Art History Collaborates with Technology

One of Evanston’s many unique treasures - its collection of public art - was documented and examined by Northwestern University art history students this fall using an imaginative software tool developed by Northwestern University Information Technology (NUIT).

Project Pad, a Web-based collaboration and media annotation tool, was used in "Promise and Problems in Public Art," taught by Professor Christine Bell of the Weinberg College of Arts and Sciences’ Art History Department. The use of the technology put a modern-day spin on the traditional disciplines of art preservation and conservation.

The artworks in question range from graffiti-art murals to '30s-era paintings, sculptures, and murals created during President Franklin D. Roosevelt’s Works Progress Administration. The students in Bell’s class digitally photographed artwork in locations such as the Evanston Post Office, and then uploaded the high-resolution images into Project Pad “notebooks.” In addition to individual notebooks, a shared area is used by the entire class and Professor Bell for collaborative work.

Project Pad was designed specifically for scholar and/or student collaboration and media annotation, according to Jonathan Smith, distributed learning architect for NUIT’s Academic Technologies. “Not only does it support synchronous interaction between users, but it allows them to download, keep copies of, and distribute their work, unlike other Web-based collaborative systems,” Smith said. “All of this puts some very powerful tools into the students’ hands.”

Students can annotate images with “sticky notes” that are sent to and saved on the Project Pad server in real-time. The size and color of each note is easily changed, and notes can be hidden or revealed as desired. Any change is immediately visible to others looking at that image, which also makes it possible for two or more users to add notes to a single image at the same time.

A separate discussion panel enables real-time chat between and among students and Professor Bell. Forms attached to each image allow students to document the physical description, work description, materials and techniques, and dimensions in detail. Data input into Project Pad can be searched and exported as a text file. "This has inspired collaboration on many different levels," Professor Bell said. “Plus, the students really seem to be enjoying it.”

One class objective was the creation of an inventory that will be used by the Evanston Public Art Committee in devising a plan for the maintenance, restoration, and preservation of Evanston’s public art. In addition, public sculptures documented by the class will be registered with the Inventory of American Sculpture at the Smithsonian American Art Museum in Washington, D.C., in affiliation with the national Save Outdoor Sculpture! program, <www.heritagepreservation.org/programs/sos/>.

Further uses of Project Pad are being developed for new uses by Northwestern students and scholars during the winter and spring quarters. To explore using these technologies, contact Bob Taylor, Director of NUIT Academic Technologies, at <bob-taylor@northwestern.edu>.
NUInfo's Greatest "Hits"
Ever wondered which NU Web pages are accessed most often? Here's our "top ten list" for the months of August-October, 2004.

The top ten home pages:
1. HereAndNow
   <hereandnow.northwestern.edu>
2. Northwestern University home page
   <www.northwestern.edu>
3. WebMail
   <www.northwestern.edu/webmail/>
4. NUIT Help
   <www.northwestern.edu/nuvit/>
5. CAESAR
   <www.northwestern.edu/caesar/>
6. Academics Top-Level Page
   <www.northwestern.edu/academics/>
7. Student Top-Level Page
   <www.northwestern.edu/student/>
8. Admissions Top-Level Page
   <www.northwestern.edu/admissions/>
9. Athletics Top-Level Page
   <www.northwestern.edu/athletics/>
10. Faculty/Staff Top-Level Page
    <www.northwestern.edu/staff-fac/>

Thanks to Adam Finlayson of University Relations' Web Communications department for providing these statistics. (Note: Online traffic instantly grows by 60 percent the first week of fall quarter.)

Featured Web Site:
Northwestern University Information Technology

If you haven’t already visited NUIT’s new Web site, now’s a great time to check it out! The completely redesigned site features beefed-up content with a customer-oriented focus. New additions, such as the “Getting Connected” section, help maximize your productivity with user-friendly instructions for getting online at work, home, and on the road.

The site also features a popular section about personal computer security (see the “Get Control” feature on this page) and expert information about emerging technology, such as smartphones, which combine mobile phone service, wireless Internet, and Personal Digital Assistant (PDA) tools to help you stay organized and connected anytime, anywhere.

