SAINT ELIZABETH HIGH SCHOOL CREATES IMMERSIVE DIGITAL LEARNING ENVIRONMENT

WITH "BRING YOUR OWN DEVICE" INITIATIVE AND COMCAST BUSINESS ETHERNET

SITUATION

- Private, co-ed college preparatory Catholic high school in Delaware
- Offers expansive liberal studies program as well as technical literacy

CHALLENGE

- Implement a 1:1 BYOD policy to replace costly, outdated textbooks and offer 21st Century Learning environment
- Add fast, scalable, Internet service to support new bandwidth requirements

SOLUTION

- Comcast Business Ethernet
 Dedicated Internet
- Comcast Business PRI Trunks

RESULTS

- Up to 300% faster Internet service to support BYOD program participation
- 95% of student textbooks have been moved to the cloud

CO-EDUCATIONAL CATHOLIC SCHOOL MOVES 95 PERCENT OF TEXTBOOKS TO THE CLOUD

DELAWARE COLLEGE PREPARATORY SCHOOL HELPS STUDENTS EMBRACE TECHNOLOGY AS PART OF RIGOROUS CURRICULUM

Located on the southwest edge of the city of Wilmington, Delaware, St. Elizabeth High School (SEHS) is a co-ed, private college preparatory school that has provided a Catholic education to more than 6,000 graduates since its founding in 1940.

The educational program offers a core curriculum of liberal studies – English, reading, and the language arts; world languages; visual and performing arts; mathematics; economics; science; the social studies –global studies, history, and government and civics; and religious studies. The liberal education format is intended to produce a cultured, well-informed individual who can read, listen, and converse intelligently about a variety of topics. In conjunction with these subjects, students are exposed to the 21st century interdisciplinary themes of global awareness; financial, economic, business, and entrepreneurial literacy; civic literacy; health literacy; and environmental literacy – as well as technical literacy. There is also a shared curricular focus on 21st century skills and abilities that emphasize presentation, collaboration, and research.

NEW 1:1 BRING YOUR OWN DEVICE POLICY DESIGNED TO MANAGE COSTS, PREPARE STUDENTS FOR FUTURE LEARNING

Because SEHS is a private high school, students' families are responsible for purchasing text books for study, as well as tuition and other fees. The average annual cost for textbooks for a student entering their freshman year at SEHS was \$500-\$600, and resale value was low as textbooks and lesson plans are updated frequently. This created an unnecessary burden for some families.

"We had a parent say 'I just paid half a mortgage payment to get those books!", said Shirley Bounds, Principal of St. Elizabeth High School.

SEHS administrators recognized this as a challenge, but saw the opportunity to leverage its students' penchant for technology to remedy the situation and to further prepare students for college and beyond.

The school devised a comprehensive plan to expand the student's use of technology – called the Viking Initiative for Innovation, or "VIFI" – named after the school's team name. The VIFI program would replace physical text books with electronic books and educational applications, and require each student to purchase a mobile device or tablet to access the new online curriculum. But in order to roll-out this mandatory 1:1 Bring Your Own Device (BYOD) policy for its students, SEHS needed to upgrade the capacity of its network to support the project.



"We knew that making the vision of our mobile device program a reality would require finding a cost-effective way to upgrade our network. So when Comcast was able to provide us with significantly more bandwidth at a low overall cost, we took a giant stride closer to achieving our goal of creating an all-digital educational environment for our students, teachers and administrators."

Shirley Bounds Principal St. Elizabeth High School "At the end of the day, our mission as educators is to fully arm our graduates for the future – both academically and technologically – and to help ensure they have a strong familiarity with modern devices and online services like video conferencing which provides them with the foundation they need to begin that journey," said Bounds.

COMCAST BUSINESS DELIVERS FIBER-BASED ETHERNET SERVICE TO SUPPORT BANDWIDTH INTENSIVE BYOD INITIATIVE

The school was using multiple bonded T1 lines from a legacy service provider, and knew the 12 megabits per second (Mbps) of bandwidth provided was not enough to support the 350 high school students who would be using tablets simultaneously as part of their daily curriculum. After an exhaustive multi-year search for a local service provider, SEHS was thrilled that Comcast Business could provide a comprehensive, fiber-based Ethernet and voice solution with room to grow.

Comcast installed a 50 Megabit-per-second (Mbps) Ethernet Dedicated Internet connection. With the new service, which offers up to 300 percent more capacity than its previous provider at a low cost, SEHS is able to support the increased and sustained traffic caused by the hundreds of mobile devices simultaneously accessing online software and electronic books during class times. In fact, the system is so robust that SEHS has been able to replace 95 percent of its physical textbooks with electronic books.

SEHS also added new Comcast Business PRI Trunks so the school has reliable, high-quality voice service. "Since we've deployed Comcast, our service has been seamless," said Bounds.

Grades Pre-K through 8, which share the same building as the high school, also are using the Comcast service for their Internet access, and additional plans to expand the BYOD program and ultimately move all textbooks to the cloud are underway. Currently, productivity apps have been pushed out to students through the school's mobile device management system, along with more than 100 other course-specific programs that have been hand-selected by teachers based on independent testing.

Added Bounds: "We knew that making the vision of our mobile device program a reality would require finding a cost-effective way to upgrade our network. So when Comcast was able to provide us with significantly more bandwidth at a low overall cost, we took a giant stride closer to achieving our goal of creating an all-digital educational environment for our students, teachers and administrators."

