

Students learn high tech in

TECH HIGH

A truly successful partnership program is developed because of a community need. Recognizing this need, partners enthusiastically and unselfishly work together to develop the best program possible.

**Partnership
Program
to serve
high
school
students**

Such a partnership program was started in 1989 when North Carolina Power and Chowan College developed a math and science enrichment program for rising high school sophomores in northeastern North Carolina. The program — a hands-on, high-tech summer camp — is appropriately called Tech High.

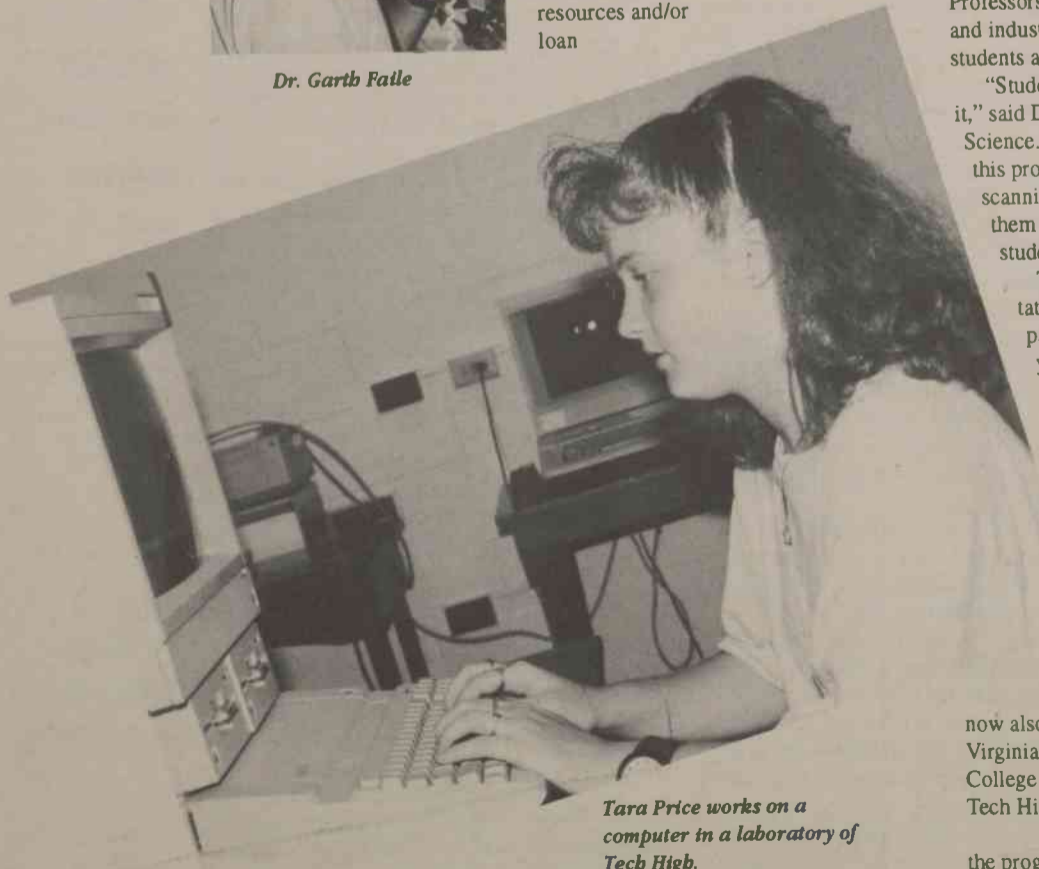
"Hundreds of students in our area of the state have the talent to become anything they want — from research scientists to nuclear engineers," said Randy D. Shillingburg, North Carolina Power's director of media and community relations. "However, many students do not have the opportunity to explore these high-tech fields because their families or schools aren't financially able to provide enrichment opportunities."

"North Carolina Power initiated Tech High in 1989 to encourage some of these students to pursue studies and careers in the sciences and mathematics," said Shillingburg. "This program responds to the crisis in math and science, and addresses other educational and workforce needs."



