Mission Statement
Our mission is to help faculty find innovative ways to use technology to achieve their educational goals.
This year marks the Center for Instructional Technology’s fifth year at Duke University. During those five years, the CIT staff and I have worked with faculty, staff and students throughout the campus. As we interact with more people at Duke and get to know them better, we continue to expand our programs and services to match their needs and interests. Several things suggest our changes have been good ones. Faculty responded very positively to the IT Fellows program we introduced last year, and applications to the program doubled. A growing number of faculty and staff consulted with us or used one of the CIT’s student workers to assist them as they started an instructional technology project. CIT staff regularly receive compliments on their expertise and dedication to helping faculty find the most effective uses of technology for their teaching goals and teaching styles.

This report describes some of the CIT’s accomplishments this past year, outlines goals for the year ahead and points to more detailed information on our Web site.

Lynne O’Brien
Director

Key Accomplishments in 2002-03

- Shared 50 faculty instructional technology projects with an audience of 170 at the 4th annual Instructional Technology Showcase
- Supported a 25% increase in Blackboard course Web site use
- Successfully completed the first year of the Faculty IT Fellows program, and increased the number of faculty joining the program for its second year
- Modified the Instructional Technology Grants program to meet the needs of both small and large projects
- Helped faculty projects previously supported by CIT to expand, some with external grants
- Reorganized staff to focus on more discipline-based, individually-tailored approaches to faculty support in response to a series of departmental visits
- Expanded CIT presence in campus planning for IT and in regional and national IT professional organizations

Key Goals for 2003-04

- Provide department- or school-focused services tailored to specific interests of faculty
- Encourage new uses of technology in teaching through training, speakers, consulting, grants, project support and an expanded set of instructional software tools
- Increase the number of faculty supported through CIT services, including faculty who have not worked with CIT in the past
- Encourage broader and deeper use of Blackboard in courses
- Increase CIT’s integration with other library services
- Expand collaboration and leadership in campus planning for IT

About the CIT
The CIT is part of the Duke University Libraries and has office space and a project workroom within Perkins Library. The CIT Director reports to the Vice Provost for Library Affairs and University Librarian. Along with the Director, the CIT has six full-time staff members and three part-time staff members. Two other instructional technology professionals share our office space and participate in CIT planning and activities. The CIT Advisory Board reviews CIT activities and advises on future plans.

More information:
About the CIT: http://cit.duke.edu/about/
Appendix A
**Generating Ideas**

**Educating the campus community**
CIT sponsored two dozen events for the campus community this year, including technology demonstrations, guest speakers and Blackboard training. Individuals who attended these sessions rated them highly.

In conjunction with the Graduate School, the CIT also conducted fifty-three workshops for graduate students, allowing participants to receive certification on their transcripts in the use of instructional technology. These workshops were attended by students from forty-six departments and programs across campus.

**Supporting those who support faculty**
In Spring 2003, CIT began offering new types of training to staff in the schools who support faculty in using instructional technology, starting with a two-day workshop on using Blackboard, scanning, digital audio and video, and other basic technologies in the Duke environment. CIT staff also offered individualized training to departmental staff to prepare them to respond to instructional technology questions from faculty in their departments.

**Showcasing faculty accomplishments**
One hundred and seventy people attended CIT’s fourth annual Instructional Technology Showcase on April 21, 2003. This year’s program included 50 Duke presenters, vendor exhibits, workshops and a keynote speaker. Eighty percent of attendees said they’d be back next year.

**Disseminating technology information**
People with Palms and other handheld devices can now get up to date information on CIT events, CIT news, Blackboard tips, and Duke faculty projects via the CIT’s new PDA channel. CIT also shares information via an e-mail newsletter with 480 people who have subscribed to its mailing list.

**CIT sponsors events and distributes information to make Duke faculty aware of the possibilities for using technology to enhance their teaching.** The annual spring Instructional Technology Showcase is our premier event for demonstrating innovative ways technology can be used in education. Through its training and support activities, CIT ensures that faculty and staff are prepared to follow through on their ideas for new uses of instructional technology. CIT’s public events help faculty generate new ideas, recognize those who have done innovative work and enhance Duke’s reputation for creative use of instructional technology.

