

# EMPOWERING SHELTON SCHOOL STUDENTS WITH TOMORROW-READY TECH

### **OVERVIEW**

Children with learning differences need innovative teaching strategies—and technology can play an important role in helping them succeed. So when Shelton School, a leading Dallas private school serving K-12 students with learning differences, decided to build a new campus, they turned to Viyu Network Solutions, a leader in information technology services.

Founded in 1976, Shelton School has been helping students with learning difficulties achieve their potential for 45 years. Over the years, the school has grown and earned international acclaim for its curriculum and programs. In 2019, Shelton School broke ground on a new, 35-acre campus in North Dallas. Shelton School contracted Viyu to help analyze, plan, design and implement the IT and voice infrastructure for the new facility. The goal was to implement the network over the summer, in time for the new campus to open in the fall of 2020.



ENGAGE, ENRICH, EMPOWER.

## CHALLENGE

Building a new network in a short time frame is challenging in any environment—but 2020 brought the unexpected challenges of a global pandemic, construction delays, and a transition to virtual learning. Viyu's scope of work included the design and implementation of a new network, including voice, wireless and power systems, and full integration with security systems and lighting throughout the campus.

Lagging speed and coverage gaps in the previous network had frustrated teachers and staff—and when remote learning began in the spring of 2020, these issues were amplified. Suddenly, hundreds of teachers and students were streaming live video simultaneously, placing unprecedented demands on the network. Shelton School needed a fast, reliable network that would accommodate virtual learning, meet current technology needs, and accommodate growth well into the future. They also wanted tools and support to manage and troubleshoot potential network issues. Viyu was ready to meet the challenge.





"We know that we could not be doing what we're doing right now, if we didn't have this network. There is so much communication in education today—so for us, this implementation happened at a good time."

#### TINA LARSON

Director of Technology, Shelton Schoo

## SOLUTION

Viyu began working with Shelton School and its partners 18 months before construction on the new campus was complete, ensuring plans were in place ahead of time, for a smooth implementation. Viyu's consulting and engineering teams met with school leaders and IT staff, architects, engineers and consultants to define requirements for Internet bandwidth, network security, LAN switching, structured cabling, wireless network, voice communications and power protection. Together, the team created comprehensive plans for classrooms and public spaces, considering the best locations for interactive displays, cameras, phones, intercoms, and bell systems.

After the planning and purchasing stages were complete, Viyu's installation engineers began the process of deploying over 1,200 switch ports, 180 wireless access points, 250 phones and 40 pieces of power protection equipment across the campus. During this installation phase, Viyu's project management team coordinated efforts with the general contractor and subcontractors for physical security, lighting, low voltage cabling, electrical and mechanical systems. Any IoT device that required network or internet access was prioritized and separated on the network using secure VLANs.



Construction was delayed due to COVID, material shortages and other causes, but Viyu was able to work around these challenges by communicating effectively with contractors and staggering installations around the construction schedule. Once the project was nearing completion, Viyu provided over 80 pages of documentation to the Shelton IT staff for their use in the future. Viyu continues to provide ongoing support for all systems.





Professiona

Professional Services

"Our parents have been very pleased with what we have been able to do through this new network. We have added so much capacity — and while they may not know all that went into it, they do know that what we are doing is working."

#### TINA LARSON

Director of Technology, Shelton School



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## OUTCOME

Shelton School staff, students and parents responded positively to the new network, which delivered impressive speed, reliability and signal strength. Educators noticed the faster Internet connection and the ability to login from all areas of the school, without dead spots. Parents were pleased that students could participate in school even when they were sick, or learning remotely. The school's IT team counted manageability, connectivity, notifications, network design and future-ready capabilities among the most important benefits of their new system.

Shelton School's network includes:

- 20 GB communication backbone
- Cabling for up to 100 GB backbone
- 1,200 switch ports
- 180 wireless access points
- 250 phones
- 40 pieces of power protection equipment

Shelton School has been a leader in education since the 1970s, and with its new network, it can leverage today's most innovative education technology—with the capability to keep growing for years to come.

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"With the size of our campus, and the amount of users and devices on the network, manageability is very important. Viyu's network gives us notifications if there is a power problem, or if a port goes down. It also gives us the ability to log into a dashboard, determine which switch is connected to which port, and easily change settings. That's a big plus."

#### EDDIE MORENO

Computer Specialist, Shelton School

"We would like to thank Tina Larson, Eddie Moreno, Corey Smith, Ahren Willms and Chris Brendel for their support throughout this installation. Their invaluable assistance and attention to detail allowed the Viyu sales and engineering teams to execute the project plan to meet the delivery needs of Shelton School"

- Viyu Executive Management

