

by Audrey R. Browka



Technology

the new academic tool

When most Canisius College alumni were in school, a blackboard, chalk and textbook were all college professors needed to communicate a good lesson plan and stimulate effective learning. These were proven academic tools. They still are. But as folk singer Bob Dylan once proclaimed, 'the times — they are a changin'.

“In my generation, if students didn’t see it on the printed page it wasn’t real,” says **Dr. Walter G. Sharrow**, a 38-year veteran professor in the college’s History Department. “In this new generation of students, if they can’t see it on a computer screen, they’re not convinced its real.”

With the first Internet-savvy high school students entering college, institutions are finding that most freshmen have



Dr. Walter G. Sharrow

already explored a full range of computer applications. They have surfed cyberspace, chatted in real-time environments and in some cases, even created their own Web sites!

To keep pace with this new generation of students, Canisius is changing the landscape of its classrooms. Buildings like Old Main and Lyons Hall are equipped with the technological tools needed for learning today. (See *That Was Then ... This is Now*, pg. 9).

“I truly believe this generation of students learns more through the visual stimulus than the oral stimulus,” notes Sharrow. “By having this new technical support in the classroom, we are now able to engage students not just intellectually, but emotionally and visually.”

It is not very often that you hear professors instructing students to ‘open their books’ anymore. Instead, many faculty who teach in Old Main are discarding the one-dimensional texts for Web sites that take students on virtual tours into operating rooms to study surgical procedures, around the world to learn foreign languages and through some of the most celebrated historical museums.

“I frequently go into class and ask my students ‘where do you want to go today,’” says Sharrow, who also chaired the Building Program Committee established to determine the needs for the “new” Old Main. For example, Sharrow and his New York State history class

recently toured a 19th century tenement house that was converted into a museum (www.wnet.org/tenement).

“They have video cameras inside,” he explains “so I can take my students from 2001 Main Street to this tenement house in lower Manhattan. We go from room to room. I can zero in, take close-ups of the cook-stove and show them the sewing machine with the treadle. I’ll tell anyone who will listen, it’s like teaching in heaven.”

Ironically, wired classrooms did not rank very high on the faculty wish list when the Building Program Committee first surveyed professors. But with the technology now in

place, faculty in all fields of study are finding out just how easy it is to adapt their lesson plans to maximize its use.

“It’s a natural in language,” says **Dr. Raymond J. Clough**, associate professor of modern languages and director of faculty development. “Having this technology in the classrooms allows more learning to take place in better ways.”

With the simple click of a mouse, Clough is able to direct students in his advanced French class to a variety of all-French Web sites and turn tedious vocabulary exercises into a much more engaging classroom lesson. They learn about French fashion by surfing the Web pages of Paris boutiques. After watching live broadcasts of the Paris evening newscasts (www.comfm.com), they discuss current events (*en français*, but of course!). And they become proficient with common weather terms by presenting weather reports based on current conditions found on French weather satellite sites.

“My main objective is for them to master the language and learn about French culture today,” explains Clough. “We visit French sites where they can see what the French are wearing. They can buy books. They can see what the latest CDs are in music. They’re using the language, they’re learning the culture and I’m taking them where they want to go to learn — on-line.”

Still, professors who take advantage of this new technology say it will never replace the student-faculty relationships for which Canisius is so well known. Instead, they explain the classrooms allow for more effective interaction and enable professors to find unique new ways to enhance what they are already doing.

Mike G. Dolan, professor of sports medicine, refers to the challenges he used to face in trying to describe various muscle injuries and surgical procedures to students. Without having an actual patient to

examine, Dolan says it was often times difficult to give students a visual idea of what they might encounter 'in the real world.'

"You can talk about what it looks like when someone tears a muscle, but it actually brings silence to the classroom when you can go on-line and view a live demonstration of an actual injury or surgical procedure," explains Dolan, who is now able to use live link-ups off the Internet to bring students into instructional operating rooms (www.health.discovery.com/fansites/life-line/surgeryarchive.html).