**More Information:**
- CIT Events
- Spring IT Showcase
- CIT PDA Channel
- Faculty Project Profiles

http://cit.duke.edu/events/
http://cit.duke.edu/showcase/2003/
http://cit.duke.edu/pda_guide.html
http://cit.duke.edu/profiles/
Next steps:

In 2003 – 04, CIT will:

- Showcase innovative faculty at Duke who are using technology in teaching
- Offer training, speakers, and workshops that highlight uses of technology in teaching
- Provide discipline-specific examples of IT use
- Help individual faculty identify ways technology can be useful in their teaching
- Offer new Web resources for faculty exploring instructional technology
- Continue graduate student training in uses of technology for teaching
- Share information broadly and seek faculty input on instructional technology planning at Duke

Consulting on IT projects

Over 100 faculty and staff from schools and departments throughout Duke consulted with CIT staff on ways they could use technology in teaching. The most common topics were converting materials into digital formats, using streaming media in Web sites, and planning for Web-based training and education programs.

Here are a few examples of the consulting requests we received this year.

- Can you help me digitize and optimize poor quality cassette tapes of creole French radio broadcasts for use in language instruction?
- Can you help me make a digital movie about my class for a conference presentation?
- Are there Web sources for making 3D maps of terrain around Islamabad?
- How can I set up a Web board for students to use in reflecting on their work?
- Could CIT help develop an electronic form that would standardize grading criteria for essays across courses?

Offering up to date, relevant information via Web sites

CIT will launch new Web sites at the start of the Fall 2003 semester to meet the growing demand for dynamic content and to provide more tailored instructional technology information to the university community. Our redesign efforts are influenced by other university projects such the university content management system and Web site redesign efforts within Perkins Library.

Publicizing interesting faculty projects

CIT worked with the Duke News Service to develop stories featuring Duke faculty using technology in innovative ways. These stories will be highlighted on the Duke home page and will remain a part of the CIT website. Faculty can see more than 70 Duke instructional technology projects on the CIT’s faculty profiles Web page.
Expanding Faculty IT Fellows program
CIT completed the first year of the Faculty IT Fellows program, which helps faculty incorporate new technology approaches into their courses. Fourteen faculty and one graduate student from departments in Arts & Sciences and Nursing formed the first cohort of IT Fellows. CIT provided a week of training, one-on-one help throughout the year, group meetings and a collection of resources.

Applications for the Fellows program doubled this year. CIT selected 21 faculty who were organized into three cohorts. Faculty from Arts & Sciences and Medicine are using basic technologies such as Blackboard, PowerPoint and Photoshop to enhance individual classes. A second cohort from the Pratt School of Engineering is integrating MATLAB into sophomore courses. Faculty from the Nicholas School of the Environment form the third team and are developing the first set of modular courses for a distance learning program, the Duke Environmental Leadership Program.

Funding innovative projects
In October 2002, CIT issued a call for projects that involve multiple faculty, have the potential to make a significant impact on teaching and learning and are a high priority for a department or school. The CIT advisory board reviewed nine initial proposals and funded two for development during the 2003-04 academic year.

Offering just-in-time help with small projects
To respond to the needs of faculty who need some assistance, but cannot meet the criteria or time line of the innovation grant CIT encourages faculty to experiment with technology in teaching by consulting with them on their plans, providing hardware and software for project development and offering training and support as they implement new technology-based teaching strategies. We provide funding, student assistants, special facilities and our expertise to help faculty explore new uses of technology in their courses.

“...I not only got my immediate questions answered, I actually got a little further into Blackboard because of the helpfulness of the CIT student worker.”
- Faculty member commenting on Blackboard house call

More Information:
- Faculty IT Fellows program http://cit.duke.edu/funding/fellows/fellows.html
- CIT Grants and Project Support http://cit.duke.edu/funding/
- CIT research groups http://cit.duke.edu/about/res-dev.html
program, CIT developed a new mini-grant program which provides up to $2,500 in direct costs, student worker assistance and/or reserved access to equipment in the CIT Project Studio. Requests for mini-grants are accepted throughout the year and filled based on CIT staff evaluation of the project plan and availability of funds and student workers.

