

## U.S. ADOPTS CCNY PEER TEACHING METHOD

**W**HAT BEGAN AS A NOVEL APPROACH TO TEACHING chemistry at City College in the early 90's has now become a national model and part of a vigorous effort by the National Science Foundation to change how chemistry is taught.

Peer-Led Team Learning — PLTL for short — is the brain-child of CCNY Professor David K. Gosser, Jr., who since 1991 has used the method successfully to teach chemistry courses at the College. Gosser's model uses students who have excelled in a course as peer leaders to help new students learn in a collaborative workshop environment. Peer leaders meet with six to eight students weekly, guiding them in problem-solving and encouraging them to engage each other in scientific debate and discussion regarding the fundamental concepts and applications of the course material.

Peer leaders are trained in several facilitation techniques and group dynamics. They also work closely with faculty members and prepare by discussing the workshop content with the faculty in weekly meetings.

Based on a highly favorable five-year evaluation showing that it leads to greater student involvement,

increased motivation and improved performance in courses, the NSF awarded City College \$2.4 million in 1999 to turn PLTL into a national model. A recent NSF review awarded new funding to extend the project to 2005. In all, NSF support for CCNY to spread the program to other campuses has totaled over \$7 million. And it has been money well spent. Today, the CCNY model has been replicated in more than 60 institutions around the United States.

Predictably, City College is the lead institution of a NSF-funded National Dissemination Project which now involves some 138 faculty, 35 learning specialists and 1,200 peer leaders who conduct PLTL courses for over 15,000 students at schools around the country each semester. Gosser attributes the success of the expansion of the model to the leadership team that has emerged across the country and to the participation of peer leaders. The peer-led learning approach has been expanded to include organic chemistry, physics and mathematics.

According to Dr. Gosser, the key element that distinguishes PLTL from other learning methods is the peer leaders and the way they work with faculty. "There's also a sense of community that creates a brand new learning environment," he adds.

"PLTL borrows from collaborative learning methods, but expands beyond that," Dr. Gosser notes. "The inclusion of a leadership role for undergraduates unifies the group and catalyzes the learning process. The model changes the emphasis from 'sink or swim' to an environment where every student is expected to succeed and is supported directly in the classroom to do so."

More than 50 CCNY undergraduate students participate as peer leaders each semester in introductory chemistry, organic chemistry and biology courses. And they have helped take their model nationwide. They have conducted sample workshops and made presentations at numerous local and national meetings, including Boston, Washington, DC, Santa Clara, Phoenix and the University of Michigan. Dr. Gosser cites student leaders' participation as a major factor in the success of the model's dissemination. "People see first-hand the poise and confidence of our leaders, and think, 'Our students could do that too!'" ■



Professor Gosser (seated, rear) and peer tutors discuss teaching strategies