## TechXcite:

## The Exciting New After School Program

For the past few years, Drs. Gary Ybarra, Paul Klenk and Rebecca Simmons have been hard at work sculpting a new curriculum called TechXcite. The initiative is a partnership between the Pratt School of Engineering, the National 4-H Council/4-H Afterschool, North Carolina 4-H, and the National Science & Technology Education Partnership (NSTEP). This curriculum, directed at 11 to 14-year-olds, aims to strengthen the participants' understanding of topics in engineering through after-school programs, as well as ignite an interest in technology.

## **Reaching Out**

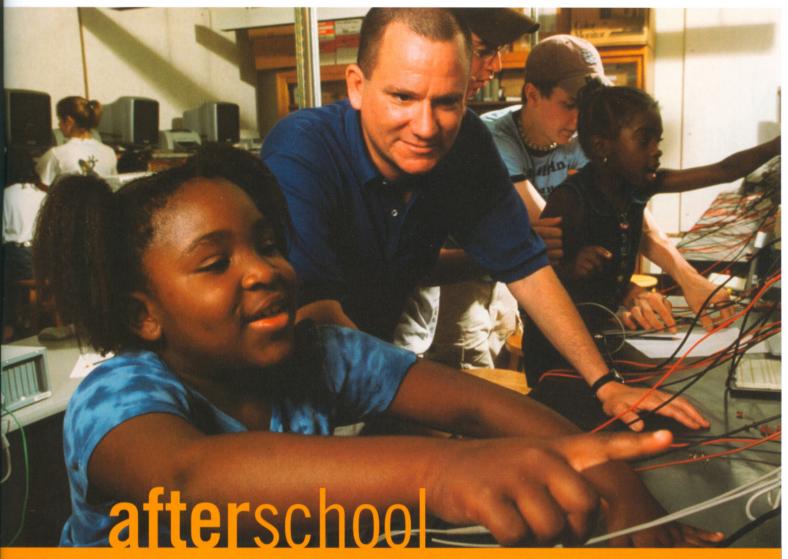
For the next five years, the curriculum will be released to an increasing number of participating after-school programs, where students "from predominantly rural as well as suburban and inner city areas" can discover and further pursue their interests in science and technolo-

gy. Ybarra hopes that TechXcite will give kids "a passion for learning and solving real-world problems that improve human life quality."

The curriculum will be implemented in current after-school programs through the existing 4-H infrastructure. 4-H is a nation-wide organization that provides curriculum and training to support after-school programs such as Boys and Girls Clubs, YMCA, and individual state programs such as Serving Our Students (SOS) in North Carolina. Depending on the particular 4-H program, students will then participate in TechXcite up to a few times a week.

A middle school girl solders a circuit in an after-school session.





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## **Looking Ahead**

Although the TechXcite curriculum has not yet been implemented, the team has some solid goals for the years to come. Starting in the spring of 2008, the pilot program will be released to 14 schools in the North Carolina area. For the next five years, additional sites will be added in states as far as Oklahoma and California, with the projected amount of new participants more than doubling each year. By the year 2013, TechXcite hopes to have its curriculum implemented in nearly 200 after-school programs, influencing almost 10,000 students and approximately 100 mentors.

Klenk added that "after the pilot phase, [TechXcite] will be made avail-

able nationally to 4-H supported afterschool programs." In the future, the TechXcite curriculum also will be available for free from the TechXcite website and TeachEngineering.org.

The current curriculum focuses on Biomedical Technology. 'Devices for the Disabled' and 'Biosensing' are the names of the two modules developed so far. Martin Brooks and his research team of Heather Wake, Arnak Aleksanyan and Xin Cai are also developing an infrared iPod wireless transmission system and a pulse oximeter to be utilized in the program. Anyone who would like to contribute is welcome to contact Ybarra or Klenk.

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