Students at a middle school in Georgia’s Cherokee County are gaining a deeper understanding of science than ever before. They are the first in the state to use zSpace, an augmented and virtual reality technology that allows students to learn STEM subjects using immersive images that they can move and manipulate. Already installed in one school, the program will expand to one of the district’s high schools for the 2015-16 school year.

Last year, nearly 1,000 students at Teasley Middle School, a Title I school (school with high numbers or high percentages of children from low-income families) completed their first school year using zSpace as a supplement to their science curriculum. “When we moved Teasley to a brand new building last year, it was a great opportunity to incorporate the latest technology,” said Bobby Blount, assistant superintendent at Cherokee County School District. “I had been looking for something that would be more engaging for our students and a more inspiring and exciting tool for our teachers to use in science and math content delivery.”

At Teasley, 14 zSpace virtual reality stations are set up as a zSpace STEM lab in a room the school has named the “Virtual Vortex.” Each zSpace station accommodates two to three students. One student lifts, turns or takes apart objects using an interactive stylus. The other students make observations and record data. All three students wear custom 3D glasses to create a communal virtual reality experience, unlike head-mounted technologies like Oculus Rift. In addition, students can watch the teacher or another student demonstrate their work on a SMART LED panel visible to the entire class.

Leah Bleisath, the science department chair at Teasley, noted that hands-on technology like zSpace plays a key role in the level of understanding for her students, who run the gamut from advanced learners to students with special needs. Other students have emotional-behavioral issues or are just learning English. She said that they all flourish when learning with zSpace. “zSpace appeals to all types of student needs,” said Bleisath. “One student told me he loved to take things apart in zSpace and not get in trouble for it. I’ve seen students with limited English gain confidence. It gets them excited about school, and increases their chances of going to the next level.”