

LIBRARY INSTRUCTION AS PARTICIPATORY ART: ENGAGING STUDENTS WITH TABLETS AND ACTIVE LEARNING

JILL MARKGRAF, JOHN POLLITZ

Participatory art engages its audience in the creative process. Similarly, librarians from UW-Eau Claire are engaging their students by “flipping the classroom” and giving students the opportunity to collaborate and actively engage with information literacy concepts and library collections. Librarians worked with the administration to acquire an iPad mobile lab in an arrangement that was mutually beneficial: Librarians were able to expand teaching spaces to accommodate growing demand for their instruction and experiment with active learning strategies; at the same time, librarians serve as ambassadors for the technology and active learning techniques across campus.

BACKGROUND

The information literacy instruction program at the University of Wisconsin-Eau Claire’s McIntyre Library was growing. The Library reallocated responsibilities of teaching librarians, enabling them to accommodate increasing demand. However, librarians were limited by a single teaching space in the Library. Computer lab space elsewhere on campus was in high demand and difficult to schedule. In the fall semester of 2012, demand for library instruction was overwhelming the one instruction classroom in the Library. Campus construction priorities did not include the refitting the Library with another physical classroom in the foreseeable future. The Library was looking for alternatives that would allow librarians to be more responsive to faculty requests for library instruction.

At the same time that librarians were struggling to meet instructional demands, the university administration was interested in encouraging more faculty to adopt technologically-rich, active learning pedagogy. Librarians wanted to support these initiatives, but faced a dilemma; how could we continue to grow our information literacy program with limited teaching space and at the same time support the University’s teaching and technology initiatives? Here is where complementary goals intersected. As the campus embarked on its task to encourage classroom faculty to develop new instruction techniques, the administration looked to the institution’s Center for Excellence in Teaching and Learning (CETL), Learning Technology Services (LTS), and McIntyre Library for leadership. CETL could provide instructional guidance, and LTS could recommend and support technology. Library faculty were identified for the unique and important role they could play in these efforts. Librarians had a proven track record of embracing change and innovative technology. We had also demonstrated, through our work with faculty in the English department, that we were committed to active learning models and were already moving our pedagogy in that direction. Through our instruction program, librarians had a wide reach across campus, working on some level with almost every department on campus. Who better to subtly evangelize new teaching techniques? We were seen as the ideal faculty to model active learning techniques and the use of new technologies for our classroom colleagues. Working together, the Library and LTS identified iPads as the technology to employ in this effort, and the Library received supplemental funding to purchase 30 iPads and the accessories that allowed use in classrooms throughout campus. Added to the mix was a cart for transporting the iPads, which led librarians to dub the new mobile iPad lab our “classroom in a box” (Appendix A). The plan was to use the iPads to provide instruction anywhere on campus where there was wireless access and a projection system. While there are certainly benefits to bringing students to the library for instruction, there are also disadvantages. Students sometimes forget that a class is meeting in the library on a particular day and go to the regular classroom, only to find that they are in the wrong place. This often results in a late start to

the library session or students arriving late and having to play catch up. Of course, the biggest issue was simply the limited availability of teaching space in the Library. The iPads allow librarians to bring instruction to where students and faculty are and may be most comfortable.

In addition to the iPads, an AppleTV was purchased with the idea that it would enable students to share control of the projection equipment to display their iPad screens. Using AirPlay Mirroring, which is standard on all iPads, any iPad's display can be transmitted wirelessly via the AppleTV to a data projector and displayed on a screen. Would the technology work? Librarians did not know of anyone else who was doing this, and AppleTVs were not deployed anywhere else on campus. But the LTS advisors thought it would work—they had tested one behind the scenes, but hadn't used it in a real teaching situation. Librarians tried out the technology and found that the AppleTV worked. Sometimes. We tested it in different buildings on campus, and found that it worked well in some buildings and not so consistently in other buildings. Would the technology be up to the task of performing on a wireless network already taxed by an abundance of laptops and smartphones?

