

# Technology, Teaching, and Learning at Xavier University

## *A Final Report to the Andrew W. Mellon Foundation, July 2002*

### Overview

In October 1999, Xavier University of Louisiana was awarded a three-year, \$450,000 grant from the Andrew W. Mellon Foundation to support Xavier's faculty development and technology program. The primary goal of this program, as stated in the original proposal, was to "...engage faculty in faculty development and training activities that will enable them to acquire, improve and/or advance their capabilities in using information technologies to transform the teaching and learning process."

This faculty development and technology program had four specific aims, including:

- To provide training in the use of currently available information technologies and provide the experiences with these technologies necessary for faculty to develop applications to transform the teaching-learning environment
- To provide expert support and consultation necessary for faculty to integrate information technologies into their courses
- To establish collaborative networks of faculty and students to work together to integrate information technology into the curriculum and implement various levels of technology in and out of the classroom
- To provide incentives for faculty to develop and implement web-supported, web-based courses and other more innovative uses of information technology.

The Center for the Advancement of Teaching has examined the data collected throughout the three-year course of this grant, with equal attention to what worked and to what did not work. The complete presentation of these data and their analyses are found in Appendices I and II. Here, we present a summary of the findings.

There are four particularly significant themes that emerge from these data:

1. As a result of this initiative, faculty members have critically examined their own teaching and its impact on student learning.
2. Faculty members' conscientious, reflective, and research-based approaches to their teaching have resulted in improved student learning.
3. There has been a significant increase in the number of faculty who, for purposes of classroom teaching and student learning, use technology for collaboration, communication, and research.
4. Institutional barriers to faculty and student use of information technology have been significantly reduced.

The evidence, as well as the experience of the staff members of the Center for the Advancement of Teaching, point to two important lessons or guiding principles that will shape future faculty development and technology initiatives at Xavier University. These guiding principles include:

### Assessment

Previous interim reports and the summary of recent grant activities described elsewhere in this document, indicate the degree to which the grant promoted, supported, and guided faculty use of information technology. The question remains, however, "What impact does information technology have on teaching and student learning?" The task before Xavier faculty members, like faculty members at most institutions of learning, is to develop the means to assess or measure this impact. Given this challenge, future faculty development and technology initiatives must be linked to strategies that aim to measure the impact of the technology on teaching and student learning.

## Collaboration

Many Xavier University faculty members are interested in working with multimedia, building interactive CD-ROMs or websites, and experimenting with digital audio or video. Such "media-rich" projects are ambitious, but can also be very rewarding. Yet often such projects do not get off the ground. Faculty members have other responsibilities that are usually more immediate, and technology projects in general and multimedia projects in particular are full of frustrations and potential pitfalls. A deliberate, structured approach is therefore necessary in order to design and implement projects that are ambitious enough to be worth doing, yet realistic enough to actually be completed. Moreover, coupled with this structured approach is the need for collaboration—that is, collaboration among multimedia and instructional design specialists, and content experts. As noted in Xavier University's Teaching, Learning, and Technology Roundtable's position paper on information technology, "... (Faculty members) contemplating the adoption of technology in their courses need personnel support, and where necessary ... training, release time, or stipend support...."

Future faculty development and technology initiatives must be designed so as to include structured collaboration and opportunities for assistance in planning, developing, implementing, and assessing the information technology projects.

Over the next three years, the Center will implement a community-based approach to faculty development and technology. A three-year grant funded by the United Negro College Fund will support the formation of communities in which small groups of faculty will work together to develop technology-enhanced curricula. A structured, faculty-driven program with a distinct planning process and an intensive summer institute will encourage a thoughtful and considered approach. Technology will be deployed in a manner that is appropriate, effective, and sustainable, and faculty will assess and critically evaluate their work.

## Introduction to the Report

This document represents the final report of the faculty development and technology grant awarded in 1998 to Xavier University of Louisiana by the Andrew W. Mellon Foundation. More specifically, this report chronicles the faculty development and technology initiatives that took place beginning in August 2000.

The original funding period for this grant was October 1998 to October 2001. At the end of this period not all of the grant funds were expended. With permission of the Foundation, as per communications with Dr. Danielle Carr at the Andrew W. Mellon Foundation, Xavier University was permitted to extend the grant period to June 2002.

This final report includes the following sections:

- **Faculty Development and Technology Initiatives.** Here, we describe the specific programmatic activities of this grant during the period August 2000 to June 2002.
- **Data and Analysis.** Here, we present the findings and analyses of important grant-related surveys.
  1. Faculty and Student Technology Use Survey
  2. Impact on Teaching and Student Learning Survey
- **Supplemental Documentation.** These materials include a request for proposals, workshop evaluations, and a strategic plan for information technology.

# Faculty Development and Technology Initiatives

This document chronicles the faculty development and technology initiatives that took place from August 2000 to June 2002.

## ***Web Course Management Systems Case Study***

In March 2000, the Center invited proposals from all faculty members to participate in a case study to explore answers to two questions about Web-based course management systems (WCMS):

1. What are the advantages and disadvantages of each system?
2. How do the course management systems change, if in fact they do, the teaching and learning process?

The case study also provided the University community an opportunity to examine Web course management systems in order that it might determine best practices of WCMS and the type of institutional support that is needed to integrate WCMS into the teaching and learning process. Furthermore, the case study offered an opportunity to examine related policy issues that may affect the University and its faculty and students.

As was reported in the 1999-2000 interim report to the Foundation (this report is on the Center's website at: [http://cat.xula.edu/about/grants/mellon/interim\\_00.pdf](http://cat.xula.edu/about/grants/mellon/interim_00.pdf)), in summer 2000 six faculty members participated in the case study and developed on-line components of their courses using WCMS such as WebCT, eCollege, Anlon, and Blackboard. The Center hosted a summer-long on-line seminar for the faculty members to assist them in course design and development. The faculty members also participated in face-to-face meetings and on-line activities using the seminar resources, which were delivered using an eCollege seminar website. The courses taught by these faculty members were offered during the 2000-2001 academic year.

In a report written for the entire University community, we addressed three primary results of the case study:

1. The lessons learned
2. A short list of recommendations
3. Brief consideration of possible issues of policy of particular relevance to faculty and administrators.

Individual faculty members contributed narratives that provide a sense of their experiences using the WCMS. We also included an analysis of data that we gleaned from surveys of students and faculty who participated in the case study.

And finally, we have a RealVideo tour that offers visitors a visual walk-through of the eCollege website we developed for the faculty members involved in the project. This website served as the focal point for helping faculty think through issues of technology and pedagogy, and plan the on-line components of their courses.

This case study is featured on the Center's website at :

<http://cat.xula.edu/scholarship/wcms/> and includes the following sections:

- o Executive Summary: an overview of the entire case study and the on-line materials
- o Final Report: primary results of the case study
- o Narratives and Data: faculty experiences and survey data
- o Findings: a summary of what we discovered.

Several of the faculty members who participated in this case study presented a paper entitled, "Teaching and Learning with Web Course Management Systems: A Case Study at Xavier University of Louisiana."

