

2003 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 will support 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 second year of this three-year grant, which includes the period from November 1, 2002 to October 31, 2003. A financial report for this period is available upon request.

The Center for the Advancement of Teaching maintains a website which includes information about the technology initiatives and workshops that are supported by the Foundation. We encourage the readers of this report to learn more about the work of the Center for the Advancement of Teaching in general and the grant-related activities in particular by visiting us on the Web at: <http://cat.xula.edu/>.

Rich Media Projects

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

In Fall 2001, and again in both Spring and Fall 2002, the Center issued a request for proposals (RFP) to all Xavier University faculty members. Proposals were evaluated by faculty members that serve on Xavier's Teaching, Learning and Technology Roundtable (TLTR), and those deemed worthy of support were approved for Phase I, *Planning*.

Planning is 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 and are reviewed by TLTR. Critical feedback from TLTR provides a basis for the Center to determine which projects should move on to the next phase.

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. At the end of the phase, a complete rich media product is submitted to TLTR for review. Again, critical feedback from TLTR helps to improve the product and provides a basis for the Center to determine which projects should move on to the next phase.

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 and submitted to TLTR for a final review.

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 faculty members involved in the Rich Media Projects Initiative and who have been supported by this grant from the Andrew W. Mellon Foundation. Some of these projects actually began under a previous grant from the Foundation and are now in the latter phases of development. One project (*Haiku of Kobayashi Issa*) has completed all three phases described above.

| Project name | Description | Faculty | Current status |
|-----------------|-----------------------------|-------------------|----------------|
| <i>Haiku of</i> | A website with Dr. Lanoue's | Dr. David Lanoue, | Phase IV: |

| | | | |
|---|--|--|-----------------------------------|
| <i>Kobayashi Issa</i> | translations of the Japanese poet Issa, along with information about Issa's life and haiku. | English Department | Continued support |
| <i>Vive la Louisiane, un état pas comme tous les autres</i> | 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 |
| <i>Collage Culturel</i> | This multimedia website will help first-year students learn about French language and culture through interviews with Francophone speakers from around the world, photographs depicting elements of French culture, and interactive exercises. | Dr. Carmen Rogers, Languages Department | Phase II: Implementation |
| <i>Interactive Taxonomic Zoology</i> | An interactive CD for biology students to help them learn animal taxonomy. | Dr. Mark Schlueter, Biology Department | Phase II: Implementation |
| <i>Kids to Afrika Website</i> | The goal is to make the existing website more flexible, dynamic, and accessible. | Ms. Debra Harley, Public school teacher | Phase II: Implementation |
| <i>Theological Perspectives of the Reformation</i> | 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 |
| <i>BibleDudes</i> | 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 |

Table 1. Rich Media Projects Initiative.

Lessons Learned

Collaboration and Assessment

These projects tend to be the brainchild of a single faculty member. However, throughout the funding period, faculty members are required to meet as a group once a month. During these meetings, we had typically asked faculty members to share their progress with one another. The purposes of this exercise were to offset the sense of isolation that can occur during the initial planning process, encourage a cross-pollination of ideas and enthusiasm, and, quite frankly, inspire faculty members to "keep up" with their colleagues. All funded faculty members are required to attend these meetings, but the series had been conceived as mainly for the benefit of those in Phase I. When slogging through the difficult planning phase, it is helpful to hear from someone who has survived that phase and moved on to actual implementation. However, we have now reached a point in the initiative where there are no longer any faculty in Phase I; everybody is in Phase II or later.

Therefore a new approach seemed appropriate, and we adopted an idea suggested by the participants themselves. At each meeting, a different faculty member presents his or her work to the rest of the group. This has proved to be a valuable experience for all involved. For the presenter, it is another opportunity to get peer feedback and new ideas; for the other members of the group, it provides some motivation and inspiration to push forward on their own projects.

Changing Technology

When the Rich Media Projects Initiative began, we encouraged both CD-ROM and website projects. As time has gone by, we have become convinced that the Web is a better platform for the majority of these projects. This shift reflects both the continued development and improvement of the Web itself, as well as a similar improvement in the tools for Web development.