**Supporting class use of streaming media**
CIT manages a RealServer streaming media server to support faculty use of media in courses. The server, which began as a pilot two years ago, currently hosts 37 Gb of multimedia content and serves students in a number of schools and disciplines. CIT staff are working with OIT to plan for a university streaming media server supported by OIT to accommodate the increasing demand for this service.

**Expanding Blackboard use**
Over 770 courses in eight of Duke’s schools used Blackboard in Spring 2003, a 25% increase over last spring. One factor in the increase was the Blackboard team’s automatic creation of course Web sites and course accounts, starting in Fall 2002, using SISS data from PeopleSoft.

The Blackboard Communities pilot provided groups other than classes with the same types of collaborative tools that are used in Blackboard Course Web sites – discussion boards, chat, and other tools for communication and interaction.

CIT student workers provided one-on-one Blackboard “house calls” to faculty in disciplines as varied as Anthropology and Nursing and received compliments for the quality of their training and assistance.

In conjunction with the OIT Help Desk, CIT extended Blackboard support hours.
By August 2003, Perkins Library E-Reserves will be integrated into Blackboard course sites.

The Blackboard group is currently exploring Building Blocks, which are homegrown, Open Source, or commercial third party tools that plug into the system and extend its functionality.

**Finding new tools for instructional use**

CIT works with other technology support groups on campus to find tools of broad interest to faculty and to migrate the most promising of those into the general computing environment.

**Experimenting with PDAs in teaching**

CIT assists faculty interested in exploring the use of PDAs for teaching and learning by providing consulting and, as available, PDA equipment. Recent projects have included the use of GIS software on iPAQs in the Nicholas School of the Environment, educational software experimentation on Palms in the School of Nursing, and the use of Wake Forest University’s ClassInHand software on a wireless iPAQ in the Sociology department.

**Tracking technology trends**

CIT’s internal research groups investigated streaming video, course management systems, instructional technology trends, interactive technologies, and Web architecture and systems. The Web Architecture working group, for example, installed and tested Web logging technology to assess the technical and pedagogical merits of this rapidly emerging medium of communication and expression. CIT research groups now are focused on Course Management Systems, Web Development and Web Tools, and Distance Education and E-Learning. We expect the focus of our

**Some of the software tools CIT investigated this year:**

- **Webslingerz’ SmartASK**, a survey tool
- **Brownstone’s EDU**, an on-line assessment and homework tool
- **Impatica for PowerPoint**, which compresses PowerPoint files into a format optimized for streaming
- **Insight’s Luna Imaging**, for organizing and delivering digital images
- **Respondus**, an assessment authoring tool
- **Wimba**, a Web-based voice communication tool
- **Trivantis’ Lectora Publisher**, a multimedia authoring and publishing tool
- **University of Wisconsin-Madison’s Scout Portal Toolkit**, a content management tool
- **Six Apart’s Movable Type**, a Web logging tool
- **TechSmith’s Camtasia** and other screen-recording software packages
internal research groups to change once or twice a year in response to trends in the technology field and new interests in the faculty we serve.

Providing resources for project development

In response to faculty demands, the CIT added a second video editing workstation to the CIT Project Workroom in Perkins Library. Faculty can now, in addition to creating web movies and edited videotapes, make interactive DVDs for classroom presentations. The Project Studio also added a high-quality large format scanner for digitizing larger materials from special collections. The extensive Web-based documentation CIT staff developed for Project Studio equipment and software is now used by other groups on campus. Eight CIT student assistants worked with faculty on projects this year. CIT staff hired, trained and supervised these workers, freeing faculty to focus on the content of their projects.

CIT Student Workers

...scanned images and text and did SGML text mark up for Prof. Matt Cohen’s (English) project involving materials from the Library’s special collection on Walt Whitman.

...digitized video clips of Italian movies for Prof. Roberto Dainotto’s (Romance Studies) class analysis.

...converted overhead transparencies to PowerPoint for Prof. Herb Childress’s (First Year Writing Program) class members.

...and assisted with many more projects.

Next steps:

In 2003 – 04, CIT will:

Identify technology tools of broad interest to faculty and students and support their use of these tools

Provide grants and support services to encourage faculty to try innovative projects

Conduct pilot projects with new technologies

Expand use of Blackboard and increase its functionality and smooth integration with other university systems

Develop plans for migrating successful innovations into the general computing environment

Enhance student worker program to support faculty projects

“I have had a wonderful year in the CIT Fellows program and have learned so much. Thanks so much for making the experience a positive and productive one.”

