2004-2005 Interim Report to the Andrew W. Mellon Foundation

In September 2001, the Andrew W. Mellon Foundation awarded a faculty development and technology grant to Xavier University and its Center for the Advancement of Teaching. This grant supports four aims or initiatives:

1. The Rich Media Projects Initiative
2. The Technology Infusion Projects Initiative
3. Technology Workshops
4. Two Research Initiatives
    i. Technology Training Center
    ii. Student Information Technology Certification Program

This report documents the activities associated with the grant during the third year of this grant, which includes the period from November 1, 2003 to April 30, 2005.

The Center for the Advancement of Teaching maintains a website which includes information about the technology initiatives, workshops, and faculty projects that are supported by this grant. The homepage for this website is at: http://cat.xula.edu.

Rich Media Projects Initiative

The Center has promoted faculty creativity and innovation with information technology through an initiative which stresses ambitious goals and long-term planning. These *Rich Media Projects* aim to create websites and CD-ROMs that combine different types of media (e.g., text, images, video, audio, animation, databases) and allow for some degree of interactivity on the part of the user. As a rule, these are more ambitious projects than a faculty member might normally take on without the support that the Center provides in the form of release time, stipends, reimbursement for expenditures, and staff support.

The Process
Since its inception, a total of 16 Rich Media Projects have been launched through a competitive proposal process.

Each project begins with Phase I, *Planning* -- the key to success with any ambitious project. The first step for an intensive multimedia project is the formulation of a **design document**, a comprehensive plan that explains what the project is and how it will be realized. Often, writing a design document is the most challenging and critical phase of the entire project. The Center has developed a standard template for such

documents, and the Center's Multimedia Artist works with the faculty members as they develop and refine their plans. The completed design documents are published on the Center's website.

Phase II, *Implementation*, is where the actual work on the project begins. Often this work is in the hands of the Center's Multimedia Artist and the faculty member, but every project is different. The steps for this phase have been spelled out in the design document. The length of the implementation phase varies considerably from project to project, in most cases lasting for more than a year.

Phase III is *Testing and Evaluation*. In this phase, the product is evaluated to see if it actually accomplishes the goals set forth in the design document. A variety of techniques are employed for this purpose, such as surveys and usability tests; every project requires a different evaluation strategy. Once again, the steps for this phase have been specified in the design document. The final evaluation report is published on the Center's website.

As each phase is completed, it is subject to critical review (by Center staff, Xavier faculty, and/or initiative participants) to obtain constructive feedback and to determine whether the project should continue to the next phase.

As mentioned in our previous interim report, we have added a fourth and final phase, *Continued Support*, which represents a commitment by the Center to provide ongoing service to successful projects. In this phase, the Center's multimedia artist will work with faculty members to make occasional updates and improvements to the project and perform maintenance as needed.

Description of Projects and Products

The information provided below in Table 1 accounts for all active Rich Media Projects. Some of these projects actually began under a previous grant from the Foundation and are now in the latter phases of development.

Project name	Description	Faculty	Current status
Haiku of Kobayashi Issa	A website with Dr. Lanoue's translations of the Japanese poet Issa, along with information about Issa's life and haiku.	Dr. David Lanoue, English Department	Phase IV: Continued support

Vive la Louisiane, un état pas comme tous les autres	A CD-ROM which will feature Francophone Louisiana residents speaking in French about work responsibilities, family background, and other cultural tasks.	Dr. Susan Spillman, Languages Department	Phase III: Testing and Evaluation
Kids to Afrika Website	The goal is to make the existing website more flexible, dynamic, and accessible.	Ms. Debra Harley, Public school teacher	Phase IV: Continued support
Theological Perspectives of the Reformation	An interactive website that incorporates PowerPoint presentations, theological documents of the Reformation Period, video interviews, and summary charts of the theological issues related to the Christian Reformation.	Dr. Mark Gstohl, Theology Department	Phase II: Implementation
BibleDudes	This multimedia website is designed to creatively and interactively entertain and teach students about the Bible and the academic discipline of biblical studies.	Dr. Michael Homan, Theology Department	Phase II: Implementation
Working in Clay	We will develop an instructional DVD for ART1050 "Introduction to Ceramics."	MaPó Kinnord-Payton, Art Department	Phase II: Implementation