## **Technology Infusion Projects Initiative**

### **2000-2001**

In March 2000, the Center issued a request for proposals (RFP) from all university faculty members (a copy of the RFP is found in Appendix III). Seven faculty members submitted proposals for review by faculty members who serve on the University's Teaching, Learning, and Technology Roundtable; six proposals were approved funding. These include:

1. Dr. Doug Athey (Education) developed PowerPoint presentations for his Personal and Environmental Health course. In addition, Dr. Athey posted student work on his BlackBoard course website.\*
2. Dr. Gerald Boodoo (Theology) developed a syllabus and collected bibliographical resources, including Web-based materials for his Theology and Science course.
3. Sr. Jean Marie Craig (Education) developed a Blackboard course websites for her Test and Measurements, and Anatomy and Physiology courses.\*
4. Dr. Bruce Danner (English) integrated JSTOR articles into his Shakespearean Tragedy course.
5. Dr. Amaresh Das (Business) developed a step-by-step set of instructions and classroom activities for students' use of Excel in his Statistics I course.
6. Dr. Lisa Pollack (Physics/Engineering) developed interactive physics experiments that allowed students in the sequence of introductory physics courses to utilize a digital video camera and software to examine fundamental physical phenomena.
7. Dr. Cirecie Olatunji (Education) integrated student and faculty use of Personal Digital Assistants (Palm Pilots) into her Counseling Practicum course for graduate students.
8. Drs. Gary Donaldson (History), Chris Doumen (Biology), and Bill Serban (Political Science) continued to serve as the managing editors of *XULAnexUS: The Internet Journal by and for Xavier University Students*. The journal is on-line at: <http://www.xula.edu/xulanexus/>.

### **2001-2002**

1. Dr. Jerry Farmer (Theology) developed a new course entitled, "Environmental Issues in Christian Perspective," which will be offered for the first time in Fall 2002. The course development and implementation have utilized Web-based resources.
2. Drs. Gary Donaldson (History), Chris Doumen (Biology), and Bill Serban (Political Science) continued to serve as the managing editors of *XULAnexUS: The Internet Journal by and for Xavier University Students*. The journal is on-line at: <http://www.xula.edu/xulanexus/>.

## **Rich Media Projects Initiative**

### **2000-2001**

In summer 2000, six faculty members began phase I of the Rich Media Projects Initiative. In this phase, each faculty member developed a detailed blueprint for the project in what we refer to as a *design document*. The completed design documents are on the Center's website at: <http://cat.xula.edu/initiatives/rich/design.php>.

During the 2000-2001 academic year, a number of Xavier University and New Orleans Public Schools faculty and students conducted Phase II of their Web or CD-ROM projects, including:

1. **The Haiku of Kobayashi Issa website**  
Dr. David Lanoue (English) is presenting his translations of the Japanese poet Issa, along with information about Issa's life and haiku, for the benefit of students, the English-speaking public, and the

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\* This project was funded in part by a grant to Xavier's Division of Education by the U.S. Department of Education, Office of Post-secondary Education's "Preparing Tomorrow's Teachers to Use Technology" Initiative.

Japanese-speaking public. The developmental version of this Rich Media project is at:

<http://webusers.xula.edu/dlanoue/issa/>.

2. **No Easy Poets website**

Ms. Patrice Melnick (English) is developing the "No Easy Poets" website as a means for providing information on literary events in New Orleans. This will include a calendar that lists readings, names of readers, dates, times, venues, contact information and cover charges, if applicable. The calendar will also list community writing workshops and literary festivals. Last, the website will provide general biographical information about local and visiting authors. The developmental version of this project is at: <http://noeasypoets.com/>

3. **Collage Culturel CD-ROM**

Dr. Carmen Rogers (Languages) began developing a multimedia CD-ROM that will help first-year students learn about French language and culture through interviews with Francophone speakers from around the world, and photographs depicting elements of French culture and interactive exercises.

4. **Gumbo LALA website**

The Gumbo LALA project website will be used as a resource to exhibit various aspects of the Gumbo LALA Project, including Creole culture. During the project, students and teachers from Benjamin Franklin Elementary School (a public school in the New Orleans Public School District) will investigate the uniqueness of Creole culture specific to south Louisiana. The students will also communicate via the Internet with students from the 6<sup>th</sup> Avenue Elementary school in Los Angeles, California. The students will discuss the similarities and differences between their Creole communities. The website will display different examples of student-generated work including WebBoard discussions, narratives, poetry, Hyperstudio stacks, artwork, and personal reflections. The developmental version of this Rich Media project is at: <http://cat.xula.edu/gumbo/>.

5. **New Orleans UnMasked website**

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 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. The developmental version of this Rich Media project is at: <http://cat.xula.edu/unmasked/>.

6. ***Vive la Louisiane, un état pas comme tous les autres* CD-ROM**

This CD-ROM will feature Francophone Louisiana residents speaking in French about work responsibilities, family background, and other cultural tasks. Some of the interview subjects were born into families who spoke French but did not teach their children the language, while others have studied French in school.

## **2001-2002**

During the 2001-2002 academic year, several of the Rich Media projects continued in Phase II. These projects included:

1. The Haiku of Kobayashi Issa website (Phase II)
2. Collage Culturel CD-ROM (Phase II)
3. Gumbo LALA website (Phase II)
4. New Orleans UnMasked website
5. *Vive la Louisiane, un état pas comme tous les autres* CD-ROM.

## **WebBoard**

WebBoard Conference is a Web-based electronic conferencing application whose purchase was made possible by this faculty development and technology grant and has been supported by the Center since January 1998.

Xavier's faculty members use WebBoard primarily to enable electronic communication with and among students. To a lesser extent, academic departments and faculty committees have used WebBoard to improve their communication and coordinate their activities (see Tables 1-4).

<b>Course (C), Department (D), Project (P)</b>	<b>Department</b>	<b>Board Administrator</b>
Operations Management (C)	Business Department	Dr. Anil Kukreja
Center for the Advancement of Teaching (D)	Center for the Advancement of Teaching	Center staff
Administrative Board (D)	Center for the Advancement of Teaching	Dr. Gayna Credle
Gumbo LALA (P)	Center for the Advancement of Teaching	Ms. Elizabeth Rhodes
Students at the Center (P)	Center for the Advancement of Teaching	Ms. Elizabeth Rhodes and Mr. Jim Randels
Organic Chemistry Laboratory (C)	Chemistry Department	Dr. Vincent Giannamore
Biochemistry (C)	Chemistry Department	Dr. Leonard Price
Broadcast Practicum (C)	Communications Department	Mr. Arnold Crump
Fundamentals of Speech (C)	Communications Department	Ms. Ann Whittmore
Forensics and Public Speaking (C)	Communications Department	Ms. Stephanie Thomson
Mass Media (C)	Communications Department	Dr. Fred Bales
Fundamentals of Speech (C)	Communications Department	Dr. Vera Walker
Instructional Technology (undergraduates) (C)	Division of Education	Dr. John Fulwiler
Methods of Teaching Science and Mathematics (C)	Division of Education	Dr. Mark Thomson
Advanced Philosophy of Education (C)	Division of Education	Dr. Charles Sevick
Instructional Technology (C)	Division of Education	Dr. Rosalind Hale
Multicultural Counseling: Theory, Research, and Practice (C)	Division of Education	Dr. Cirecie Olatunji
Reading/Special Education (C)	Division of Education	Dr. Deborah Bordelon
Instructional Technology (graduates) (C)	Division of Education	Dr. John Fulwiler
Honors English (C)	English Department	Dr. David Lanoue
Course Portfolio Working Group (P)	Center for the Advancement of Teaching	Dr. David Lanoue
World Literature II (C)	English Department	Dr. Michele Levy
World Civilizations II (C)	History Department	Dr. Elizabeth Hemenway
Intern journals (P)	Mathematics Department	Dr. Paul McCreary
Service Learning (P)	Student Services	Ms. Denise Beal
Xavier Student Services (D)	Student Services	Mr. Melvin Beasley

Table 1. WebBoard use in Fall 2000.

