

Technology In the Classroom at the Western PA School for the Deaf

Active learning has long been successful in improving both attention in the classroom and retention of concepts for Deaf students. Engaging students in the learning process during instruction enables the teacher to monitor student achievement and helps to keep the students focused and "on task". Technology, when integrated into classroom instruction, can not only facilitate the active learning process but also provide a stimulating, visual learning experience. High-tech classrooms have been designed at the Western PA School for the Deaf to promote active learning and to integrate technology into the curriculum. Through the use of wireless laptop computers, interactive whiteboards, LCD projectors and networking software, the teacher can present content, monitor student achievement and meet curriculum objectives in all subject areas in an engaging and visual format.

At WPSD, high tech has met active learning, and the combination has reinvigorated teachers and students. Many of the school's classrooms in all departments have been renovated to provide a perfect blend of warm, inviting architecture and interactive, visually stimulating, mindengaging technology.





Each classroom is outfitted with a Smart Board, a ceilingmounted projector, an iMac teacher's computer workstation, a networked printer, a document camera, and a television connected to

the school's video distribution system. All of the High School classrooms have iBooks or Macbooks (Apple laptops) for each student in the class, and the Middle School and Lower School students have access to mobile carts of laptops.





With all of this technology, the teacher's computer screen can be projected on the Smart Board. By touching the Smart Board's screen, the teacher is controlling the computer. The teacher's finger acts as the "mouse". Programs and Internet sites open with the touch of a finger. Teachers or students may "write" on the screen using the writing tools of the SMART Board.

A favorite program for writing on the board is SMART Notebook. SMART Notebook allows teachers and students to write on the board in bright, colors using only their fingers, and whatever is written on the board may also be saved to the computer and printed. This is an excellent visual device for Deaf students. A math teacher can demand the full attention of the students while an equation is being solved on the



board. The students do not get lost by looking up at the board and then down at their notes. The teacher simply prints whatever is written on the board and gives the students the necessary notes. If a student is absent, the notes are ready when the student returns. If questions arise concerning a previous day's lesson, the teacher may bring up the notes that are saved on the computer. SMART Notebook is extremely useful, but also fun to use.

The network program that provides the most assistance teachers and the students using Apple iBook and MacBook laptops in the classroom is Apple Remote Desktop. ARD allows the teacher to see whatever the students are working on in their laptops from the teacher's computer. The teacher can also share, control and lock the students' screens, and send files and text messages to student computers. This program has been a big contributor to increasing active minds-on engagement for the students.

Typically, the teacher will pose a question or a problem, and the students solve the problem and type the solution on their laptops. The teacher, standing in front of the SMART Board, will select a student's laptop to be displayed upon the SMART Board. The teacher and/or the other students in the class can critique the displayed solution. Students are eager to have their answers to be displayed.



The laptops are wirelessly networked. The Internet is available for research and interactive sites to practice with math, science, social studies, language arts or whatever subject is being studied. Students use journal programs to not only solve problems, but explain how they solved them. Such "writing-to-learn" exercises helps focus the students' minds more intently on what they are doing, at the same time encouraging the development of their written expressive skills. Students then send their work to the

printer in the classroom or just save their notes. Students usually find writing on their computers much less restrictive than writing in their notebooks.

The document camera is used to project any object or document (such as a textbook page or worksheet) on the screen. The object or document may be magnified, focused, and even "frozen" so that the captured image stays there until it is no longer needed. This is an incredible timesaving tool for teachers. Transparencies are no longer needed. Pages from textbooks are readily displayed. The



whole class may watch a magnified protractor as the teacher shows how to measure angles. Dissecting a frog can even be displayed and magnified on the document camera.

These are just some of the exciting things that are happening in our classrooms through the use of technology at the Western PA School for the Deaf. The technology being used is actively engaging our students in learning and fully integrating technology into the curriculum.

For more information about technology in the classroom at the Western PA School for the Deaf, please contact: Linda Burik, Director of the Learning Center, *Technology*, *Media*, *and Library Services*, lburik@wpsd.org.