NRCC iLearn Game Team
creates learning applications
for elementary and middle school students

Giving an elementary or middle school student an iPhone or an iPad usually means that within moments the slick electronic device will be filled with music, movies, and messages from friends. In a world of rapid-fire entertainment and communication, it’s easy to see how such a device could become an enticing diversion from school work. But a group of students and graduates at New River Community College (NRCC) is looking to help change that -- by creating learning game “apps” for Apple’s “App Store.” Along with Director of Game Technology Programs CARLOTTA EATON, six NRCC students and graduates have created a variety of games designed to help elementary and middle school students with language skills like synonyms, antonyms, and homophones. The design of the games was based on elements from the Virginia Standards of Learning (SOL’s). The team released its first game, “Same Sound Spell Bound” in June and a second game, “Same Meaning Magic” in July. A third game dealing with antonyms, “Opposite Ocean,” was released in August.

Development of the games has been supported by an “Enhancing Education Through Technology” (EETT) grant from the Virginia Department of Education. Part of the grant includes securing iPod touch devices for students in the Pulaski County and Radford City school systems to use in testing and playing the games. Additionally, the grant provides support for Dr. Matt Dunleavy, the EETT grant project director. Dunleavy is part of the education department at Radford University and in addition to other duties, will be compiling statistics on the use and educational benefits of the games.

In talking to the members of the “iLearn” game team, one quickly discovers that the stories behind the team members are just as interesting as the games they help to create. The six team members are Adrian Lowry, Cody Beasley, Heather Walters, Carmel Stowers, Justin Price and Jason Clemons. Their reasons for attending NRCC and how they got involved with the iLearn project vary, but all display an obvious passion for the work they do and the potential benefits to local school students.

ADRIAN LOWRY, from Blacksburg, was one of the early members of the team. Lowry has been taking classes at NRCC as he prepares to transfer to Radford University in the software engineering program. He has been working with computers since middle school and says that computer science “just comes naturally” to him. At NRCC, Lowry got involved with the iLearn team while taking one of Eaton’s programming classes. iLearn team member Jason Clemons was also enrolled in the class and upon observing Lowry’s strong work ethic, suggested him to Eaton as a potential addition to the team. Now, Lowry serves as the team’s lead programmer, though he says the programming work is shared equally between him and teammate, Justin Price.

CODY BEASLEY, of Christiansburg, is one of the team’s graphic artists. Beasley recently received his associate degree in general studies from NRCC and plans to transfer to Radford University next spring to continue his work in graphic arts. Beasley sought to further his skills at NRCC by taking classes that helped him learn about computer programs such as Adobe Dreamweaver and Flash. While taking Eaton’s Flash course, Beasley created some drawings for fellow classmates in need of computer game character designs. Eaton was asked to scan the drawings into a computer and noticing Beasley’s artistic talent, approached him about joining the iLearn team. Beasley says his favorite part of the game creation process is designing the levels and characters. But, he admits, the careful precision required to design high-quality characters can sometimes get tough.
“There’s an octopus whose tentacles really got to me at one point,” Beasley says. He shares design duties on the team with fellow graphic artist HEATHER WALTERS.

Walters, born in Lynchburg, now calls Radford home and has been captivated by art and design her whole life. A home-schooled student since fourth grade, Walters came to NRCC wanting to further her interest in design and benefit from the “classroom experience.” Walters started out as a part-time student and took several of Eaton’s classes while also working part-time. After getting laid off, Walters decided to attend school full time and ended up taking Eaton’s Flash course with fellow team member Cody Beasley. Eaton asked about her art skills and invited her to join the team. Walters works with Beasley on design and also creates animations and short movies that accompany the games.

“I like the whole design process,” says Walters, “coming up with ideas, creating a storyboard, and then seeing it all come to fruition.” After she finishes her coursework at NRCC, Walters has her sights set on transferring to Radford University in the media studies program.

CARMEL STOWERS is a Blacksburg native who received her degree from NRCC in Information Technology Game Design in 2009. When asked how she decided on her major, Stowers said simply “Carlotta Eaton.” Stowers credits Eaton with guiding her toward the IT path that was right for her and helping her to learn what she really loved to do. Stowers learned about the iLearn team while working for Eaton as a work-study student, but didn’t become directly involved with the team until May, 2010. She is the team’s resident “drag-and-drop” expert, helping to assemble the games with a program called GameSalad. One of her favorite parts of the game creation process, Stowers says, is “working with very talented people – it makes it very enriching and very rewarding.” Stowers has a young daughter, so the potential benefits of the educational games she helps to create are especially important to her.

“We’re incorporating that ‘fun’ aspect into learning,” says Stowers, “and hopefully that takes off and teachers can really use it.”

Stowers isn’t a fan of the programming part of game design, but for teammate JUSTIN PRICE, there’s nothing better. Price is from Blacksburg and is studying IT at NRCC. Like his teammates, Price also plans on continuing his education at Radford University once he completes his NRCC coursework. However, unlike some of his teammates, Price didn’t start out with a burning love for IT – in fact, he didn’t really like it much at all. But, once he took a programming class, Price found his niche in the IT world. He also found his way onto the iLearn team through a programming class he took with teammate Adrian Lowry. Price works alongside Lowry to program the iLearn games and says he learned much from Lowry in the process. He says his favorite part of the game design process is “having someone tell me an idea and then I just figure out how to do it – and that’s what I get to do in this job every day, so I really like it.” Price’s least favorite part? “Deadlines,” he says. “They drive me nuts!”

Keeping the projects on deadline and on task falls to iLearn game team member JASON CLEMONS, who serves as the team’s project manager. Clemons has lived all over the New River Valley, but currently resides in Pilot. He came to NRCC in 2007 after working various jobs including waiting tables and being a brick mason’s assistant. He has since earned associate degrees in IT and in general studies. While pursuing his studies, he served as a work-study student at NRCC’s New River Valley Mall site doing everything from knocking out drywall to building a butterfly garden, and then serving as Eaton’s work-study student. Clemons’ role on the iLearn team includes lots of different tasks including documentation, assisting programmers, and working with the game content.

“I look at how the content matches up with the SOL’s that Radford City Schools and Pulaski County Schools are asking us to address,” Clemons says. In addition to the potential educational benefits of the games themselves, Clemons says he sees an added benefit for area students: “I like the idea that you can empower children, not just to grow and develop, but to see a sense of giving back to the community what’s been given to you.”

All six iLearn team members and their instructor share a common enthusiasm for designing high quality educational learning games despite coming from drastically different backgrounds. Each team member brings a unique skill set to the team and uses it to help produce innovative, fun learning tools. Eaton can tell each student’s story from memory and comments often on how well they all work together – showcasing how much she cares not only about meeting goals, but also just how much she cares about the welfare and success of each member of her team.