio State University. As participants read, watched, and discussed how other schools are approaching mobile learning, they gleaned ideas, insights, and lessons about how mobile technology can enhance teaching, learning, research, and collaboration at APU.

The first case study looked at **Abilene Christian University (ACU)** and their mobile learning initiative that started in 2008. They were the first university in the U.S. to have a one-to-one deployment of iPod Touches, iPhones, and iPads. Through their Connected Summit gatherings and the Learning Studio, ACU has served as an innovative model for other higher education institutions interested in adopting mobile technology at a campus-wide level. Our second case study focused on **UC Irvine’s iMedEd initiative** (http://www.imeded.uci.edu/), a bold strategy to reinvent the traditional medical school curriculum and experience. Starting in 2010 every incoming students in the School of Medicine were given an iPad, fully loaded with iBooks, courses, and relevant apps needed for their four years of training. Our third example featured **CSU Northridge’s myCSUNtablet initiative** (http://www.csun.edu/mycsuntablet), a one-to-one tablet deployment with the goals of increasing student learning and engagement, improving the quality of teaching materials, and decreasing cost. **Ohio State University’s Digital First initiative** (https://odee.osu.edu/digitalfirst) provided good fodder for MLI participants learning about effective mobile learning models. Since launching in 2012, OSU’s Digital First mission has been to develop and deliver mobile solutions for anytime, anywhere learning, deploying iPads and the use of free content from iTunes U.
Table 15.2
Exemplary Mobile Learning Models

<table>
<thead>
<tr>
<th>Case Studies</th>
<th>Resources</th>
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After reviewing these examples, the majority of MLI faculty participants were impressed and inspired by the possibilities. One participant noted, “There are so many possibilities...it is a good thing but a little overwhelming.” In a post-institute survey, every participant indicated that he/she not only “can point to mobile learning examples” but also “identify mobile learning opportunities within their area.” In other words, through studying the exemplary mobile learning initiatives at other
schools, faculty participants learned to see possibilities that can be adopted locally.

**Converting Faculty from Consumers to Creators of Content**

The iPad is a powerful device for creating content, but most people, including our faculty participants, mainly used it for browsing websites, reading their emails, watching videos, and other similar “consuming” tasks. Packed with features like a touchscreen, microphone, speakers, and a camera, the iPad is capable of performing a range of “creation” tasks. Yet many of these features are often unused or underutilized. It has been said that “The iPad is a $500 Netflix machine.” To encourage MLI participants to use their device for content creation, we directed them to apps, such as Adobe Voice, Explain Everything, and iTunes U.

Table 15.3

*Creating Content with Apps*

<table>
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<tr>
<th>Apps</th>
<th>Use Cases</th>
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<tbody>
<tr>
<td>Adobe Voice</td>
<td>Quick content creation, including faculty introductions, syllabus overview, intros to assignments, mini-lectures, case study summaries, short storytelling, etc.</td>
</tr>
<tr>
<td>Explain Everything</td>
<td>Screencasting, lecture capture, lecture narration, interactive whiteboard, animation and storytelling, video editing</td>
</tr>
<tr>
<td>iTunes U</td>
<td>Content platform, resource library, discussion board, assignment posting, link documentation, evaluation tool</td>
</tr>
</tbody>
</table>

Adobe Voice is a simple storytelling app. With two simple clicks, faculty participants are able to create and record a short video. Adobe Voice makes adding themes, animations, and music to a presentation a snap, allowing users to focus on the content. Since users do not have to deal with the technical aspects, such as post production, they can quickly create, post, and share content. A popular way faculty have used Adobe Voice is to create short (30 seconds to 2 minutes) introduction and synopsis videos. Faculty can use these videos within their
course/curriculum to personalize their course and help students better engage.

Unlike Adobe Voice, Explain Everything allows faculty to create screencasts, narrated presentations, and lecture captures. To create a screencast, faculty can add videos, images, and drawings as well as add emphasis via the laser pointer tool or object animation, resulting in a more impactful presentation. Narrating a presentation is as simple as importing an existing PowerPoint and recording an audio track. Faculty can use Explain Everything to record their lecture during class and post and share the video immediately after the lecture ends—a convenient and cost-effective lecture capture option. The robust features of this app empowers faculty to easily create engaging content without having to be technically savvy.

