

## Texas School for the Deaf



### Engaging Students with Special Needs

"Having our students engaged in learning is a constant challenge," said Mari Liles, Director of Technology for TSD. "Couple that with the advanced accountability and student achievement issues required by the No Child Left Behind federal education mandate, we really had our work cut out for us.

"We needed a learning tool that students could connect with - one that would drive them beyond their limits and stretch their educational experience. We also were cognizant of our teachers' desire to provide more interesting, interactive, visually stimulating, and technologically advanced lessons."

### Challenges and Goals

TSD administrators and teachers alike embrace the thinking outlined in *Instructional Media and Technologies for Learning*, 6th Edition, written by Robert Heinich, Michael Molenda, James D. Russell and Sharon E. Smaldino. In the book, the authors succinctly state that visual learners gain knowledge more readily when they see images, and even students who tend to rely on other sensory input often need visual supports in order to grasp certain concepts. Additionally, cognitive theories of learning support the principle that students learn more effectively when they are actively manipulating information.

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### Implementation

With that in mind, the school purchased 10 Activboards with the Activstudio 2 software and placed these groundbreaking systems in classrooms across all grade levels.

This visually engaging and user-friendly group teaching system has clearly captivated the attention of TSD teachers and students, alike. Examples of grade-level specific uses abound.

Take Twyla Loftin, a veteran middle school educator who teaches Science to seventh and eighth grade students, who reported on the simplicity and fun of introducing the periodic table using the Activboard. According to Loftin, students could readily see how elements are grouped using a scanned-in periodic table and by using the highlight tool to distinguish between the various groups. Then, they searched the Internet and found an online interactive periodic table, which was used to show pictures of the actual elements so students could associate the name of the element with a picture of it. The students each took turns using the Activboard to review the information learned.

"Before the Activboard system was integrated into our science curriculum, my students were less than enthused with the learning process. Not to mention special adaptations had to be made for my visually impaired students. "Now all of my students are more motivated, drawn in, even inspired by the delivery of truly interactive material that allows them to work as a group and excel individually," said Loftin.

Second-grade teacher, Sharee Darce used the Activboard to introduce animal groups. She said that the countless colorful graphics and pictures included in the software as well as those accessible on the Internet helped bring her lesson alive.

"I had my students group the animal pictures under the correct heading – mammal, bird, and reptile. Later, they had to move the various animal characteristics into the correct category. This provided a secondary pedagogic evaluation – aligned with the Texas Essential Knowledge and Skills (TEKS) standards - of their individual reading skills," said Darce.

Michelle Long, a high school math and science teacher wanted to lessen the amount of time her students were writing as they can't easily write and look at her for information through sign language at the same time.

"Having the Activboard in my classroom has allowed me to create enriched, interactive discussion and note-taking sessions without the students having to write everything down. I just print off copies for each student when we are finished," said Long.

Long regularly sets up flip charts with fill-in the blank, short answer type questions related to the current chapter under study. This gives her an instant understanding of how her students comprehend a new concept.

Depending on the amount of class time she wants to dedicate to the review, Long will either ask students to come up to the Activboard and write in the answer or she will lead a discussion and fill in the answers with student responses. Then she prints out a copy as a study guide for students. On test day, Long puts the test on the Activboard and signs the test for students who need it.

At other times, the Activboard allows Long to show a variety of media to help students grasp the material that proves to be more of a challenge to learn. Some days, Long even uses the CD that came from the textbook company to show videos and graphics related to the current chapter being studied.

### **Results and Next Steps**

Based on the successes experienced in the initial 10-classroom implementation, the school invested additional funds, and now has 30 Activclassrooms.

"The Activclassroom has had an impact on having students engaged and motivated," said Liles. "We have a teacher who has been here for 32 years, and her first statement was that technology is what inspires and energizes her to teach every year, and the Activclassroom is what makes it happen. All 30 teachers would say, 'Now that we've had it, we wouldn't be able to teach without it.'"

The school has also incorporated accessories to assist their students, such as the Activwand and Activotes.

"The wand works great with wheelchair kids, and kids with fine motor skills problems," said Connie Potersnak, a Special Needs Department science teacher of 17 years.

"I love the Activote because it's a great way to review lessons and see how students are doing in a very quick and non-threatening manner, and students don't have to be embarrassed if they are wrong," said Michelle Halvorsen, high school science teacher. "It's a good way for me to quickly assess how they are doing, or a fun and motivating way to review for tests."

Sharee Darce has also been encouraging teachers to join and take advantage of the resources on Promethean Planet to assist them with lesson development.

"I encourage as many teachers as I can to sign up," said Darce. "Once you see what's there, you're going to be amazed. It's a great resource for resource packs and flipcharts."

The students at the Texas School for the Deaf have been equally thrilled with the opportunity to work with the Activclassroom solution.

"The Activboard is very helpful in my classroom because it's a great visual aid. Visual aids are necessary to help get points across and they are also great for taking notes." Clairia O, age 16

"I think the Activboard helps me understand math better, and I like that I can see the Internet and play math games on the board." Paul S., 7th grade

"I like the Activboard because you can see and touch it rather than looking at a small computer laptop screen." Ilan B-M., 7th grade

"The Activboard is so helpful for kids to learn and understand because it is so visual. We can write on the board - that is definitely awesome!" Kamilla F., 7th grade

Over the next several years, Liles hopes there will be an Activboard in every classroom.

“We have been especially impressed with the seamless integration of this teaching solution into every aspect of classroom instruction,” said Liles. “If we can say that with the distinctive challenges our deaf and hard of hearing student population present, imagine what a teacher in a standard classroom situation could do – the possibilities are infinite.”

### **School Profile**

The Texas School for the Deaf (TSD) provides exceptional educational services and opportunities for Texas children who are deaf or hard of hearing. Located on the same site in Austin since 1856, TSD is the oldest continuously operating, publicly funded school in the state.

From its modest beginnings, TSD has grown into a state-of-the-art residential school that serves approximately 500 students from infancy to 21 years of age, in regular school curricula and in post-high school transition programs.

Similar to most public schools, TSD offers an elementary program for pre-kindergarten through fifth grade students, a middle school department for students in grades six through eight, and a high school program for students between ninth and twelfth grades. Middle school students are offered introductory classes in the Career and Technology Education (CTE) program, and all high school students have the opportunity to receive career orientation and technology courses in the CTE program.

Nearly 90 percent of its student population is eligible to receive free or reduced price lunches. Through the school's Educational Resource Center on Deafness, TSD also provides outreach services to hundreds of professionals and families with hearing disabilities throughout Texas.