

2016 Technology Fee Proposal

Title: Creating Connections: Using Technology to Access UF's Unique Historical Collections

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Sponsoring Organization: George A. Smathers Libraries

Purpose: In order to enhance instructional technology resources for students and faculty, the proposed project will, 1) create a technology-enhanced active learning environment to connect students and instructors with the distinctive, unique collections and expert knowledge found in the Special and Area Studies Collections Department of the George A. Smathers Libraries at the University of Florida, and 2) introduce emerging applications in visualization technology to faculty and students for collaborative and engaging course work. Four large touch screens with interactive whiteboard technology will create mobile instructional spaces within Smathers Library and allow students to interact with and experience special collections in new and dynamic ways. Rich in primary sources, historical materials, original manuscripts, and expert subject knowledge, the Special Collections and Area Studies Collection facilitates interdisciplinary student learning and research using both physical collections and digital assets.

The technology-enhanced active learning concepts of interactivity, flexibility and collaboration are central to this proposal. The touch screens feature multi-touch and multi-user capabilities for cooperative work and dynamic usability. Dedicated desktop computers allow additional versatility in usable programs and applications, including those used for mapping and visualization such as Google Earth and ArcGIS. Both the touch screens and the desktop computers will be mounted on mobile cases to create flexible instructional spaces. They can be used together for large groups and breakout sessions or individually when more than one class is visiting the Smathers Library. The addition of one 65 inch touch screen for larger classes provides additional opportunities for multi-user collaboration using the multi-touch technology. If not being used directly in classes, the screens can be used by groups for collaborative learning and visualization projects as well as one-on-one instruction. The built-in interactive whiteboard on all the touch screens allow for overlaying images, annotating text and maps, and saving/sharing of collaborative class work. Wireless screen sharing for mobile devices and laptops using Air Media encourage greater knowledge exchange between the instructors and students. A high resolution camera with image analysis software permits students to explore in detail the vast array of materials which have not yet been digitized and to enable video capture, opening the door for use in distance learning initiatives on campus.



Figure 1. Using multi-touch screen to explore Google Maps.

This proposal directly correlates with the George A. Smathers Libraries' stated strategic direction to have "integrated space, technology, and services" in support of the University of Florida's mission and goals. The technology rich instruction spaces proposed will enable Special and Area Studies Collections to enhance current instruction programs, as well as provide the opportunity to develop specific courses to teach new research methods, encouraging cutting edge scholarship among the talented students at the University of Florida.



Figure 2. A rare calendar from Amsterdam, 1925 by husband and wife artists, Else Berg and Mommie Schwarz. The Price Library holds the only known copy. The artists were murdered in Auschwitz. The Judaica Suite is shown on the right.

Unique Historical Collections: The Smathers Library houses the oldest and most unique materials found in the George A. Smathers Libraries of the University of Florida. It is home to the Department of Special & Area Studies Collections which encompasses collections of unique and special types of materials (e.g., maps, rare books, archives, and manuscript collections) and interdisciplinary collections pertaining to geographical, national or cultural regions. The collections directly support a variety of academic disciplines and research programs. It is comprised of the Harold and Mary Jean Hanson Rare Book Collection, Archives and Manuscripts Collections, the P.K. Yonge Library of Florida History, The Popular Culture Collections, the Baldwin Library of Historical Children's Literature, and the Map & Imagery Library. Area Studies is comprised of the Latin American and Caribbean Collection, the African Studies Collection, the Isser and Rae Price Library of Judaica, and the Asian Studies Collection.

Within these collections are countless treasures of great historical and cultural significance. It includes over 250,000 books and 10 million manuscript and archival items residing in Special Collections; 500,000 volumes, 50,000 rolls of microfilm and other materials for Area Studies programs; and over 500,000 maps, 300,000 aerial photographs, and 5,000 books and atlases in the Map & Imagery Library. Holdings include documents of colonial Spanish rule, manuscripts of Florida authors such as Marjorie Kennan Rawlings and Zora Neal Hurston, historical maps, American popular culture, architecture, book arts, university archives, and rare books of flora, fauna and science related to Florida. A large quantity of these special materials can be found in the University of Florida Digital Collections (UFDC) which hosts more than 300 outstanding digital collections, containing over 10 million pages, covering over 78 thousand subjects in rare books, manuscripts, antique maps, children's literature, newspapers, theses and dissertations, data sets, photographs, oral histories, and more for permanent access and preservation. Through UFDC, users have free and Open Access to unique and rare materials held by the University of Florida and partner institutions which can then be used in instruction, enhancing students understanding of physical items with rich digital content.