So many questions remained, but the librarians were going to walk into a classroom of 30 students in mere weeks. We didn't know how students would take to the technology. Would we need to spend precious moments of that 50-minute one-shot instruction opportunity teaching students how to use the iPads? Even though the Library had been lending iPads for a year, tablets were nowhere near common on campus. Would they distract from the teaching message? How would classroom faculty react to our new methods and tools? Would they become enthusiastic partners or would they be more comfortable with our tried and true techniques? Would all of our librarians be able to maneuver the huge carrying case through the snow of a Wisconsin winter? Finally, even though the librarians were accustomed to changes in technology, we didn't relish the idea of possibly standing in front of a room full of students, with one chance to make an impression, and having to scrap our lesson plan because the technology would not cooperate. We were painfully aware that Apple TVs and iPads were designed primarily for the individual consumer and not for the shared educational environment. Even in the face of so many uncertainties, the librarians were eager to give it a try. The next step was to identify classes in which to pilot our "classroom in a box."

ENGAGING THE FACULTY

Initially, librarians attempted to recruit faculty members we believed would have a pedagogical interest in experimentation with the iPads, but the faculty members approached were somewhat ambivalent. Some preferred computer labs, and others were less inclined to experiment with the iPads if they and their students could not keep the iPads for an extended period of time. Ultimately, introduction of the iPads into classes came to pass as demand for the library instruction lab exceeded availability. The mobile iPad lab was offered as an alternative to using the library computer lab for library instruction, thus allowing faculty to schedule library instruction based on curricular needs rather than library lab availability. The mobile iPad lab could turn any classroom into a hands-on lab. This became a greater impetus for iPad use the following year when the freshman English composition program—by far the library instruction program's most active partner—went through a major revision that included standardization of the curriculum across more than 100 sections. This standardization included the timing of library instruction, which previously had been spread throughout the semester. Now all 100 freshmen composition courses would need library instruction sessions in the same one to two week window. The librarians were able to adjust our schedules to accommodate this demand, but the one library instruction lab would not suffice. The iPads came to the rescue, enabling librarians to meet the concentrated demand. Classroom faculty expressed appreciation for the library's increased flexibility in supporting their curriculum.

After some initial hiccups, the technology worked as planned. At first, networking issues on campus made the AppleTV technology unreliable. Librarians quickly developed strategies to avoid or recover from technology fails. Early on, librarians brought a colleague or student assistant to the classes to assist with troubleshooting technology issues. This proved to be helpful but not essential as librarians became more comfortable with the technology and its foibles. When the AppleTV didn't work, librarians improvised and had students share their iPad screens by placing them on document cameras. Librarians quickly encountered a challenge posed by the iPad's basic single-user design. Since our iPads were not customized for an individual user, but were shared by many, emailing search results to themselves posed a problem. Some databases enabled emailing of results without being associated with an email account on the device, but not all. Librarians created a generic email account for the iPads, which has been successful in circumventing this problem. A support staff member was charged with running updates and maintaining the bank of iPads.

As librarians became more comfortable with the technology, we realized that it freed us up to offer more flexibility in our services. Librarians have repeatedly heard from faculty that they would like librarians to meet with students more than once in a semester. The iPads enabled us to do this. For example, we now offer a “pre-visit” option where we can take the iPad lab to a classroom and use just a portion of the class to introduce ourselves and briefly present a research concept prior to a full library instruction session. While scheduling a short session in one of the campus active learning teaching spaces was nearly impossible, the iPad mobile lab provides a greater degree of flexibility making it possible for librarians to be more responsive to such requests.

ENGAGING THE STUDENTS

Once the faculty were on board with the librarians using the iPads with their classes, and the librarians were comfortable with the technology, the next step was to explore ways of using the iPads that would take advantage of the technology without letting the technology drive the instruction. The librarians established some guiding principles:

- We would minimize the teaching of the tool as much as possible
- We did not want to be in the business of teaching apps and would keep the iPads free from excessive apps, at least at first
- We would opt for using standard interfaces rather than mobile interfaces when teaching database searching.

We knew that most of our students did not personally have iPads or tablets, and few would be doing searching on iPhones or other mobile devices. So we wanted the instruction to be as transferable as possible. Already struggling with what to cover and what to leave out in a 50-minute instruction session, we did not want to turn the session into the teaching of a tool that they may or may not use again. And we found we didn’t have to. Students appeared to have little difficulty using the iPads, and those who did were invariably helped by the students sitting next to them.

