Program teaches students science of video games

Jeremy Slayton | Posted: Sunday, April 18, 2010 6:01 am

Many teens pass the hours away from school playing video games. A program funded by the National Science Foundation is now taking students inside the world of gaming.

Through the Digispired ii program, students will explore science and engineering principles behind game controllers while learning programming tools to help create their own video games.

Longwood University, Virginia State University and the Southern Virginia Higher Education Center partner to run the program at each school's campus.

"If you ask the students to come learn computer programming, computer science, many students may not enroll in the programs," said Manorama Talaiver, director of Longwood's Institute for Teaching Through Technology and Innovative Practices. "We used game design as the hook to capture them."

Talaiver, along with co-principal investigators Giti Javidi, Ehsan Sheybani and Seung Yang at Virginia State University, is looking for about 20 current ninth-graders to participate in Digispired ii. The program consists of two weeks during the summer and eight to 10 Saturdays during the school year. The National Science Foundation awarded a $1 million grant to fund the program.

During the three-year program, students will learn the concepts that make controllers, joysticks and dance pads work. The teens also will use computer programming language like C#, which will help them learn to use the game-developing software Unity.

"Most of the Wii games and many of the iPhone games are all created using the software called Unity," Talaiver said.

Digispired launched three years ago with 85 students from school divisions in the cities of Hopewell and Petersburg, and the counties of Buckingham, Cumberland, Dinwiddie, Halifax and Prince Edward. This year, there are no locality restrictions for current ninth-graders interested in joining the program. Twenty spots are open; 30 students from the original program will remain.

"I think in today's world, anytime you add technology and hands-on experience for students, it's a definite bonus," said Cumberland schools Superintendent James Thornton.

The program will follow the teens through the 11th grade to track the kind of impact it has in helping students select college courses, Advanced Placement courses -- if offered at the high school -- and advanced math or science courses.

Students chosen for the program will get a $400 stipend -- $200 at the end of summer attendance and $100 each for fall and spring attendance. Talaiver says students feel like they are working for

Longwood, which makes them more eager to attend the program every day.

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