Xavier Literary Readings Series	Xavier has had numerous literary visitors in the past, and will have many who will come in the future, but few have left anything behind; the idea behind this website is to leave a record on-line for prospective future students at our Creative Writing Program, for our Creative Writing faculty as teaching tools, as well as for the larger Xavier, New Orleans, Louisiana and, the literary community beyond, so that they, too, may gain something from these experiences.	Dr. Biljana D. Obradovic, English Department	Phase II: Implementation
Gumbo LALA	This Gumbo LALA project web site will be used as a resource to exhibit various aspects of the Gumbo LALA Project, including Creole culture.	Fatima Shaik, Martha Gilliam, Lisa Gilbert, Susan Cutillo, Kotch Bergman Local K-12 public school students	Phase III: Testing and Evaluation
New Orleans Unmasked	This website will present information on the New Orleans' heroes and cultural leaders in an interactive website designed to educate the general public. The site will concentrate particularly on heroes in struggles for social justice for people of color. Students involved in the Students at the Center (SAC) program, a school-based writing course at many public schools in New Orleans, have designed the site and will contribute the majority of the writings that appear on it.	*Students at the Center*, A school-based writing program in many New Orleans public schools	Phase II: Implementation

Thinker	Thinker is a CD-ROM intended to assist students with their mastery and appreciation for the field of cognitive psychology through interactive exercises that illustrate principles from within and beyond the textbook.	Dr. Elliott Hammer, Psychology Department	Phase II: Implementation

Table 1. Rich Media Projects Initiative.

Technology Infusion Projects Initiative

Faculty interest in using information technology in the classroom remains extraordinarily high at Xavier University. Of the faculty members who completed a technology survey in 2004, more than 80% indicated a moderate to high level of interest in incorporating computer technology in their classes.   The Center's *Technology Infusion Projects Initiative* supports faculty use of technologies such as Blackboard (a web-based course management system), WebBoard (also a web-based conferencing system), course websites, videoconferencing, JSTOR and other on-line databases, and discipline-specific courseware such as simulations and CD-ROMs.

Project Phases

Each Technology Infusion Project consists of two phases.

Phase 1: Planning & Development

Center staff assist faculty in exploring pedagogical and technical issues, identify project outcomes, develop means for assessing the projects' affects on teaching and student learning, seek solutions to problems, and inspire faculty productivity and innovation. It is hoped that shared learning and collaboration will occur by providing a venue for faculty to meet and discuss projects throughout the funding period.

Phase 2: Implementation and Assessment

During this phase, faculty implement the technology into their courses and assess the impact of the technology on teaching and student learning. At the conclusion of this phase, faculty report on the project outcomes and the assessment results.

Faculty Projects and Products

The information provided below in Table 2 accounts for the current project in the *Technology Infusion Projects Initiative*.

Project name	Description	Faculty	Current status
CAI-based Developmental Mathematics	This project entailed revising the Mathematics Review course (MATH 0960D) by changing it from one that relies on lectures to one that integrates computer-assisted instruction more fully. The software used was the Hawkes Learning Systems Introductory Algebra. Although the primary course is Mathematics Review (MATH 0960D), the experience gained from this project will also affect Algebra Review (MATH 0981D).	Dr. Lester Jones, Mathematics Department	Phase II: Implementation and Assessment

Table 2. Technology Infusion Projects Initiative.

The information provided below in Table 3 describes the projects that were completed during this reporting period.

