Burlington County Times

A space station on wheels rolls into Burlington County

By Brian Woods

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MOUNT LAUREL -- A space station on wheels sat in the middle of a parking lot at Rowan College at Burlington County, as the county and school introduced its Virtual Reality Studio.

Representatives from the county, college and Palmyra Cove Nature Park stood in front of the 30-foot RV trailer on the Route 38 campus, touting it as another way to use technology to move education forward for all ages of students.

Inside the RV, there are several virtual reality stations that use real-time satellite data to put participants in a space station, looking out at Earth with the moon and stars in the background.

Once a participant puts on the virtual reality headset and steps into the space station, he or she can also view a small 3-D Earth model with data such as current weather patterns and sea and land levels.

"It is a wonderful experience for our children when they come to the cove," said Pete Dorofy, the director of science at the nature park and one of the two scientists who wrote the virtual reality programming. "Their first virtual reality experience is looking at the Earth from space, and I think that is really, really cool."

The nature cove is owned and operated by the Burlington County Bridge Commission.

The Virtual Reality Studio won't just be stationed at the cove, off Route 73 under the Tacony-Palmyra Bridge. It will travel to schools across the county, community events and the college. "With the innovative and educational activities, there is no doubt that this equipment will instill a lot of learning in students of all ages as it visits school districts and community events," Burlington County Freeholder Mary Ann O'Brien said at the unveiling event.

The cove, county and college entered into a partnership about a year ago to rebrand and remodel the RV, which the college acquired through a grant, according to RCBC Director of Communications Greg Volpe. They spent \$5,100 to get the outside and inside of the vehicle ready for its introduction Wednesday.

Dorofy said they used virtual reality software called Understanding Satellite Observations for Augmented Reality, or USOAR, which was developed by him and John Moore, the director of geoscience/STEM education at the nature park.

"The experience that participants are able to experience is virtual reality simulation of being out in outer space on a space station orbiting the Earth and looking at the Earth in real time, using real-time satellite data," Dorofy said.

"It's looking at real-time data observing satellites that are literally flying right over our heads," Moore added.

The RV has five stations where students can look left and right and see one another's avatars in the space station. In the coming years, Dorofy hopes to design virtual reality missions to Mars that students have to complete as a team.

The RV will also be used by RCBC students in the geosciences program, a new major the college plans to introduce by next fall, college Provost David Spang said.

Although the inside of the RV has practical use for students, the outside was also discussed at the unveiling event.

"Not only is it an educational tool, it is a moving billboard," county spokesman Eric Arpert said.

The outside features "Rowan College at Burlington County" in big bold letters and some of the new cost-saving initiatives it is launching, such as 3+1, which will allow students to obtain a bachelor's degree by spending three years at RCBC and one year at Rowan University. Brian Woods: 609-410-9962; email: bwoods@calkins.com; Twitter: @woodsb42