Technology, Teaching, and Learning at Xavier University
An Interim Report to the Andrew W. Mellon Foundation

The timing of the award of the technology grant from the Andrew W. Mellon Foundation to Xavier University and its Center for the Advancement of Teaching (henceforth, the Center) was especially fortuitous. Since the early part of this decade, Xavier has taken significant steps toward building a technology infrastructure that serves its diverse academic and administrative needs. The infrastructure has matured to such a degree that all but two campus buildings are wired for the campus network, most faculty members have a networkable computer at their desktops, and every faculty member, staff, and student has a university e-mail account. An integrated system for the administrative and academic management of the University is currently being phased-in in preparation for the year 2000. Finally, Xavier's network services are being significantly enhanced by the implementation of new servers for mail, Web, administrative, and academic applications.

In the early part of this decade, new faculty development and technology initiatives aimed at supporting faculty use of technology in the classroom were launched. As was common in most institutions of higher learning, these initiatives attracted the "early adopters" of computers to develop and integrate computer and information technologies into the curriculum. Since the launch of these initiatives, we have witnessed the birth of the World Wide Web, greater global dependence on computer technologies, and profound changes in higher education attributed, at least in part, to the growth of technology. These changes have, in turn, inspired even the most hesitant of faculty members to explore the potential of educational technologies. As the results of a recent faculty survey indicated (see page 2), a significant proportion of Xavier's faculty members are eager to integrate information and computer technologies into the teaching and learning process.

Finally, the timing of the award coincided with the beginning of a comprehensive self-study at Xavier. As noted in the introduction to the self-study:

> In determining the goals of the self-study, the Steering Committee identified one major issue as significant to the enhancement of the University. This issue is technology and its integration into the teaching and learning process. During the self-study, the University community worked together to (1) develop a shared vision of the role of technology in the teaching and learning process, (2) improve student access to technological resources, and (3) use technology to improve University administrative processes.

These three factors—growth of a technology infrastructure, broad interest among the faculty to use educational technologies, and an institutional vision for the role of technology in academic and administrative process—combined with the award of the technology grant from the Andrew W. Mellon Foundation, form a unique set of

conditions for effective, innovative, and relevant uses of technology for improved student learning on Xavier's campus.

The award of the grant in October 1998 was coincident with the administration of a technology use survey developed by the Southern Education Foundation (SEF) as a part of the Gateway 21 Project. Approximately 45% of Xavier faculty members completed the survey. The staff of the Center and the members of the Teaching, Learning, and Technology Roundtable (TLTR), which serves an advisory role for this grant, determined that the survey addressed two key questions that are relevant to the initiatives supported by this technology grant. These key questions are:

1. *To what degree are faculty members using information technologies?*
2. *What barriers exist to incorporating computer and information technologies into the classroom?*

The survey results indicated that approximately 60% of the respondents use computer and information technologies in the classroom. The technologies most widely used include word processing applications (used by approximately 78% of the respondents) and computer-based research tools such as CD-ROM and online resources (used by approximately 53%). Equally noteworthy are the results that indicate the degree to which other technologies are *not* being used.

- Over 70% of the respondents never require students to use spreadsheets;
- Over 60% never require students to use presentation software;
- Over 80% never require students to use software for collaborative work; and
- Over 45% never incorporate the World Wide Web into instruction.

Many of the faculty technology projects that have been supported by this grant to date have been especially effective in increasing the use of software for collaborative work and the World Wide Web (see the sections titled **Implementation of a Web-Based Conferencing System** and **Faculty Technology Projects**, respectively)

The survey also provided a clear picture of the barriers that prevent the respondents from successfully integrating computer and information technologies into the classroom. These findings are presented below in Table 1.

Table 1. Survey results regarding barriers to using technology in the classroom.

Barriers Associated with Incorporating Computer and Information Technologies into the Teaching and Learning Process	
Barrier (Survey question #)	**Identified by Approx. % of the Survey Respondents**
Network infrastructure (6)	66%
Desktop computers (7)	71%
Technical support (8)	70%
Training (9)	46%

To date, the Center has implemented initiatives aimed at addressing three of the four barriers that currently exist. The Center is not directly involved with the management of the university's network infrastructure. However, the Center's staff and faculty are indirectly involved in its planning and implementation. Ms. Janice Florent, Ms. Elizabeth Rhodes, and Mr. Bart Everson are members of the Technology Strategic Planning Committee—a committee responsible for designing a long-range plan for technology. Dr. Todd Stanislav and Mr. Bart Everson are members of TLTR—a committee that addresses both academic and administrative technology issues. Both committees routinely provide input to the Office of Technology Administration (OTA) and Director of the Information Technology Center (ITC). The OTA and ITC are currently implementing a plan designed to significantly improve connectivity, reduce network interruptions, and introduce new technology tools to the university community.

The Center has used grant funds to support several initiatives that will address the other three barriers. These initiatives are described elsewhere in the report (see Table 2).

Table 2. Reference guide to specific topics in this report.

