



PARTNERSHIP FOR
21ST CENTURY SKILLS

Case Study Description
May 2004

Case Study #4: Challenger Center for Space Science Education

Area of focus: Content- Science

Location: Decatur Township, IL (one of many around the country)

Basic information:

Website: www.challenger.org and

<http://www.eschoolnews.com/news/showStory.cfm?ArticleID=4908>

Contact person: Sue Keene, teacher at EdVenture Lab

The Story:

- The Decatur Township EdVenture Lab opened its doors in December 2002.
- The EdVenture Lab represents the next generation of computer labs, where students use technology to enrich and enhance learning.
- The lab contains wireless laptops, plasma screens connected to my teacher computers, a document camera, a digital camera, and several pieces of probeware--electronic sensors which enable data collection and analysis.
- Sample lesson: Students learn about the differences and similarities between megabats and microbats. To demonstrate how microbats use echolocation, they use probeware in the form of a Motion Detector from PASCO Scientific. The Motion Detector uses ultrasonic pulse ranging technology to help focus on a target and report its distance from that target. They compare the clicking noise of the Motion Detector to the noise a bat makes. The Motion Detector's data are fed into DataStudio software, which produces a graph showing distance versus time.
- When teachers see how technology can be managed in the classroom and how it can be integrated to the point where it's almost invisible. The kids don't even realize they're using it; it's just another way to communicate information. Teachers also see that, when kids are actively engaged in learning using technology, it deepens their understanding.