

Video technology helps students in special education

December 11, 2008

By Lindsay Key '11MFA

Following a cooking recipe or using a debit card machine may seem like a simple task for those who don't have an intellectual disability. But for those that do, self-prompting through video technology displayed on a personal digital assistant (PDA) or a portable DVD player can increase daily skill sets, according to the research of Dr. Linda Mechling.

The associate professor in special education used a PDA software program called Cyrano to create visual recipes, or pictures and videos simulating cooking tasks. For three months, beginning in September, she and graduate student Nicole Seid observed how two groups of students in special education at New Hanover High School, one group diagnosed with autism and the other with intellectual disabilities, used the PDA program to cook meals.

The programs are self-prompted, meaning that students can view a video of a certain step or simply a symbolic picture. Mechling and Seid worked with each student individually, to see if the student could perform the task independently or relied on the program's video or audio components. They found that as students progressed, they generally relied on the video less. After repeated practice, most were able to perform the task without aid. Both groups handled the technology similarly.

Mechling said that the videos are more conducive to the students' learning than picture books because they can be personalized and therefore more easily recognized.

"The videos are made wherever they do their cooking," she said.

Mechling began researching computer-based video instruction in 2002. She created videos simulating a grocery store shopping experience, ordering fast food, and using a debit card. She has progressed from playing the videos on a laptop to playing them on a PDA or handheld device, which has proved more convenient to students for daily tasks, she said.

In 2008, Mechling published four articles on her research in *The Journal of Special Education*, *Journal of Special Education Technology*, and *Exceptionality*. She presented her research at the 26th Annual Closing the Gap conference in October. In January, she will present her research at the Assistive Technology Industry Association: Showcasing Excellence in Assistive Technology conference in Orlando.