Project name	Description	Faculty	Current status
Integrating Bootstrap into Statistics	The project's purpose was to make students understand the all-pervasive concept of sampling distribution using the bootstrap. The aim was not only to broaden students' knowledge via the use of this innovative technique, but also to impart necessary technical (programming) skills that include a broad appreciation of statistical theories and concepts.	Dr. Amaresh Das, Business Department	Completed

Course Website for Theories of Personality (PSYC 4010)	This project involved creating a course website using Microsoft Publisher to educate students about the field of clinical psychology and provide students enrolled in Theories of Personality (PSYC 4010) with information about the course.	Dr. Michelle Marion, Psychology Department	Completed
Development of Interactive Homework Questions for General Biology 1230 and 1240.	Interactive study questions were created by using a software program called "Hot Potatoes." The questions were made available to the students through Blackboard, which allowed for the recording of student usage. This project will be further developed to determine not only which students are participating but also how successful they are in answering the study questions.	Dr. Hema Bandaranayake, Biology Department	Completed
PowerPoint Infusion into Experimental Psychology (PSYC 2020)	This project involved creating PowerPoint presentations for each chapter for the text.	Dr. Lisa Schulte-Gipson, Psychology Department	Completed
Teaching, Technology, and Environmental Biology	In this project, the faculty member converted most of the class notes to PowerPoint. The PowerPoint lectures included figures, images, animations, and audio files.	Dr. Jeanine Burse, Biology Department	Completed

The Integration of Video Clips in an Articulation Disorders Course	After reviewing several hours of videotaped speech therapy sessions, 22 short video clips were burned to CD. PowerPoint lectures were made using some of the clips. Three assignments and class exercises were created from the longer length of video and burned to DVDs.	Dr. Nancy Martino, Communications Department	Completed
Classroom Education and Demonstration System for Digital Communications	In this project, the faculty member designed interactive electronic presentations for four lab sessions and five classroom demonstrations. The project will be further developed so that these types of classroom and lab presentations can be used in a pre-requisite course to provide students a smoother transition to this upper-level digital communications class.	Dr. Dongyan Chen, Computer Sciences & Computer Engineering Department	Completed

Table 3. Technology Infusion Projects Initiative; projects completed during the reporting period.

One project developed by faculty in the Philosophy and Theology departments was not completed due to scheduling conflicts between classes at Xavier University and at Santa Clara University. Two additional project proposals by faculty members in the Business Department and the College of Pharmacy were approved for funding. However, because of scheduling conflicts and job changes, these projects were never developed beyond the proposal stage.

Observations

The Technology Infusion Projects Initiative provided opportunities for faculty to try something new and, in doing so, faculty began to rethink their approaches to teaching and student learning. Some of the projects not only changed what occurred in individual classes, but also provided models for all sections of a course, as in the Introductory Biology and Mathematics Review courses. The infusion of computer-aided instruction in the math course, in particular, is also influencing the structure of other courses in the Mathematics curriculum.

Several unanticipated outside factors influenced the success of a few of the projects. Among these factors were limited course enrollments, limited electronic classroom facilities, and faculty attrition. And, as

mentioned previously, class scheduling conflicts complicated efforts of Xavier faculty to collaborate with faculty at another institution in linking their courses via videoconferencing.

Beginning with projects that began in fall 2003, we have placed greater emphasis on the assessment component of each project. As a result, each project has become a quality research study in technology use and teaching. We are hopeful that more faculty who are involved in the Technology Infusion Projects Initiative will present or publish the results of their projects and assessment studies.

Technology Workshops

Since November 1, 2003, the Center has hosted a number of technology-related workshops including:

PHP: Hypertext Preprocessor: An Introduction to PHP

This informal talk will introduce you to the main concepts behind using the PHP scripting language. PHP is a widely-used Open Source general-purpose scripting language that is especially suited for Web development and can be embedded into HTML. This session will offer a few basic examples that give a flavor of what can be accomplished with PHP. We will touch lightly on basic syntax, variables, functions and control structures, as well as dealing with forms, but we won't explore any of these issues in depth. We will not even pretend to cover installation, security, database connectivity, or any of the other myriad subjects that would require far more time than this brief session will allow; however, if there is sufficient interest, these topics could be addressed in a future session.