<b>Course (C), Department (D), Project (P)</b>	<b>Department</b>	<b>Board Administrator</b>
Service Learning (P)	Student Services	Ms. Denise Beal
Art Essentials (C)	Art Department	Ms. Janel Marsalis
Principles of Management (C)	Business Department	Ms. Janet Gillspie
Operations Management (C)	Business Department	Dr. Anil Kukreja
Center for the Advancement of Teaching (D)	Center for the Advancement of Teaching	Center Staff
Administrative Board (D)	Center for the Advancement of Teaching	Dr. Gayna Credle
Gumbo LALA (P)	Center for the Advancement of Teaching	Ms. Elizabeth Rhodes
Physical Chemistry for Life Sciences (C)	Chemistry Department	Dr. Cheryl Stevens
Organic Chemistry Laboratory (C)	Chemistry Department	Dr. Vincent Giannamore
Biochemistry (C)	Chemistry Department	Dr. Leonard Price
Division of Pharmaceutical Sciences (D)	College of Pharmacy	Dr. Mark Welt
Biotechnology (D)	College of Pharmacy	Dr. Mark Welt
College of Pharmacy (D)	College of Pharmacy	Dr. Vimal Kishore
Broadcast Practicum (C)	Communications Department	Mr. Arnold Crump
Fundamentals of Speech (C)	Communications Department	Ms. Ann Whittmore
Forensics and Public Speaking (C)	Communications Department	Ms. Stephanie Thomson
Mass Media (C)	Communications Department	Dr. Fred Bales
Law and Media (C)	Communications Department	Dr. Fred Bales
Fundamentals of Speech (C)	Communications Department	Dr. Vera Walker
Instructional Technology (undergraduates) (C)	Division of Education	Dr. John Fulwiler
Methods of Teaching Science and Mathematics (C)	Division of Education	Dr. Mark Thomson
Advanced Philosophy of Education (C)	Division of Education	Dr. Charles Sevick
Instructional Technology (graduates) (C)	Division of Education	Dr. Rosalind Hale
Multicultural Counseling: Theory, Research, and Practice (C)	Division of Education	Dr. Cirecie Olatunji
Reading/Special Education (C)	Division of Education	Dr. Deborah Bordelon
Honors English (C)	English Department	Dr. David Lanoue
Course Portfolio Working Group (P)	Center for the Advancement of Teaching	Dr. David Lanoue
World Literature II (C)	English Department	Dr. Michele Levy
World Civilizations II (C)	History Department	Dr. Elizabeth Hemenway
Intern journals (P)	Mathematics Department	Dr. Paul McCreary

Table 2. WebBoard use in Spring 2001.

Course (C), Department (D), Project (P)	Department	Board Administrator
Operations Management (C)	Business Department	Dr. Anil Kukreja
Administrative Board (D)	Center for the Advancement of Teaching	Dr. Gayna Credle
Center for the Advancement of Teaching (D)	Center for the Advancement of Teaching	Center Staff
Gumbo LALA (P)	Center for the Advancement of Teaching	Ms. Elizabeth Rhodes
Web Course Management Systems Case Study (P)	Center for the Advancement of Teaching	Dr. Gayna Credle
Organic Chemistry Laboratory (C)	Chemistry Department	Dr. Vincent Giannamore
Biochemistry (C)	Chemistry Department	Dr. Leonard Price
Biotechnology (C)	College of Pharmacy	Dr. Mark Welt
Division of Pharmaceutical Sciences (D)	College of Pharmacy	Dr. Mark Welt
Broadcast Practicum (C)	Communications Department	Mr. Arnold Crump
Law and Media (C)	Communications Department	Dr. Fred Bales
Instructional Technology (undergraduates) (C)	Division of Education	Dr. John Fulwiler
Multicultural Counseling: Theory, Research, and Practice (C)	Division of Education	Dr. Cirecie Olatunji
Honors English (C)	English Department	Dr. David Lanoue
Course Portfolio Working Group (P)	Center for the Advancement of Teaching	Dr. David Lanoue

Table 3. WebBoard use in Fall 2001.

<b>Course (C), Department (D), Project (P)</b>	<b>Department</b>	<b>Board Administrator</b>
Administrative Board (D)	Center for the Advancement of Teaching	Dr. Gayna Credle
Center for the Advancement of Teaching (D)	Center for the Advancement of Teaching	Center Staff
Gumbo LALA (P)	Center for the Advancement of Teaching	Ms. Elizabeth Rhodes
Web Course Management Systems Case Study (P)	Center for the Advancement of Teaching	Dr. Gayna Credle
Organic Chemistry Laboratory (C)	Chemistry Department	Dr. Vincent Giannamore
Biochemistry (C)	Chemistry Department	Dr. Leonard Price
Physical Chemistry for the Life Sciences (C)	Chemistry Department	Dr. Cheryl Stevens
Biotechnology (C)	College of Pharmacy	Dr. Mark Welt
Division of Pharmaceutical Sciences (D)	College of Pharmacy	Dr. Mark Welt
Broadcast Practicum (C)	Communications Department	Mr. Arnold Crump
Law and Media (C)	Communications Department	Dr. Fred Bales
Instructional Technology (undergraduates) (C)	Division of Education	Dr. John Fulwiler
Multicultural Counseling: Theory, Research, and Practice (C)	Division of Education	Dr. Cirecie Olatunji
English Department (D)	English Department	Dr. Deany Cheramie
Poetry Workshop (C)	English Department	Dr. Biljana Obradovic
Preparatory English I (C)	English Department	Dr. Deany Cheramie
Preparatory English II (C)	English Department	Dr. Deany Cheramie
Calculus I (C)	Mathematics Department	Dr. Gurdial Arora

Table 4. WebBoard use in Spring 2002.

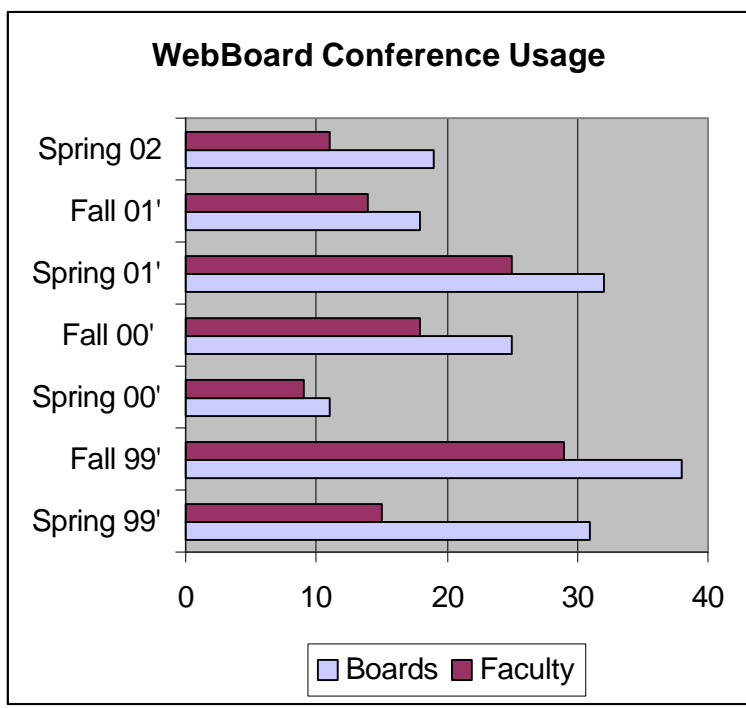


Figure 1. WebBoard use data since Spring 1999 semester. That more boards were used than faculty members using them is due to individual faculty members using multiple boards for the courses they teach.

We have begun to observe a modest decrease in the number of boards being used by faculty members (Figure 1). We attribute this decrease almost exclusively to the availability on campus of Blackboard, a Web-based course management system (Table 5). Blackboard has a variety of tools, including a communication tool similar to WebBoard. The variety of electronic tools (*e.g.*, grade book, links, discussion, white board) makes Blackboard an attractive and powerful alternative to faculty members who wish to integrate electronic discussion and other information technologies into their courses.