- 2002-03 Faculty IT Fellow
CIT staff interact with representatives from private industry, foundations, other educational institutions and the local community to leverage resources and encourage the exchange of ideas about instruction technology. Through our professional activities we stay knowledgeable about technology trends and funding opportunities and share our expertise with a broader community.

“TRI-IT meetings offer an excellent opportunity to learn what other North Carolina institutions of higher learning are doing with regard to instructional technology, to share ideas, and to discuss current trends, while reflecting on past projects.”

- Giz Womack, Wake Forest University
services. Recent CIT visitors came from Sangyo University in Japan, Essex College in England, the U.S. Joint Military Intelligence College and Georgetown University.

**Contributing to professional organizations**
CIT staff represented Duke and gave presentations at several national professional meetings, served in organizations supporting community technology initiatives and took classes to continue their professional development.

**Examples of CIT professional networking**

Jim Coble is a member of the NC LIVE Technical Advisory Committee

Patrick Murphy presented Preparing Graduate Students as (IT Using-) Future Faculty at the Computers on Campus Conference, University of South Carolina at Myrtle Beach, SC, November 2002.


Jason Morningstar (with Bob Henshaw of UNC-CH ) presented Incremental Approaches to Accessible Electronic Content at Educause Southeast, Atlanta, June 2003.

Amy Campbell gave a poster session on Using Faculty Feedback to Shape Faculty Support Services at Educause Mid-Atlantic Regional Conference, Baltimore, MD, January 2003.

Lynne O’Brien was a member of the New England Association of Schools and Colleges accreditation team for Tufts University accreditation visit, March 2003.

**Next steps:**
In 2003 – 04, CIT will:

Expand professional activities and network with individuals outside Duke, such as technology vendors, faculty and staff at other universities, and the surrounding community

Leverage resources by seeking grants and donations from external sources and by collaborating with other universities on technology purchases and projects
Planning with Arts & Sciences departments

In conjunction with Dean Lee Willard from Arts & Sciences, CIT staff met with 16 departments during the last year to learn how instructional technology is used in the department, what specific training or support would encourage wider use of instructional technology, and what the department’s vision is for the use of instructional technology. As follow up to these meetings, CIT staff offered customized training in departments, provided information about discipline-specific resources for IT, connected library subject specialists with departments, advised on departmental digital image projects in connection with the Luna project in Perkins library and summarized departmental priorities for the Deans in Art & Sciences and other university IT planning groups.

As a result of these planning visits, CIT is assigning two CIT staff members to each Arts & Sciences department. These departmental liaisons will research subject specific trends in instructional technology and use that expertise to respond directly to the questions and concerns faculty have about instructional technology in their discipline.

Working with library staff

CIT staff served on Library search committees and planning groups, worked with the Perkins renovation team, shared support of pilot projects such as LUNA and Blackboard advisory group CIT participation in campus planning groups.

CIT staff contribute to departmental, school and university-wide technology planning through their participation in committees and planning groups and through collaborative projects with faculty and staff in many different parts of the university. This year, we devoted special effort to understanding technology use in Arts & Sciences departments and planning ways to help each department move closer toward its instructional technology goals.

More Information:

http://blackboard.duke.edu/advisory.html
Appendix A
The e-reserves integration with Blackboard and partnered with librarians on IT presentations to departments.

**Planning with campus technology groups**

CIT staff participated in numerous cross-unit committees and working groups, sharing information and expertise, and fostering communication between groups to coordinate instructional technology offerings for Duke faculty and students.

**Leading Blackboard Advisory Group**

The Blackboard Advisory Group, comprised of faculty and technology support staff from across Duke, serves to provide input to the decision-making process about Blackboard, and provides feedback about Blackboard policies at Duke. This year, the group was instrumental in suggesting policies about freshman schedules in Blackboard, e-reserves integration with Blackboard, Blackboard waitlist policies, and in discussing use of course management systems in general.