Blackboard Training: Basics and Beyond

Learn how to use the main features of Blackboard and be introduced to several more advanced tools, such as the virtual classroom, the test manager and the discussion board.

Teaching Well, Saving Time: How to Improve Learning Outcomes While Still Having Time for a Life

This workshop will be led by Dr. Kevin Barry, Assistant Director of Notre Dame University's Center for Teaching and Learning. Dr. Barry will cover the following topics:

- goal setting
- best practices in higher education
- the assignment-centered course design concept
- alternative uses of time and space

Teaching Well With Technology: An Overview of Technologies for Teaching and Learning

In this follow-up workshop to "Teaching Well, Saving Time," Dr. Kevin Barry, Assistant Director of Notre Dame University's Center for Teaching and Learning, demonstrates various technologies as they apply to student learning.

Electronic Classroom Orientation

The Center for the Advancement of Teaching has two electronic classrooms and a teaching lab that faculty can reserve. Training is required to schedule these facilities. This electronic classroom orientation workshop is provided to train faculty to use the equipment.

Educating the 'Netgen': Strategies that Work

A teleconference. Dr. Diana Oblinger, Executive Director for Higher Education, Microsoft Corporation, explores the characteristics of the next generation of learners, the uses of technology to support these learners, and the learning styles that may signal different instructional needs.

Blackboard and Learning: A Discussion of Creative Uses of Blackboard Across the Disciplines

Blackboard is a course management system that is currently available to all Xavier faculty members. Some professors use it extensively, some use it moderately, some not at all. This discussion will bring together experts, novices and the curious to explore innovative uses of this technology. We are interested not only in what Blackboard can do but in the underlying assumptions about teaching and learning that inform its use.

E-Moderating: Developing and Managing On-line Discussions

How can on-line discussions using e-mail, chat, or a class management tool such as Blackboard positively affect student learning? What constitutes a "good" threaded discussion? What can the moderator do to assure its success?

Creating Engaged Learning Environments for Today's Students: A Live Teleconference for Faculty and Administrators

Are your students disengaged academically? Is there a disconnect between teaching and learning? As educators, these questions are at the heart of our personal mission - promoting student success in the classroom. As our student population changes, research has shown that innovative instructional strategies are crucial in helping students succeed. This teleconference focuses on proven pedagogies that work in the classroom. Recognizing that change may be difficult, our panel of experts discusses strategies for securing broad-based institutional support. As they offer examples of good practice, they also explore the role assessment plays when student learning is the intended outcome.

Webcast: A Live, Interactive Videoconference

This webcast facilitates a cultural exchange between high school students in Jordan and New York. The lengthy agenda seems to indicate that this will be an all-day affair. Watch it from your desktop or stop by the fifth floor of the library to check it out on the big screen.

Searching and Thinking: Inclusion of Library Resources in Teaching

This hands-on workshop will familiarize faculty with library research tools and suggest ways to incorporate them in courses.

Library Tips: Inclusion of Library Resources in Teaching

- How can I make the Library central, not peripheral, to my courses?

- How can the Library assist me and my students with a particular research project?

- What's new in Library technology?

- What databases are now available?

- Can I access them from home?

- How can I order Interlibrary Loan materials online?

- Is the digital Reserve Desk coming?

This workshop will answer the above questions while familiarizing faculty with Library tools. Recommended not only for new faculty, but also for veterans who need a bit of updating: This isn't your grandfather's Library!

Feeding Frenzy: Or, what are those little orange XML buttons?

Perhaps you've seen those little orange buttons which seem to be cropping up all over the Web. Usually they're labeled "XML" and they often link to inscrutable computer code. What's it all about? This informal talk will explain the mystery behind the little orange button -- the syndicated content feed. We'll discuss the two popular formats (RSS and Atom) and how you can use feeds in a news aggregator to keep up-to-date with your favorite websites.

Wiki Wiki: What in the World is a Wiki?