NUIT has also expanded its awareness campaign to customers, with easier access to technical support contacts, NUIT news and events postings, and improved site navigation for smart, productive browsing. We invite you to visit our site at <www.it.northwestern.edu>.

A Comprehensive Approach to Computing Security

If warnings about computer security threats seem repetitive, there’s a good reason. New threats seem to emerge even as solutions for them are developed. But don’t despair—NUIT is on the case!

Information Systems Security/Compliance: To further its commitment toward protecting University information technology resources, NUIT created an Information and Systems Security/Compliance office. This office will lead Northwestern’s efforts to prevent, detect, and respond to network security threats and develop security and compliance programs and policies. The office will also collaborate with departments and schools to facilitate communications regarding security responsibilities.

Netpass: As part of its continued efforts to keep the University network safe and accessible, NUIT implemented NetPass, a safety inspection program on the residential network. NetPass helps fight network vulnerabilities by scanning students’ computers before granting them Internet access. If a problem is detected, NetPass provides self-service “clean-up” instructions and/or more information to correct it.

To date, nearly 5,000 students have successfully passed a NetPass scan, making the NU Network that much safer. NUIT is exploring the deployment of NetPass-type tools in other University environments.

Computing Safety Awareness:

NUIT’s Get Control Web site continues to provide the latest resources and information about network and computer security for faculty, staff, and students. New this year is a cross-media publicity campaign encouraging preventative computer care through the “5 Simple Steps to Secure Your Computer.” The entire University community is urged to “Get Control” by using antivirus and anti-spyware software, strong passwords, and firewall protection. The campaign also stresses keeping operating systems updated regularly for maximized security.

The Get Control site was updated with information about avoiding “phishing” schemes in recent headlines—scammers posing as representatives of banks or corporations asking for personal or financial information.

Stay ahead of the computer virus game by visiting NUIT’s Get Control site at <www.it.northwestern.edu/getcontrol/> and following the 5 Simple Steps to computing security. Protect yourself, and help protect others on the Northwestern network.

“The commitment to a comprehensive University-wide approach to security impacts all other technology initiatives,” said NU Associate Vice President & Deputy Chief Information Officer Patricia Todus. “Our efforts to protect the University from network threats include the campus community, whose vigilance in support of this effort is essential.”
Focus on Faculty: Tools for Academic Collaboration

One of NUIT’s fundamental goals is to build and support technology for academic collaboration at the University. In this insert, we highlight three innovative tools used to advance teaching and learning at Northwestern.

Videoconferencing Helps Distribute Learning

Technology-enhanced classrooms, though far from a novelty at Northwestern, continue to provide some of the most effective collaborative environments available for instructors. Videoconferencing is coming into wider use as a tool that can significantly enhance teaching and learning, with new and imaginative uses being developed by NUIT and University schools and departments.

“With the challenges surrounding travel with cost and safety in recent years, companies have been moving to virtual modes of communication,” said Dennis Glenn, Assistant Dean for Distributed Education in the School of Communication. “We discovered that many of the same strategies work well in a classroom setting.”

Distributed learning, Glenn explained, is distinct from so-called distance learning. “What we offer is a blended program with a variety of ways to meet. The students get real-time classroom experience via videoconferencing, and they can work on team assignments and interact with people regardless of location. It’s a great environment for collaboration.”

In the Network Mediated Communication course, taught by Brian Nielsen of NUIT Academic Technologies, who has an adjunct appointment in the School of Communication, remote student teams have successfully made group presentations and led discussions to the classroom in Evanston.

“Videoconferencing does create a different dynamic,” said Nielsen, “but the ability to see the facial expressions of my remote students and also have them view and interact directly with local students adds real engagement in the classroom.”

Next quarter, the courses will integrate local and remote students in “virtual teams,” a concept adapted from the corporate world. “The teams can meet at any time, and they can add and remove members without being concerned with office space,” Glenn said. “Organizations worldwide are using this concept, and we’re using videoconferencing technology to help teach it.”

