Flattening Classrooms: Expanding Minds

Thomas Friedman, in his book, The World is Flat, describes a world with fewer trade and political barriers and a world with remarkable technological advances that make it possible to do business instantaneously with people all over the planet. Since the publication of this bestseller, educators have been grappling with the implications of a “flat” world. During this poster, learn how broadband technology, Internet2, and IP videoconferencing are providing learning environments that are empowering, engaging, and collaborative. K-12 students have access to classrooms, teachers, students, and experts from around the globe. They have access to curricular resources that have never been available inside school buildings.

The Berks County Intermediate Unit (BCIU), an educational services agency, has been proactive in positioning local school districts in Berks County, Pennsylvania to take advantage of the “flat” world. BCIU has put into place a 21st-century, world-class, wide-area network (WAN). The network inter-connects WAN Consortium members and provides access to Internet2 and other networking resources. In addition, BCIU’s high-speed regional WAN has brought about substantial cost savings, enhanced network performance, and expanded collaboration opportunities for school district partners. The project has exponentially improved the technology capacity of BCIU-member schools for a marginal increase in price by leveraging the collective buying power of schools to drive down costs.

During the spring of 2005, the BCIU garnered support from Berks County schools to begin preparations to digitally connect the districts in Berks County. On behalf of the Berks County WAN Consortium, which is composed of the BCIU, 13 school districts, and three vocational-technical school entities, BCIU was awarded a $1.4 million E-Fund competitive grant to subsidize the effort. The funding was used to build the network infrastructure, provide technical services, and promote integration of technology into classroom instruction. Initial construction of the network was completed during summer 2006.

The improved infrastructure has provided vastly expanded learning opportunities for Berks County students by providing distance-learning opportunities, access to Internet2, virtual fieldtrips, and shared digital curricular resources. BCIU’s Educational Technology Services (ETS) department has promoted the educational resources available via videoconferencing. Early adopters within each district are kept informed of K-12 projects and initiatives that take advantage of videoconferencing, virtual fieldtrips, course sharing, and Internet2. They have also helped to pave the way for others within their school districts. Quality professional development has been instrumental to the projects success.

Local teachers and district technology directors are excited about the difference the WAN has made in their districts. The WAN is changing the ways teachers view the Internet and distance education. Educators are only beginning to discover the potential of high-speed WAN connectivity between districts and with the rest of the world. Teachers are integrating virtual field trips to the Gemini Observatory, virtual tours of Gettysburg, and NASA e-Missions. Other examples of “flat” classroom experiences include access to Video-on-Demand (VOD), foreign language instruction from native speakers, and connections to forensic scientists, and collaborative learning experiences with students overseas. “Flat” classrooms are removing the boundaries of geography and time and teachers that effectively
use this technology are preparing students to navigate successfully in the increasingly “flat” world.