

Empowering Navajo Nation Students with Immersive, Equitable Learning Opportunities Using zSpace



The Challenge

Chinle Unified School District is located in the heart of the Navajo Nation, encompassing 4,200 square miles of Arizona's high desert. The district faces profound logistical and socioeconomic challenges. With over half of its students transported by bus daily—some for nearly two hours each way—access to quality, consistent education is a daily obstacle.

Students in this rural community often face:

- Historical trauma and generational poverty
- Limited access to broadband, electricity, and clean water
- Minimal exposure to modern technology and career pathways

These barriers result in significant disparities in educational equity and opportunity compared to urban counterparts.



The Solution: AR/VR Learning

To bridge this gap, Chinle Unified adopted zSpace, a cutting-edge augmented and virtual reality learning platform that brings immersive, hands-on experiences into the classroom—without needing to leave the reservation.

Through zSpace, students interact with 3D models, conduct virtual dissections, explore scientific concepts, and visualize abstract content in tangible ways.

Impact Highlights

- **Increased Engagement & Aspiration:** zSpace allows students to explore new career paths—like welding, mechanics, science, and natural resources, sparking curiosity and motivation to pursue post-secondary goals.
- **Overcoming Geographic Isolation:** Students can experience simulations of the world beyond their community, gaining exposure to global contexts and competitive STEM skills.
- **Culturally Responsive Learning:** zSpace supports content and academic vocabulary development while respecting and building on students' rich knowledge of the natural world.
- **Equity in Access to Innovation:** This technology levels the playing field by giving rural students the same caliber of education and tools seen in well-funded city schools.

Voices from the Classroom



"There's so many things that I can do with zSpace that I can change to meet my students' needs. It's such a beautiful, useful tool."

**- Kaelyn White,
Chinle Junior High Science Instructor**

"My favorite thing about zSpace is that it's pretty cool that you can take out stuff out of an image with just the pen, and you can, like, dissect stuff... I think zSpace is helping us learn more in science."

- Student

"They're competitive with any other students who may have unlimited access in a city. But this here allows our students to also be included, to be considered, and also be competitive"

- Principal Watson-Murray



Results & Vision

Each year, Chinle Unified graduates around 200 students. The hope is that 10% of them return to the community as doctors, teachers, or skilled professionals, bringing change from within. By providing access to quality, immersive education through zSpace, the district is **not just teaching curriculum, they're building future leaders.**



"Them coming home and helping our community is how we change the socioeconomic status here in our community. I believe very strongly education is the key to making that happen."

— Superintendent Quincy Natay