Semester	Number of courses	Number of students
Spring 2001	61	783
Fall 2001	121	2039
Spring 2002	135	2169

Table 5. Blackboard use statistics since it became available in Spring 2001.

### ***K-12 Initiatives and Partner Schools***

Although this grant from the Andrew W. Mellon Foundation does not directly support initiatives with the Center's partner schools, it has nevertheless allowed the Center to build both its staff and technology infrastructure.

This grant made possible the hiring of Mr. Bart Everson, the Center's Multimedia Artist. Bart, along with Ms. Elizabeth Rhodes, the Center's School/University Liaison, and Dr. Gayna Credle, the Center's Instructional Design Specialist, have worked with K-12 teachers throughout the grant period. Particular projects during the 2000-2001 and 2001-2002 academic years included:

- **Gumbo LALA**

Gumbo LALA is a joint project among Xavier University, Benjamin Franklin Elementary in New Orleans and 6<sup>th</sup> Avenue Elementary in Los Angeles, California. The purpose of this project is to involve students and teachers at all three schools in the use of technology in the classroom as a tool to

learning. The theme of the project is to learn about the uniqueness of our local community. The focus of Gumbo LALA will be to involve the students in learning about Creole culture, as it is alive in our community today.

One focus of the project will be for Ben Franklin students to communicate via the Internet with a transplanted community of former New Orleanians in Los Angeles. The 6<sup>th</sup> Avenue Elementary School children will be the link to that community. The students will investigate the similarities and differences of their communities. This problem-based approach to learning will allow students to research and generate their own possible theories concerning the given topic. While investigating this topic, it is expected that both teachers and students at the involved schools will become proficient users of Hyperstudio Software and the World Wide Web.

- **McDonogh 35 Senior High School**  
Several Xavier faculty members responded to the call for workshops from the staff development coordinator at McDonogh 35 Senior High School. Two Xavier faculty members will work with students and faculty of McDonogh 35 in the Spring 2001 semester as resource persons in various curriculum development projects and extracurricular activities.
- **St. Monica's Elementary School**  
Faculty from St. Monica's Elementary School came to Xavier University as part a Back-to-School staff development activity. This small school has a historical affiliation with the Sisters of the Blessed Sacrament and Xavier University. The school's Principal, Mrs. Ross and her staff of twelve teachers learned basics in Hyperstudio and multimedia authoring software, and searched the Web for lesson plans to use when the school year begins.
- **Students at the Center**  
The Students at the Center (SAC) program began in 1997 at McDonogh #35 Senior High School. The program seeks to develop and promote students as resources to improve schools and communities. The heart of this work is giving students the in-depth training they need in the classroom in order that they may emerge as valuable agents of community improvement. SAC establishes two to eight elective courses, limited in size to 15 students per class, at middle and secondary schools. In these settings, students train to become skilled wordsmiths. Their writing is directed toward other students and teachers with the intent of planning and implementing community improvement projects. Students involved in the SAC program have begun developing the program's website, "New Orleans Unmasked"
- **Lusher Alternative Elementary School**  
Eighteen teachers from Lusher Alternative Elementary School participated in staff development workshops that focused on the use of information technology in the classroom. They joined an on-line community for teachers at kiko.com and created Web pages.

## ***Faculty and Staff Scholarship and Conference Participation***

### **2000-2001**

During the 2000-2001 and 2001-2002 academic years, several of Xavier's faculty and staff members produced scholarly works that were supported, at least in part, by the Center for the Advancement of Teaching and the faculty development and technology grant from the Andrew W. Mellon Foundation.

- Ms. Gayna Stevens Credle, Instructional Specialist with the Center for the Advancement of Teaching, exhibited her dissertation study Student Interaction Patterns in Electronic Conference Systems, in the Poster session of WebNet 2001 held in Orlando, Florida.
- Dr. Bruce Danner (English) published a paper, "You that look pale and tremble... That are but mutes and audience to this act': Hamlet in the College Classroom" in the Journal of College Writing [4:1 (2001)].
- Ms. Elizabeth Moore Rhodes, School/University Liaison in the Center for the Advancement of Teaching, was one of three symposium panelists on the "Risks and Opportunities in the Age of Information Technology: E-learning, Commercialization, and Measures of Success," at the April Annual Meeting of the American Educational Research Association in Seattle.
- During the 1999-2000 academic year, Drs. Mary Carmichael, Robert Fulginiti, Barbara Green, and Kris Norenberg (all from the Biology Department) developed a project to improve student learning in

the first semester General Biology course. Drs. Green and Norenberg have posted several resources from this project on the General Biology course website at:

<http://webusers.xula.edu/kmnorenb/XUGenBio/Biol1230.htm>

- Xavier is one of 20 colleges and universities in the country to receive a grant from the Lilly Endowment, Inc. to support programs that encourage young people to consider the ministry as a career or consider their faith commitments in whatever career they choose. Dr. Gerald Boodoo (Theology) is the program director. Dr. Boodoo was funded by this faculty development and technology grant during the 2000-2001 academic year.
- Drs. Deborah Bordelon (Division of Education) and Nancy Martino (Communications) received a grant from the U.S. Department of Education's Office of Special Education Programs to establish "Project Talk." The primary goal of "Project Talk" is to "...increase the number of highly trained special education teachers from underrepresented populations who are aware and responsive to speech and language disorders and are prepared to work collaboratively with speech and language pathologists." Drs. Bordelon and Martino and students participated in a project during the 1999-2000 academic year that focused on developing and promoting literacy skills.
- Mr. Major Jackson won the 2000 Cave Canem Poetry Prize for his book, *Leaving Saturn*. Mr. Jackson gave a poetry reading at the Second Annual Cave Canem Reading.
- Dr. Barbara Green (Biology), Ms. Megan Hill (Biology student), and Ms. Carmen Echols (Biology student) presented a poster session entitled, "Learning by Doing: Using Case Studies Written by Students" at the February 2001 conference of The Collaboration for the Advancement of College Teaching and Learning.
- Dr. Jerry Farmer (Theology), Dr. Fred Humphrey (Philosophy), Dr. Brian Fitch (UW-Stout, English), and Dr. Alec Kirby (UW-Stout, Political Science) presented a session entitled, "Promoting Greater Student Responsibility Through Synchronous and Asynchronous Learning Methodologies" at the February 2001 conference of The Collaboration for the Advancement of College Teaching and Learning.
- "Euphoria," a poem by Mr. Major Jackson (English), was published in *The New Yorker* (November 6, 2000). The poem will also be published in the 8th edition of the college textbook anthology, *Reading and Writing the Human Experience*. Another of Mr. Jackson's poems, "How to Listen," also appeared in *The New Yorker* (December 25, 2000). Mr. Jackson also received a prestigious Writing Fellowship from the Fine Arts Work Center in Provincetown, MA. He was in residency there during the 2000-2001 academic year.
- Dr. Deany Cheramie (English) wrote "Resources for Teaching English Core Curriculum Classes." The book is on the English Department's website at:  
[http://www.xula.edu/Academic/as\\_college/engl\\_dept/coreresources.html](http://www.xula.edu/Academic/as_college/engl_dept/coreresources.html).
- Dr. Paul McCreary (Mathematics) presented a paper at the Twenty-second Annual Meeting of The North American Chapter of the International Group for the Psychology of Mathematics Education in October 2000 titled "Apprenticeship in a Technology-rich Classroom."
- Dr. Nancy Martino (Communications) presented a workshop, "Why Can't This Child Understand? Adjusting Language Through Three Continuums," at a meeting of the New Orleans Chapter of the National Black Association for Speech, Language, and Hearing.
- Drs. Bill Serban (Political Science) and Chris Doumen (Biology) gave a presentation at the 7th HBCU Faculty Development Symposium titled "Collaborating through Educational Technology: The Development of XULAnEXUS, the Interdisciplinary Electronic Journal of Xavier University Students."
- Drs. Cirecie Olatunji (Education), Todd Stanislav (Biology, Center for the Advancement of Teaching), and Pamela Waldron-Moore (Political Science) gave a presentation at the "Creating Partnerships - Creating Scholarship: Strengthening Research, Teaching, and Learning with Effective Use of Electronic Resources" workshop titled "Promoting and Incorporating the Use of Electronic Databases." Dr. Stanislav also participated in a panel discussion on "Action Planning and Evaluation." Much of what Drs. Olatunji, Stanislav, and Waldon-Moore presented at the conference is on the Center's website at: <http://cat.xula.edu/scholarship/jstor/>.
- Dr. Joseph Ross (Biology) presented a paper titled "A Recipe for a Conversation, or How I Stopped Worrying and Leaned to Love the New Economy" at New York University's national symposium, "Defining the Liberal Arts Institutional Mission."