Once faculty learned how to create course content using apps such as Adobe Voice and Explain Everything, we focused on iTunes U as the platform for delivering the content. Since our MLI course was created using iTunes U, faculty participants could reference the course as a model. We familiarized them with the iTunes U interface and showed them how to create assignments, post resources, engage discussions, and outline their syllabus. iTunes U serves as a rich ecosystem for integrating resources, structuring learning, and showcasing unique faculty content. As faculty participants gain confidence and insight about the potential of mobile learning, they leverage their iPads not just for the consumption of educational materials but also for the creation of engaging learning experiences.

**Designing a Mobile Learning Plan**

As part of the requirements of the MLI, all faculty participants submitted a Teaching or Administrative Plan at the end of the first semester. The plan asked them to identify at least two pedagogical and/or administrative tasks that could be “improved” through the use of mobile technology. Improvement might mean saving time, gaining convenience, increasing effectiveness, or streamlining processes.

For each of the tasks identified, faculty participants had to create a plan that outlined the practical steps involved in using the iPad and appropriate app(s). With peer faculty as the primary audience, the plan took the form of a one-page write-up or a 30-second media presentation (e.g., video, narrated slides, etc.). This plan also served as a formative assessment of their ability to apply the different knowledge and skills acquired during the first half of the institute.
The following table summarizes some of the ways faculty used mobile apps in their teaching and administrative contexts. When it comes to cloud storage apps like Google Drive and Dropbox, faculty looked for benefits of convenience and collaboration, where they can easily collect, share, and archive materials, especially media files that might be more cumbersome to share via email. As a time-saving strategy, faculty used annotation apps such as iAnnotate and Notability to digitally markup student papers, journal articles, or administrative documents. To increase presentational impact, faculty utilized apps such as Adobe Voice and Explain Everything to convert their slides into narrated lectures, which can be used to support a flipped-classroom or to supplement professional presentations and meetings.

Table 15.4
Teaching and Administrative Plans

<table>
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<tr>
<th>Type of App</th>
<th>Teaching Contexts</th>
<th>Administrative Contexts</th>
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<tbody>
<tr>
<td>Cloud Storage Apps</td>
<td></td>
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<tr>
<td>Google Drive</td>
<td>Share resources with students and collect and archive student work, including paper assignments and media projects</td>
<td>1) Collect and archive research manuscripts and references. 2) Centralize departmental meeting agendas</td>
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<tr>
<td>Dropbox</td>
<td></td>
<td></td>
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<tr>
<td>Annotation Apps</td>
<td></td>
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<tr>
<td>iAnnotate</td>
<td>Provide formative and summative feedback on student work via text and audio</td>
<td>1) Provide feedback on administrative documents 2) Annotate journal articles and other scholarly documents</td>
</tr>
<tr>
<td>Notability</td>
<td></td>
<td></td>
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<tr>
<td>Google Docs</td>
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<tr>
<td>Presentation Apps</td>
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<tr>
<td>Adobe Voice</td>
<td>Create narrated presentations or explanations that can be accessed by students outside class time (flipped classroom)</td>
<td>Create presentations for academic conferences and other professional meetings.</td>
</tr>
<tr>
<td>Explain Everything</td>
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The SAMR framework, developed by Ruben Puentedura (2012), serves as a useful model for assessing the extent to which faculty integrate
technology in their teaching and administrative contexts. Looking at the faculty mobile learning plans in light of SAMR, many of the strategies are at the substitution (e.g., iAnnotate for marking up documents) and augmentation (e.g., Google Drive for file storage) levels. One might argue that using Explain Everything to easily create mini-lectures could be classified as a modification or even a redefinition of the task. As faculty progressed through the institute, the goal is to help them further integrate mobile technology so that the benefits are transformational, as opposed to simply transactional.

**Immediate Impact and Future Implications**

At the end of the year-long institute, faculty participants submitted their final report, reflecting on their institute experience with a specific focus on what worked, what didn’t, and what next. Here are a few select quotes (italics added for emphasis):

1. The most valuable experience involved *taking the time to learn about new apps* (e.g. Google Hangouts) and crafting learning outcomes for my blended course that would *directly implement these apps*.