Things to Come

Looking ahead, we anticipate that the open-ended nature of Phase IV will pose a special problem. As more and more Rich Media Projects enter this phase, the work involved in providing continued support will multiply. The amount of work entailed in supporting any given project may be small (though possibly not), but the amount of work entailed in supporting all projects combined will eventually become significant. However, we have no metric with which to gauge exactly how much work continued support will entail.

Technology Infusion Projects Initiative

The Technology Infusion Projects Initiative supports faculty members' use of instructional media to enhance teaching and student learning. Both entry level and advanced projects are supported in a two-phase approach, with each phase a semester in duration. During Phase I, the faculty members plan and develop their projects, and in Phase II, the projects are implemented and assessed.

Faculty projects may involve incorporating e-mail, *Blackboard*, or *WebBoard* into an existing course, developing a course website, using virtual office hours via bulleting board chat, using videoconferencing to link Xavier students and students from other institutions, integrating electronic presentations (such as PowerPoint slides) into a course, using commercially available CD-ROMs or discipline-specific courseware for instructional purposes, conducting classroom research that focuses on the effect of technology on teaching and learning, or integrating JSTOR or other electronic journals or databases into a course.

The Process

The Center has issued requests for proposals to all Xavier faculty members for the Technology Infusion Projects Initiative in Fall 2001, Spring and Fall 2002, and Fall 2003 (the deadline for the Fall 2003 proposals has, at the time of this writing, not yet passed). For each request for proposals, the Center has held help sessions that give faculty an opportunity to bring their questions or to float their ideas by us in order that we might help them develop a proposal for any of the projects described in the request for proposals. Originally, the proposals that faculty submitted were reviewed by members of Xavier's Teaching, Learning, and Technology Roundtable. However, members of the Center's newly formed Faculty Advisory Group review the proposals now.

Once proposals have been reviewed by the Faculty Advisory Group, those approved for funding coordinate their work with the Center's Curriculum Design Specialist, Dr. Gayna Stevens-Credle. Prior to the Fall 2003 semester, funded faculty met as a group once monthly, usually over lunch, throughout the funding period. In Fall 2003, the meeting schedule was altered so that funded faculty meet individually with Dr. Stevens-Credle once every-other month; in alternate months, the funded faculty meet as a group with Dr. Stevens-Credle. The purpose of the individual meeting is to address specific faculty needs and to ensure that the projects remain on-track. The group meetings provide a venue in which faculty members can share experiences, receive peer comments, and provide progress reports.

In addition to the assessment that faculty members do as part of their projects, they also complete an on-line report at the conclusion of each phase.

Description of Projects and Products

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

| Project name | Description | Faculty | Current status |
|--|---|--|--|
| <i>Integrating Bootstrap into Statistics</i> | The bootstrap method will be used as an innovative teaching device for students in Statistics I and II courses. | Dr. Amaresh Das Business Department | Phase II: Implementation and Assessment |
| <i>Morality and Business: An Impossible Relationship</i> | Videoconferencing will be used to facilitate conversing with others who are from diverse backgrounds to integrate morality and business (using articles and technology) into two separate courses for interdisciplinary learning. | Drs. Jerry Farmer and Fred Humphrey Theology and Philosophy departments, respectively | Phase I: Planning and Development |
| <i>Development of Interactive Homework Questions for General Biology courses</i> | Assessment and gradebook features in <i>Blackboard</i> will be used by students. Hot Potatoes application will be used to convert text-based homework study questions into an interactive tutorial. | Dr. Hema Bandaranayake Biology Department | Phase I: Planning and Development |
| <i>Course Website for Theories of Personality</i> | The development of a course website will include the course syllabus, chapter outlines, class assignments, sample personality assessments, and clinical psychology information. | Dr. Michelle Marion Psychology Department | Phase I: Planning and Development |
| <i>Experimental Psychology</i> | Infusion of PowerPoint slides into Experimental Psychology course to provide examples of course concepts, related experiments, demonstrations and outlines of lectures | Dr. Lisa Schulte Psychology Department | Phase I: Planning and Development (to begin June 1, 2004) |

Table 2. Technology Infusion Projects Initiative.

Lessons Learned

Adaptability and Resourcefulness

We have learned that it is necessary, as we assist faculty in developing their projects, to be able to adapt to changes that are made to the original project plan. Our experience indicates that, as faculty begin to use a particular technology and discuss using the technology with their colleagues, new options for accomplishing a task or activity become apparent. Despite a faculty member's interest in a technology, he or she may have little experience with or knowledge of the technology at the time when they write the project proposal. Thus, the Center staff members must be both adaptable and resourceful so that they can provide expert guidance to the faculty members with whom they work.

