**2015 Technology Fee Full Proposal**

**Title**:    *Interdisciplinary Museum Educational Tool for UF* (I-MET UF) Courses

**Proposer**: Eric Segal, Director of Education & Curator of Academic Programs
Samuel P. Harn Museum of Art, University of Florida
P.O. Box 112700, Gainesville, FL 32611-2700
esegal@harn.ufl.edu, (352) 392-9826 x2115; Fax: (352) 392-3892;
harn.ufl.edu

**Sponsoring Organization**: UF Harn Museum of Art. With collaborative support from Matt Herring, Harn IT Director; Dr. Lisa Anthony, CISE Department; Dr. Suzanne Colvin, College of Education; Dr. Andrea Lucky, Entomology and Nemotology; Dr. Diana Reichenbach, Digital Worlds Institute. Dr. Andy Wolpert, Department of Classics and coordinator for HUM 2305: "What is the Good Life?"

**Purpose**: The purpose of this project is to develop an interactive multi-touch table housed at the Harn Museum of Art through which UF students will engage with class content designed in collaboration with their instructors.

Currently, *every* UF undergraduate visits the Harn Museum as part of the "What is the Good Life?" Another 1,000 students visit in other undergraduate and graduate courses. The I-MET UF technology project will support the instructional goals of UF student museum visits and enhance their impact through touchscreen-based interactive activities that promote social learning experiences. By joining course content from class syllabi, original art objects, interactive technology and social learning, this project will stage enriching, enjoyable and effective learning at the intersection of the class and the wide-world.
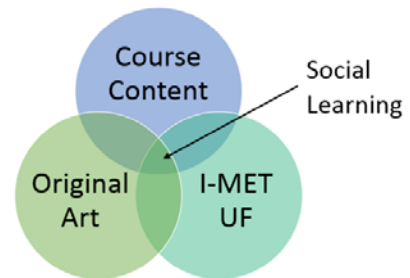
As an example, students in an Entomology class who come to the Harn to see artworks that reflect different cultural perspectives on insects, will augment their tour of original works of art from Africa, Asia, Europe and the US. The multi-touch table will allow them to explore dynamic, multi-media content such as insect sounds, anatomical models, and digital video of colony behavior or culinary uses of insects. Challenge questions, will allow students to gauge how well they have understood material that the instructor has identified as important, while the somewhat playful social context will promote discussion of information and key concepts.