**Collaborating on Blackboard improvements**

CIT collaborates with OIT and the SISS office to plan and implement changes to the Blackboard system, and to maintain the system in working order. This Blackboard project team and the good working relationships of its members is essential to the effective maintenance of the Blackboard system and the rapid response to user needs and suggestions.

**Orienting new faculty and students**

CIT staff participated in orientation activities for new faculty, new graduate students, and freshmen in conjunction with the Provost’s office, the Graduate School and OIT.

**Next steps:**

In 2003 – 04, CIT will:

- Contribute to University IT planning efforts through participation in committee work and special planning groups
- Conduct joint projects with other IT organizations
- Share information across IT groups
- Convene task forces and evaluation groups around new technologies

**Arts & Sciences Departmental planning visits in 2002-03**

Asian and African Languages and Literature
Art and Art History
Biology
Chemistry
Classics
Cultural Anthropology
Economics
English
History
Physics
Public Policy
Psychology: Social and Health Sciences
Psychological and Brain Sciences
Religion
Romance Studies
Sociology

**CIT worked with OIT on...**

Blackboard support
Froshlife project
Teaching Resources Website
Cluster software planning
Student technology training
Survey Software Evaluation Team
Tech Week planning
Multimedia server planning

**Arts & Sciences**

- Asian and African Languages and Literature
- Art and Art History
- Biology
- Chemistry
- Classics
- Cultural Anthropology
- Economics
- English
- History
- Physics
- Public Policy
- Psychology: Social and Health Sciences
- Psychological and Brain Sciences
- Religion
- Romance Studies
- Sociology
Understanding Blackboard use

To understand how well Blackboard meets user needs, CIT conducted several user surveys. A survey in mid-fall was designed to determine whether CIT’s advertising was raising faculty awareness of the Blackboard service, and whether support options for Blackboard were known and useful to faculty. A second survey of non-Blackboard users attempted to discover their reasons for not using Blackboard. At the end of each semester, two separate user surveys (faculty and student) were conducted to gather general feedback about user response to Blackboard features and implementation at Duke. Results of these surveys are used to continually improve the Blackboard service at Duke.

Assessing the Grant and Fellows programs

Evaluation activities are built into many facets of the CIT Incentive Grants and CIT Fellows programs. We survey the faculty for their feedback and help faculty develop plans for evaluating student attitudes and student learning in connection with the introduction of new technologies in their courses.

Choosing assessment tools

CIT recently purchased a one year subscription to the national Flashlight project and will be seeking ways to use their question banks or evaluation data from other schools to help us understand the impact of IT use at Duke.

CIT evaluates its services and programs through surveys of faculty and students, focus groups, user interviews and informal feedback. We work with faculty to help them evaluate the impact of their instructional technology projects on student learning, student attitudes and their own teaching. Reports on CIT activities and faculty projects are posted on the CIT’s Web site, shared with university groups and used to shape future CIT activities.

More Information:

CIT reports http://cit.duke.edu/about/reports.html
Blackboard project information http://blackboard.duke.edu/about.html
Faculty resource guides on project evaluation http://cit.duke.edu/resource-guides/development.html
Collecting feedback on CIT activities

In addition to the formal mechanisms for gathering faculty input (surveys, CIT Advisory Board, etc.) CIT also collects email and informal feedback from faculty to use in evaluating and improving our services.

Learning what helps projects succeed

This year, CIT began using a database to track the progress of supported projects and the resources devoted to them. Over time, this database should help CIT understand the factors that contribute to successful projects.

What we learned from last year’s grant projects:

1. Most faculty completed 76 – 100% of their projects.
2. Project leaders plan to continue using their projects in future courses, and many have plans to share the materials with other faculty in their department or audiences beyond Duke.
3. The most popular technology strategies were collaborative Web development, streaming audio and video, digital images, database development and/or use of Blackboard.
4. Projects are more likely to be completed and have a longer "shelf life" if several faculty members work together, or have strong backing from the chair or if the department has a stake in the project’s implementation.
5. Faculty are more satisfied if they complete a modest project successfully than if they start an ambitious project and don’t finish.
6. There is a wide range in the amount of time faculty devoted to their projects, from a low of 35 hours to a high of over 500 hours. Most of them found that it took longer than expected.
7. Faculty reported positive student outcomes from using their projects in class – expanded use of course materials, more positive comments about class activities, and improved quality in student work.

