Teaching Visual Literacy to Students with Technology
Improvement of Instruction Grant, Category: Teaching with Technology
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Catherine Hays Zabriskie, Associate Director, Academic Technology, College of Arts and Humanities

Visual imagery can play a valuable role in the teaching and learning process, but undergraduate and graduate students often do not have the skills needed to analyze images. For faculty to effectively integrate images into their curriculum, students need to be able to apply critical thinking to images in the same way they apply critical thinking to text. Students need to be able to work with primary source documents, and they need a vocabulary to talk about what they see. For some disciplines such as art history and studio art, the analysis of images is integral to the discipline. Skills needed to work with images are taught within the curriculum. However, faculty from other disciplines such as history and American studies would like to use images in more than just an illustrative fashion but find that students often do not possess the skills needed to glean additional information from images. Typically, these faculty do not have time within course curriculum to help their students develop these skills.

With the support of the Center for Teaching Excellence through the Teaching with Technology category of the Improvement of Instruction Grant, this project proposes to develop online modules that can be used by students to help develop a set of skills to be applied to the analysis of images. Students will work with these modules independently outside of class so that faculty can address this issue without taking up valuable class time. The final decision on which technical solution will best meet the needs of faculty will be made after further discussion with faculty. However, we are imagining using a tool such as Calibrated Peer Review which would not demand a significant amount of additional time for grading or maintenance by faculty. These
modules will help transform courses by providing faculty with a tool that will help them to more effectively make use of an additional media, imagery, in the teaching and learning process.

Support from CTE will allow us to hire students to work on the project. The Associate Director of Academic Technology for the College of ARHU, Catherine Hays, will coordinate the project, and she will provide technical support and guidance to the students. A graduate student from the College of Arts and Humanities knowledgeable about the visual literacy challenge will be hired to work on the development of the modules. During brainstorming sessions with the faculty development team, lead by Elsa Barkley Brown, Associate Professor, Department of History, we will identify challenges faced in the teaching and learning process and relevant skills needed in our students (see project plan below for more detail). We will develop rough sketches of exercises to be used to develop these skills. The graduate student will then work to flush out the details of the exercises and create story-boards that can be reviewed by a faculty development team. The storyboards can be transformed into the identified technical medium. This will be an iterative process between the graduate student and the faculty development team.

The effectiveness of the modules will be assessed during Fall 2005 and Spring 2006. We will identify three classes Fall semester, 2005 to make use of the module prototypes. We will work with a second graduate student from the School of Education to development an instrument to assess the modules. Undergraduate support for obtaining digital images to be used in the class will be made available to the faculty teaching these courses. Revisions will be made and the prototypes will be used by a larger number of classes during the Spring 2006 semester. Further assessment will be conducted and final versions of the modules will be released Spring 2006.
The Problem

At times images are used as illustrations and faculty face challenges in regard to access. However, images used in other ways for instruction pose additional challenges. For example, when an image is used as a primary source document, students learn by “reading” the document. Reading a primary source document is different than reading a secondary source document. Reading visual materials is different than reading written text. The vocabulary is different.

Students need to know terms such as composition, foreground, middle ground and background in order to talk about images. Students need to be able to describe everything that they see. This is necessary from a very practical perspective for graduate students since work may be published by journals not willing to publish images. There is a need to understand the technology behind the visuals. The process behind the production of an image (how much is the image staged, the state of the tools used, and the technology involved for example) can affect the final image. Students need to learn the importance of recognizing these conventions. Further discussion with faculty will reveal more challenges.

Test Classes, number of students benefited

We will identify three (or more) classes, one of which will be a graduate-level course, that will use the prototype modules during Fall semester, 2005 and four or five classes that will use the prototypes Spring 2006. An undergraduate student will be made available to assist faculty in these test courses. The student may scan images, find digital images from online sources and help integrate images into class presentations. Assessment will be conducted to identify the effectiveness of the modules. Approximately 610 students would participate in this phase. After the prototype phase of the project is completed the modules would be made available for public
use; however, faculty in the College of Arts and Humanities will be targeted to encourage use in their courses.

**Dissemination of Project Results**

We will share information on the results of the project and make faculty aware of the availability of the modules. We will share our findings at the College of Arts and Humanities' Administrative Council Meeting which is a monthly meeting of ARHU Chairs and Department Heads. We will continue the Faculty Forum series started Fall 2004 featuring visual analysis as a topic to be covered Spring 2005.