For more information about NUIT’s videoconferencing capabilities, please visit <www.it.northwestern.edu/videoconferencing/>.

Q & A: Spyware

Q: What is spyware and how do I know if I have it?

A: The term “spyware” generally refers to any type of technology that collects and transmits information about a person or their browsing, usually for advertising purposes.

Spyware is most commonly installed as a component of freeware and shareware applications, such as the popular Kazaa Media Desktop software. If you notice that some of your Web browser settings have been changed, that pop-up ads are appearing when your browser is not running, or that your computer is running a lot slower than usual, you may have spyware.

To diagnose and repair spyware, NUIT recommends Spybot Search and Destroy, a free download. Just as with antivirus software, you must update your spyware definitions regularly and scan your computer at least once a week. However, due to the complex nature of spyware applications, no single software program offers complete protection. Using multiple anti-spyware tools and downloading with caution are the best ways to secure your computer.

For more information, please visit NUIT’s Anti-Spyware Software page at <www.it.northwestern.edu/getcontrol/>.

Free Technology Presentations For You! NUIT Tech Talks

Each quarter, NUIT presents a variety of free “Tech Talk” presentations on new technology and technology-related issues, open to the entire University community. “Computing Unplugged” and “A Flu Shot for Your Home and Work Computers” are just two of the recent topics. These lunchtime sessions are informal and enjoyable! For information, visit the NUIT Events site at <www.it.northwestern.edu/events/>.

2East: New Technology Series

In partnership with the University Library, the 2East: New Technology Series is specifically intended for Northwestern faculty who want to take advantage of the teaching and research capabilities of digital media, course management systems, online archives, advanced visualization technologies, electronic journals, and other emerging technologies. For detailed descriptions of future 2East presentations and workshops, please visit <2east.northwestern.edu/>.
Focus on Faculty: Tools for Academic Collaboration

NU’s Course Management System Aids Discussion

Northwestern’s Web-based Course Management System (CMS/Blackboard) has become a campus staple for faculty to provide students with lecture notes, course reading, and related Web links. Recently, instructors are using more of the CMS’s collaborative features to increase student input and interaction in a virtual setting.

At the Medill School of Journalism, students in Associate Professor Richard Gordon’s Analytical Reporting class use NU’s CMS discussion board capabilities for a broad range of coursework, ranging from simple assignments to collaborating on long-term projects. Gordon asks his students to post reactions to course reading assignments on the CMS discussion boards before class to spark discussion. “The online boards have dramatically improved the quality of discussion in the class,” Gordon said. “For students to write a few paragraphs before class tells me not just that they’ve read the material, but that they’ve reflected upon it.”

Gordon’s students also use the discussion boards for a major course project. Each student picks a news beat that he or she follows for the duration of the course. Initial assignments include identifying and critiquing ten news data sources for their beat. By having his students post preliminary homework to the discussion boards, Gordon can comment on posts in a public space. Students then have access to each others’ work and Gordon’s feedback for future phases of the assignment. “The fact that they can post and I can go in and give them feedback is both collaborative and productive for the students,” Gordon said.

For more information on NU’s Course Management System and new fall features, please visit <course-management.northwestern.edu/>

Depot Offers an Online Repository of Data & Ideas

Another collaboration tool growing in popularity is NU’s Depot file management service. Depot allows faculty and students centrally-located space on University servers for course-related documents. Documents are then accessible via several methods: students can access the files via the Web from any computer, instructors can embed the service into the Course Management System, or directories can be created on Windows-based computers to look and work like a standard folder.

Some of the University’s biggest Depot users are the almost 400 first-year students in the McCormick School of Engineering and Applied Science. Students in the 24 sections of the McCormick School’s Engineering Design and Communications course use the Depot service to collaborate on long-term group projects, storing data ranging from clients’ contact information to drawings, papers, and initial product designs.