Initiatives Aimed at Removing the Barriers Associated with Incorporating Computer and Information Technologies into the Teaching and Learning Process	
Barrier	**Discussion presented in this report**
Network infrastructure	Not addressed in this report
Desktop computers	Building an Information Technology Infrastructure (page 17)
Technical support	1. Technology Support Program (page 11) 2. Multimedia Specialist (page 16)
Training	1. Multimedia Specialist (page 16) 2. Workshops (page 14)

Finally, the response to one survey question, in particular, reaffirms the important role the Center has in promoting effective, relevant, and innovative uses of information technology. The survey question (# 32) asks:

> *To what extent are you interested in incorporating computer technology in your classes?*

Over 95% of the respondents indicated an interest in using computer technology in their classes; over 65% were *very* interested. This single datum, when viewed in the context of the other data referred to in this report, paints a picture that is undoubtedly characteristic by virtually every institution of higher learning. That picture describes a growing interest by faculty members to integrate computer and information technologies into the curriculum. However, when trying to do so, they encounter significant institutional and knowledge barriers. (It should be noted here that, although students did not take this survey, there is every indication on Xavier's campus that the students are interested in

learning via computer and information technologies.) The challenge to eliminate the barriers is great. The award of the technology grant to Xavier University and its Center for the Advancement of Teaching will assist in meeting this challenge. What follows is description of the grant activities during the first year of the grant. This period includes a portion of the fall 1998 semester, the spring 1999 semester, and the summer 1999. The grant activities during the fall 1999 semester will be addressed in the 1999-2000 interim report.

Year I Grant Initiatives

During the 1998-1999 academic year, the Center launched several initiatives supported by the technology grant, including:

- Faculty technology projects;
- Implementation of a web-based conferencing system;
- Technology support program;
- Workshops, technology fair, seminar, *etc.*; and
- Hardware and software upgrades.

A financial report is found in Appendix I.

Faculty Technology Projects

Spring 1999. The Center and TLTR issued a request for proposals (RFP) in the fall 1998 semester (a copy of the RFP is in Appendix II). Sixteen project proposals were submitted and all were approved for funding (Table 3). The faculty members supported during the spring 1999 semester represented nine departments. The projects ranged from using spreadsheets for recording grades, to holding virtual office hours via *WebBoard*, incorporating e-mail into courses, and creating course websites. Of the sixteen projects, most involved the development of course websites or integration of *WebBoard* into a course. At least 29 courses offered at Xavier will be affected by these projects.

Table 3. Faculty projects during the spring 1999 semester. *URL (Uniform Resource Locator).

Faculty Member and Department	Project (including the URL*)	Courses Affected
Dr. Randy Bates (English)	Use of Virtual Office hours and *WebBoard*	WRIT 1050, Introduction to Creative Writing ENGL 1020, English Composition and Rhetoric ENGL 3150, Advanced Writing
Dr. Deborah Bordelon (Education)	Use of Internet resources, e-mail, and *WebBoard* in courses; develop a course website	EDUC 2030, Children's Literature EDCI 5140, Teaching Reading in Content Areas EDCI 5440, The Exceptional Child EDCI 5820, Advanced Seminar in Children's Literature
Dr. Levon Bostanian (College of Pharmacy)	Use electronic exam grading and grade recording systems; integrate multimedia into teaching; http://www.xula.edu/~lbostani/	PHCY 3150, Pharmaceutical Calculations PHCT 4480, Biopharmaceutics and Basic Pharmacokinetics
Dr. Ashish Chandra (College of Pharmacy)	Develop Internet search tools; student presentations made using PowerPoint; http://www.xula.edu/~achandra/	PHAD 4530, Drug Marketing PHAD 4753, Research in Pharmacy Administration
Dr. Thomas Coe (Business Administration)	Develop course websites; http://www.xula.edu/~tcoe/	FINC 3160, Advanced Financial Management FINC 3170, Investments
Dr. Bruce Danner (English)	Develop course websites and use *WebBoard* in courses; http://www.xula.edu/~bddanner/	ENGL 1020, English Composition and Rhetoric ENGL 1023HN, Introduction to Literature (Honors) ENGL 3050, Shakespeare
Dr. Chris Doumen (Biology)	Make interactive image maps of histology samples on course website; http://www.xula.edu/~cdoumen	BIOL 3350, Anatomy and Physiology BIOL 3450, Histology
Dr. John Fulwiler (Education)	Improve student computer literacy; use *WebBoard*	EDCG 5500, Instructional Technology
Dr. Shamsul Huda (History)	Use multimedia and e-mail in a course; http://www.xula.edu/~shuda/index.html.gz	HIST 3001, History of American Law
Dr. Anil Kukreja (Business Administration)	Develop course website; put PowerPoint presentations on-line; http://www.xula.edu/~akukreja/	BSAD 2055, Quantitative Analysis BSAD 3195, Computer Based Information Systems
Dr. Tarun Mandal (College of Pharmacy)	Develop course website; use an electronic grade book	PHCT 4050, Pharmaceutics I PHCT 4060, Pharmaceutics II

