

Enhancing portable classroom learning environments with Lightspeed audio solutions

Freewater Elementary School, part of the Milton-Freewater Unified School District, serves students in grades four and five. At Freewater, diversity is celebrated and high expectations are the norm in every classroom. It's Oregon State Assessment scores indicate that what they are doing is successful, and they've received the State "Excellence" award twice in the last four years.

THE CHALLENGE: LISTENING IN PORTABLE CLASSROOM

With the need to replace an old, out of date school building, Freewater Elementary determined portable classrooms were the optimal replacement solution to meet current needs in a timely fashion to support its 290 students. Today two-thirds of its classrooms are portables. In addition to routine homeroom classes, the portable rooms are used for special education, reading intervention, and English as a second language classes.

Along with the benefits of portables to provide quickly deployed and flexible classrooms, they also presented some challenges. "Our portables get more noise from outside,

because they are placed in rows 15 feet apart to meet our space needs," said Aaron Duff, Principal of Freewater Elementary.

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Aaron Duff, Principal

"Noises like walking on the concrete sidewalks, teachers welcoming students to neighboring classrooms, doors closing, all coming in from the outside can be loud and distracting to students in the classroom."

The need for better hearing in the portable classrooms was particularly important for the classes where being able to hear and understand what was being spoken was very critical.

This included English as a second language, reading intervention and special education, where students are

taught at their level of performance to assure that they have the quality instruction they need to learn the curriculum.

THE SOLUTION: BOOSTING TEACHERS' NATURAL VOICE

Looking for a way to improve audio quality, Principal Duff and others toured other school districts to learn about possible solutions in use. What they found was the use of the Lightspeed Redcat Access all-in-one wireless audio system for students with hearing problems and other classroom audio challenges. Freewater Elementary took action to try out two systems.

After a week of use, the two teachers in the trial didn't want to give the Redcat systems



FREEWATER ELEMENTARY SCHOOL MILTON-FREEWATER, OREGON

CHALLENGE

Creating an equity in the learning environment in portable classrooms

LIGHTSPEED SOLUTION

Lightspeed Redcat Access portable audio system



RESULTS

- High speech intelligibility
- Full access to the teacher's natural voice
- Convenient wireless connectivity
- Payout control of digital audio sources
- Flexibility for small group learning

back. Additional teacher trials were conducted, with observations by administrative staff. What was experienced and observed was improved teacher and student interaction. Using funding from the school's technology budget, systems were obtained for every teacher. There is now a Redcat in every portable classroom.

The Redcat provided exceptional audio clarity, filling the room with the teacher's natural voice and enabling all students to hear every word despite the background noises.

A simple-to-use solution right out of the box, it proved portable for mobility, quickly moved to different buildings as needed. Each system uses two microphones for audio support of reading or presentation, and responses or questions back from the class.

Being able to hear is a primary channel for learning and teachers work hard to communicate in the classroom. But physical factors such as distance and noise prevent students from hearing the full message, often missing critical components required for learning and understanding. Redcat proved to remove those barriers in many more ways than the original remedy of managing outside noise.

RESULTS

- Freewater Elementary has seen great improvement in teacher and student interaction with the use of the Redcat Access.
- With Redcat's voice amplification, there is no need to shout to be heard. Says Principal Duff: *"All sound is at an even level, not amped or loud. It's comfortable and understandable, facilitating better behavior and helping students listen better and feel included."*
- The solution has allowed an even playing field for every classroom. Quiet voices get attention and are heard and listened to.
- Teachers benefit by not raising and stressing their voices. *"Teachers voice exhaustion is reduced, saving around 20% of energy by not having to speak up all day long,"* says Principal Duff.
- Students are not only are they confident their voices will be heard, they like speaking with the microphone and engage with the class more.

Today, all staff uses the Redcat for student group interaction, from every classroom to even in the gym.

It's instrumental in providing every student access to a high-quality education, respecting each child's unique needs, interests, and potential.

With the addition of new classrooms, both portable and traditional, all teachers are the biggest proponents of Redcat. *"You know you have a good thing when teachers don't want to give it up when moving to a new classroom, and tell you they need it,"* said Principal Duff.



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