Figure 3. Speed's famous 1626 map, "Africae, described, the manners of their habits, and building: newly done into English". Detail from the map of a Senegalese person in traditional costume shown on the right.

Beyond the collections themselves, the department is rich in human resources and facilities. It is comprised of an innovative and collaborative team of curators who are nationally, and often internationally, recognized experts in their disciplines. The Smathers Library itself, provides a historically significant learning environment. The oldest library on campus, it opened its doors to University of Florida students in 1925. The Grand Reading Room, the Latin American and Caribbean Collection Reading Room, the Judaica Suite, and the Map & Imagery Library, as well as the numerous exhibit areas throughout the building, are inspiring spaces for students to engage in learning about the unique collections within. In addition, the Smathers Library main conference and presentation room, Room 100, can hold over 100 people and is regularly used by classes and academic programs.

This proposal leverages these existing resources, immersing students in distinctive collections.

Impact & Benefit to UF Students and Faculty: Application of technology-enhanced active learning concepts have been shown to increase participatory learning (collaborative and social learning) which leads to a deeper understanding of the materials and principles being taught. The instruction already taking place within the Department will be elevated and enhanced by the use of this technology, providing new opportunities for students and instructors to directly engage with unique or rare items, and other special collection materials which illuminate history and spark creativity and learning.

The potential impact of this proposal includes all students and faculty who currently visit Special and Area Studies Collections for dedicated instruction. In 2015 at least 50 classes visited the collections, crossing many disciplines and UF Colleges. To highlight the variety of students and faculty who will be impacted by technology enhanced instructional spaces within Smathers Library, below is a selection of classes with scheduled visits to the Special & Area Studies Collections and their curators, September 2015 thru February 2016.

ANT 4930 - Researching Anthropology
ARC 6773 - Florida Modern Architecture
ARH 4930 - Mapping the World in the Age of Discovery
ARH 4930 - Renaissance & Baroque Collecting
ART 3807C - Visual Language (Studio)
ART 4505 - Advance Painting
ART 4639C - Advanced Experiments in Digital Art
ASH 3931 - Digital History
CHT 3500 - Introductory Survey to Chinese Culture
DAN 4124 - Dance History
ENC 3254 - Writing in the Social Sciences
ENG 3121 - Film History 1
GEA 1000 - Geography of a Changing World
IDH 3931 - Uncommon Arts
JOU 3220C - Visual Journalism
LIT 2000 - Intro to Literature
LIT 6856 - Into the Archive: Reading in the Baldwin
LAS 4935 - Politics of the Caribbean
LAS 6293 - Design and Methods of Research in Latin American Studies
PGY 3444C - Black & White Photography
REL 4491/5338 - Sacred Geographies
TPA 5047 - Costume Design I

They are comprised of undergraduate and graduate students from Departments and Schools, such as History, Geography, Religion, English, Anthropology, Art and Art History, and Architecture. It also includes instruction and programs in support of nationally renowned Centers such as the Center for African Studies, the Center for Latin American Studies, and the Center for Humanities and the Public Sphere. Additionally, in 2015, there were 100,000 visitors to the Smathers Library. Those students and instructors seeking one-on-one instruction and areas for collaborative group work will also benefit from this proposal. It should be noted that the creation of technology enhanced learning spaces is expected to increase both of these numbers. With the use of high resolution camera, distance learning initiatives on campus can be supported and students participating in online classes will have the potential to explore in detail the distinctive materials in the collection. Finally, we will work to ensure that benefits mentioned above will be shared

by all participating students through communication with UF's ADA Compliance Office and through reasonable accommodation.

Use Case Examples from University of Florida Instructors



1) "I have been incorporating mapping in several of my classes, and working with the Map and Imagery Library has been extremely helpful. Having whiteboard/touchscreen would be a huge help, and I envision using them in these classes. These whiteboards would be helpful both for demonstrating mapping to the class and also for teams of students working on collaborative in-class projects. These boards would help illustrate how mapping helps us

visualize religious practices such as pilgrimages or temple locations."