Next steps:

In 2003 – 04, CIT will:

- Establish clear goals and evaluation strategies for all major CIT programs
- Provide summary reports and recommendations to Duke administration, IT groups and faculty
- Use evaluation data to modify CIT goals and activities and to offer input to other IT planning groups
- Consult with individual faculty on assessment plans for their instructional technology projects
- Participate in an external five-year review of CIT as an organization at Duke
Appendices

Appendix A: CIT at a Glance

CIT staff and associated staff:

Lynne O’Brien, Director
Neal Caidin, Applications Manager
Amy Kenyon Campbell, Senior Academic Technology Consultant
Jim Coble, Senior Technology Specialist
Stella Lee, Web Designer
Jason Morningstar, Academic Technology Consultant
Randy Riddle, Academic Technology Consultant
Sean Aery, Staff Assistant (half-time)
Jim Van Gorder (quarter-time)
Program Evaluator – open position (half-time, one year contract position shared with Clinical Research Training Program)
Samantha Earp, Director, Foreign Language Technology Services (Arts & Sciences)
Patrick Murphy, Instructional Technology Specialist (Graduate School)

CIT participation in campus IT planning includes:

Perkins Library Web Architecture and Design Group
Perkins Library ILS planning group
Perkins Library Web Accessibility working group
Perkins Library Content Management System Implementation Group
Medical School’s Curriculum Committee - Educational Technology
Arts and Sciences Computing Committee
ITAC - Information Technology Advisory Committee
Blackboard project team: OIT, SISS, CIT
CLAC - campus system administrators
ITAC Video Services Steering Committee
Search committees within and outside the library
Center for Teaching, Learning and Writing Advisory Board

Web site: http://cit.duke.edu

Location

We are located on the second floor of the Perkins Library on West Campus.
CIT
Box 90198
Perkins Library
Duke University
Durham, NC 27708
CIT Staff professional activities

Neal Caidin
Blackboard Users Conference - March 2003
Blackboard Building Blocks Developers Conference - July 2003
Member: Blackboard Building Blocks Open Source Advisory Group and BASA - Blackboard System Administrators group

Amy Campbell
Using Faculty Feedback to Shape Faculty Support Services, poster presentation at Educause Mid-Atlantic Regional Conference, Baltimore, MD, January 2003
CMS Implementation as a Catalyst for Curricular Change, presentation (with Samantha Earp and Lynne O’Brien) at Educause Mid-Atlantic Regional Conference Baltimore, MD, January 2003

Jim Coble
Member, NC LIVE Technical Advisory Committee

Samantha Earp
Workshop leader at the University of Wisconsin-Madison in October 2002 as part of the American Council of Teachers of Foreign Languages professional development series in foreign language instructional technology.
Co-presenter (with CIT colleagues Lynne O’Brien and Amy Campbell) at the Educause Mid-Atlantic Regional Meeting in January 2003.
Coordinator of the Blackboard Foreign Language Users’ Group, including management of the group listserv and host of on-line discussions and tutorials of interest to the membership.

Stella Lee
Attended New Media Centers Summer Conference at Virginia Tech, Blacksburg, VA, June 2003.
Took Survey of Operating Systems course in Spring 2003
Member of Triangle Macromedia User Group

Jason Morningstar
Incremental Approaches to Accessible Electronic Content, Presentation with Bob Henshaw of UNC-CH at Educause Southeast, Atlanta, June 2003.
Quick-and-Dirty Usability Testing in an Academic Environment, Presentation at Syllabus 2003, Santa Clara, CA, July 2003
Managing Student Technical Assistants, Presentation at Syllabus 2003, Santa Clara, CA, July 2003

Patrick Murphy
Preparing Graduate Students as (IT Using-) Future Faculty, Presentation at Computers on Campus Conference, University of South Carolina at Myrtle Beach, SC, November 2002.
Appointed to the advisory board of the Mid-South Instructional Technology Conference, hosted annually by Middle Tennessee State University.