"It gives students a very vivid, very real image. The technology definitely brings reality to the subject as opposed to the old days where you would hold up a picture and say 'this is what it looks like.'"

Mastering these new educational tools requires some work therefore many professors rely on the college's Center for Teaching

Excellence (CTE).

"We run regular workshops for the faculty throughout the year to teach them how to run PowerPoint, iMovies or how to use BlackBoard, a course-management program for professors," says Clough, who also serves as the CTE's director. "We connect faculty with other faculty who are doing things with technology with the idea that expertise breeds expertise."

As more and more professors experience the new classrooms, they are also finding new ways to change the traditional role of the student. In Mike Dolan's pharmacology class, students research two medications commonly used to treat orthopedic injuries. They must then present their findings in an HTML document (a Web language), which Dolan

later posts on the class Web site for peer review and future reference. He describes the exercise as a way of enabling students to take greater ownership of their learning experience.

"Having this technology, to a certain degree, puts the burden on students," says Dolan. "It forces them to go find the information instead of relying on the professor as their sole source of information. And that allows students to develop their learning skills."

Ray Clough concurs, noting that when his students are engaged in discovering and developing course material, they demonstrate an

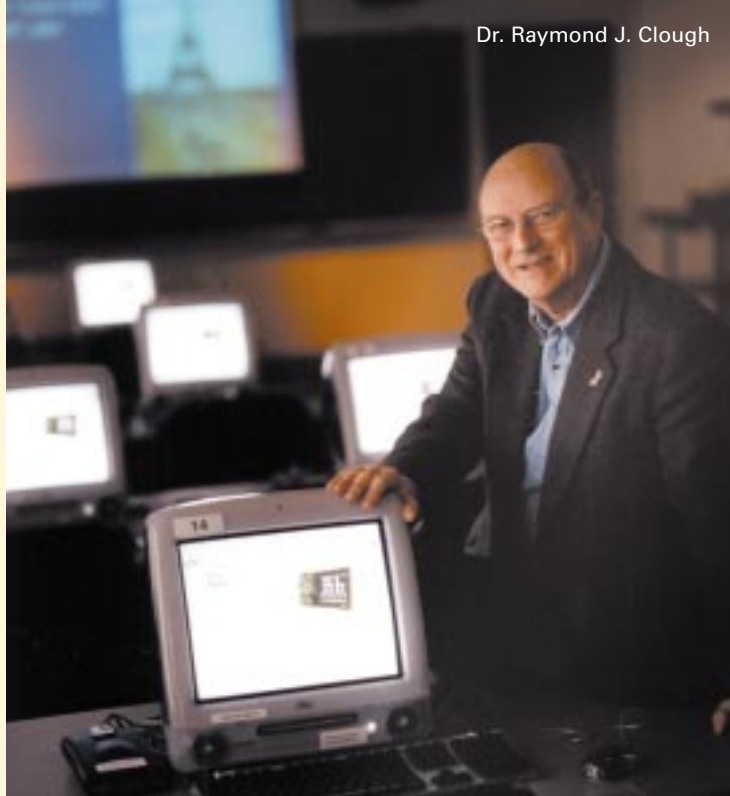
increased retention rate and are more comfortable leading class discussions, collaborating and evaluating peer work. And quite often, Clough adds, the professor can learn just as much as the students.

"At the same time I'm sharing information with them, they are sharing information with me," he explains.

"For example, when we study French-Africa I assign them to research countries such as Rwanda or Burundi. I know a lot about these places but they always find out more. One student last year did a project on ZouGluou music, which I never heard of. That's the beauty of it. It's not just me lecturing them. The students get a chance to share what they've discovered. That makes for better learning."

And because better learning is what distinguishes a Canisius education, the college will continue to keep pace with the new educational tools.

"The objective here is to meet our students where they are and bring them along to where they want to go," explains Sharrow. "We can only do that by communicating in the language and mediums with which they are most comfortable." ■



Mike G. Dolan