~Dr. Whitney Sanford, Associate Professor, Department of Religion



2) "I am currently teaching an upper-level art history course called 'Mapping the World in the Age of Discovery,' and at least six of our class meetings over the semester take place in the Maps Library, where students come face to face with the objects themselves. The option to introduce students to intimate object-based study is the dream of many art history instructors, and I count myself lucky to have the resources of the Maps Library with

which to do so, but viewership remains an issue with UF class sizes hovering around 35 for most upper level art history courses. First and foremost, a large screen would enable the entire class to simultaneously view a map as we examine and discuss it in detail, without sacrificing the presence of the physical object... A large screen in the Maps Library would allow us to immediately zoom in on important cartographic features, decipher handwritten text, and isolate visual elements for discussion.

Secondly, an interactive whiteboard feature would allow the instructor as well as the students to circle, highlight, or point to significant aspects of a map, to trace routes, superimpose other maps, and otherwise layer information onto the image in question. In our class meeting at the Maps Library last week, for example, we crowded around tables to look at 15-20 maps of Jerusalem and the Holy Land, and considered the changing depiction of sacred spaces, architectural sites, biblical symbols, and pilgrimage routes. The students posed many questions about the differences in these detailed representations, but it was difficult to engage everyone in a lively group debate when only two or three students at a time could bend over the map with a magnifying glass. Similarly, it would have been incredibly helpful to have the option of virtually 'marking' details under discussion, creating layers of student comments and observations that might help the Maps Library itself accumulate knowledge about the objects in the collection."

~Dr. Ingrid Greenfield, Visiting Assistant Professor, School of Art + Art History



3) "Currently, the instruction program of the Baldwin Library of Historical Children's Literature focuses heavily on the physical object. And although this will always be an important facet to any special collections instruction program, the ability and means to add more interactive and technological methods will enable me to expand the instruction currently offered to encompass the digital humanities - including textual criticism, textual

mining and analysis, visualizations based on data-enabled research, and Bibliographic description - all of which are crucial for students to learn because these skills have a broad impact after graduation.

In addition, this past year a Strategic Opportunities Grant was funded internally to create a pilot undergraduate research course using materials from the Baldwin Library of Historical Children's Literature to teach students digital humanities tools. If the Libraries, in particular Special and Area Studies Collections, offered equipment such as large touch screen displays and the ProScope HR2, I would have

been able to incorporate comparative analysis between digital and physical books, use microscopic image technology to demonstrate how books were printed and the technological changes over two centuries, and the students would be able to work in groups on creating a digital exhibit using the Omeka program for their final project in real-time and in an interactive environment."

~Suzan Alteri, Curator of Baldwin Library of Historical Children's Literature

Sustainability: As in previous Technology Fee funded projects the Libraries have received, the cost of any ongoing technical support will be accomplished by Library IT and costs will be absorbed by the UF Libraries. To ensure that equipment is kept updated with current software and security protocols, the desktop computers will be plugged into network connections each night.

Project Timeline

Activities	July 2016	Aug 2016	Sept 2016	Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	March 2017	April 2017	May 2017	June 2017
1. Prepare sites for install												
2. Purchase & receive equipment												
3. Install equipment and applications												
4. Develop multi-media instruction plans												
5. Develop assessments												
6. Organize faculty & student demos												
7. Schedule multi-media instruction for classes												
8. Conduct faculty workshops												
9. Administer assessments												

Each instruction station will be loaded with **Crestron AirMedia AM-100 presentation gateway software, \$1,000.00 each for a total of \$4,000**, to allow for easy wireless screen sharing from laptops and other mobile devices to the touch screen display. This will provide exciting opportunities for students and instructors to collaborate in new ways using a combination of their own devices and the instruction equipment.

The **ProScope HR2 Base QC Lab, \$1,029**, will allow for high magnification viewing of the unique materials within the Department of Special and Area Studies Collections. The lab comes with a variety of lenses, up to 100x magnification, a flexible stand, a deluxe case for mobility, and the LX-ProScope HR software, which will provide the capability to capture stills and video, to perform detailed measurements, and to annotate images. The images will be shared with classes through the touch screen displays or sent over the Internet to allow distance learners a chance to closely examine historical artifacts.