The interactive components and the content will be designed in consultation with faculty, instructional designers and students. The museum has substantial working relationships with individual students, numerous student groups and with Student Government. Input from students in a range of majors will shape the conceptual design of I-MET UF. The furniture housing the table is wheelchair accessible, and the museum's ADA coordinator will be involved in the project.
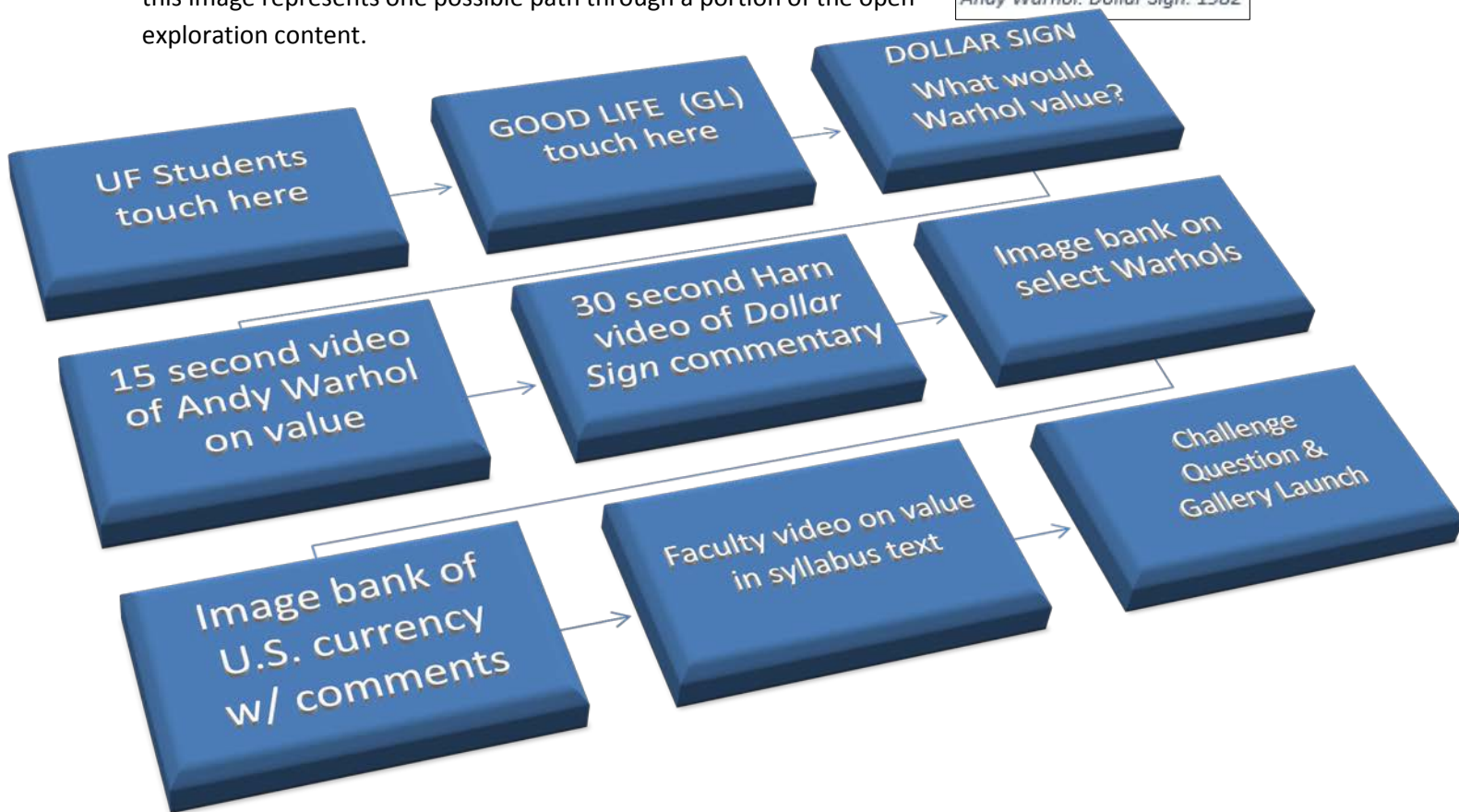
**How does it work?**

When a student arrives at the museum s/he is directed to I-MET UF. S/he approaches the flat screen table and touches **UF Students touch here**, then chooses **Good Life** (or another course).

Students typically arrive at the museum in groups of 2-3, and multiple groups are often at the museum at a time. Ideally, students will experience this as a group learning process with other students in the class. However, museum staff are on always on hand to engage with students who may come on their own.

**I-MET UF Student Experience.  COURSE: Good Life. MODULE: Value:** this image represents one possible path through a portion of the open-exploration content.

Andy Warhol. Dollar Sign. 1982

UF Students touch here

GOOD LIFE  (GL) touch here

DOLLAR SIGN What would Warhol value?

15 second video of Andy Warhol on value

30 second Harn video of Dollar Sign commentary

Image bank on select Warhols

Image bank of U.S. currency w/ comments

Faculty video on value in syllabus text

Challenge Question & Gallery Launch

- The content is non-linear, but clearly organized into discrete modules.
- Each module addresses a course issue and is built around a central artwork. Several modules (and several artworks) will comprise a course visit to the museum.
- A master list of modules will allow students to quickly navigate through all course content.

