

“
The disease is contagious even before people know they have it. By the time you see the rash, it's too late for others to avoid it.
”

DR. DAVID SWAN, ACTING MEDICAL OFFICER FOR ASPEN REGIONAL HEALTH, ON FIFTH DISEASE.

Students learn better BY HEARING BETTER

GERRY T. BULMER
ADVOCATE STAFF

Student achievement depends on many factors. The challenge for Aspen View Schools is finding the right blend of resources to enhance the quality of the learning environment.

Results are not yet conclusive, but early indications suggest another important piece to the puzzle has been found in a device called Phonic Ear.

“Phonic Ear is an assistive learning device,” explained Aspen View director of Student Services Derm Madden. “It’s an infrared sound field system — new technology designed to assist students and teachers in the classroom.”

Research in recent years has confirmed that noise levels in classrooms are higher and cause more student distraction than most people realize, having a negative affect on student achievement.

“This new sound system improves the acoustic conditions in the classroom,” said Madden. “It amplifies all the sounds in the teacher’s voice, the consonants and the vowel sounds, so the student hears all the word. It provides improved clarity, as if the student is standing right next to the teacher.”

Acoustics in large classrooms have always been a problem, aggravated by various noises in the room, as well as noise outside the room from school activities or equipment such as heating or ventilation. “By the time the sound (of the teacher’s voice) reaches the back of the room, students at the back can’t pick up every sound,” said Madden.

Adding to the problem are medical or physiological conditions.

“Sensory-neural hearing loss is predominant,” Madden explained. “There’s quite a high percentage of students with some hearing loss, perhaps from ear infections when they were young or from a congenital condition they were born with.

“(Phonic Ear) is a benefit to students with Attention Deficit Disorder as well,” added Madden.

Students aren’t the only

ones benefiting from the new technology.

“Teachers are saying these things are fantastic,” said Madden. “They’re asking why we didn’t have them years ago.”

The use of Phonic Ear is resulting in less sick days for teachers and greater economy for Aspen View. Madden said the system allows teachers to speak softly, almost in a whisper, preventing strain.

“Teachers are saying they’re not experiencing vocal fatigue. They don’t get voice strain,” he said. “They’re less fatigued, more relaxed and they have more energy. You don’t need to call in a substitute teacher.

“You save costs, and you keep the continuity of the teacher in the classroom.”

This is the second year the system has been used in Aspen View schools. Although results have been negligible in Language Arts classes, results in Math classes have been encouraging.

“The results are statistically significant in math,” said Madden. “The sound field system had a major impact.

“If it’s good for kids and teachers, it’s good for Aspen



Tiny and unobtrusive, the microphone and transmitter components of the Phonic Ear sound field system measure just inches across, but deliver remarkable clarity.

Gerry T. Bulmer/AA

View.”

By purchasing multiple units, Aspen View has been able to keep the per-unit cost low, paying just over \$1,000 for each system. There are 80-85 systems in Aspen View schools, with at least one in every school.

“They will have long-term affects,” Madden said. “The systems can be in the schools for years.”



Landing Trail Intermediate School teacher Ron Bay instructs a class while wearing a Phonic Ear microphone and transmitter. The lightweight device clips on and off clothing easily and transmits to speakers strategically located in the classroom.

Gerry T. Bulmer/AA

Madden first learned of Phonic Ear at a teacher’s convention in Edmonton where he and educators from three schools went to check it out.

“I purchased one and did some research on my own,” he said. “Then I requested

do that as my thesis, so I did,” Madden explained.

“I finished up the thesis last summer,” he said. “In October we were looking at putting more systems in the schools, and we did.”

Now that the sound systems have been in place with positive results confirmed, the nature of Madden’s research will shift a bit.

“This year’s focus will be more on student response and teacher response,” he said, noting that their direct input would be especially valuable.

Educators at Landing Trail Intermediate School are pleased with the Phonic Ear systems so far.

“I’m not hearing any negative comments on them,” said LTIS principal Brian LeMessurier. “We very much believe in the value of (the systems) enhancing the learning environment.”

Teachers say they appreciate the assistive resource.

“It is something that’s definitely helping,” said teacher Ron Bay. “You don’t have to project your voice. It clarifies the speech, making it the dominant sound in the room.”

Bay said students have shown appreciation for the system as well.

“When I’ve had a substitute teacher come in, stu-

dents have requested the sub use it,” he said.

Teacher Lana LeBlanc has been using Phonic Ear since Christmas. “I think it’s going to take learning to a whole new level,” she said. “It relieves the amount of repetition. It’s just so very clear — everyone hears at the same volume.”

LeBlanc noted the value the system has to teacher wellness. “You don’t have to strain your voice at all,” she said.

Teacher David Maguire has been using the device since the beginning of the school year. “It definitely enhances the learning environment,” he said. “It’s easy for students to hear me without being too loud or not loud enough.”

He praised the benefits of vocal chord stress relief.

“I’ve found it very easy to use for my voice,” he said, “It saves having to push my voice.”

Teacher Gina Payzant sees many benefits for the students.

“In my class, we’ve been given a hand-held mic for the children to use when they address the group,” she said. “It’s encouraging children to get up and speak.”

Students are developing valuable listening skills, she said.

“It’s teaching children to be better listeners,” said Payzant. “The classroom is quieter.”

The better listening environment is producing results.

“I’ve noticed an improvement in students’ performance in orally delivered material — spelling tests, for example,” she said.

“A child can sit anywhere in the room and hear clearly. If I’m putting notes on the board, I’m still heard, even with my back to students.”

Payzant noted the reduced stress afforded by the system.

“I’m personally taking fewer sick days,” she said.

So impressed with the results to date, Aspen View will be making a presentation on the sound system at the National Congress of Rural Education in March in Saskatoon. Madden will be doing the presentation.

“Aspen View traditionally does a presentation there,” he explained. “The idea is to promote the best practices. We believe this is it.”

The title of the presentation will be ‘The Effects of Enhanced Acoustics on Student Achievement.’

“Personally, I believe this system does impact learning in the classroom,” said Madden.