Dr. Nancy Martino (Communications)	Integrate e-mail discussions and the web into a course http://www.xula.edu/~nmartino/	EDSC 2012, Speech Pathology
Dr. Joe Melcher (Communications)	Integrate software and the web into courses	SPTH 2061, Physics of Music Lab SPTH 3535, Hearing Testing
Dr. Carmen Rogers (Languages)	Assessment of technology	SPAN 1010, Elementary Spanish I
Dr. Susan Spillman (Languages)	Use websites in courses; develop a CD-ROM; http://www.xula.edu/~sspillma/#Courses	FREN 2010, Intermediate French I FREN 3012, Conversational French
Sr. Mary Ann Stachow (Theology)	Post student assignments on course websites; http://www.xula.edu/~mstachow/	THEO 1010, Hebrew/Christian Scriptures THEO 2000, Hebrew Scriptures

Table 3 continued. Faculty projects during the spring 1999 semester. *URL (Uniform Resource Locator).

Summer 1999. The Center issued a second RFP in the spring 1999 semester (see the spring 1999 Newsletter in Appendix III). Eight faculty members representing seven departments were supported by the grant to develop technology projects during the summer; only one project was not completed. All but one of the projects involved the development of course websites; one project involved the development of an interactive CD-ROM. These projects will be integrated into at least fourteen courses at Xavier (Table 4).

Table 4. Faculty projects during the summer 1999. One project was not included in the data, as it was never developed. *URL (Uniform Resource Locator).

Faculty Member and Department	Project (including the URL*)	Courses Affected
Dr. Ashish Chandra (College of Pharmacy)	Develop a course website; http://www.xula.edu/~achandra/	PHAD 4350, Professional Communications
Dr. Valerio De Angelis (Mathematics)	Make substantial changes and additions to a mathematics website; http://www.mathnerds.com/	No specific course. This website is a free service providing help in many areas of mathematics.
Dr. Anil Kukreja (Business Administration)	Develop course website; http://www.xula.edu/~akukreja/production/index.htm	BSAD 3190, Production and Operations Management
Dr. Nancy Martino (Communications)	Develop a course website and integrate *WebBoard* into courses; http://www.xula.edu/~nmartino/#Courses	SPTH 4010, Language Disorders SPTH 4610, Senior Clinical Practicum
Dr. Scott Reese (History)	Develop course websites http://www.xula.edu/~sreese/1030.htm	HIST 1030, World Civilizations to 1500 HIST 1040, World Civilizations from 1500
Dr. Mark Schlueter (Biology)	Develop a website for use in several courses; http://www.xula.edu/~maschlue/	BIOL 2141, Zoology BIOL 2141LB, Zoology Laboratory BIOL 3110, Genetics BIOL 3110, Genetics Laboratory
Dr. Susan Spillman (Languages)	Develop a CD-ROM	FREN 1010, Elementary French I FREN 1020, Elementary French II FREN 2010, Intermediate French I FREN 2020, Intermediate French II

Assessment of Projects. The assessment of the technology projects is the responsibility of the funded faculty members. Each RFP asks the faculty members to provide information on two important aspects of the project related to assessment, including:

> Explain the educational goal(s) you intend to accomplish in this project, using the technology described; and
>
> How will you assess the effectiveness of your project?

In the evaluation of a proposal, this and other information provided by the author of the proposal is considered.

Additionally, each funded faculty member is required to submit progress and final reports. (These reports are available in the Center.) Staff in the Center developed an on-

line form that can be used directly by the faculty members or simply serve as a model for project reports (see Appendix II for a copy of the form). Two questions address the project assessment:

> What specific objectives were you trying to achieve using this technology?
>
> How will your project enhance student learning, and how will you measure its success?

Finally, in an attempt to determine the long-term impact of these projects on the teaching and learning process, Ms. Gayna Stevens-Credle, the Center's Instructional Design Specialist, has developed surveys that will be sent to faculty members who received grant support. These surveys will be distributed in early November 1999 to faculty members who received funding from the grant during the spring and summer 1999. The results of these surveys will be provided in the Year II interim report.

Implementation of a Web-Based Conferencing System

WebBoard Conference is a web-based conferencing software application purchased by the Center in connection with the *Sacred and Secular in the African Americas*, a project also funded by the Andrew W. Mellon Foundation. This conferencing system offers users several advantages over a conventional e-mail system such as *Open Mail*, Xavier's current e-mail system. Perhaps the two most important features that make *WebBoard* particularly useful in classes are the abilities to see a "thread" of related messages and replies arranged as a scrollable document, and to hold "virtual" office hours via a live "chat" feature. A graphical comparison of *Open Mail* and *WebBoard*, as seen by the user at the desktop, is provided below in Figures 1 and 2.

Figure 1. A screen shot of the *Open Mail* interface. Note the list of messages subject header, sender ID type and date.

