



article search

 10 results

Video-game project hopes to expose middle-schoolers to science fun

2006-07-31

BY ERNEST WAITITU

Athens NEWS Writer

Home

[Editorial](#)
[News](#)
[Entertainment](#)
[Opinion](#)
[Features](#)
[Obituaries](#)
[Special Sections](#)

Classifieds

[Notices](#)
[Employment](#)
[Rentals](#)
[Real Estate](#)
[Supplies & Services](#)
[Merchandise](#)
[Attractions & Recreation](#)
[Vehicles](#)
[Submit classifieds](#)
[Classified Ad Reps](#)
[Classified Rates](#)

[Advertising](#)
[Ad reps](#)
[Rates](#)

[Resources](#)
[Links](#)
[Submissions](#)
[FAQ](#)

Contact us

[Letter to the editor](#)
[Webmaster](#)
[Contact us](#)

In a unique way of getting involved in solving the problems of its community, Ohio University has launched an educational video-games project that brings together university graduate students and teachers from middle schools in Appalachian Ohio to develop video games for learning purposes.

Graduate students from the Russ College of Engineering and Technology have been paired with science teachers from Alexander, Athens, Belpre, Federal Hocking, Miller and Roseville middle schools to develop "digital curriculum modules for conveying hard-to-teach and/or hard- to-learn science concepts" in the Science and Technology Enrichment for Appalachian Middle-schoolers (STEAM) project, said an OU news release.

In an interesting fusion of hard sciences and pedagogy, the STEAM team will seek to make it easier for middle-school students in Appalachia to perform better in sciences. From the effects of the moon on sea levels, to measuring mass, volume and density, to the working of the water cycle, the group has designed exciting video games to focus on these concepts.

OU President Roderick McDavis showed up Friday to help launch the program. In his opening remarks, McDavis said it's good for OU to be part of the solutions to the problems of the Appalachia. "This is where we live, this is where we work, and this is where our hearts ought to be," he said.

The president said that the STEAM project is hard work that "represents where Ohio University is and where it wants to be. This encapsulates what education is and what it ought to be."

Teresa Franklin, an associate professor in instructional technology in OU's College of Education, said the program is using technology "to enrich, excite and engage students in learning difficult science concepts."

The project provides an outlet and resource for students who are not excited about sciences but are usually excited about technology, Franklin said.

Chang Liu, assistant professor in the school of Electrical Engineering and Computer Science and one of the investigators working on the STEAM project, said that since youths will always play games, it made sense to him and his colleagues to add learning to games and provide a way of studying sciences, which would be more engaging than books.

Liu said the project will help the college to produce "well-rounded students who can communicate well and see the social relevance

of the work we are doing." This, he said, is helping grad-student fellows in the program improve their communication with non-technical people as they work with the middle-school students.

Liu said that the \$1.67 million grant received for the project was the biggest the College of Engineering has received from the National Science Foundation. If the work goes as planned, this will be money well spent, he added. "If we can show the effectiveness of the material with the selected schools, we can take the project to the national level," Liu said.

Another investigator working with the grad-student fellows, David Chelberg, an associate professor in the school of Electrical Engineering and Computer Science, said that the project "uses the engineering students to accomplish a goal that will be helpful to the community." Chelberg added that STEAM provides a "very good career path for many students who do not think about a career in sciences."

Middle-school teachers from near and far agree that the project has the potential to help their students a lot. Tim Taylor, a science teacher for fifth and sixth grades at Roseville Middle School, said he drove 42 miles from Muskingum County to participate in the project and see how it can help his students.

"I want my students to do well. If I can use these tools to improve their performance, let's have them," Taylor said.

Most of his students do not go to college, he said, and will benefit substantially from the inspiration they receive after interacting with OU students. "Having the fellows interact with students is very helpful because the fellows act as positive role models to the students," Taylor said.

Closer to home, Kurt Nostrant, an eighth-grade teacher at Athens Middle School, said that sees the potential for the STEAM Project to be very beneficial. Nostrant said it's great to see "Ohio University reach out to schools" and assist because OU has the capacity "to secure grants and utilize fellows for research," things that middle schools would not be able to do.

The development is definitely an image booster for a university that is struggling to bolster its profile after being hit by allegations of plagiarism involving dozens of former students in the Russ College's Mechanical Engineering Department.

Chad Mourning, a first-year master's student in computer science and one of the fellows in the program, said the STEAM initiative "lends a lot of credibility to the academia. It is nice to see the university giving back to the people."