http://dnews.com/local/pokemon-tech-researchers-bring-augmented-reality-to-the-classroom/article_e99b8e1b-1868-56c3-b38b-b4fdc4965c07.html

‹

PREVIOUS

Marijuana to stay on dangerous drug list

WASHINGTON - The Obama administration has decided marijua…

›

NEXT UP

Alcohol banned from lots outside of Kibbie Dome

University of Idaho football fans will have to leave campus if they plan on c…

Pokemon tech: Researchers bring augmented reality to the classroom

By Tom Hager, Daily News staff writer Updated Aug 12, 2016

Tess Fox/Daily News

Washington State University Assistant Professor Don McMahon demonstrates the use of augmented reality glasses Aug. 5 in Clevela at WSU. McMahon's view can be seen on the screen behind him.

The same technology that helped Pokemon Go take the world by storm this summer might soon be coming to local special education classrooms.

Schools stretching from the Palouse to Asia have been in contact with Washington State University about the technology known as "augmented reality."

Unlike the completely artificial environments of "virtual reality," augmented reality enhances the real world with artificial images.

It's what Pokemon Go used in its app that earned 100 million downloads. Although Don McMahon and other researchers at WSU were working on augmented reality long before Pokemon Go brough it to everyone's attention, they are hoping the appeal of the smartphone game translates into learnin for special education students.

"One of the things that we find in going through applied research is what things are motivating," said McMahon, an assistant professor of special education. "Some things kind of wear off and 'Wow that was kind of neat for a lesson,' and some things become a lot more empowering tools for students with disabilities."

Augmented reality, or AR, could have a huge effect getting special needs students engaged in learning. Once digital images can be placed alongside real images, the sometimes arduous task of learning can start to seem fun for them.

McMahon's lab has a headset that can display a digital image of a shark hovering in the air right in the classroom. Students see the image and the word "shark" next it so they can begin to connect the two in what feels like a game. To make things better, McMahon's headset comes with internet acces which students activate with hand gestures. They can get information about sharks while they are looking at one right in front of them. McMahon hopes that will spur their interest in using technology as well as in the topic they are studying.

"Students with disabilities tend to adopt technology at a lower rate than the general population," McMahon said. "But with so many cutting edge tools coming out, the purpose that we have behind this Assistive Technology Research and Development Lab is to take these cutting edge tools and ge

them in hands with disabilities that much faster."

In a study run by McMahon and his colleagues, they used AR with special needs students to help them understand human anatomy. McMahon wrote names of body parts on cards, in addition to a digital code in the background. Much like bar codes (or QR codes for smartphones), the headset would fetch the encoded digital information and display back an image of the body part to the studer When a student sees through the headset the word "spleen" on a piece of paper with the codes, the headset displays a picture of the spleen and short video clip of its function in the body.

The headset is not meant to replace reality but to enhance it.

"Think about it as a continuum. Virtual reality is a completely artificial environment, so, obviously, if I was wearing that virtual reality headset you wouldn't want me crossing the street," McMahon said, "Whereas augmented reality, I can still see all of the live world around me, and I can get just a little b of visual information to help me out."

WSU has not signed any official partnerships with schools yet, but McMahon is hoping to see the technology being used in classrooms in the near future.

Tom Hager can be reached at (208) 883-4633 or by email to thager@dnews.com.

ADVERTISEMENT