McKinney ISD Leads the Online Learning Experience with Fiber-optics connectivity from Time Warner Cable Business Class

BACKGROUND

McKinney ISD serves almost 25,000 students in McKinney, the town of New Hope and parts of Allen, Fairview, Lovejoy, Weston, Princeton, and Lowry Crossing. Its 30 campuses are supported by roughly 2,500 employees, including about 1,700 teachers. The district is known for its strong parental support of innovative education and for its strong administrative backing for the district's technology initiatives.

McKinney, Texas has made regular appearances for many years in newspapers and magazines as one of the best places to live in the U.S. This attention has attracted families to McKinney and its school district. Such growth, plus a national migration toward online learning, has repeatedly challenged the McKinney Independent School District's (ISD) bandwidth resources. Time Warner Cable Business Class (TWCBC) has been there all along for McKinney ISD to solve those challenges.

SOLUTIONS

The district initially had one, 100 Mbps circuit with another provider, but realized it needed more bandwidth and network redundancy. Allen McDaniel, McKinney ISD's Chief Information Officer, turned to TWCBC for help in 2008. An up to 100 Mbps Dedicated Internet Access (DIA) circuit from TWCBC, delivered via fiber-optic-rich network provided the much needed redundancy. By 2011, McKinney ISD's needs were exceeding even the two 100 Mbps circuits. As part of the competitive federal E-Rate process, McKinney ISD chose TWCBC to provide for its current needs and future growth by upgrading its existing 100 Mbps circuit to an up to 1 Gbps DIA circuit. The upgrade was completed within a matter of days and did not require additional costs of routers, switches and hardware.

As an E-rate eligible Telecommunications Provider (ETP), TWCBC assists education entities such as McKinney ISD to understand E-rate funding rules and regulations. McDaniel found that TWCBC not only provided the best price, but also the best end-to-end, secure and redundant network to connect McKinney ISD to the Internet. Installation and implementation were flawless, with TWCBC working closely with the district's network services group.

TWCBC's DIA is provisioned on dedicated fiber optic facilities from the customer's premises to TWCBC's hub site and is rate-limited at the Ethernet aggregation switch from 5 Mbps to 10 Gbps. It is designed for school districts such as McKinney ISD to provide a private (not shared) connection to meet heavy data demands through a dedicated port, ensuring that the school network is not competing for bandwidth.

RESULTS

Students, staff, campus personnel and the central administration staff all noticed significant improvements in speed and latency. The classroom learning experience was enhanced through superior

“I can’t really speak to the (issue of) support because our circuit is so reliable.”

– Allen McDaniel, Chief Information Officer, McKinney Independent School District

continued on back...
download and upload speeds. Posting assignments to the district’s centralized website is very efficient for teachers with the upgrade to 1 Gbps circuit. McDaniel’s IT staff can easily upload required staff development courses to the district’s video portal so teachers can log in via home instead of driving to the school on weekends. “There are a variety of programs that we have implemented that would never have been possible without… our Internet circuits that we have with TWCBC,” McDaniel said. McKinney ISD is a leader in helping parents stay involved. This is enabled by TWCBC’s DIA, which allows for fast upload of curriculum and critical student data to the district’s Home Access Center, where parents can view grades and student progress at any time.

“We can now efficiently post required curriculum to the district’s centralized website, which is very efficient for teachers with the upgrade to 1 Gbps circuit. McDaniel’s IT staff can easily upload required staff development courses to the district’s video portal so teachers can log in via home instead of driving to the school on weekends. There are a variety of programs that we have implemented that would never have been possible without our Internet circuits that we have with TWCBC,” McDaniel said. McKinney ISD is a leader in helping parents stay involved. This is enabled by TWCBC’s DIA, which allows for fast upload of curriculum and critical student data to the district’s Home Access Center, where parents can view grades and student progress at any time.

“Having these very robust circuits allows our employees at every level to have access to systems and continue preparing lesson plans, adding grades to the grade book and communicating via e-mail with other staff. Those circuits allow us to continue communicating and continue our work after the school day has ended.” added McDaniel.

The upgrade to TWCBC’s 1 Gbps DIA has helped improve Internet access and performance. The system has been reliable and there has been no reason for McDaniel to utilize TWCBC’s technical support staff. “I can’t really speak to the (issue of) support because our circuit is so reliable” he said.

The notable success with TWCBC’s reliable and fast fiber-rich network encouraged McDaniel to launch a BYOT roadmap in 2011. The precursor to implement the roadmap was a pilot program, which allowed smart devices in two high school classrooms for evaluation of bandwidth demands. Over the course of two years, the district documented almost 4,000 unique devices accessing the district’s Wi-Fi network enabled by TWCBC’s 1 Gbps circuit. The positive feedback from students led to McDaniel’s decision to move forward with the implementation of his district-wide BYOT initiative.

McDaniel will soon add more than 1,500 wireless access points across its campuses to provide Wi-Fi access to all 25,000 students and 1,700 faculty members in the 2013-14 school year. The TWCBC gigabyte circuit will be critical to ensure that fast and reliable access is available to everyone and anywhere on campus. “We look forward to the expansion of BYOT, and obviously having the Internet capacity that we will have at the start of the school year is of immense importance to the success of that project,” said McDaniel.

McDaniel is confident that his school district has the telecommunications infrastructure it will need to handle the next major innovation in education. That confidence springs from past performance. “We know that Time Warner Cable Business Class is always there and has the ability to increase and enhance the experience we are providing our students,” said McDaniel.

“We know that Time Warner Cable Business Class is always there and has the ability to increase and enhance the experience we are providing our students.”

– Allen McDaniel, Chief Information Officer, McKinney Independent School District

About Time Warner Cable Business Class

Time Warner Cable Business Class, a division of Time Warner Cable (NYSE: TWC), offers a full complement of business communications tools to small-and medium-sized businesses and enterprise-sized companies. Its phone, Internet, Ethernet, cable TV and security solutions are enhanced by award-winning customer service and local support teams. Through its NaviSite subsidiary, the Company also offers managed and outsourced information technology solutions and cloud services. Time Warner Cable Business Class was founded in 1998. Today, it serves more than 579,000 business customers throughout Time Warner Cable’s markets.

twc.com/business