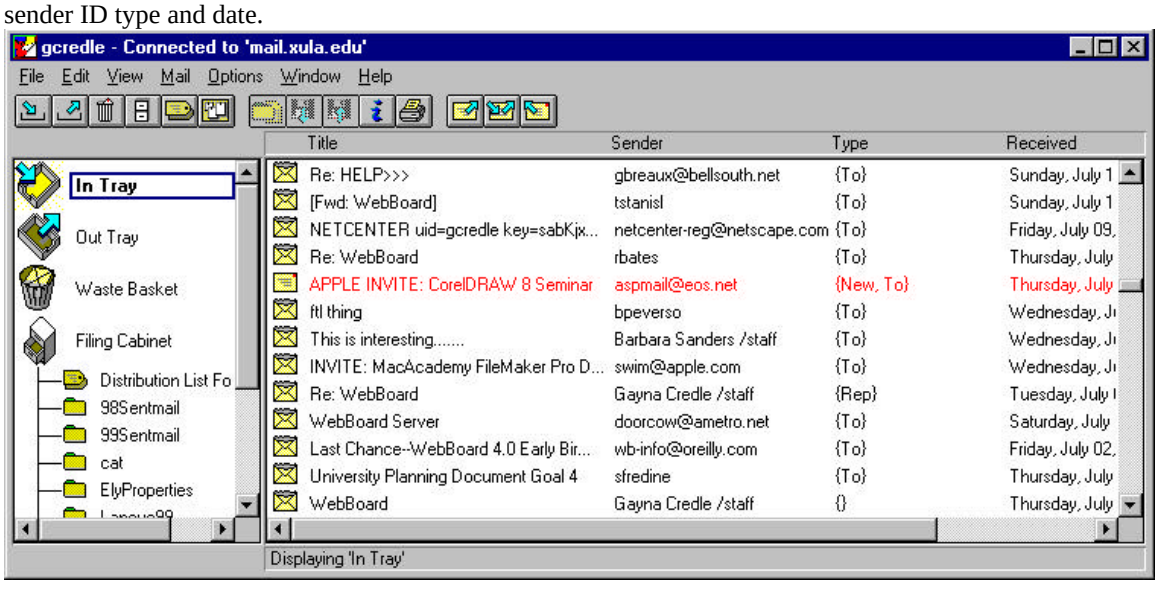
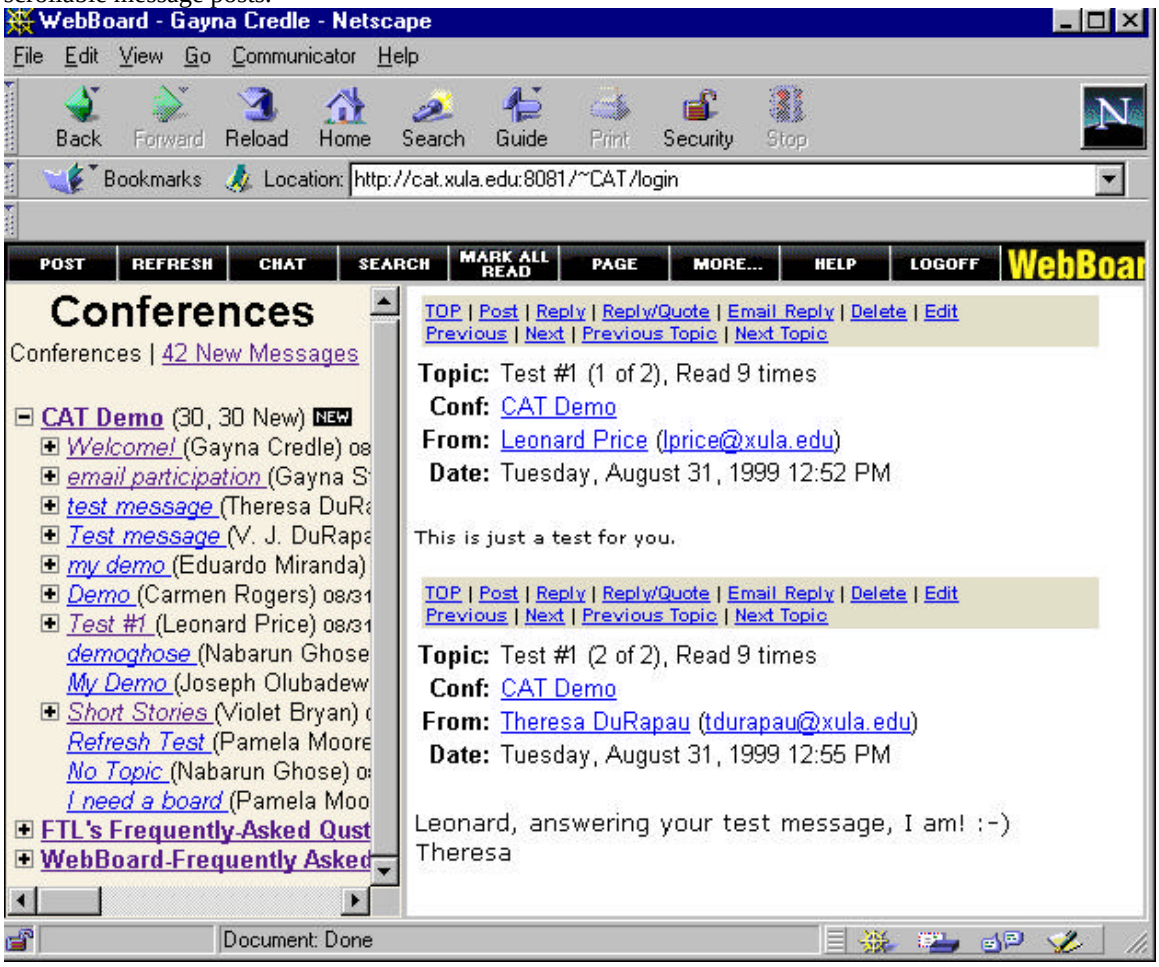


