

## GLOBE Travels to Antarctica

Students from kindergarten through high school will not have to travel far to learn first-hand about climate change in the coldest place on earth thanks to a research weather station that will be set up this fall on one of Antarctica's active ice shelves. The environmental data-monitoring station is part of a science education initiative called the Con Edison/Queens College GLOBE-NY Metro program, which was just renamed to recognize the utility's continued support. As a result of Con Ed's long-standing commitment to GLOBE, the college has trained more than 1,700 teachers and staff from over 600 New York schools, agencies, and community environmental groups.

"Con Ed has been a strong partner since 2001 when the college first became involved with GLOBE in New York," says President James Muyskens. "In those seven years, the program has grown in size and scope, paving the way for future science education initiatives such as the Antarctica research weather station."

The meteorological station will be brought to Antarctica as part of a National Science Foundation-funded expedition led by Stephen Pekar (EES), who will be accompanied by three of his students and a science teacher from a Harlem middle school. The expedition will study sediment deposited in Antarctica during the Cretaceous Greenhouse World period, when atmospheric carbon dioxide levels were similar to what is predicted for the end of this century. Each day the station will monitor and feed data on air and ice temperature, relative humidity, cloud cover, and other research into the international GLOBE databank for use by students, teachers, and scientists.



**Steve Pekar (EES) will bring a GLOBE climate monitoring station when he returns to Antarctica this fall.**

GLOBE emphasizes hands-on activities that can be integrated into daily classroom work at any academic level. Each school in the program receives research equipment and instruction in its use on-site. Participants turn their campuses into open-air labs where they monitor environmental conditions in five categories: air, soil, water, land use/land cover, and seasonal change. Then students enter their findings into an international GLOBE database, which can be accessed by scientists around the world. To date, students have submitted more than 14 million pieces of information.

"Students aren't just learning chemistry, physics, or biology," says Allan Ludman (EES), the GLOBE-NY Metro director. "They're learning about the natural world in a way that makes science understandable. At the same time, they are developing observational abilities, math skills, general literacy and a sense of inquiry, research and the investigative process—an integrated approach that can be applied to any academic subject."