Librarians went into this project unsure if the iPads would prove to increase engagement or—conversely—prove to be a distraction. Initial observations suggest that the iPads have not been a distraction. Students seemed more engaged than usual. In response to a question following his LOEX keynote speech, Terry Doyle (2014) suggested that the single most important thing that would improve learning in the one-shot library instruction scenario was novelty, doing something that would grab and engage students. The iPads themselves initially provided the novelty. As students become more accustomed to them, or increasingly come from high school environments that use them, the iPads themselves may become less novel, but they have enabled us to use spaces more effectively and creatively. The iPads allow the transformation of just about any library—or campus—space into a teaching space, thereby infusing online research into the environment where learning is occurring and information is needed, and just being in a new space can be novel.

Library instruction teaching evaluations now include a question about iPads in the classroom, asking that respondents rank the iPads in the classroom anywhere from “distracting” to “enhanced my experience.” Preliminary results suggest that faculty view them as enhancing the classroom experience. Student responses are more neutral but still positive, rating them at the midpoint of “functional” to “mildly enhancing” or “enhanced my experience.” Among students and faculty, not a single respondent has rated the iPads as distracting.

PARTICIPATORY P(ART)

As librarians become more comfortable with the technology, we are able to focus more on exploring pedagogical techniques. Just as we devote very little class time to teaching how to use an iPad, we also spend very little time on teaching how to search a database. Rather, we set the students loose, often having them work in pairs or groups, to explore and experiment. The librarian works the room, observing, answering individual questions, and preparing for a class discussion in which the bulk of the content is conveyed. While observing the students at work, the librarian notes examples and strategies employed by the students, and encourages them to take control of the screen and share with their classmates what worked—or maybe what didn’t work so well--and eliciting suggestions from the group.

Slowly and intentionally, librarians are finding ways to incorporate other features of the iPads to enhance teaching. One lesson, for example, had students all go to different parts of the library collection—literature, photography, history, sociology, etc.—and using the iPad camera take pictures of sections of books that might inform their collective research on American women writers of the 19th century. They reconvened and shared their findings using the AppleTV. Another lesson intentionally transgressed from the “no apps” rule by having graduating nursing students test drive and evaluate health-related apps. Because they would soon be working in clinical environments with iPads and apps among their tools, nursing faculty wanted the students to gain this experience.

Librarians got out of this project what we had hoped for: tools that enabled us to expand our services, be more flexible and responsive in meeting curricular needs, and engage the students in more active and participatory learning. But what about the administration? Did their gamble to invest in the librarians as ambassadors of new technology and active learning pay off? All signs point to yes. The English Department, impressed with the flexibility the iPads offer and struggling to find enough teaching lab space of its own, has purchased its own collection of iPad minis. The Library AppleTV, once the lone AppleTV to appear on the campus AirPlay menu of such devices, is now joined by dozens more. And perhaps the best endorsement to date is for a faculty member to contact a librarian to schedule library instruction and say, “Oh, and can you bring the iPads?”

Doyle, T. (2014, May 9). *The new science of learning: How to learn in harmony with your brain*. Address at the 42nd Annual LOEX Conference, Grand Rapids, MI.

APPENDIX A

Equipment List for iPad Mobile Lab

Apple iPad 2, 16GB with WiFi, plus AppleCare+ (30)	\$16,740.00
Marware iPad CEO Hybrid Cases (30)	\$942.00
For storing, charging, updating, syncing iPads:	
Bretford Powersync Cart for iPad (G3635LL/A)	\$2599.95
Apple Mac Mini tower W/Apple Configurator Software package	\$669.00
Computer Monitor Computer mouse Computer keyboard	
For connecting, displaying, sharing iPads in classrooms and other teaching spaces:	
AppleTV	\$99.00
Apple TV to VGA W/Audio Ports 6' HDMI Cable iPad charging cable(For instructor's iPad) iPad to VGA Adaptor iPad to HDMI + Charger Adaptor	
For transporting iPads:	
Pelican 1690 Transport case	\$386.89
Uline Handimover platform hand truck	\$170.00
Used suitcase with wheels	

(items without prices were either repurposed from existing supplies or incidental costs)