Assessment

The focus on assessment in the Technology Infusion Projects Initiative has transformed the faculty projects into mini action research projects. Although faculty members were aware of the assessment component of the Initiative, the details were not the focus until well into Phase II. Beginning with projects that began in Fall 2003, the Center staff members have placed greater emphasis on the assessment component of each project in Phase I in order to ensure that faculty members can obtain useful and meaningful data about the affects of their projects on teaching and/or student learning.

Expert Staff Members

The Technology Infusion Projects Initiative has reminded us of the critical need for staff members with expertise in two areas in particular: (1) technology and instructional design; and (2) pedagogy and assessment. The Center is fortunate to have a staff member with expertise in the former area. We are, however, unable to provide the kind of assistance that faculty need in order for them to successfully develop and implement projects in which they have given deep and careful consideration to questions regarding teaching and learning theory, and classroom assessment and research methodology. There is a critical need in the Center for a person with expertise in the area of pedagogy and assessment.

Things to Come

A new request for proposals is currently active; we have held two help sessions discuss proposal requirements and other Center opportunities with faculty members. We introduced a new project in the current request for proposals that supports student use of handheld response devices in the classroom. These devices can lead to greater and more active student involvement in learning in the classroom. We call this special project the "Classroom Response System" project.

Technology Workshops

Since November 1, 2002, the Center has hosted a number of technology-related workshops including:

- New Features of SMART Board
- Teaching with SMART Board
- Introduction to the Electronic Classroom
- Electronic Conferencing: WebBoard Conference Review
- Introduction to BlackBoard
- The WebBoard Primer
- Redesigning the Xavier Website
- How PowerPoint Made Me More Interesting
- Extensible HyperText Markup Language
- Classroom Tools: Student Response Devices
- Extensible Markup Language
- Blackboard and Learning: A Discussion of Creative Uses of Blackboard Across the Disciplines
- Faculty Videomakers at Xavier

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

Regrettably, we have not made the amount of progress to which we had committed ourselves in the original proposal, and again in the 2002 Interim Report. Although we are steadily chipping away at these research projects, we have not yet completed the various components that will constitute the final report. Here, we present a report on the status of the research and planning efforts.

Technology Training Center

In October 2002, the Technology Training Center Focus Group was constituted and included 10 members representing the teaching faculty, administration, Library faculty, staff, and students. The specific work of the focus group is described below in Table 3.

| Research and Planning Efforts of the Technology Training Center Focus Group | Status |
|--|------------------------|
| Compile and analyze the results of the student IT survey that was conducted in April 2002 | Completed October 2002 |
| Compile and analyze the results of the faculty IT survey that was conducted in August 2002 | Completed October 2002 |

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| Obtain data relevant to the University 's computer competency assessment of freshmen students | Completed December 2002 |
| Develop specific programmatic aims and activities of the proposed Technology Training Center | Not yet completed |
| Develop models and corresponding budgets for a Technology Training Center at the University | Completed May 2003 |
| Develop implementation plan(s) for each Technology Training Center model | Completed May 2003 |

Table 3. Specific tasks of the Technology Training Center Focus Group and their status.

Student Information Technology Certification Program

In September 2002, the Information Technology (IT) Certification Working Group was formed. It is comprised of five faculty members, one administrator, one Library faculty member, two staff members, and two students. The initial work of the group was to collect and analyze data that will allow it to determine if there is an interest in and/or a need for a student IT certification program. The specific tasks and the status of each are presented in below in Table 4.

| Research and Planning Efforts of the IT Certification Working Group | Status |
|---|-------------------------|
| Compile and analyze the results of the student IT survey conducted in April 2002 | Completed October 2002 |
| Compile and analyze the results of the faculty IT survey conducted in August 2002 | Completed October 2002 |
| Develop and distribute an alumni IT survey | Completed November 2002 |
| Compile and analyze the results of the alumni IT survey conducted beginning in December 2002 | Completed October 2003 |
| Review accreditation standards of the Commission on Colleges of the Southern Association of Colleges and Schools with an eye for those that have particular relevance to students' IT skills and knowledge | Not yet completed |
| Consider the findings and recommendations of studies (e.g., Digital Divide studies) and reports (e.g., National Academies of Science and Engineering, Association of College & Research Libraries) that address issues related to students' IT skills and knowledge | Not yet completed |
| Learn what other (liberal arts) institutions are doing to develop students' IT knowledge and skills | Completed December 2002 |