Figure 2. A screen shot of the *WebBoard* interface. Note the frames, expandable list indicator (+), and scrollable message posts.



Use of WebBoard *on Xavier's Campus*. *WebBoard* was first introduced in the classroom in January 1998 (Table 4). One faculty member in the History Department, who, incidentally, was also one of the authors of the *Sacred and Secular* project, utilized *WebBoard* for conducting extended discussions of course topics, as well as for holding virtual office hours. The staff of the Center also used a board to discuss Center-related issues and initiatives. In the following fall 1998 semester, classroom use of *WebBoard* increased to include six faculty members from six departments (Table 5).

Table 4. *WebBoard* use in spring 1998 semester.

Discipline	Faculty Member or Academic Unit
History	Dr. Jonathan Rotondo-McCord
Center initiatives	Center for the Advancement of Teaching

Table 5. *WebBoard* use in fall 1998 semester.

Discipline	Faculty Member or Academic Unit
Center initiatives	Center for the Advancement of Teaching
Chemistry	Dr. Vincent Ginnamore
Communications	Mr. Arnold Crump
Education	Dr. John Fulwiler
English	Dr. Randy Bates
History	Dr. Jonathan Rotondo-McCord
Philosophy	Dr. Fred Humphrey

An upgraded version of *WebBoard* was introduced in January 1999. During the spring 1999 semester, 15 faculty members were using the electronic conferencing system in the teaching and learning process (Table 6). During the summer 1999 session, five faculty members integrated *WebBoard* into five courses (Table 7).

Table 6. *WebBoard* use in spring 1999 semester.

Discipline	Faculty Member or Academic Unit
Center initiatives	Center for the Advancement of Teaching
Chemistry	Dr. Vincent Ginnamore
Communications	Dr. Fred Bales, Dr. Chris Campbell, Mr. Arnold Crump, Ms. Kim LeDuff, Ms. Stephanie Thomson, and Ms. Vera Walker
Education	Dr. Deborah Bordelon, Dr. John Fulwiler, Ms. Janice James, Dr. Cirecie Olatunji, and Dr. Charles Sevick
English	Dr. Randy Bates and Dr. Bruce Danner
History	Dr. Jonathan Rotondo-McCord

Table 7. *WebBoard* use in summer 1999 session.

Course and Course Number	Discipline(s)	Faculty Member or Academic Unit
Introduction to Characteristics & Study of Gifted Individuals; EDCI 6400	Education	Dr. Charles Sevick
Methods of Teaching the Gifted; EDCI 6410	Education	Dr. Deborah Bordelon
Vocational and Transition Services; EDCI 6055	Education	Dr. John Fulwiler
Instructional Technology; EDCG 5500	Education and Computer Science	Dr. John Fulwiler, Dr. Rosalind Hale, and Dr. John Mason
Special Topics; EDCI 5800	Education and Chemistry	Dr. Mark Thomson

Training Faculty Members and Students to Use WebBoard. During the 1998-1999 academic year, faculty members received exclusive one-on-one training by the Center's Instructional Design Specialist, Ms. Gayna Stevens-Credle. Now, with increased use of the technology by more faculty members, the Center will offer *WebBoard* workshops to train faculty to use this technology.

Student Assessment of WebBoard. A survey designed by Drs. John Fulwiler and Deborah Bordelon (Division of Education) was administered to students enrolled in three Division of Education courses—Teaching Reading in the Content Area (Undergraduate EDSC 4150 and Graduate EDCI 5140), and The Exceptional Child (EDCI 5440).

Based on the survey results, student perceptions of *WebBoard* can be categorized as follows:

- Training;
- Organization and management;
- Network; and
- Attitudes toward *WebBoard*.

Training. Students expressed particular interest in receiving handouts and periodic in-class review of the mechanics of using *WebBoard*. They also requested having more *WebBoard* assignments.

Organization & Management. Students requested having a set time when online chat would occur. They also suggested that the electronic board be periodically organized so as to reduce "clutter."

Network. Students were very concerned about the university's inability to provide uninterrupted network services.

Attitudes. Students were generally complementary of *WebBoard* and its integration into the courses. They enjoyed the convenience of submitting assignments at anytime and interacting online with their classmates. Last, they appreciated the experience of using the technology.

