ABSTRACT
        This paper focuses on programs for the broad-scale, cyclical
replacement of faculty desktop computers and attendant training to help
faculty best utilize the new technology. Four diverse institutions, Mount
Holyoke College, University of Mississippi, University of North Carolina, and
Virginia Tech, present and discuss their solutions. Issues related to the
replacement of faculty desktop computers include application processes,
methods for distribution, length of the replacement cycle, hardware and
software standards; and appropriate faculty training. Areas examined include:
how much choice faculty should be given in platform selection; whether
programs are best handled at the department level or on a university-wide
scale; how these programs fit with students computer requirements; what kinds
of training programs are most effective; what formats work best; how the
needs of novice computer users can be met while more advanced users can still
be challenged; and incentives that can be provided to ensure faculty
participation. The paper targets information technology professionals who are
charged with implementing quality instructional technology programs. The
degree of success that institutions have in meeting these challenges will
impact the quality of core teaching and research efforts. (AEF)

Equipping Faculty for Success with Technology

Kathy Gates
The University of Mississippi
University, MS

John Moore
Virginia Tech
Blacksburg, VA

John Oberlin
University of North Carolina
Chapel Hill, NC

Susan Rusiecki
Mount Holyoke College
South Hadley, MA

Tracy Wascom
The University of Mississippi
University, MS

A key challenge for any university is getting current technology into
the hands of faculty and equipping faculty to use that technology. In
this session, representatives from four institutions will discuss their
programs for the cyclical replacement of faculty desktops and attendant
faculty training.

Equipping Faculty for Success with Technology

This session will focus on programs for the broad-scale, cyclical replacement of faculty desktop computers and attendant training to help faculty best utilize the new technology. Four diverse institutions, Mount Holyoke College, University of Mississippi, University of North Carolina, and Virginia Tech, will present and discuss their solutions.

Issues related to the replacement of faculty desktop computers include application processes, methods for distribution, length of the replacement cycle, funding options, and hardware and software standards, e.g., how much choice should faculty be given in platform selection. Are these programs best handled at the department level or on a university-wide scale? How do these programs fit in with student computer requirements?

While the first step of any successful instructional technology program is to ensure that faculty have access to current hardware and software, the crucial next step is to provide appropriate training so that faculty can become adroit in the use of new technology. What kinds of training programs are most effective? What formats work best? How can the needs of novice computer users be met while still challenging more advanced users? What incentives are provided to ensure faculty participation?

This session targets IT professionals who are charged with implementing quality instructional technology programs. The degree of success that institutions have in meeting these challenges will impact the quality of core teaching and research efforts. The multiple perspectives offered by four diverse institutions are certain to result in valuable and practical insight for all session participants.

Brief statements from each participating institution follow.

Mount Holyoke College

In 1996, Mount Holyoke College administrators made the decision to merge the Library and Computing divisions to create a new division called Library Information and Technology Services (LITS). This merger brought together resources in a way that allowed for new and improved services for faculty, staff and students. Prior to the merger, the provision of desktop computing facilities to faculty and staff had been handled on a smaller scale and a "by request" basis.

One of the first combined endeavors, conducted during the summer of 1997, was to train interested library staff to help with computer upgrades and installations. A three/four year cyclical upgrade program was expanded under the direction of the new position of Coordinator of Computer Installations. In 1999, funding from the college allowed for the installation/upgrade of approximately 220 computers and 30 networked printers. This number increased to over 400 new and recycled computers in 2000. Next year the process will be automated. Using information from the hardware database we plan to project 80% of the needed upgrades. By eliminating the request process for standard upgrades, faculty and administrators will be able to focus on requests for new initiatives.

The LITS Mellon Web Grant has enabled the expanded use of web technology on the Mount Holyoke campus. For the last four years, LITS sponsored web-based curriculum projects (as well as administrative projects), which partnered faculty and students. The grant also supported the training of student web specialists known as "SWEB TECHS". LITS initiated a series of presentations in which faculty could demonstrate their technology projects to one another. Another effective tool has been the Liaison program. Faculty know who their liaisons are and can confer with them about their varied computing needs. All facets of LITS are involved in this endeavor, including Curriculum Support Liaisons and Reference Library Liaisons who assist with pedagogy issues and Technical Support Liaisons who keep faculty computers functioning and current.