**Ongoing Development, Connections to College Efforts**

The need for this project was initially expressed by the Department of History. The Academic Computing Office in the College of Arts and Humanities identified the Department of History for targeted support Fall 2004 and Spring 2005 in an effort to identify alternative methods to better meet the needs of Arts and Humanities faculty. Various specialized needs were identified during this period one of which is the basis for the *Visual Literacy* project. In a recent Faculty Forum conducted by the CTE and the College of Arts and Humanities, it was revealed that this challenge was shared by many disciplines. Faculty from American Studies, History, Women Studies, English, Art and the Languages all expressed this concern. Students enrolled in History 251 during the Spring 2004 semester were surveyed to determine how students experience the use of images in instruction. The comments from the students reflect the sentiment of the faculty. Sometimes it is not clear to the students why a professor is using a particular image. In response to an open call for participation, faculty from the Departments of English, Comparative Literature, Communication, Art, Art History and Archaeology, Jewish Studies, and Women’s Studies have expressed interest in participating in this project on some level (see addendum).
The office of Academic Computing is committed to working to address the associated challenges. The Associate Director of Academic Technology, Catherine Hays, will manage the project. As part of her job responsibility to support the use of technology by faculty for teaching and learning she will continue to support this work as needed beyond the duration of this grant. This may include revisions to the modules, making faculty aware of the modules, and supporting faculty who use the modules. The Academic Computing office in the College of Arts and Humanities is continually looking for new ways to provide support to faculty. The creation of tools that can be used by faculty is just one avenue being explored. These modules would become part of a library of offerings for the faculty.

**Implementation Plan**

1. **Call for Faculty Participation, Fall 2004**
   - An initial call for participation was distributed Fall 04 and faculty from six different departments responded with some level of interest (see attached.)
   - This call will be repeated Spring 2005.

2. **Develop Modules Spring 2005/ Summer 2005**
   - Brainstorming sessions with faculty over lunch
     - Identify challenges faced by faculty in various disciplines.
     - Faculty will be encouraged to bring examples of what activities they may have been doing already in their classes.
   - Identify members of faculty project team.
   - Identify student support for project to be managed by the project coordinator.
     - A graduate student will be hired to take the lead on developing the modules. They will work out examples that can be reviewed by the faculty project team. This will be an iterative process between the faculty and the graduate student.
   - Identify tool to be used to distribute modules for student use.
     - A tool called “Calibrated Peer Review” has been identified as one possibility; however, the final decision on the tool to be used cannot be made until a better understanding of faculty needs is obtained.
   - Identify courses that can use prototype of modules.

3. **Use prototype of tools in actual courses, Fall 2005.**
4. **Create assessment instrument, Fall 2005**
5. **Assess effectiveness of modules.**
6. **Edit modules based on assessment. Winter 2006**
7. **Make modules available to a wider audience, Spring 2006.**
8. **Assess effectiveness of edited modules, Spring 2006.**
## Budget

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Proposal Guidelines:

1. The Improvement of Instruction proposal package should contain the following:
   A. An application cover sheet (available from the CTE web site);
   B. An abstract of not more than 250 words submitted (i) with proposal, and (ii) electronically to the CTE IIG proposal site;
   C. A proposal narrative not longer than five double-spaced pages, including the following:
      i. How the proposed project will result in improved undergraduate instruction and student learning;
      ii. Which criteria it addresses;
      iii. The number of undergraduate students who will benefit from the project;
      iv. The proposal's potential to have a long and broad impact depends on connections to departmental and/or college commitments. Please explain the connections to departmental or other unit efforts;
      v. An implementation plan and the commitment of the department or program to continue that implementation after the grant year;
      vi. A description of how the project's results will be disseminated.
   D. A budget page clearly identifying any matching support from the department or college;
   E. Letters indicating any matching support from the department. Support from the college should be noted in the dean’s letter to CTE.
   F. Any supporting materials that might enhance the review of the proposal.

2. The Office of Undergraduate Studies, through the Center for Teaching Excellence, may sponsor occasional forums and workshops related to the funded projects. In submitting a grant application you are indicating your willingness to participate in these activities.

3. Grant funds may support salaries (staff, summer support, and release time), operating expenses, or other necessary costs. Past awards have ranged from $1,000 to $6,000. The program does not fund purchases of equipment such as computers, extensive travel, or other expenses that are considered obligations of the department.