“It’s difficult to imagine what we would do if we didn’t have something like Depot available,” said John Anderson, Instructional Technology Coordinator for the IDEA Program and Lecturer at Northwestern’s Writing Program.

“Students need a place for their stuff,” Anderson said. “We use Depot to create space where students have autonomous control over their data so they can gather information, generate ideas, and ultimately solve problems.”

Anderson also praises Depot’s portability and universal access for group collaboration. “Our students work on their projects in a lot of different places: the classroom, computers labs, and their dorms,” he said. “The fact that everything’s Web-accessible and has an address makes Depot a mechanism for sharing files that’s much better than e-mail attachments.”

For more information on Depot, please visit <www.at.northwestern.edu/depot/>.
Mobility Options at Northwestern

That familiar ad slogan, “It’s everywhere you want to be,” could just as well refer to the Internet. There are more options for Internet access than ever, whether you’re on campus, at home, or traveling.

On-campus access: There’s no escaping wireless! You can access the NU Network and Internet from more than 300 wireless locations on the Evanston and Chicago campuses. Whether you’re sending e-mail, reviewing assignments posted to the Course Management System, or doing research on the Web, wireless frees you from the constraints of your office. Learn more at “Connecting from On-Campus” at: <www.it.northwestern.edu/oncampus/>.

Off-campus access: Need to access Northwestern from home? We recommend a high-speed DSL (Digital Subscriber Line) or cable modem connection if you’ll be spending lots of time on the Web, downloading large files, and/or viewing multimedia rich Internet content. But if all you need is a way to check NU e-mail from home, many local ISPs offer lower-cost dial-up service similar to the NU modem pool service (which will be phased out in August 2005). More information is available at our “Connecting from Off-Campus” site: <www.it.northwestern.edu/offcampus/>.

Traveler access: If your work assignments take you far from home, the NU Network could be as close as your hotel room or even the airport lounge. NUIT has partnered with iPassConnect to offer Internet access on a monthly for-fee basis to faculty and staff. iPassConnect is a national and international network service with over 19,000 access nodes in 160 countries. For details, check out <www.it.northwestern.edu/offcampus/ipass/>.

Mobile telephone services: More than just a portable, convenient communication tool, the latest “smartphones” have PDA (Personal Digital Assistant) features to help you stay in touch: e-mail messaging, Web browsing, even reading and editing of Word and Excel files on the go. Learn more at <www.it.northwestern.edu/telephone/mobile/smartphones/>.

First Phase of CONDUITS Launch a Success

It’s official, the first phase of CONDUITS (Customer-Oriented Network Delivering University Information Technology Services) has been launched. CONDUITS, the new technology management system for services offered by NUIT, was kicked off on October 25 and encompassed “back-office” use of the system for staff handling order processing and related functions.

To help ensure a successful roll-out to the larger Northwestern community in 2005, a CONDUITS University focus group was established. This fall, the group reviewed demonstrations and drafts of training initiatives. The group was asked to comment on the training and on the functionality of the system being demonstrated. Their feedback will help shape training for the more than 2,200 CONDUITS departmental contacts responsible for ordering NUIT services and retrieving online statements.

Electronic delivery of bills is scheduled to be available in early 2005 via a Web portal. After this occurs, Web ordering of services will be launched in a phased roll-out.

Due to the business rules concerning who can place orders, only designated departmental contacts previously indicated by administrative department heads will be able to place orders through the system. This will help create a more stable and secure system.

General information about CONDUITS, including a departmental contacts list, is available at <www.it.northwestern.edu/transitions/>. Please direct questions to NUIT Consulting Services at 847-467-5560 or <consulting-services@northwestern.edu>.

What's New and What's Changing: Technology @ NU

For more information on the items below, please visit <www.it.northwestern.edu/transitions/>.

Online Directory Changes: To ensure the integrity of directory information, most of the online directory fields are now being directly fed by the Human Resources Information System (HRIS). The University community is encouraged to review their online directory information for any missing or changed data (e.g., office phone). To make changes to HRIS information, please visit the HRIS Self-Service page at <https://nuhr.northwestern.edu/>.