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|---|-------------------------|
| Examine currently available IT certification exams (e.g., Tek.Xam) | Not yet completed |
| Analyze the extent to which professional academic societies address issues relevant to certification of students' IT knowledge and skills | Completed December 2002 |
| Review data from businesses and corporations that address issues related to certification of students' IT knowledge and skills | Not yet completed |

Table 4. Specific tasks of the Information Technology Certification Working Group and their status.

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 these presentations.

- Dr. Mark Schlueter (Biology) and Bart Everson (Center for the Advancement of Teaching) demonstrated a CD-ROM titled "Interactive Taxonomic Zoology" at ED-MEDIA 2003.
- Bart Everson (Center for the Advancement of Teaching) gave a presentation titled, "The Rich Media Projects Initiative at Xavier University of Louisiana" at ED-MEDIA 2003.
- Dr. Todd Stanislav (Biology and the Center for the Advancement of Teaching) gave a presentation at a workshop titled, "Best Practices in Faculty Development" at the 9th National HBCU Faculty Development Symposium held in October 2002.
- Dr. Deany Cheramie (English) gave a presentation titled, "Multimedia Writing Instruction: It's Not Just About Writing with Computers," at the 2nd Annual University of New Orleans Academic Technology Forum held in March 2002.
- Dr. Gayna Credle (Center for the Advancement of Teaching) gave a presentation titled, "Electronic Environments and Communication," at the 2nd Annual University of New Orleans Academic Technology Forum held in March 2002.
- Dr. Susan Fitch Spillman (Languages) made a presentation describing the development and implementation of a CD-ROM project at the 2002 joint conference of the Southern Conference on Language Teaching and the Louisiana Foreign language Teachers' Association. The CD-ROM, titled *Vive la Louisiane, un état pas comme tous les autres*, features video clips of francophone Louisiana residents speaking in French about work responsibilities, family background, and other cultural tasks.
- Dr. Gayna Stevens-Credle (Center for the Advancement of Teaching) presented results from her content analysis research study, *Student Interactions in Electronic Conference Systems*, at the 2002 Teaching in Higher Education Forum in Baton Rouge, Louisiana.

Final Thoughts

The faculty development and technology grant from the Andrew W. Mellon Foundation has provided opportunities for Xavier's faculty to utilize technology for scholarly and community service projects, and to enhance the teaching and student learning process. These opportunities would simply not have been available were it not for the support of the Foundation.

The Foundation's support of faculty development is vital to Xavier's commitment to recruit and retain the very best faculty. The opportunities made possible by this faculty development and technology grant, such as to develop innovative scholarly and teaching projects, are an indispensable part of a comprehensive faculty recruitment and retention plan. We're grateful for the Foundation's similar commitment to assist Xavier in recruiting and retaining the very best faculty.

Xavier's Center for the Advancement of Teaching has played an important role in faculty development efforts at the University. Results from a recent survey indicated that the Center meets the needs or expectations of over 75% of Xavier's faculty members (a summary of the data and the results of this survey are on the Center's website at <http://cat.xula.edu/scholarship/fds/>). This faculty development and technology grant has allowed the Center to offer meaningful faculty development opportunities and to have an expert staff and infrastructure to meet the needs and expectations of most of Xavier's faculty members.

Finally, the Foundation's support of Xavier's faculty and its students has far-reaching affects. From the use of videoconferencing technology to enhance discussion among students who are from diverse backgrounds, to the CD-ROM of Francophone Louisiana residents speaking in French and the Web-based audio files of readings of the haiku of Kobayashi Issa, the products of the Foundation's grant to Xavier University have far-reaching literary, historical, social, and educational significance. We look forward to the months ahead when Xavier's faculty members, with the support of the Andrew W. Mellon Foundation and Xavier's Center for the Advancement of Teaching, develop projects that are similarly far-reaching and significant.