

WUSF 89.7 News

Science Students Reach for the STARS

By BOBBIE O'BRIEN



TAMPA (2006-06-23) That opening is from a CD produced to promote the STARS program - STARS stands for Students Teachers And Resources in the Sciences.

STARS pairs University of South Florida engineering and science students with children in 11 Hillsborough County elementary schools. It's a year-round program that culminates in a three-week summer science camp.

The goal of STARS is simple - to create a program that makes science fun for youngsters. USF Industrial Engineering Professor Geoffrey Okogbaa is a principal investigator for STARS.

OKOGBAA: They've done things like preparing molecules using M&M's, then eat the M&Ms, and that has been one of the most fun things.

And teaching children about molecules is more important than ever according to STARS' other principal investigator, USF Industrial Engineering Professor Tapas Das.

DAS: One thing we're saying is the way the technology is going in the nano direction, nano-skill technology, we've got to start kids thinking at the molecular level, at the small level right from the beginning. We can't wait for them to go to college or high school because everything is explained at the molecular level.

Initially, the STARS program targeted students in low-performing schools. Many were from diverse racial and ethnic backgrounds. Das says it was important to mirror that diversity in the graduate and undergraduates hired as STARS fellows.

DAS: They want to be scientists, because they see our fellows are very racially ethnically, socially-economically, gender-wise balanced. They see role models. That's one of the critical elements of our project too.

But hands-on experiments rank at the top of how to get kids to love science.

Souheil Zekri is a mechanical engineering graduate student at USF and a STARS fellow. Gathered around him are several elementary-age students - one holds a voltage meter - another aims a flashlight - still another positions a solar panel.

ZEKRI: Everything they get to get their hands on is great. The more hands-on things they get to, the better. If we say anything about FCAT, they get a little bit afraid. As long as this doesn't have anything to do with FCAT, they're fine.

Students are tested before and after each class - but only to measure the success the module in teaching specific scientific principles. USF doctoral student Wilkister Otieno co-manages STARS.

OTIENO: We try to look at what they're taught in school and try to look at what now is state of the art from the Internet and our labs and try to put that together integrate that with their syllabus and add to what they have learned.

Down the hall - other students experiment with luminescence. And in Kevin Young's class, the kids have just finished building their own anemometers. Young's goal is to dispel the myth that science is hard.

YOUNG: I think its just because teachers really don't know how to teach it. Try to expose these kids to some fun science. I know there are a few kids here who are interested in science already.

STARS co-manager and USF graduate student Vishnu Nanduri says there's another science myth that needs dispelling.

NANDURI: They think science is boring, that's the biggest misconception. That is what we try to drive away - science is fun as you'll see in some of our classrooms we're doing really fun very interesting science experiments that will get the kids interested in science and math and all the good stuff.

There's a lot of anecdotal information that students are doing better in

science. And STARS has expanded to include high performing suburban schools.

During the school year, the college fellows go to the elementary schools to teach. in the summer, the children come to the college campus.

The USF STARS team is applying to the National Science Foundation this year to renew the grant that created STARS four years ago.

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