The adoption of *WebBoard* just twenty months ago was an experiment in using an electronic conferencing system to promote student-to-student and student-to-faculty dialogue outside of the traditional classroom setting. Until this experiment began, electronic means of communication between faculty and students had been sporadic and technically cumbersome. The adoption of *WebBoard* launched a new era in electronic communication at Xavier. Since its initial implementation, there has been a steady increase in both the interest and use of this technology. The support offered by the Andrew W. Mellon Foundation has made *WebBoard* a success at Xavier.

Technology Support Program

Faculty Technology Liaison (FTL) Program. As noted previously in the report, the SEF survey results indicated that the lack of technical support was an impediment to incorporating computer and information technologies into the teaching and learning

process (see Table 2). Prior to the administration of the survey and at the time when the grant proposal was written, the faculty, staff, and administration of Xavier University had begun to recognize the ineffectiveness of the technology support mechanism. To address this inadequacy, the Center, with support from this grant, has implemented a technology support program that utilizes technologically capable faculty members. This program, the Faculty Technology Liaison (FTL) Program, began in spring 1999 with 15 faculty volunteers from 13 departments. The names of the FTLs and department(s) each FTL served are listed below in Table 8.

Table 8. Spring 1999 Faculty Technology Liaisons and the department(s) each served.

Faculty Technology Liaison	Department(s) Served
Dr. Gurdial Arora	Mathematics
Dr. Ashish Chandra	College of Pharmacy
Dr. Shifa Cheng	Chemistry
Mr. Arnold Crump	Communications
Dr. Bruce Danner	English and African American Studies
Dr. Valerio De Angelis	Theology
Dr. Chris Doumen	Biology
Dr. John Fulwiler	Education
Dr. David Hogue	Psychology and Sociology
Dr. Anil Kukreja	Business Administration
Dr. John Mason	Music
Dr. Scott Reese	History and Political Science
Dr. Daniel Sarpong	College of Pharmacy
Dr. Susan Spillman	Languages and Art
Dr. Jie Yao	Physics/Engineering

Faculty Technology Liaison Roles and Responsibilities. An initial description of desired computer skills for all faculty members was given in the grant proposal in the section titled "Technology Skills: Towards a Faculty 'Core Curriculum.'" This description covered four main skill areas: Windows or Mac operating systems, desktop applications (Microsoft Office), e-mail, and web browsers. The FTLs are fluent in these four skill areas so that they can assist departmental colleagues in learning needed skills. A list of general guidelines were established in order to give clarity to the roles and responsibilities of the FTLs, as well as to define the limits of the FTLs. The general guidelines follow.

- FTLs should be required to devote no more than three hours per week assisting colleagues;
- assistance should take the form of teaching a colleague a necessary skill, rather than simply performing a task for a colleague;
- FTLs should encourage colleagues needing repeated assistance in basic computer skills to attend appropriate ITC and Center workshops;
- FTLs may request that colleagues set an appointment for assistance; FTLs are not be expected to help colleagues "on demand" if class preparation, office hours, or other

departmental, university, or personal responsibilities would be thereby delayed or compromised; and

- FTLs should in no circumstances be expected to assist colleagues off-campus (*i.e.*, in a colleague's home).

Initial Assessment of the FTL Program. The spring 1999 FTLs completed midterm and final reports (copies of the on-line form used are found in Appendix II). These reports are summarized below.

During the spring 1999 semester, each FTL provided assistance an average of 2.4 times per week (range of 1 to 6 times per week). The average was slightly higher (2.7) at mid-semester. Each FTL spent approximately 1.5 hours per week addressing their colleagues' technology questions and problems (range of 0.5 to 3 hours per week). The average time spent by mid-semester was slightly lower (1.4 hours per week).

The technology support provided by the FTLs during the spring 1999 semester can be divided into five categories. The following categories are listed from 1 to 5, with category 1 being the most frequent FTL activity.

1. Provide e-mail assistance.
2. Install software and provide application assistance. Software examples are Microsoft Word, PowerPoint, and Excel.
3. Provide assistance to solve printer problems associated with file extension and file sharing conflicts.
4. Contact the Information Technology Center (ITC) for information about network problems.
5. Create web pages and assist with uploading and setting permissions.

The survey was also used to identify obstacles that FTLs perceive their colleagues having as they integrate technology into their academic endeavors. The obstacles noted as being most significant include the reliability of campus network services, and the need to upgrade the hardware and software used by faculty at their desktops. Unfortunately, these obstacles lie outside the range of responsibilities assigned to the FTLs.

The survey was a medium through which the FTLs were asked to propose solutions to faculty technology needs. The proposed solutions are listed from 1 to 7, with solution 1 being the most frequent.

1. Faster response from ITC personnel.
2. Provide information about and access to software upgrades.
3. Improve the university's technology infrastructure, including a more reliable server and newer computers.
4. Support more FTLs, especially in the larger departments.
5. Increase faculty participation in technology workshops.
6. Encourage FTLs to offer technology workshops to colleagues.
7. Have more faculty and staff in the Center for the Advancement of Teaching.