- Dr. David Lanoue (English) delivered a paper, "Beyond Haibun: the Haiku Novel" at the Haiku Society of America conference in San Francisco. Dr. Lanoue also read from his novel, *Haiku Guy*. Dr. David Lanoue (English) received an honorable mention in the World Haiku Festival 2000's achievements competition for the translations on his "Haiku of Kobayashi Issa" website (<http://webusers.xula.edu/dlanoue/issa/>).

## **2001-2002**

- Dr. Deany Cheramie (English) led a workshop titled "Course Portfolios: Self Study in the Teaching of Writing" at the 2002 Conference of the Louisiana Association for College Composition
- Drs. Beverly Mason (Sociology), Stephanie Thomson (Communications), and Pamela Waldron-Moore (Political Science) presented a paper titled, "Service Learning for Social Change: The Xavier Experience" at The Collaboration for the Advancement of College Teaching & Learning's winter conference.
- Dr. Mark Gstohl (Theology) was invited, as a result of his work in the Course Portfolio Working Group, to participate as a panel member of the "Reflections on the Teaching of Religion" at the Southwest Regional Meeting of the American Academy of Religion.
- Drs. Gstohl and Michael Homan (Theology) published a paper entitled, "Jesus the Teetotaler? How Pasteurization and Welch's Grape Juice Put Jesus on the Wagon" in the April 2002 edition of Bible Review.
- 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 (SCOLT) and the Louisiana Foreign language Teachers' Association (LFLTA). 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, Instructional Specialist with the 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.
- Dr. Valerio De Angelis (Mathematics) co-authored an article with Paul Dawkins, W. Ted Mahavier, and Allen Stenger titled "MathNerds Offers Discovery-Style Mathematics on the Web," which was published in the February 2002 issue of *Focus*, the newsletter of the Mathematical Association of America.

## ***Technology Workshops and Faculty Development Events***

This faculty development and technology grant supported a variety of technology workshops and other faculty development events—all of which have an important place in the overall efforts of the Center for the Advancement of Teaching to advance the art of teaching and improve student learning at Xavier. A list of these events is provided in Tables 6 and 7; examples of evaluations of several of the technology workshops are found in Appendix III.

<b>Center for the Advancement of Teaching 2000-2001</b>		
<b>Date(s)</b>	<b>Technology Workshops and other Faculty Development Events</b>	<b>Faculty Attendance</b>
August 2 and 25, September 13, 2000 and January 12, 2001	"Orientation to the Electronic Classroom" workshop	7
August 21, 2000	New Faculty Orientation	34
August 23, 2000	"Using WebBoard in and out of the Classroom" workshop	8
August 25, 2000	Meeting with funded faculty funded by grants through the Center for the Advancement of Teaching	35
September 1, 2000	"Partners and Alliances with BellSouth" brown bag discussion	5
September 8, 2000	"Evaluation of Faculty Use of Technology" workshop	17
September 9, 2000	"Writing a Professional Development Plan" workshop	42
September 23, 2000	"Introduction to Course Portfolios" workshop	16
September 28, 2000 and October 28, 2000	"How the Web Works: Basics of Web Imaging" workshop	12
September 29, 2000	Web Course Management Systems Case Study meeting	8
October 3, 2000 and November 11, 2000	"How the Web Works: Animation for the Web" workshops	12
November 16, 2000	"Technology and Teaching at Xavier" discussion	11
November 18, 2000	"How the Web Works: Using Style Sheets" workshops	3
December 9, 2000	Lusher Alternative Elementary School technology workshop	18
January 27, 2001	"How the Web Works: Introduction to the Web" workshop	3
January 30, 2001 and February 3, 2001	"How the Web Works: Introduction to HTML" workshop	8
February 15, March 3, and June 21, 2001	"Using Homesite" workshop	19
February 15, 2001	"Two Cultures" discussion	13
April 25, 2001	"Privacy" discussion	3
April 26, 2001	"Teaching with Video Conferencing" workshop	4
March 10, 2001	"With Minds Wide Open" workshop	6
March 29, 2001	"Intellectual Property" discussion	5
March 30, 2001	Technology teleconference	18

Table 6. Technology workshops and other faculty development events sponsored by the Center for the Advancement of Teaching during the 2000-2001 academic year.

<b>Center for the Advancement of Teaching 2001-2002</b>		
<b>Date(s)</b>	<b>Technology Workshops and Related Events</b>	<b>Faculty Attendance</b>
August 20, 2001	New Faculty Orientation	20
August 23 and 25, September 14, November 2, 2001 and January 11, 2002	"Orientation to the Electronic Classroom" workshop	22
January 9, 2002	"WebBoard Conference" workshop	7
October 2, 2001	X.U.F.O.O.H.	23
September 19, 2001	"Writing to Learn" workshop	8
October 26, 2001	"Teams and Team Assignments" workshop	6
December 8, 2001	"How the Web Works: Using BBEdit" workshop	5
October 27, 2001	"How the Web Works: Introduction to HTML" workshop	3
October 30, 2001	"Multiple Choice Exams" workshop	9
November 28, 2001	"E-Moderating" workshop	6
January 28, 2002	"Student Evaluations" new faculty luncheon	12
February 18, 2002	"Mentoring: Perspectives of the Mentors" forum	17
March 18, 2002	"Mentoring: Perspectives of the New Faculty" forum	13
February 21, 2002	"International Education Across the Curriculum" workshop	20
February 22, 2002	"Innovations in Teaching" brown bag discussion	15
February 28, 2002	"Issues Related to Teaching with Technology at Xavier, Part 1" forum	17
March 7, 2002	"Issues Related to Teaching with Technology at Xavier, Part 2" forum	12
March 21, 2002	"Issues Related to Teaching with Technology at Xavier, Part 3" forum	8
March 20, April 3, 10, and 19, 2002	Advisory Group meetings	42
April 2, 2002	"Designing Essay Questions" workshop	29
November 8, 2001 and April 15, 2002	Wine and Cheese and RFP's event	46
April 17, 2002	"No Child Left Behind" workshop	17
April 24, 2002	Luncheon for faculty funded for Mellon Rich Media and Technology Infusion Projects	19
April 29, 2002	RFP help session	13

Table 7. Technology workshops and other faculty development events sponsored by the Center for the Advancement of Teaching during the 2001-2002 academic year.