2. I would strongly encourage other faculty/staff colleagues to *utilize the iPad as a complementary learning device* that offers remarkable possibility for engaging students.

3. The most valuable for me was having a *community of faculty together in one place to think about how to practically utilize technology* in our work for the benefit of students.

4. The most valuable aspect of the institute was having *my eyes opened to what is available*.

As evidenced in this feedback, faculty participants noted several important themes about the institute. First, they appreciated having time set apart to learn about mobile technology (1). Since research, service, and teaching constantly vie for faculty’s limited time, the institute provided faculty participants institutional support and permission to take time to learn new technology to improve their trade as educators. Second, they learned in a community with other colleagues (3). In the last decade or so, faculty learning communities (FLCs) have proven to be one of the most effective strategies for faculty to grow as practitioners, and the institute
essentially served as such a community (Cox & Richlin, 2004; Wenger 1998). Third, their learning led to understanding practical ways to implement mobile technology in their teaching and administrative contexts (1, 2, 3). Like other adult learners, faculty participants are most interested in learning that have immediate impact to their work, so the institute is designed for direct relevance and impact for the participants. Finally, the institute experience opened up new ways of thinking and possibilities about how to implement mobile technology (2, 4). One of the most rewarding aspects of the institute is seeing participants undergo a transformation, some who started as skeptical and ended as evangelical regarding mobile learning.

MLI serves as a small, yet important, intervention, providing faculty an opportunity to learn, experience, and develop fluency and strategy around mobile learning. Given the initial success of MLI, our next step is to focus on expanding the initiative to other parts of campus. However, like most universities in recent years, our institution is faced with resource constraints, so scaling our initiative must be done in a way that is strategic and sustainable. In particular, we propose three basic principles that can guide the continued development and growth of our institute.

First, the institute will need to focus on added pedagogical and practical value for faculty and academic units to buy-in. In other words, stakeholders, including faculty who are investing their time and administrators who are funding the initiative, need to see immediate and tangible benefits when employing mobile technology. For faculty, does participating in the institute translate into reducing or optimizing their workload because mobile apps help them do something quicker, better, or easier? In short, the addition of technology alone is not enough; it must be deployed purposefully and meaningfully to achieve greater results. Participants take what they learn at MLI and apply it in their teaching and administrative contexts, hopefully resulting in improved experiences, learning, and productivity. We administered anonymous pre-institute and post-institute surveys to measure what impact, if any, participating in the MLI had on faculty in terms of their knowledge, confidence, and satisfaction with mobile technology use. In the pre-institute survey, 80% of the faculty indicated that they were “novices” when it came to using mobile technology in their teaching and administrative contexts. In the post-institute survey, 100% of the faculty indicated they were either “semi-expert” or “expert” when it comes to leveraging mobile technology in their work as faculty. While the evidence is anecdotal, it still speaks volumes about how the MLI experience positively influences faculty’s
confidence and overall perception about their ability to effectively implement the use of technology.

Second, we will need to align the institute to campus mission and priorities, namely student success, teaching effectiveness, and technological stewardship. We have been collecting participant feedback from our first MLI, and it has provided us valuable insight about the initiative’s effectiveness and impact. We plan to extend our assessment strategy by doing focus groups regarding the use of mobile technology to improve teaching and learning. When a mobile learning initiative addresses campus concerns head-on and is supported by data, it invites attention, allies, and hopefully, administrative support and resources from the top.

Finally, we will continue to work with central IT to ensure that the wireless network in the classroom and throughout campus will remain strong and robust to support the proliferation of mobile device use. For mobile learning to become more widespread at any campus, IT will need to bolster the wireless infrastructure as well as prepare to support hardware problems, such as device malfunction and troubleshooting.

The potential benefit of a mobile learning faculty development institute is incalculable, and TLCs should not leave the important task of forging a mobile learning strategy on their respective campuses to others. Like most disruptive innovations, mobile devices and their impact on learning will not be fully understood or valued until it becomes common practice. Rather than waiting for the dust to settle, campuses waiting on the sidelines should begin to take small steps and get involved immediately, such as starting a mobile learning institute. The sooner a campus establishes a culture for mobile learning, the sooner it will be able to identify best practices and address some of the barriers and roadblocks.
References


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