

## Spring 2003 Incentive Grant Program Summary Report

### Overview

In Fall 2002 a Call for Proposals was issued from CIT to encourage faculty to explore and develop highly innovative applications of technology to address instructional needs. Projects were solicited that could demonstrate highly innovative approaches to using technology to improve learning or use existing technologies to make fundamental changes in the approach to teaching a subject.

Projects were selected according to the following criteria:

- Innovative use of technology to address an instructional need
- Potential for broad and continuing impact
- Feasibility of project plan
- Alignment with school and/or departmental priorities

Nine brief initial proposals were received. Of these, four were offered support through alternative means, three were invited by the CIT Advisory Board to submit full proposals, and no further action was taken on two proposals [Table 1].

**Table 1. CIT Advisory Board response to initial proposals submitted Oct. 28, 2002**

School	# Proposals Reviewed	# Request Full Proposal	# Propose Alternative Approach	# No Further Action
<b>Arts and Sciences</b>	4	1	2	1
<b>Medicine</b>	3	0	2	1
<b>Law</b>	1	1	0	0
<b>Engineering</b>	1	1	0	0
<b>Total</b>	9	3	4	2

Three final proposals were submitted in February 2003. All three final proposals were funded. Two proposals were supported under the Incentive Grant Program. A third proposal from Engineering evolved into a group Faculty IT Fellows project and is reported on separately. A total of \$42,258 was distributed to the two projects supported under the Incentive grant program.

## **Details and Outcomes of Spring 2003 Incentive Grant Projects**

Two projects received awards under this program:

- Distinctive Aspects of US Law Video Project (PI: Tom Metzloff)
- Use of Web-Based Instruction in the Organic and Advanced Chemistry Laboratories (PI: Christopher Roy)

### **Distinctive Aspects of US Law Video Project.**

Law School

**Award:** \$38,000

**Date of Initial Award:** May 2003

#### ***Project Participants:***

- Metzloff, Tom, Professor, Law
- Miller, Wane, Dir. Ed. Tech., Law
- Shoemaker, Todd, Meida Production Coordinator, Law
- Wood, Sarah, Attorney, Law

#### ***Final Project Summary***

The goal of this project was to create high-quality educational materials to assist Duke Law students in studying the Supreme Court and its role in American society. Fifteen important topics in American constitutional law and a number of critical cases were identified. For those cases, the faculty participants prepared detailed video case documentaries consisting of interviews with the parties themselves, their lawyers, and the judges who shaped the case. These videos were created to tell the stories of the real people behind the Court's opinions and help bring the cases alive to students in the classroom.

#### ***Project Outcomes***

Filming and production work on four case videos and four accompanying plaintiff videos were completed and filming or scheduling for at least four additional videos had begun at the time of the final report in August 2004.

The completed videos were used by two Law school courses in Fall 2003: Distinctive Aspects of American Law (Law 190) and Civil Procedure (Law 110) with a cumulative enrollment of 220 students. In April 2004 the project was presented as part of the CIT Instructional Technology Showcase. In Fall 2004 the video case documentaries were published via a web site, Distinctive Aspects of American Law.

The effectiveness of the videos was evaluated using a random group study and questionnaire as well as a through a focus group of students. Students were randomly assigned to two groups, one which would watch the video plus do a reading, and another which would only complete the reading. One group was also given access to the video to be viewed over the web and told to spend the same amount of time as they usually spent preparing for class (meaning that they would spend about twenty minutes less reading the materials and instead view the 20 minute video relating to the primary case for discussion). The questionnaire contained both multiple choice questions on factual and legal issues raised by the videos as well as questions on the student's own subjective views of issues included to gauge whether watching the video impacted the students perceptions about the topic.

Based on analysis of the questionnaire responses, faculty found that students in the video group showed greater legal understanding and greater willingness to engage in critical legal thinking. Students who watched the video also reported that viewing them helped them to better understand the case and the process by which individual cases reach the Supreme Court and affect American law. According to the faculty, this outcome was particularly important for international students in the Distinctive Aspects of American Law course, many of whom are unfamiliar with the American legal system.

### **Use of Web Based Instruction in the Organic and Advanced Chemistry Laboratories**

Chemistry Department, Trinity College of Arts & Sciences

**Award:** \$4,258

**Date of Initial Award:** March 2003

#### ***Project Participants:***

- Roy, Chris, Instructor, Chemistry
- Woerner, Todd, Lecturer, Chemistry
- Sebahar, Holly, Instructor, Chemistry
- Dechand, Billy, Staff, Chemistry
- Guest, Christie, Grad. Student, Chemistry

This project involved web-based video for helping students better understand concepts covered in lecture and laboratory Chemistry courses. Misti Anderson and Christopher Roy created labs for undergraduate students incorporating 3D molecular modeling and FTIR software into introductory lab experiences that more accurately reflect the trends in professional labs. Video demonstrations, training videos and pre-lab lectures developed during this project were provided to students via Blackboard.