Finally the FTLs made suggestions for improving the FTL Program. The suggestions are listed below from 1 to 4, with suggestion 1 being the most frequent.

1. Offer more training to the FTLs.
2. Clarify for the university community the role and responsibilities of FTLs.
3. Hold a meeting of FTLs early in the fall 1999 semester.
4. Seek greater institutional recognition of faculty technology needs and the role that FTLs have in meeting at least some of these needs.

Workshops, Technology Fair, and other Technology-related Events

This grant provided opportunities for faculty to improve their basic technology skills, as well as to develop technology projects for classroom use. The Center provided 11 technology workshops, including a Technology Fair, and other related events (Table 9).

Table 9. Technology-related events during Year I of the grant. *Faculty presenters; attendance data are unavailable.

Center for the Advancement of Teaching 1998-1999		
Date	Technology Workshops and Related Events	Faculty Attendance
October 19, 1998	*Building Interactive Websites* workshop	8
November 2-6, 1998	The Collaboration for the Advancement of College Teaching and Learning Virtual Conference	25
November 3, 1998	Roundtable Discussion associated with the Virtual Conference	19
November 5, 1998	Brown Bag Discussion associated with the Virtual Conference	7
November 16, 1998	*Basics of Web Design* workshop	3
January 21, 1999	*WebBoard* Meeting for Communications Department faculty members	7
January 21, 1999	*WebBoard* Meeting for Division of Education faculty members	7
January 22, 1999	Faculty Technology Showcase	13*
March 6, 1999	*Introduction to Web Authoring* workshop	21
April 22, 1999	*WebBoard* meeting for all users	9
July 19, 1999	*How the Web Works: Introduction to the Language* seminar	19

In addition to the workshops and other technology-related events hosted by the Center, Xavier's ITC, which serves a technology support role for all academic and administrative processes, also offered technology-training workshops for faculty and staff (Table 10).

Table 10. Technology training workshops offered by the Information Technology Center during Year I of the grant. *Total attendance includes staff and faculty members.

Information Technology Center 1998-1999		
Date	Technology Workshops	Total Attendance* (Faculty only)
October 7, 1998	Microsoft Excel	7 (data unavailable)
October 8, 1998	Microsoft Access	6 (data unavailable)
March 16, 1999	Open Mail and Netscape Mail	9 (1)
March 24, 1999	Microsoft Access: Level I	9 (0)
March 25, 1999	Microsoft Excel; Level I	5 (0)
April 13, 1999	Microsoft Access: Level I	10 (1)
April 13, 1999	Microsoft Access: Level II	6 (1)
April 13, 1999	Microsoft PowerPoint: Level I	9 (1)
April 14, 1999	Microsoft Excel: Level I	12 (0)
April 15, 1999	Introduction to Windows 95	2 (0)
May 6, 1999	Introduction to Windows 95	11 (0)
June 7, 1999	Computer Housekeeping	4 (0)
June 7, 1999	Microsoft Access: Level II	7 (1)
June 8, 1999	Introduction to Windows 95	5 (0)
June 21, 1999	Microsoft Access: Level I	13 (3)
June 22, 1999	Open Mail and Netscape Mail	9 (2)
June 23, 1999	Microsoft Excel; Level I	16 (2)
June 24, 1999	Microsoft PowerPoint: Level I	9 (2)
July 28, 1999	Microsoft Word: Mail Merge	10 (1)

The staff members of the ITC have also served a primary role in training faculty and staff in the use of Banner 2000, the integrated computer software for managing the administrative and academic processes of the University. Since the fall 1999 semester, numerous Banner workshops have been offered for faculty and staff members. This new system will not be fully utilized until the fall 2000 semester.

Additional documentation of the technology workshops offered by the Center for the Advancement of Teaching is found in Appendix II3. These documents include:

- A flyer for the Virtual Conference titled "Teaching and Learning in Cyberspace: Issues and Ideas" hosted by The Collaboration for the Advancement of College Teaching and Learning
- Minutes of the faculty roundtable discussion held in conjunction with The Collaboration's Virtual Conference held November 3, 1998
- A flyer for the Technology Showcase
- Evaluation summaries for:
    1. *Building Interactive Websites* workshop held October 19, 1998
    2. *Introduction to Web Authoring* workshop held March 6, 1999
    3. *How the Web Works: Introduction to the Language* seminar held July 19, 1999

Multimedia Specialist: A New Staff Position in the Center

The technology grant from the Andrew W. Mellon Foundation has generously supported the addition of a Multimedia Specialist to the staff of the Center for the Advancement of Teaching. A national search was launched in November 1998. Nine applications were received and four candidates were invited for interviews with members of Xavier's administrative staff, and staff and faculty in the Center. Mr. Bart Everson accepted the offer for this position (Mr. Everson's *curriculum vita* is found in Appendix IV).