The University's Information Technology Center (ITC; a computing services support office) continued to provide opportunities for faculty to hone or develop new technology skills. More detailed information, including faculty and staff attendance data and evaluations, is found in Appendix III.

<b>Information Technology Center 2000-2001</b>		
<b>Date(s)</b>	<b>Technology Workshops</b>	<b>Faculty Attendance</b>
October 16 and 23, 2000	Banner Navigation	1
October 23, 2000	Introduction to Web Design	3
October 24 and November 7, 2000, February 21, March 5, June 12, June 26, 2001	Microsoft Access	2
October 30, 2000, February 14, June 6, and June 20, 2001	Microsoft Excel	4
November 2, 2000, February 20, March 22, and June 21, 2001	Microsoft Publisher	10
November 7, 2000, February 13 and March 20, 2001	Microsoft Powerpoint	2
February 1 and May 29, 2001	Windows 98	2
February 7, May 31 and June 14, 2001	Microsoft Word	6
March 27, 2001	Introduction to Web Design with HTML	0
March 1 and June 5, 2001	Netscape Mail	1
June 6, 2001	Microsoft Excel	2

Table 8. Technology workshops offered by the Information Technology Center in 2000-2001.

<b>Information Technology Center 2001-2002</b>		
<b>Date(s)</b>	<b>Technology Workshops</b>	<b>Faculty Attendance</b>
October 16, 2001	Banner Navigation	1
November 15, 2001	Microsoft Access	2
February 20 and March 13, 2002	Microsoft Excel	0
June 28 and November 14, 2001	Microsoft Publisher	4
June 28, July 20, and October 30, 2001, March 15, 2002	Microsoft Powerpoint	4
October 9, 2001	Windows 98	1
July 6, October 17, and November 29, 2001, February 4 and March 7, 2002	Microsoft Word	2
October 22, 2001, March 19, 2002	Introduction to Web Design w/HTML	2
September 19 and October 11, 2001	Netscape Mail	0
December 18, 2001	Microsoft Windows	0

Table 9. Technology workshops offered by the Information Technology Center in 2001-2002.

## ***Building an Infrastructure to Support, Sustain, and Extend Faculty and Student Use of Technology***

As the technology survey data indicate (Appendix I), this grant has played a key role in the improvements that have been made since 1998 in the University's technology support and services. This grant also permitted the Institution to make several important hardware and software purchases, as detailed below.

### **Hardware, Software, and Other Resources**

Several hardware and software purchases, and other technology-related equipment and services have enhanced the technology infrastructure of the University in general and the Center in particular. These purchases included:

#### **2000-2001**

- SMART Board, Proxima projector, and wireless control panel for Room 501
- 15 Palm Pilots
- Nikon digital video camera and accessories
- Dell OptiPlex GX110 Pentium III computer for Dr. Stanislav's office
- iMac 800MHz TFT computer for the Center's Production Room
- Miscellaneous accessories (*e.g.*, wireless mice, mini-DVD tapes, computer supplies external Zip drives)
- On-year site licenses for access to Anlon and WebCT, Web course management systems
- Snag It software

## 2001-2002

- iMac 800MHz TFT computer for the Center's Production Room
- Software including BBEdit, Prosoft, Director, Final Cut Pro, Microsoft Office XP, and Norton Antivirus

## Center for the Advancement of Teaching Multimedia Artist

This faculty development and technology grant permitted Xavier to hire Mr. Bart Everson, a technology expert and gifted artist who has assisted faculty members to develop and implement educational and scholarly technology projects. Bart has made extraordinary contributions to Xavier University in general and the Center for the Advancement in particular.

Although a simple list of Bart's work (see below) gives an overview of the breadth of his involvement in the life of Xavier University, it does little to convey the professionalism, sensitivity to faculty concerns and abilities, patience, persistence, and technical and artistic sophistication that Bart has brought to this work.

## 2000-2001

### Multimedia production

PowerPoint to HTML conversion

Various image scanning

### Web production

Haiku of Kobayashi Issa website

(<http://xavier.xula.edu/~dlanoue/issa/>)

Shakespeare Festival website (<http://xavier.xula.edu/~bddanner/sft/>)

Web photo albums of Africa

(<http://xavier.xula.edu/~pnmoore/albums/kodak/> and

<http://xavier.xula.edu/~pnmoore/albums/konica/>)

### Print production

Various Center flyers

Image formatting for a number of faculty

### Consulting:

Web design for a number of faculty

### Video production

Frame captures from various surveillance tapes (New Orleans Police Department)

### Seminars and Workshops

INTRODUCTION TO THE WEB

INTRODUCTION TO HTML

BASICS OF WEB IMAGING

ANIMATION FOR THE WEB

USING STYLE SHEETS

USING HOMESITE

### Ongoing

Maintained Center's website

Maintained XNUG (Xavier Network Users Group); a mailing list

### Committee service

TLTR

Strategic Planning Committee

IT Certification/Technology Training Subcommittee

Web/Internet Development Subcommittee

**2000-2001**

Web production (see Table 10)

Faculty Member (department)	Activity(ies)
Dr. Pamela Waldron-Moore (Political Science)	Web photo album, Web authoring, FTP
Dr. David Lanoue (English)	Web authoring, digital camera, setting permissions
Dr. Susan Spillman (Languages)	Design document, video editing, multimedia authoring
Ms. Vera Walker (Communications)	Scanning, web design
Dr. Paul McCreary (Mathematics)	Porting program to Mac
Dr. Milton Martinez (Languages)	Web imaging and authoring
Dr. Marion Carroll (Chemistry)	Domain registration
Ms. MaPo Kinnord (Art)	PowerPoint, web
Dr. Fred Humphrey (Philosophy)	Web authoring
Dr. Michael Homan (Theology)	Web authoring
Dr. Biljana Obradovic (English)	Web authoring
Dr. Cirecie Olatunji (Education)	CD-ROM burning
Dr. James Lilly (Education)	Video editing
Dr. Roldan Valverde (Biology)	Web authoring
Dr. Chirs Doumen (Biology)	Camera
Dr. Janet Gillespie (Business)	Web authoring
Dr. Valerio deAngelis (Mathematics)	Printing
Sr. Juliana Haynes (Music)	Video editing, print imaging
Dr. Michael White (Languages)	Web radio
Dr. Mark Schlueter (Biology)	Imaging, design document

Table 10. Mr. Bart Everson's collaborative work with faculty during the 2001-2002 academic year.

Consulting

Web design for a number of faculty

Committee Service

TLTR

Strategic Planning Committee

Web Development Subcommittee

Seminars and Workshops

INTRODUCTION TO HTML

BASICS OF WEB IMAGING

USING STYLE SHEETS

MARTIN LUTHER KING & NONVIOLENCE (organized)

USING BBEDIT

USING HOMESITE

Other

Planned, implemented and maintained new website for Center

Maintained XNUG (Xavier Network Users Group); a mailing list

Created a variety of other users groups at faculty request

## Faculty Technology Liaisons

We described in the original proposal to the Foundation a plan to provide technical support at the department level for faculty members who have "... basic questions about fundamental operating systems skills, e-mail use and management, and Internet use and search techniques." These technologically oriented faculty members were referred to as *Faculty Technology Liaisons* (FLT). The *Faculty Technology Liaison Program* was a two year initiative within this faculty development and technology grant that was designed to address what Steven Gilbert of the TLT Group refers to as the "support service crisis," which simply stated is a need on campuses to support faculty in their efforts to integrate information technology into their daily work, including the teaching and learning process.

