Technology Fee Full Proposal Template

Title: Untethered Instruction: Engaging Learners In and Out of the Classroom

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Sponsoring Organization: George A. Smathers Libraries

Purpose and Specific Objectives: This proposal looks to re-conceptualize the idea of "classroom" and re-energize traditional settings where faculty and students engage in active, as opposed to passive, learning environments. Traditionally, classroom design in libraries (across the nation and across campus) has tended to follow a similar layout – instructor podium in the front with rows and rows of desks or tables for student learners facing the instructor and podium. If computer workstations are part of the classroom design they are often hard-wired (or "tethered") to a specific spot on a specific desk or table. Now that almost every UF classroom is capable of wireless (Wi-Fi) connectivity and learners are embracing mobile technology, this model for instruction begins to seem rather immobile and outdated. The model we propose here is a more adaptive and malleable one:

The new Education Library classroom will take a traditional training room (Norman 1504) and make use of two of the most current mobile technologies (iPads and SMART Technologies) as well as an interactive whiteboard that enables the capture of instructional materials produced in the classroom by both the professor and the students. Relaxed, moveable, ADA-compliant furnishings and layout will facilitate collaborative learning and group work while breaking down the traditional classroom hierarchy and thus enable the instructor to move freely across the room, engaging and interacting with each and every student. Seats and tables along the walls can provide workspace to support group work as needed. Instructors in the Architecture & Fine Arts Library have no dedicated classroom but with the addition of a mobile interactive panel and a charging station full of tablets, almost any space can become a learning space – art/architecture studios, critique areas, the library's reading room. Additionally, UF faculty taking students over to St. Augustine's Government House (which UF now manages along with several historic properties -- Chapter 267.1735 F.S.) could make a similarly vibrant, mobile learning space there as well, with an added benefit of being able to take tablets out into the historic district to document and collaborate on multidisciplinary projects.

Re-conceptualizing the "classroom" with Technology Fee funding will accomplish the following objectives:

1) provide innovative learning spaces incorporating mobile and interactive technologies;
2) provide students and faculty with three learning spaces that assist student-centered learning; and
3) familiarize students with mobile and interactive technologies used in 21st century businesses.

Impact/Benefit: Since university classes incorporate more technology in the curriculum and group assignments for students in preparation for professional collaborative work environments, libraries are responding to student collaborative study needs by creating more collaboration space which allows or even incorporates technology, such as the current technology fee-funded projects *Making Every Space …* and *iPad Circulation*. Collaboration has become such an integral part of a student's academic life; shouldn't library classrooms provide collaborative environments for learning?

Within the 2013-2014 academic year to date, UF Libraries' faculty reached 13,463 faculty, graduate, and undergraduate students through 1,110 instruction sessions; concurrently, the Education and Architecture & Fine Arts librarians instructed 831 students through 49 scheduled classes within 4 colleges (CFA, CLAS, COE, DCP) and across multiple disciplines. Keep in mind, this all took place in traditional classroom settings where set tables and layout restrict group involvement and mobility. With the university's focus towards becoming a preeminent university, the Education and Architecture & Fine Arts librarians seek to support the university's mission by re-

conceptualizing the learning environment, "flipping" traditional instructional settings and creating untethered classrooms that incorporate mobile educational technologies. The new spaces will emphasize student-centered learning with more informal and collaborative environments which better prepare students for work and technology used beyond the university. These spaces will increase faculty-to-student, student-to-faculty, and student-to-student interactions. By offering more flexible instruction space, library and university faculty can schedule more than 49 classes annually (and instruct more than 831 students) in an environment where faculty and students can collaboratively learn from each other. Other library classrooms can then be modeled after these untethered classrooms utilizing technology specific to the disciplines and the thousands of students and faculty they serve.

The integration of technology into UF's curriculum requires a changed pedagogy. Interactive technologies like whiteboards and panels are used throughout education and in the business world for collaboration. Without embracing interactive technologies in the classroom, instruction retains its "chalk and talk" approach and discourages student interaction. Mobile and interactive technologies can provide a surface where multiple people can interact with videos, webpages, documents, etc. through annotations and gestures. Universities and businesses around the world are incorporating these technologies in unique ways.

- Monash University in Malaysia developed its own interactive smart table to meet medical student collaboration needs (http://tinyurl.com/lethjl3). Faculty teaching anatomy can immediately answer a question by having eight to ten students manipulate and explore three-dimensional images displayed on the table.
- Yonsei University Library in Seoul, Korea incorporates 52" touch screens to connect students with university and library notices, and interactive tables for entertainment and group discussions in their U-Lounge (http://tinyurl.com/U-Lounge).
- Deakin University in Australia networks interactive whiteboards among campuses creating interactive distance learning. The university adapts existing pedagogies to create enhanced video conference lectures, bridged video conference and web conference lectures, and enhanced video supplemental instruction. Students can choose to participate through computer and tablet software that links them to the interactive whiteboards, or from an interactive whiteboard classroom nearby.
- Engineering and Architectural offices use interactive panels for project team collaboration and conferencing on site and remotely. Collaboration software works with programs like SolidWorks and Autodesk products to provide instant annotation, drafting and exportation both on the interactive panel and through tablets (http://youtu.be/kJzDOIrTvCk).

By adding mobile and interactive technology in a relaxed classroom setting similar to Indiana University's Cedar Hall (http://tinyurl.com/IU-CedarHall), UF can set a new standard for instruction fitting for a preeminent university. The Saint Augustine Government House, Architecture and Fine Arts Library, and Education Library can start the pedagogy shift moving instruction from teacher-centered classrooms to flexible student-centered environments free to meet students and faculty at the location best serving them. With traditional technology and furniture removed from the existing classroom, librarians can begin the process of adapting pedagogical practices to prepare students for the environments found in innovative businesses and compete with the world educational market.

Sustainability: The Libraries remain committed to providing the technology needed by students in support of their coursework. Each set of iPads ordered will have one or two extra to replace breakage or loss. All equipment ordered will be under warranty for two to three years. With rapidly changing technology, it is unrealistic to commit to replacing the iPads, Interactive Projector, Interactive Flat Panel, Table, and computers with the same technology in three years, but the commitment to finding the appropriate devices and services for students will remain. A possible source of funding for replacement devices is the Fines and Fees fund that generates approximately $110,000 a year and is used for equipment and services which directly benefit students.

Project Timeline:

Activities:	July/Aug 2014	Sep/Oct 2014	Nov/Dec 2014	Jan/Feb 2015	Mar/Apr 2015	May/June 2015	July/Aug 2015	Sep/Oct 2015	Nov/Dec 2015
1. Prepare sites for install	■								
2. Purchase/ receive equipment		■	■						
3. Develop workshops & lesson plans			■						
4. Install equipment & apps				■					
5. Pilot test equipment/ procedures					■				
6. Areas fully functional						■			
7. Faculty & student demos							■	■	
8. Develop assessments						■	■	■	
9. Administer assessments								■	
10. Final report & submit findings to natl. journal									■