Wikis are systems that allow people to quickly create and modify Web pages in a collaborative setting. Anyone and everyone can edit the pages of a Wiki website, subverting traditional ideas about authorship, ownership and authority. This talk will explain what Wikis are, where they came from, and how they are being used, with particular attention to Wikipedia, the free online encyclopedia that is the biggest Wiki in the world.

Blogs and the Blogging Bloggers Who Blog Them

What are these 'blogs' that everyone's talking about, anyway? Find out more about the blogging phenomenon and hear from Xavier faculty who are using blogs in their teaching.

CAT Colloquium: Media and Methods: Technology Initiatives

The CAT Colloquium is a new series of workshops intended to showcase Center-supported initiatives. In this first installment, Dr. Gayna Stevens-Credle of CAT presents two recent projects in technology infusion and technology enhancement. Dr. Michael Homan of the Theology Department will demonstrate his project, "Pedablogy: How a Course Blog Promoted Xavier's Mission." Dr. Elizabeth Rhodes (Library) will demonstrate, "Blackboard in University 1010." If you are thinking about applying for Center support involving technology in your teaching, here's your chance to see what others have done.

CAT Colloquium: Rich Media: Using Technology to Enhance Learning

The CAT Colloquium is a new series of workshops intended to showcase Center-supported initiatives. In this third installment, Mr. Bart Everson of CAT provides an overview of the Rich Media initiative, followed by demonstrations of two completed projects:

- Dr. David Lanoue (English), "The Haiku of Kobayashi Issa," a website that includes haiku lessons and a searchable archive of over 5,500 poems.
- Dr. Susan Spillman (Languages), "Vive la Louisiane," a CD-ROM featuring Francophone Louisiana residents speaking in French about work responsibilities, family background, and other cultural tasks.

Two Research Initiatives: The Technology Training Center and Student Information Technology Certification Program

Regrettably, we have made no progress since the last report on these research and planning efforts.

Scholarship

The support provided to Xavier's faculty and staff by this faculty development and technology grant has resulted in many tangible products, such as new course materials, CD-ROMs, and multimedia websites. In addition, several faculty and staff members have given presentations about their grant-supported work at professional and scholarly conferences. Below is a list of the presentations made during this reporting period.

2003-2004

- Dr. Nitsa Rosenzweig (Chemistry), Mr. Yamlak Tsega (ITC), Dr.Gayna Stevens-Credle (CAT), and Dr. Marion Carroll (Chemistry) presented a pre-conference workshop "Electronic Classrooms: Instant Feedback to Bioinformatics" at the 11th Annual American Society for Microbiology Conference for Undergraduate Educators held at Xavier University of Louisiana in May 2004

- Dr. Michael Homan (Theology) and student Roy DuBose (double major in Biology and Theology) presented a paper "The Tabernacle: Historicity and Context" at the American Schools of Oriental Research Regional meeting in Irving, Texas in March 2004

- Dr. Mark Gstohl (Theology) gave two papers at the Southwest Commission on Religious Studies 2004 Meeting of the American Academy of Religion held in Dallas in March. The papers were: "Muriel Lester: Social Activist, Peacemaker, Theologian" and "The Contextual Theology of Muriel Lester."

2004-2005

- Dr. Andrea Edwards (Computer Sciences and Computer Engineering) published a paper titled, "eLearners Must be Full-time Learners" in the peer-reviewed "International Information Resources Management" conference in New Orleans, in May 2005

- Dr. Michael Homan (Theology) submitted his website, BibleDudes, to MERLOT for peer review

- Dr. Michael Homan (Theology) and Ms. Whitney Davis (Theology undergraduate student) presented a paper entitled "BibleDudes and Blogging: Technological Applications in Teaching Biblical Studies and Biblical Archaeology" at the American Schools of Oriental Research conference held in Dallas in March 2005

- Dr. Elliott Hammer (Psychology) delivered the invited keynote address, "What I've Learned: Lessons from a Career as a Minority in the Classroom," at the [Southeastern Conference on the Teaching of Psychology](#) held in Atlanta in February 2005