- Within each module all media (image collections; videos; commentaries and challenge questions) are visible on the table in stacks that can be opened and explored. Multiple courses can be active on the table at a given moment.
- **Challenge Questions** are accompanied by answers, but are open for discussion by groups of students. An example would be: "Does Andy Warhol's *Dollar Sign* comment on the art market or on capitalism, or both?"
- **Gallery Launch** connects the I-MET experience to the works on view in the galleries. The Galley Launch offers a clue to something that can only be understood by seeing the work in person. This might be its relation to nearby works, details requiring close looking or a gallery wall label. The Gallery Launch is a fun and intriguing tool for connecting I-MET users with the experience of looking at original works of art.

**Impact/Benefit**:  This project in its first iteration will impact upwards of 7,000 UF students and more than 25 instructors. Over the next five years, the number of students and classes served will increase progressively. We currently work with more than 50 different fields of study, and students in a broad range of majors – from Art History to Zoology – will take advantage of I-MET UF through their classes.

The development of I-MET UF will leverage substantial University resources including the museum's technological infrastructure and its collections, as well as professional Education staff members who produce content. Students will partake in content delivery design through an existing robust internship program at the museum which currently engages 45-70 interns each year, including interns working on technology projects.

Although content will be designed for specific classes and user priority reserved for students in those classes. I-MET UF will be available for anyone visiting the museum to explore.

**Sustainability:** As with any project that takes advantage of current technologies, hardware will become obsolete in 4-5 years. This project is conceived and budgeted as a pilot project. When the concept is proven at UF through evaluation of student and instructor experiences, we will seek new sources of funding.

Viability:  Can this project accommodate its intended audience?  Case Study:  Each term (Fall, Spring & Summer), HUM 2305 "What is the Good Life?" students complete an assignment at the Harn Museum. In the Fall term, for instance, students have access to the museum – which is closed on Mondays -- during 75 days of the assignment window. As demonstrated in the following spreadsheet, I-MET UF can accommodate all of these students in 22 days.  Reviewers may modify assumptions by double clicking blue fields in this live spreadsheet.

**"What is the Good Life?" and I-MET UF**

| Scenario | year | Semester* |
|---|---:|---:|
| Number of students | 7000 | 2600 |
| Number simultaneous students at unit | 5 | 5 |
| Number of student sessions | 1400 | 520 |
| Minutes per student session | 15 | 15 |
| Total minutes | 21000 | 7800 |
| Total hours | 350 | 130 |
| Active hours/day | 6 | 6 |
| Number of days to accommodate all students | 58.33333333 | 21.66666667 |

*Fall and Spring enroll 2,600, Summer enrolls 1,800

**Timeline:**

| August 2015 | Funding |
|---|---|
| Aug. – October | Hardware acquired; meet with collaborators, students and faculty for conceptual design focus. |
| Aug. - | Develop/acquire content. Purchasing multi-media content where necessary; working with faculty, staff and student interns to develop content whenever possible. |
| Oct. – December | User Interface design, debug and implementation. |
| December – January 2016 | Upload small course pilot content |
| January – May | Evaluate pilot, prepare and upload major course content. |
| Summer 2016 | Unveil first major project. |
| Summer 2016 forward | Continue to expand courses and content. |

Project partners include:

**Dr. Lisa Anthony**
University of Florida, CISE Department, E301 CSE Building, PO Box 116120, Gainesville, FL 32611.
(352) 505-1589, lanthony@cise.ufl.edu


**Dr. Suzanne Colvin**
Associate Director and Unified Elementary Proteach Coordinator, School of Teaching and Learning, College of Education.
University of Florida, 2403 Norman Hall, PO Box 117048, Gainesville FL 32611.
(352) 273-4218, scolvin@coe.ufl.edu


**Diana Reichenbach**
Digital Worlds instructor specializing in immersive and architectural media.
University of Florida, Fine Arts A, 1389 Stadium Road, Gainesville, Florida 32611-5800.
(352) 294-2000, diana@digitalworlds.ufl.edu


**Dr. Andrew Wolpert**
Associate Professor of Classic, Humanities Common Course Coordinator ("What is the Good Life?")
University of Florida, 138 Dauer Hall, Gainesville, Florida 32611-7435.
(352) 273-3702, Email: wolpert@ufl.edu