

COMCAST METRO ETHERNET SUPPORTS A NATIONAL LEADER IN DIGITAL EDUCATION



ORGANIZATION

- Forsyth County is a top-ten Georgia school district, with 37,000 students in 35 elementary, middle, and high schools
- High school graduation rate exceeds 90%; SAT scores exceed state average
- Broad community support for ongoing technology infrastructure investments

CHALLENGE

- Maintain high standards for innovative education while continuing to add new students
- Support new learning opportunities and innovative teaching for “digital natives”

SOLUTION

- Comcast Wide Area Network (WAN) solution
- Comcast Ethernet Dedicated Internet

RESULTS

- Rapid scalability to support growth and demand
- Improved learning flexibility
- Improved parental involvement
- Return on financial investment
- Return on learning: demonstrated excellence in student performance

Scalable bandwidth supports excellence in school and at home for K-12 students

THE BUSINESS CHALLENGE

Forsyth County, a growing community in suburban Atlanta, adds over 1,200 students per year to its enrollment of over 37,000. Bailey Mitchell serves as Chief Technology and Information Officer for the Forsyth County Schools. His task since 1997 has been to help teachers, students and parents leverage technology to deliver learning value in and out of the classroom.

“We’re a high-achieving district in terms of our graduation rate and test performance,” Mitchell says. “Our budget is focused on the classroom and on improving instruction. Our community has always been supportive of our educational technology investment, and what we’ve seen in Forsyth County is the importance of infrastructure in education – for the volume and speed of information that education requires today, you have to think today in industrial terms, not the 150 MB or 250 MB that don’t support your needs. The school district is the biggest consumer of broadband in this county, including the corporate data centers. People underestimate their needs based on past experience, and that’s the point – past experience isn’t what this will look like going forward.”

THE COMCAST SOLUTION

Comcast Wide Area Network (WAN) solution and Ethernet Dedicated Internet connect Forsyth County’s schools, administrative offices and operations centers with secure, point-to-point connectivity to ensure fast and efficient data transmission, as well as file sharing and document storage via the district’s central server. They also provide greater access to the district’s Internet connection to students working from home, a development that’s transforming education in Bailey Mitchell’s district: “Our students are ‘digital natives,’” Mitchell says. “They’ve grown up with this technology, and using it comes naturally to them as their preferred way to learn. We anticipated a spike in network use during the hours of the school day,” he continues, “but instead we see it after school hours, when they come back into our network to continue learning. They’re typically on line from 3:30 to about 11:00 PM.”

“We’re applying techniques from business to create individualized learning,” Mitchell continues, “aiming to keep track of a child’s preferences, performances and cater a learning plan to their needs. It’s the end of the old stand-and-deliver model. The future is mixing individualization, standardized content, and digital content, all simultaneously. Our intent is that every child will be connected in some way, and that requires the bandwidth we get from Comcast.”

Forsyth County is a leader in linking broadband infrastructure with educational objectives, and Bailey Mitchell counsels his colleagues around the county to think on the same Ethernet scale as he does. “Every time you increase the speed of the network, you are enabling incredible educational opportunities,” Mitchell says. “The infrastructure investment is a return on learning, and that’s why I’m glad to have Comcast as a service provider. Comcast’s pricing is very competitive and I appreciate it because it helps me achieve my budgeting goals. I have to get the best I can with the resources I have.”

COMCAST
BUSINESS

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Chief Technology and
Information Officer,
Forsyth County Schools*

THE RESULTS

Rapid scalability to support growth and demand

As students become more adept at using information in high volumes, Comcast Wide Area Network (WAN) solution and Ethernet Dedicated Internet are readily scalable to their increasing needs, “I’m not caught without enough bandwidth,” says Bailey Mitchell. “Comcast gives me scalability to increase it as demand presents itself.”

Improved Learning Flexibility

Forsyth County has incorporated Ethernet-supported technologies like Interactive Whiteboards and student owned devices to support learning. With Forsyth’s “Bring Your Own Technology” initiative, students utilize their individual Internet-capable tablets, laptops, netbooks and cell phones to work in classrooms learning in the ways they like best. “Now students can have access to the learning approach best suited for them, on their own hardware, and even capture their own best practices and instruct each other creatively,” Mitchell says. “They can learn at home on their own and be rewarded in the collaborative setting by the teacher – that changes the old ratio of students-to-teachers into something new: student-to-valuable time with teacher.”

Improved Parental Involvement

Forsyth County parents can view course content, grades, assignments, progress reports and other information provided by each school and teachers via the Internet. Families without a computer at home are encouraged to use the computers in the local library or make use of the school’s media center computers. “Over 9,000 of our parents are registered for our online student information system,” Mitchell says. “They can even replenish lunch money, receive alerts and school notices and access bus routes and transportation pick-up times via the Internet.”

Return on Financial Investment

Forsyth County spent \$2.8 million on textbooks in 2008. Interactive online content in the form of streaming video, simulations and digital content have cut that expense to \$400,000. “As we’ve cut investment in traditional textbooks,” says Mitchell, “we’ve increased investment in content and infrastructure. It’s a lot more efficient to consume a digital instructional product than to print and publish books. Things change so quickly that textbooks become obsolete and require replacement, and our students find digital content much more engaging and relevant.”

Return on Learning

Forsyth County goes beyond delivering digital tools for learning. It can constantly grow the repository of learning materials in its network, and measure as well as evaluate their utility. “Digital materials delivered online give us accountability we never had with paper materials,” Mitchell says. “I can tell you exactly how a digital asset is being used because we track the throughput on the network, the logins and the amount of time a child spends with a digital resource, and we can measure the traffic and the minutes in use for everything we offer.”

The advancement represented by these digital tools is more than just a step beyond traditional media, Bailey explains. “These digital resources are changing the curriculum dramatically,” he says. “Educators can be more efficient at matching the needs of learners with these resources. These aren’t e-textbooks; it’s a different way to engage today’s students, and it will evolve quickly into learning objects available a la carte, not just a digitized version of the hardcover text.”

Bandwidth is the key, Mitchell says: “The only way to have the access to all that content is to connect technology and infrastructure with the instructional understanding. Blended offerings of face-to-face and online, virtual learning, personalized instruction... all of that goes back to infrastructure. You can’t do any of that without a ramped up and highly accessible infrastructure for your school district.”