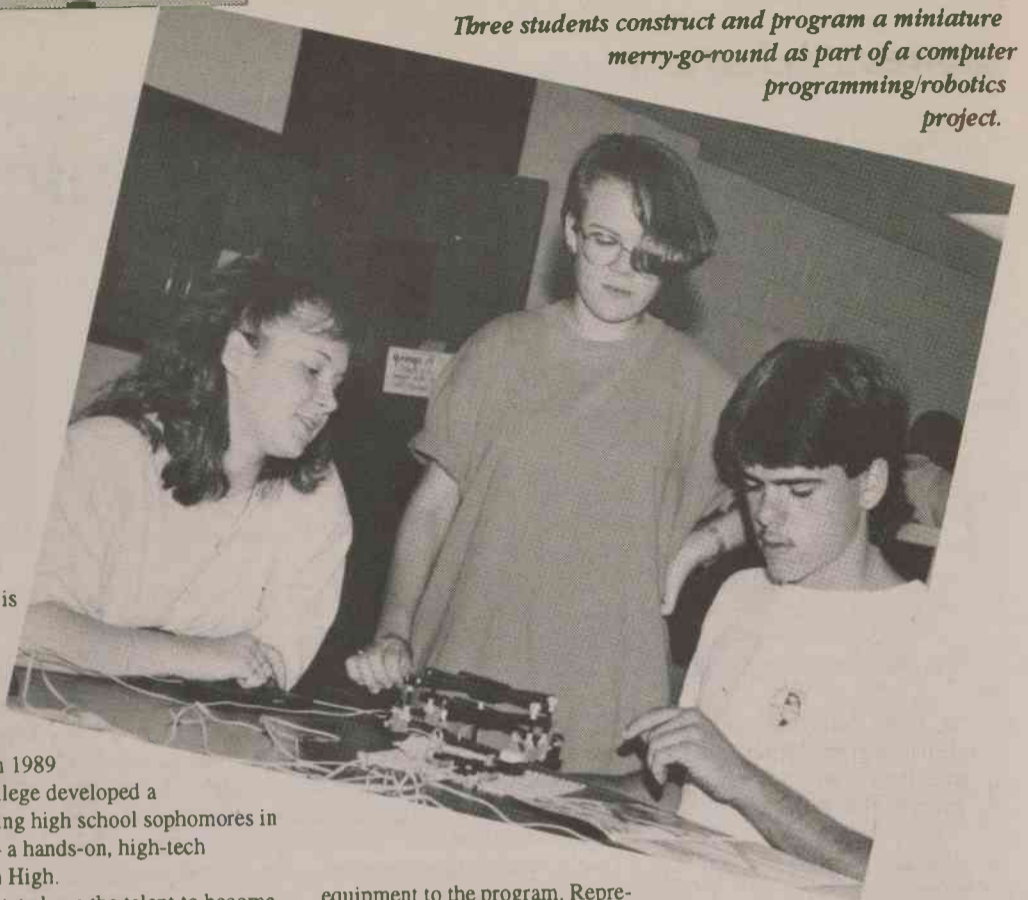
Dr. Garth Faile

Chowan College and North Carolina Power have worked in partnership with numerous partners — including North Carolina Alternative Energy Corporation, North Carolina State University, North Carolina Department of Public Instruction, Apple Computer and area schools — to develop an exciting and educational curriculum. Although North Carolina Power pays the entire \$15,000 annual cost of the program, the other partners bring valuable human resources and/or loan



Tara Price works on a computer in a laboratory of Tech High.

Three students construct and program a miniature merry-go-round as part of a computer programming/robotics project.



equipment to the program. Representatives from these partners make up the Tech High Planning Committee.

"We utilize the best of what each partner has to offer," Shillingburg said. "We feel the expertise, vision and enthusiasm that each partner brings to the program are more valuable than dollars. Each partner brings something different — from experience in working with students, to computer expertise and high-tech equipment. All of the parts fit together to produce what we feel is the most exciting math and science camp in the country."

Each year, a new class of 34 students is invited to participate in the hands-on high-tech camp. Students, nominated by their schools, are selected by the Tech High Planning Committee.

The 1994 Tech High camp will be held June 19-24 on the Chowan campus.

Working from 8 a.m. until 9 or 10 p.m. each day, students work in robotics, computer, chemistry, biotechnology, electron scanning microscopy and physics laboratories, and participate in tours and activities at high-tech facilities. The curriculum varies from year to year to take advantage of changing technologies and available resources provided by the partners.

Each student attending the camp receives and learns how to use a programmable graphics calculator, the latest in hand-held technology. Professors from Chowan, area teachers and representatives from business and industry instruct the classes. Area teachers and former Tech high students are utilized as dorm counselors.

"Students work in classes about 12 hours each day and actually enjoy it," said Dr. Garth D. Faile, chairperson of Chowan's Department of Science. "The difference between Tech High and school is that students in this program actually see and use high-tech tools such as electron scanning microscopes, robots and lasers — instead of just reading about them in a book. Lectures are kept to an absolute minimum so that students can learn by doing."

Tech High is more than just a one-week summer camp. Representatives from North Carolina Power, Chowan College and the other partners maintain contact with students during their high school years through phone calls, visits to schools, follow-up workshops and a quarterly alumni newsletter.

"Tech High students are made to feel that they are part of a family — a family that challenges and encourages its members to succeed," Dr. Faile said. "By reaching students at that critical time between their freshman and sophomore years, we hope to have an impact on their studies and career goals."

The program has proven to be an overwhelming success. In 1992, 25 of 30 students who attended the first program in 1989 entered college majoring in mathematics or science-related fields. Ten began work toward engineering degrees.

Because of the success at Chowan College, Tech High program are now also being held at James Madison University in Harrisonburg, Va.; Virginia Commonwealth University in Richmond, Va.; and Longwood College in Farmville, Va. Almost 400 students have participated in the four Tech High programs.

North Carolina Power's sister company, Virginia Power, expanded the program to these additional locations. Although the curriculum differs slightly from program to program, each Tech High is successful because of a strong company-community partnership.