- Dr. Vlajko Kocic (Mathematics) gave a presentation titled, "Multivariable Calculus with DPGraph" at 17th Annual International Conference on Technology in Collegiate Mathematics held in October 2004

- Dr. Todd Stanislav (Biology and Center for the Advancement of Teaching) gave a presentation titled, "Haiku, Gumbo, and the Minor Prophets: Three Case Studies of Faculty and Student Uses of Technology," at the [Southern Education Foundation](#)'s [Instructional Technology Assistance Project](#) conference held in Atlanta in October 2004

- Drs. Tony DuRapau (Mathematics) and Todd Stanislav (Biology and Center for the Advancement of Teaching) gave a presentation titled, "Faculty Participation in the Center for the Advancement of Teaching, 1998-2004: An Application of the Chi-square Probability Distribution" at the Mathematics and Statistics Colloquium. The Colloquium was hosted by Xavier University's Mathematics Department and held in October 2004

New Developments

The Center for the Advancement of Teaching embarked on two ambitious and important projects during this reporting period. One project involved a review of the Center's support of new faculty members, while the other involved the development of a comprehensive strategic plan

Support of New Faculty

In November 2004, the Center staff met with members of its Faculty Advisory Group and 1st- and 2nd-year faculty members to discuss ways in which the Center could better support and serve new faculty members in their first few years at Xavier. In January 2005, each Center staff member identified those items in the list that he or she considered most important. This list was discussed by the staff and whittled down to a subset of highest priorities items. Finally, in March 2005, the staff developed a plan of action for each goal; this plan is published on the Center's website at:

http://cat.xula.edu/about/advisory/recommendations_short

In late spring 2006, the Center staff will review the extent to which it achieved these goals.

Strategic Planning

The second project involved the establishment of the Center's Strategic Planning and Implementation Group in November 2003 which set out to develop a comprehensive strategic plan, and means to both

implement and assess it. As part of the strategic planning process, the Center invited two outside consultants to review both the planning process and the current efforts in the Center to assess and evaluate its work.

The work of the Strategic Planning and Implementation Group, with assistance of numerous other faculty, resulted in two important documents:

- a new statement describing the Center's mission, programs, and values; this document, now in it's second public draft form, is available on the web at:
  http://cat.xula.edu/about/spig/mpv2
- a strategic plan; this document is available on the web at:
  http://cat.xula.edu/about/spig/plans1.pdf

These plans will direct the work of the Center for the Advancement of Teaching for at least the next five years. It's important to point out, having particular relevance to the initiatives and other work that this faculty development and technology grant supports, that technology – its integration into the teaching and learning process, its use as a tool for scholarship, training to use technology, and expert staff support – continues to be have an important place in the work of the Center, as evidenced in the strategic plan (see, for example, goals 3, 4, 5, 6, 7, 8, and 10).

Final Thoughts

The faculty development and technology grant from the Andrew W. Mellon Foundation continues to provide unique opportunities for Xavier's faculty to utilize technology for scholarly and community service projects, and to enhance teaching and student learning. And we emphasize *unique*, since no other resource on campus offers these kinds of technology-based initiatives that allow faculty to develop teaching, scholarly, and community service projects, provides this level of expert staff support, or hosts technology-related workshops and brown-bag discussions of the kind offered during this reporting period. In addition, this grant has provided faculty and students opportunities to give presentations about their projects at local and national conferences and symposia. The reach of this grant clearly extends to Xavier's faculty and the students they teach. And it is the students, ultimately, who are the most important beneficiaries of this faculty development and technology grant. These students are the ones who are, for example, provided new opportunities to learn about environmental issues and digital communications via interactive multimedia lectures, to participate in rich discussions via blogs about important social issues and ways to improve them, to learn to speak French from Francophone Louisiana residents, and to present scholarly papers at regional and national conferences. This final example of an opportunity afforded Xavier faculty and students illustrates that the reach of this grant extends beyond the Xavier community to scholars throughout the world.