Mr. Everson joined the Center as its Multimedia Specialist in June 1999. In addition to maintaining the Center's website he has worked with several faculty members on an *ad hoc* basis to solve technology problems, teach new technology skills, and design new technology projects. Of particular note, however, is the assistance Mr. Everson has provided to a few faculty members on an on-going, intensive basis. Specifically, Mr. Everson has been involved in four complex technology projects.

Vive le Louisiané. Dr. Susan Spillman (Languages) and Mr. Everson have been working on a CD-ROM called Vive le Louisiané. It is an aid for teaching the French language that focuses on real-life Louisiana francophones. The content will be divided into several areas by themes such as religion, ethnicity, cuisine and so forth. In addition to planning the structure of the CD-ROM, Mr. Everson has been tutoring Dr. Spillman in the art of multimedia authoring. They have also made several excursions for the purpose of videotaping subject matter. To date, 11 interviews have been videotaped.

Jazz: Dialect Voices. Dr. Michael White (Languages) and Mr. Everson have begun planning for a project called *Jazz: Dialect Voices,* most likely another CD-ROM. Work

on this project began some time before Mr. Everson's arrival and is a part of the **Sacred and Secular in the African Americans** website. Since that time, however, Dr. White has had new ideas and wishes to start 'from scratch' as it were. Mr. Everson has conferred with Dr. White on several occasions and has been particularly instrumental in helping Dr. White understand multimedia, from both a potential and operational standpoint.

MathNerds (formerly the Math Doctor). Dr. Valerio De Angelis (Xavier University Mathematics Department) has maintained a website called "The Math Doctor" for several years that is designed to provide assistance to people throughout the world who have mathematics questions. Dr. De Angelis received a grant from the Center to overhaul this site. Mr. Everson has consulted with and advised Dr. De Angelis. Working with a programmer at Nicholls State University, Mr. Everson has done the graphic, layout, and HTML design of the new site, even writing some copy and helping develop the overall theme.

The Word: Sacred and the Secular in the African Americas. Mr. Everson has assisted Dr. Violet Bryan (Xavier University English Department) in her efforts to update her portion of the website.

Learning Spanish: A Language and Culture. Mr. Everson has assisted Dr. Carmen Rogers (Xavier University Languages Department) in completing a CD-ROM for use in Spanish courses taught at Xavier.

Since coming to Xavier Mr. Everson has been asked to serve on two university committees—TLTR and the Technology Strategic Planning Committee. Mr. Everson also offered a seminar in July 1999 titled "How the Web Works: Introduction to the Language." Mr. Everson is planning to offer several such workshops and seminars in the 1999-2000 academic year. Last, Mr. Everson has served an important role as a liaison between the Center and Xavier's ITC. As such, he has helped to increase communication between the two units, which effectively support and depend upon each other due to their common commitments to using educational technology.

Building an Information Technology Infrastructure

The technology grant has also offered Xavier and its Center for the Advancement of Teaching resources to strengthen and improve its growing technology infrastructure. Grant funds have supported the following changes to the technology infrastructure:

- Computers in the Center's electronic classrooms were upgraded so that now both classrooms are now equipped with 450 MHz Pentium IIs and 350 MHz PowerMac G3s.
- A new Infocus 725 portable computer projector was purchased for the Center's Teaching Laboratory. Besides being a portable projection system, the new system projects at higher resolutions than the previous projector.

- Equipment that will enable Mr. Everson to assist faculty in developing multimedia projects was purchased including an upgraded CD-Recorder and a digital camcorder.
- A 400 MHz Pentium II and color inkjet printer for Dr. Nancy Martino (Xavier's Communications Department) was purchased to allow Dr. Martino to complete educational technology projects.
- Grant funds were used for repairs and maintenance such as replacement floppy drives, keyboards, and batteries for UPS device, and service on ceiling mounted projectors and other peripherals in electronic classrooms.

As We Look Ahead: Future Directions for Grant and Technology Initiatives

This first year of funding from The Andrew W. Mellon Foundation has been an exciting year filled with new opportunities for faculty and students to learn via educational technologies. As the staff and faculty in the Center look to build upon this success, three opportunities stand out as particularly worthwhile and important:

1. The broad interest in and use of *WebBoard* has created the opportunity to examine the impact of this technology on teaching and student learning. The Center is interested in promoting a rigorous examination of the value that this technology adds to the teaching and learning process. In year II of the grant period, the Center will begin to address this issue.
2. Increasingly, faculty members express interest in using new media that integrate features of a conferencing system such as *WebBoard* with the more general web-based course materials such as syllabi, on-line assignments, and images. There are several course management systems available commercially such as *Blackboard* and *WebCT*. In year II of the grant, the Center will explore the feasibility of using one or more of these systems.
3. On a very practical note, there is need for continued improvement in the collaboration and communication that occurs between the Center for the Advancement of Teaching, the Office of Technology Administration, and the Information Technology Center. As Xavier strives to build and support its technology infrastructure and provide opportunities for faculty to use educational technologies, there is an urgent need for the best possible technical support, and coordination and cooperation of all parties who share a vested interest in campus technology.