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Upgrades put North Schuylkill at head of class

BY JOHN E. USALIS

FOUNTAIN SPRINGS — The terms “thin client,” “application server” and “interactive whiteboard” may not be familiar to most people, but when the new school year begins in the North Schuylkill School District, students in elementary through high school will benefit from those computer technologies that could take them to the head of the class.

The school district is completing technology upgrades in the high school and Ringtown Area Elementary Center buildings, along with installing an up-to-date computer network in the new elementary school, currently under construction. The total cost of the upgrade project is about \$750,000.

Also, on July 1, the district became a member of the regional fiber network formed by a consortium of school districts in Schuylkill, Carbon and Lehigh counties.

“This will greatly increase bandwidth and transform the delivery of curricula for our K-12 student body and staff,” said Paul Caputo, supervisor of curriculum, technology and federal programs, a position created by the school board in 2006.

“Fiber lines owned by the district also connect the new elementary school and the junior/senior high school. The district’s first WAN (wide area network) will be created through the use of innovative technology. Ringtown Elementary will connect to the fiber network of the main campus through a wireless VPN (virtual private network).”

Caputo added that the board of education recently approved a complete overhaul of the network infrastructure of the high school.

“This project will allow that school to realize the true benefits of the fiber network,” he explained. “New cable, routers, switches, servers and other hardware are being installed to increase the stability, speed and efficiency of that local area network.”

Working on the hardware side of the upgrade is George Williams, a technical support specialist from Schuylkill Intermediate Unit 29, Mar Lin.

“The IU provides technical support to all the districts and this was an opportunity for us to partner with North Schuylkill,” Williams said. “The school district is going to end up with the leading edge technology that will put it in the forefront of technology among the other school districts this year.

“This project will be the shining star across all the districts,” he said. “What Blue Mountain has is probably on par. They will be one of the first districts to embrace the thin client concept. I think it will work out well for the district.”

Williams mentioned that the “thin client” technology has a number of advantages over the

traditional use of an individual computer at each student workstation.

"Thin client technology is a way to provide a computer to someone without having a full-blown computer sitting there," Williams said. "What a full-blown computer would do is taken up within a server somewhere. A server acts like 15 or 20 computers."

A typical workstation would include an LCD flat-panel monitor, keyboard and the thin client, which is about the size of a small video game console or an old-style external modem.

Acting Superintendent Dr. Gerald Nesvold and Caputo toured the thin client setup in the high school library as Anthony Fanelli and Christian Moyer of American Computer, Frackville, installed communication lines in the ceiling.

"This is far overdue," Nesvold said. "This is very good news. The elementary school is absolutely fantastic, with a smartboard in every classroom."

The project includes placing 400 thin clients in the elementary schools and the junior senior high school. Thin clients have a life span of eight to 10 years, as opposed to three to five years for a traditional personal computer.

Also as part of this initiative, the district has invested in software produced by ClassLink Inc., a New Jersey-based company. ClassLink software allows the thin clients to run Windows-based software and will enable the district to turn aging PCs into thin clients that can run the latest software, something that is not always possible with a traditional computer.

"Beginning in 2008-09, PCs that would normally be discarded or recycled will be converted to thin clients. The shift to thin client technology will extend the lifespan of our equipment, thus reducing the district's technology total cost of ownership," Caputo said.

The cost of a conversion is approximately \$300 per computer, compared to an average of \$1,000 for a new PC.

The new system will also be a help to the faculty members by providing access to their files no matter where they are.

"The teachers will continue to log in as they always do, but the big plus will be that they'll have access to the network. This way they can save information in their personal folders and no matter where they are in the building or the district, they can log in and have access to the information," Caputo said. "Right now they're saving information on floppy drives, which go bad. Some have stepped up to flash drives, but they're mechanical and they can fail.

"The teachers will also be able to update their class Web pages, which they can't do right now. That will help improve communication between the teacher and the parents and student at home," he said.

Caputo said teachers and parents will have their own passwords to keep the information secure and available only to the designated parties.

"As long as the passwords are kept secure, there won't be any issues," Caputo said. "In fact, that information is stored in Lewisburg. That's another level of security."

The district will make available eSchoolBook, a Web-based student management system, which will allow parents to log in to a secure site and access their child's grades, assignments and attendance records.

The new technology will provide video streaming and increased opportunities to offer distance learning to students.

In addition to the computer improvements, the district is also installing a new telephone system with voice mail features, a video surveillance system in the high school and a new cafeteria management system that will allow parents to monitor and control their child's account electronically.

To make sure the new technologies work like they should and troubleshoot when needed, the district hired Mark Andrewcavage, Frackville, as coordinator of computer services and technology, a new position created by the school board earlier this year.

"The North Schuylkill School District has committed to an unprecedented investment of capital and budgetary funds in order to provide our students and staff with the tools and training needed to compete in today's global marketplace," Caputo said. "The board of education and administration, guided in part by an extensive needs assessment of our kindergarten through grade 12 students and staff, has begun to implement a plan which will allow North Schuylkill to create a model technology program."