Datacenter Services: In response to the needs of University departments, schools, and researchers, NUIT has revised the service level and pricing structure for its Datacenter server hosting and storage services. Servers and associated equipment are located in NUIT’s secure Datacenter space. Fees are determined by the amount of rack space needed and the level of support requested. Three service levels—server hosting, storage, and research specific services—are available, depending on the customer’s needs. For further information and pricing, please visit <www.it.northwestern.edu/dss/abt-dept-itcs/>.

Novell IPX: NUIT will stop routing the Novell IPX protocol across the campus backbone network on January 2, 2005. IPX is the protocol most commonly used to communicate with older Novell NetWare servers. Because router vendors do not see a market for continued IPX support, extending IPX will limit what NU can do with the network. Novell servers should be upgraded as necessary to use TCP/IP. NUIT recommends that current Novell IPX users migrate to Novell server operating system 5.1 or above and upgrade to use TCP/IP.

New E-mail Password Technology: In the interest of creating a more secure e-mail environment at Northwestern, NUIT is phasing out its current password technology (Kerberos) on NU’s central e-mail servers (casbah, hecky, lulu, and merle). All e-mail users must upgrade and/or reconfigure their e-mail software to SSL (Secure Sockets Layer) before January 11, 2005. After this date, non-SSL e-mail clients will no longer work at Northwestern. To help configure your e-mail software, step-by-step instructions are available at <www.it.northwestern.edu/accounts/email/config/>.

(continued on next page)
Macintosh Support Ends: The Macintosh OS X 10.0 and 10.1 operating systems will reach the end of their supported lifecycles at Northwestern on January 11, 2005. Support is ending because these operating systems do not support NU’s e-mail password encryption technology (SSL). Users are encouraged to upgrade to Mac OS 10.3.

Modem Pool Retirement: The NU modem pool will be retired in August 2005. This decision reflects a reduced demand for modem pool services as well as the need to reduce points of entry into NU’s network because of increased security concerns. As the availability and affordability of residential broadband Internet access has increased, usage of Northwestern’s modem pools has declined by more than 50 percent since 1999. NUIT recommends that faculty, staff, and students living off-campus consider high-speed DSL or cable modem service as the most convenient and effective means to access the Internet from home. For more information, please visit NUIT’s Off-Campus Connections site at <www.it.northwestern.edu/offcampus/>.

Workshops for Graduate Students and Faculty

The WINGS program (Web-enhanced Instruction for Northwestern Graduate Students), launched early in 2003, has been well-received and has had 25 students to date. WINGS trains graduate students to use technology in their teaching so as to engage students and enhance learning. At the end of the program, participants will have created a Web-enhanced course or section using University-supported technology.

Developed by the Searle Center for Teaching Excellence with assistance from NUIT’s Academic Technologies, WINGS is designed to help prepare graduate student teaching assistants for the University’s Web-enhanced educational environment.

Graduate students in the program meet with peers once a week for five weeks and interact in class as well as online, primarily utilizing features in NU’s Course Management System (CMS). During that time, teaching assistants have the opportunity to explore and evaluate a Web-enhanced class as students.

They also acquire technology skills, such as becoming proficient in using the CMS as an instructor.

The next six-week WINGS session is scheduled to begin January 17, 2005. For more information, please visit <teach.northwestern.edu/prog_students_wings.html>.

The Teaching, Learning, and Technology (TLT) Workshop, now in its third year, is also recognized as one of the premier faculty development events on campus.

Co-conducted by the Searle Center for Teaching Excellence and NUIT, the program provided hands-on learning, demonstrations, and discussions at the beginning of the academic year for faculty from the Weinberg College of Arts and Sciences, the Medill School of Journalism, the School of Music, and the Feinberg School of Medicine.

The workshop offers faculty attendees a carefully-planned blend of learning theory and practical experience with software techniques coming under increasingly wide use at the University.

For more information on WINGS and TLT, please visit <2east.northwestern.edu>.