Lynne O’Brien
Member, New England Association of Schools and Colleges accreditation team for Tufts University accreditation visit, March 2003.
Member, Educause program planning committee for Mid-Atlantic Regional Conference for January 2004.
Member, Ivy-Plus Academic Computing Directors group
CMS Implementation as a Catalyst for Curricular Change, presentation (with Samantha Earp and Amy Campbell) at Educause Mid-Atlantic Regional Conference Baltimore, MD, January 2003

Randy Riddle
Attended Educause 2003, October, 2002, Atlanta, Georgia
Attended California Virtual Campus 2003 Student Support and Instructional Services Electronic Conference, May 2003, Ridgecrest, California via the Internet
Appendices

Appendix B: CIT in the news

News Releases - Duke News and Communications

CIT Showcase Exhibits How Technology Is Remaking the Classroom
Faculty show many applications of instructional technologies they’re using to enhance learning

Friday, April 18, 2003 | Duke faculty are wielding the latest multimedia technologies to enable students to examine rarities from ancient primate fossils to the original drafts of Walt Whitman’s writings. Such technology-enabled educational projects were among more than two dozen featured in the April 11 Instructional Technology Showcase 2003.

“Technology is bringing things into the classroom that would otherwise be unavailable to students,” said Lynne O’Brien, director of the Center for Instructional Technology, which sponsored the event.

In fact, the extraordinary fidelity of today’s digital imaging technology means that almost any kind of content can be depicted such that direct access to the original is reduced or eliminated, said Franziska Frey of the Rochester Institute of Technology in her keynote address.

For example, the Duke Primate Center has created digital images of many of its vast collection of fragile fossils, to enable wide access without jeopardizing the specimens. Students using the “Paleoprimatological Digital Teaching Library” can zoom in for the most close-up examination of the fossils, according to the library’s developers, Elwyn Simons of biological anthropology and anatomy and Timothy Ryan of the Primate Center.

Legions of students can also safely scrutinize original drafts of Walt Whitman manuscripts, including corrections in Whitman’s hand, thanks to a collaborative project of CIT, Perkins Library and Assistant Professor of English Matt Cohen. The digital image collection also includes a rare edition of Leaves of Grass, which Whitman gave only to about a hundred people.

Even such rare historical sources as Bezhboznik U Stanka (Godless at the WorkBench), a Soviet party periodical published in the 1920s are available as archival-quality images, thanks to the efforts of Alison Rowley, visiting assistant professor of Slavic Studies, and art librarian Lee Sorensen.

The gargantuan task of managing burgeoning collections of such images will require new database tools, according to Paul Conway, director of information technology services at Perkins Library. Fortunately, said Conway, the Duke community has available the new Luna Insight imaging database tool adopted in 2002 to organize images. Conway said that Insight can not only replace slide projectors in the classroom, but can “also permit organizing and annotating collections, creating more dynamic classroom presentations, and publishing them to the web.”

Duke faculty are also using new software tools to enhance collaborative distance learning over the web, as demonstrated by Assistant Professor of Nursing Linda Goodwin. She showed a distance-learning system based on Yahoo group software in which a team of students in the Health Systems Leadership course could see one another
on their video screens, as well as converse via text messages. However, emphasized Goodwin, student ratings of the system she used, as well as its competitors, made it clear that improvements are needed. Nevertheless, she said, the pedagogic value of distance learning is clear, “The quality of the work already produced by these teams is high.”

While image libraries and distance-learning classes are relatively well-established technologies, web-based laboratories have been far more difficult to implement, said showcase participants. However, a team led by Henri Gavin and John Dolbow, assistant professors of civil and environmental engineering, is trying to improve web-based access to laboratories so that students can run real-life experiments as well as simulations from afar. They have developed a system called WEAVE (Web-based Educational Framework for Analysis, Visualization, and Experimentation), to implement physical experiments and simulations on the web. And according to the engineers, WEAVE is adaptable enough to enable faculty with limited technical expertise create such remotely controlled and virtual laboratories.

Accelerating the sometimes onerous process of learning a language is also benefiting from new video and audio technologies, reported Diane Bryson, assistant director of English for International Students. For example, a teaching program developed by Bryson allows foreign graduate students to transcribe famous American speeches and to compare their own transcriptions with correct ones. Such comparisons allow the students to identify the unfamiliar English sounds that elude both their hearing and their speech.