In addition to desktop installations, LITS is also charged with upgrading student labs, mediated classrooms and the Faculty Resource Center. The Faculty Resource Center is a high-end computer lab reserved for faculty and staff. Here LITS provides state-of-the-art hardware and software to motivate and support faculty members and staff who have advanced beyond the basics of course/personal web pages. This fall LITS will begin to work with the Dean of Faculty and other advisory groups to develop a classroom strategy which will include a technology upgrade plan for every classroom and computing lab on campus.

Currently, any member of the community can submit requests for hardware upgrades via a web form. They can also check on the current status of approved upgrades and completed installations. We offer a set of guidelines, helpful tips about backing up and tell them what to expect on the installation day. The current forms are at www.mtholyoke.edu/lits/tsr/status/status.html.

The University of Mississippi

In Fall 1999, the University of Mississippi (UM) began a program called TACIT (Technology Acquisition for Curricular and Instructional Technology) to systematically replace faculty desktop computers. Four years ago, UM invested heavily in a program to provide each faculty member with a new computer. While some faculty members had been able to acquire upgrades or replacement systems after that initial acquisition, many were still using these same, now-outdated computers at the start of the 1999 Fall semester. The objective of first year of TACIT was to replace any computers that remained from the previous acquisition.

A team consisting of faculty, IT staff and academic administrators developed an application procedure. (The current form is available as a link from the website, www.olemiss.edu/tacit.) Equipment options included laptop, desktop, PC, Apple, standard and high-end. The age and state of existing faculty computers served as the ke factor in determining who would receive new computers. As part of the application process, faculty members were asked to state how they intended to use the new equipment, e.g., Internet, video, statistics. Faculty members who requested laptops rather than desktops were asked to provide a brief justification. Finally, faculty members were asked whether their existing computers could be recycled for others campus uses. For example, a number of older computers have been placed in public areas for student e-mail access.

The faculty members who received new computers were also required to participate in specially-focused, half-day technology workshops. These sessions were presented in a "conference-style" format and attempted to address varying degrees of expertise among faculty. While a small minority of faculty resisted the notion of training, most appreciated the opportunity to learn and improve their skills. Examples of topics covered include "How the Web Can Serve Your Course," "Statistical Packages and Research," and "All About E-mail." Faculty members with exceptional technology skills were asked to help facilitate training for other faculty.

One aspect that will be reworked in this year's implementation is the delivery of the computers. Last year, student workers assisted with delivery, and matching student schedules with faculty schedules proved to be a challenge. This year, the computers will be delivered to departments, and the appropriate property transfers will be made. At a later time, an IT staff member or student worker will return to set up the computer and transfer data from the old system to the new system.

The faculty response to TACIT has been very positive, and university administrators have shown a strong commitment to continuing the program in future years. IT staff are conducting follow-up faculty surveys to further tune TACIT for future implementations. The response thus far indicates that there is much to be gained by centralizing the purchase of desktop computers for faculty and by tieing in the acquisition of new equipment with suitable technology training. See www.olemiss.edu/tacit for more information.

4

The University of North Carolina

The Carolina Computing Initiative (CCI) is a plan to ensure that students, faculty, and staff have appropriate technology and are able to use it effectively and efficiently in various endeavors. At the center of the initiative is the requirement that, beginning with freshmen in the fall of 2000, undergraduates at UNC-CH own laptop computers that meet university specifications. In addition to the requirement that students own computers, the CCI also ensures that faculty and staff are provided with computer equipment.

The CCI requirement allows faculty to know that all students have access to computers. Professors are more likely to design learning opportunities using computers when they are assured of student participation.