As noted in the 1999-2000 interim report

([http://cat.xula.edu/about/grants/mellon/interim\\_00.pdf](http://cat.xula.edu/about/grants/mellon/interim_00.pdf)), the FTL program has alleviated but in no way solved the faculty technology "support service crisis." As with any complex and large enterprise such as information technology, there is an on-going need for timely information about a variety of technology issues and concerns, including virus alerts, network, software, and hardware troubleshooting, day-to-day technology notices, and network policies and procedures.

To address these and other information technology needs at Xavier, an Office of Technology Administration (OTA) was recently established at the University; this office oversees the work of Xavier's Information Technology Center. The OTA has made several improvements, many of which have lessened the support service needs at Xavier. Most notable, the OTA's Associate Director of Academic Relations, a position held by Mr. Yamlak Tsega, has been tremendously helpful in supporting University, departmental, and, especially, faculty members' technology needs.

That being said, the input obtained through faculty surveys and discussions with Faculty Technology Liaisons indicated that the FTL Program played an important role in serving faculty members' technology needs. Hence, the Center for the Advancement of Teaching and the Division of Education collaborated during the 2000-2001 to support a third year of the FTL Program. A grant from the U.S. Department of Education to Xavier's Division of Education supported eight FTLs during the 2000-2001 academic year.

Faculty Member (and department)	Department(s) Served
Dr. Gurdial Arora (Mathematics)	Mathematics; Theology
Dr. Bruce Danner (English)	African-American Studies; English
Dr. Chris Doumen (Biology)	Biology
Dr. Raymond Duplessis (Physics/Engineering)	Physics/Engineering
Dr. John Fulwiler (Education)	Education
Dr. Anil Kukreja (Business Administration)	Business Administration
Dr. Scott Reese (History)	History; Political Science; Sociology
Dr. Susan Spillman (Languages)	Art; Languages; English

Table 11. Faculty Technology Liaisons during the 2000-2001 academic year.

Eighty-seven percent of the FTLs completed a survey in Spring 2001. During the course of the academic year, each FTL provided assistance to faculty an average of 3 times a week (range of 1 to 6 per week). The FTLs reported that they spent an average of 1.7 hours per week assisting faculty (range of 1.5 to 3 hours per week). The FTLs assisted faculty with:

- Microsoft Office software applications
- Netscape mail
- Web search tools and other Web navigation skills
- Web page authoring
- Local area networks
- File transfer protocol software

Since 1998, the first year of the program, several profound changes have occurred that have impacted faculty and student access to and use of information technology. Not the least of these is the Andrew W. Mellon Foundation's support of the FTL Program. As noted by one FTL,

" For the time being, the FTL mission as a means of assisting technologically novice faculty has been accomplished. We're working with consistent, reliable machines that faculty have learned to use effectively..."

"... my colleagues are using technology efficiently and with confidence. Their understanding and implementation of Netscape Communicator is high, and people are using departmental distribution lists on a daily basis. Not only that, but the consistency of the equipment department-wide has enabled my colleagues to help each other and discuss technology issues from a common perspective."

Clearly, the FTL Program came at a critical time in the evolution of information technology use at Xavier University. The need for support of faculty use of information technology will not disappear with the end of the FTL Program. In fact, the need may indeed increase as new technologies evolve and new information about the place of information technology in the teaching and learning process is obtained. Just such an evolving approach to the FTL Program was noted by an FTL:

"If the FTL program is to continue, I believe it should begin shifting its focus from a "bringing faculty out of the dark ages" program into a "bridge to the 21st Century" mission.... The revamped mission statement from last summer is a good start, but I suggest that FTLs focus on a presentation dealing with (and tailored to) a locally departmental issue or problem, or teaching potential. This way we can schedule a presentation within a faculty meeting, perhaps, while beforehand soliciting ideas and interests about a technological tool/problem that people want to know more about."

As noted in the Overview of this report, the Center has taken steps to implement new technology initiatives that focus on the needs of the academic department. Specifically, a three-year grant funded by the United Negro College Fund will support a meaningful and effective infusion of technology into the curriculum at Xavier University. This will be accomplished through the formation of communities in which small groups of faculty will work together to develop technology-enhanced curricula. A structured, faculty-driven program with a distinct planning process and an intensive summer institute will encourage a thoughtful and considered approach. Technology will be deployed in a manner that is appropriate, effective, and sustainable, and faculty will assess and critically evaluate their work.

## **Information Technology Center**

In addition to what has been noted earlier in this report regarding the Office of Technology Administration and the Information Technology Center, we would like to make brief mention of the efforts at Xavier to develop and implement a new strategic information technology plan.

Over the past several months, the Information Technology Strategic Planning Committee, a group of faculty and staff representing academic and administrative units of the University and chaired by Mr. George Baker, Associate Vice President for Technology Administration, has sought to update and expand the 1997 Strategic Plan for Technology Implementation. A draft of the current Strategic Plan for Technology Implementation is found in Appendix III.

In revising the strategic plan, the committee has focused its research and discussions on several questions, issues, and policies, including:

- Creation of a comprehensive Internet development strategy
- Student information technology certification program
- Technology training center
- Laptop program for students
- Wireless networking

- Web portal
- Replacement process for hardware
- Equipping more classrooms with multimedia and Internet capabilities
- Information technology needs assessment.

Two of these points of discussions—the student information technology certification program and the technology training center—were the focus of a subcommittee report prepared in Spring 2001. These two research initiatives were subsequently described in the August 2001 "Teaching, Learning, and Technology Initiatives" grant proposal to the Foundation. We are grateful to the Andrew W. Mellon Foundation to have received funding for the grant; the two research initiatives commenced in January 2002. A report on these research initiatives will be submitted to the Foundation in Fall 2002.

During the 2001-2002 academic year, a Web Development Subcommittee of the Strategic Planning Committee was established. This subcommittee has focused on the following:

- Redesigning the University website
- Implementing a Web portal
- Hiring a Web Developer
- Implementing a Web content management system.

The work of this subcommittee is on-going and, hence, a report has not yet been prepared. The subcommittee has successfully completed the search for a Web Developer, a staff position in the Office of Technology Administration; the Web Developer joined Xavier in June 2002.

We have chosen to highlight this work of the Strategic Planning Committee because we believe it illustrates a new era of collaboration, planning, and implementation of information technology efforts at Xavier. Moreover, this work is clearly a result of the vision of Xavier's faculty, staff, and administration for a thoughtful, meaningful, and successful integration of information technology into the very fabric of the Institution.

We hasten to add that without the support and vision of the Andrew W. Mellon Foundation, much of the innovative and hard work of Xavier's faculty to integrate information technology into the teaching and learning process simply would not have occurred. Thus, Xavier's students—its most treasured asset—are immediate beneficiaries of this support and vision.

## **Distance Education**

Xavier University continues to be a residential campus serving a traditional student population of 18-22 year olds. Like so many institutions worldwide, Xavier's administration and faculty are sincerely interested in examining what place Xavier University has in educating students via distributed learning technologies. The best indication of this interest is in the hiring of a Coordinator of Distance Learning in summer 2002.

In Fall 2000, the National Science Foundation extended its cooperative agreement for Xavier's Model Institutions for Excellence program by renewing a three-year grant totaling \$7.3 million. The additional funding has supported several Institutional and programmatic goals, including the expansion of Xavier's video conferencing capabilities in support of distance learning initiatives.

Although the campus technology infrastructure and services have developed in extraordinary ways in the past 5 years, Xavier has developed neither a plan nor the infrastructure to support an extensive distance education program. The Institution is in a position to begin asking questions such as:

1. Is there a market for Xavier's distance education programs?
2. What courses or areas of study should be delivered to students through a distance education program?
3. How should students' access to information technology be determined? And how do we assess students' level of information technology skills and knowledge before they enroll in a distance education course?
4. Are there issues related to faculty compensation – time or otherwise – that deserve consideration?