CCI builds upon recent momentum. In 1997 and 1998, Chancellor Michael Hooker provided Instructional Technology Grants to professors proposing innovative ways to use technology in their teaching. Hundreds of Carolina professors participated in Simple Start, a Carolina course designed to teach faculty how to use the Internet in their teaching. Since the inception of the CCI, many other resources to assist faculty in adding technology to their courses have been developed on campus, including the Center for Instructional Technology and the Technology in Context Consortium.

The CCI's Intel-based laptop standard allows the University to more effectively offer services and control costs. Using a laptop provides portability and therefore access to learning resources and student services anytime, anywhere.

All campus residence hall rooms are wired to give students direct access to campus networks and the Internet. Classroom buildings are systematically getting added to the network, though the age of the University's historic buildings presents obstacles. However, an ambitious networking and classroom renovation plan has been in place for several years to ensure that campus buildings can support the growing demand for technology. In buildings that present major wiring obstacles, wireless Ethernet is being explored as a solution.

Incoming freshmen will be eligible for need-based financial aid in the form of grants to cover all or a portion of the cost of the laptop. For all other students, subsidized, low interest computer loans are available to all Carolina students regardless of financial need for the purchase of CCI computers.

Virginia Tech

Virginia Tech, a major land-grant research university of 1,500 faculty and 25,000 students, faced a serious challenge in 1991-93 as it grappled with a series of severe budget cuts amid calls for improving undergraduate education. To cope with the sudden loss of budget and positions, the university restructuring plan recognized faculty as a core asset and cited investment in faculty development as a way to recover and regain momentum. A primary goal was to enhance student learning and improve instruction. To reach this goal, a plan was developed and implemented in 1993 for a university-wide Instructional Development Initiative (IDI) that would make significant use of instructional technology.

Between 1993-97, the university invested over $10M in the first phase of the IDI. A key component is the Faculty Development Institute (FDI). As a result of this commitment, more than 1,400 of the faculty both participated in three- and four-day summer workshops designed to support course transformation and received modern computer technology for their offices. A key point is that this program is recurring, so that intensive training opportunities and replacement technology is available to all university faculty at least every four years. In addition, over 500 student-access computers, each multimedia-equipped and networked, were installed in public labs and computer-intensive classrooms, and 50 presentation classrooms and seven distance learning classrooms were also implemented. To support course development, internal grants (over $500K each year) are competitively awarded to faculty from every college.

5

During 1998-2001, a second round of FDI workshops and computer replacements is occurring. Since 1998, every summer about 400 faculty participate in 3-day workshops and receive a replacement computer. Over half of the faculty have participated in at least two summer FDI workshops since 1993. We are now offering both desktop and laptop computers to faculty. Offering faculty a range of content choices when registering for a workshop (9 tracks for summer 2000) and computers (11 for summer 2000) is an important component of building and maintaining a positive attitude towards the program.

We anticipate changing the four-year replacement cycle to three-years and adding more seats for faculty (550/summer) starting in summer 2002. The workshop offerings are also expected to include asynchronous and hybrid approaches to provide more flexibility and just in time learning opportunities to faculty and graduate teaching assistants. These and other parallel activities represent a substantial commitment to improving instruction across the university. To our knowledge, the IDI remains the only large-scale continuing program of its kind in the nation. See www.fdi.vt.edu for more information."

Copyright Notice

e **EDUCAUSE** *Information Resources Library*

....
Transforming Education Through Information Technologies

Abstract

Category: Papers Presented at EDUCAUSE annual conferences

ID Number:	EDU0014
Title:	Equipping Faculty for Success with Technology
Author:	Kathy Gates, John Moore, John Oberlin, Susan Rusiecki, and Tracy Wascom
Organization:	The University of Mississippi, Virginia Tech, University of North Carolina, Mount Holyoke College
Year:	2000
Abstract:	A key challenge for any university is getting current technology into the hands of faculty and equipping faculty to use that technology. In this session, representatives from four institutions will discuss their programs for the cyclical replacement of faculty desktops and attendant faculty training.

This material is available in the following electronic formats:

Select one of the icons above to retrieve the material in that format. We also have definitions and instructions for setting up your computer to download these formats.

8