5. What support is needed to assist faculty in developing and delivering a course on-line?
6. What support is needed to students who enroll in an on-line course?

In Spring 2000, the Visiting Team of the Southern Association of Colleges and Schools indicated the following in its final report to Xavier:

Committee suggests that a detailed description be formulated that provides clear and explicit goals concerning Distance Learning Programs (Criteria 4.5, page 39). Further, the Committee suggests that the Institution demonstrate that it achieves these goals and that all Distance Learning Programs are effective and comply with all applicable Criteria.

If the Institution decides to pursue Distance Learning Programs the Committee suggests that a detailed description be formulated that provides clear and explicit goals concerning these Program(s) (Criteria 4.5, page 39). Further, the Committee suggests that the Institution assess these goals on a regular basis.

The Southern Association of Colleges and Schools is currently reviewing its principles and requirements for accreditation (see the Proposed Principles and Requirements for Accreditation at <http://www.sacscoc.org/COC/accrdoc.PDF>). It is expected that the new requirements will require even greater attention to all aspects of distributed learning, including planning, implementation, and assessment.

When considered together, the suggestions and the pending changes to the SACS criteria for accreditation make it imperative that the University thoughtfully and carefully build a foundation on which a successful distributed learning program may be offered. Hiring an experienced and knowledgeable Coordinator of Distributed Learning is an important first-step toward these ends.

### ***Faculty Participation***

As noted in the 2000 interim report, this faculty development and technology grant has made available to the Xavier community a host of relevant and important resources, from workshops, travel grants, teaching, research, and service opportunities, to computer hardware and software, and expert technology support staff. Additionally, this grant has supported Xavier's faculty members by providing for release time from teaching and stipends as compensation for projects pursued under the auspices of this grant.

#### **2000-2001**

During the 2000-2001 academic year, over 55% of Xavier's faculty members were involved in one or more of the Center's activities (Table 12).

Department	# of faculty involved in activities	Total # of faculty in the department	% of faculty involved in activities
African American Studies	2	2	100%
Art	2	5	40%
Biology	12	25	28%
Business	9	9	100%
Chemistry	9	24	38%
Communications	8	11	73%
Computer Science	3	7	43%
Deciding Majors	0	1	0%
Education	9	15	60%
English	11	18	61%
History	6	7	86%
Languages	7	7	100%
Mathematics	5	14	36%
Music	1	6	17%
Pharmacy	16	34	47%
Philosophy	6	6	100%
Physics/Engineering	3	7	43%
Political Science	2	3	67%
Psychology	4	7	57%
Sociology	2	2	100%
Theology	6	6	100%
TOTAL	123	215	57%

Table 12. Number and percent of faculty members per department involved in Center activities during the 2000-2001 academic year.

We observed an increase of 25% in the number of faculty who participated in Center activities during the 2001-2002 academic year. During the 2001-2002 academic year, we offered more frequent workshops, brown bags discussions, and other Center events that spanned a broad range of topics from discussions of President Bush's new education bill to the use of electronic communication in the teaching and learning process (Table 13).

## 2001-2002

Department	# of faculty involved in activities	Total # of faculty in the department	% of faculty involved in activities
African American Studies	3	3	100%
Art	3	5	60%
Biology	20	25	80%
Business	9	10	90%
Chemistry	19	24	79%
Communications	11	13	85%
Computer Science	6	7	86%
Education	12	12	100%
English	15	16	94%
History	7	8	88%
Languages	7	7	100%
Mathematics	11	15	73%
Music	5	6	83%
Pharmacy	28	34	82%
Philosophy	6	6	100%
Physics/Engineering	3	7	43%
Political Science	3	3	100%
Psychology	5	7	71%
Sociology	2	3	67%
Theology	7	7	100%
TOTAL	182	218	83%

Table 13. Number and percent of faculty members per department involved in Center activities during the 2001-2002 academic year.

### ***Faculty Reports***

As in Year I, faculty members supported by this grant were required to submit progress and final project reports. These project reports assisted the Center in determining the degree to which project objectives were reached. They also provided the Center with a sense of how the project affected faculty professional development and student learning. The reports are available in the Center for the Advancement of Teaching.

### ***Faculty Surveys***

The evidence gathered during the three-year course of this faculty development and technology grant is described in greater detail here. This evidence has served as the basis of the emergent themes and lessons learned described in the overview of this report.

### **Faculty and Student Technology Use Survey**

A survey administered to all faculty members in 1998 and again in 2001, measured, among other variables, faculty use of information technology (Appendix I). A comparison of the results obtained in 1998 and 2001 showed significantly large increases in the number of faculty who:

1. Regularly use technology for collaboration, communication, and research and integrate these processes into classroom instruction
2. Incorporate Web-based instruction into their course work.

The results also indicate that there is a modest increase in the number of faculty members who regularly use CD-ROM or on-line research resources, e-mail, and electronic bulletin boards such as WebBoard in the classroom.

The level of faculty interest in using computer technology in classrooms was high in 1998, and has continued at a high level through 2001. Nearly 90% of our faculty do not consider themselves beginners in the use of basic applications such as word processors and Web browsers. Most Xavier faculty use some form of technology and feel encouraged by the university to use technology.

Word processors, research resources, spreadsheets, and presentation software are the most commonly used forms of technology by Xavier faculty members. Regular classroom integration of information technology for collaboration, communication and research is practiced by more than 75% of faculty. Despite an increase since 1998, less than one-half of Xavier's faculty members integrate the Web into their courses. Most faculty members never use listservs, chat, or bulletin boards.

As concerns information technology, faculty members most commonly require their students to use word processors, research resources (*e.g.*, CD-ROMS or on-line resources), and electronic mail. Since 1998, there has been a modest increase in, for example, student use of e-mail as part of classroom instruction.

Over the three-year course of this grant, the barriers to using technology such as insufficient technical support and equipment have been significantly reduced. However, approximately one-half of Xavier's faculty members still consider those items to be barriers. In addition, faculty members indicated that an inadequate infrastructure has remained a barrier to their using Web-based instruction in classrooms.

The results of the technology survey are presented in Appendix I. The survey results and an item-by-item analysis are also on the Center's website at: <http://cat.xula.edu/scholarship/ftu/>.

## **Impact on Teaching and Learning Survey**

Near the end of the current grant period, a survey was administered to all faculty members who participated in Center's activities during the past three years. The survey was designed to help Center staff understand the impact of the Center's activities on teaching and student learning. It is important to note that the population surveyed was a subset of the entire university faculty, since the purpose of the survey was to measure the impact of faculty members' participation in Center activities.

The results indicate that faculty members who responded to the survey, to a greater extent now than before their participation in Center activities:

1. Have integrated new information technology and assessment practices (*e.g.*, performance-based assessment) into their teaching
2. Developed knowledge, understanding, and collegial practices
3. Perceive improvements in student behaviors with regard to learning and classroom experiences.

A correlation analysis was particularly helpful in demonstrating the interconnectedness of faculty teaching and assessment practices, successful faculty development, and perceptions of impact on student learning.

Two particularly noteworthy cases deserve attention:

1. Faculty members reported that, as a result of their participation in Center activities, they reflect more now than before on their effectiveness as teachers. This finding is significantly correlated with faculty members' deeper understanding of course content and their requirement of students to use information technology.
2. Faculty members also reported that they discuss learning and teaching issues with departmental colleagues more as a result of their participation in Center activities. This finding is significantly correlated with faculty members' increased understanding of barriers to students' learning, knowledge of institutional issues, and confidence as teachers.

The analysis of the data from the Impact on Teaching and Learning Survey is found in Appendix II.