

# Dallas Independent School District Adopts State-of-the-Art Technologies for Learning

*BOXLIGHT interactive projectors allow teachers to be anywhere in the classroom, thanks to WiFi capabilities.*

In June 2013, the Dallas Independent School District completed the installation of a 300-mile, state-of-the-art fiber-optic network — billed as the biggest and best IT network of any school district in the country. The 20Gbps network is 200 times faster than the previous one. As part of the upgrade, 17,000 wireless access points were added, creating the largest K-12 wireless network in the state of Texas.

While preparing for the major undertaking, Dallas ISD knew it would need to replace its interactive projectors in the classrooms so they could connect wirelessly to the new network as well as be compatible with the Microsoft Surface Pro tablets to be used by teachers. Six months prior to the infrastructure upgrade, the district began researching options, attending trade shows and meeting with vendors for demonstrations.

“We were looking for wireless interactive functionality, high-resolution and the ability to connect the projector across the building’s wireless infrastructure,” said DISD’s Director of Network Services Gary Shuman.

With 11,000 classrooms, which have individual wireless access points, the challenge was in finding a product that could work seamlessly with the LAN connection while allowing the tablets to connect through the WAPs.

“We didn’t want additional radios in the classroom because they interfere with the wireless access points we have,” Shuman said.

## **PARTNERSHIP WITH BOXLIGHT**

The Dallas Independent School District found a solution in BOXLIGHT’s ProjectoWrite6™ WX31NST interactive projector, which uses wireless USB for interactivity, instead of a standard USB cable required by most other vendors.

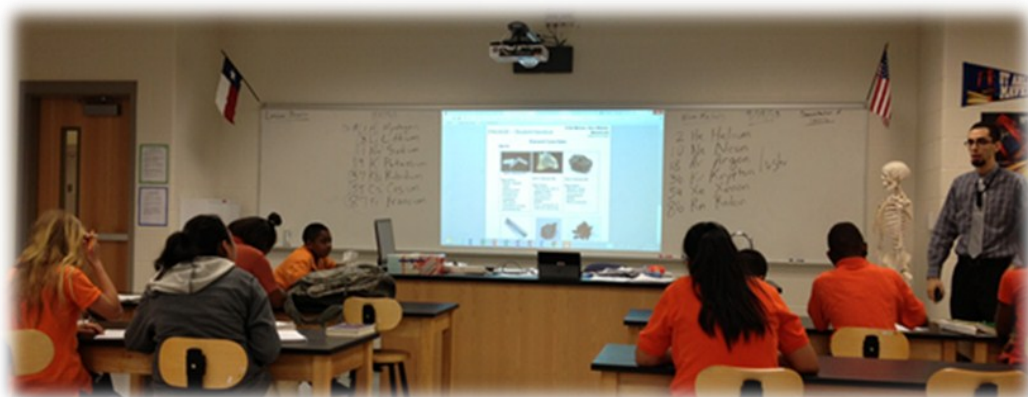
The one-of-a-kind LCD projector features integrated whiteboard technology with very accurate, easy-to-calibrate and durable metal pens.

“BOXLIGHT had better picture quality and a more accurate pen than other vendors we looked at,” Shuman said. “But what set BOXLIGHT apart was their ability to set the teacher free in the classroom with a tablet, and be able to

connect with the projector while being in control of the audio and video wirelessly.”

Before the technology could be deployed, however, Dallas and BOXLIGHT had to solve the network connectivity challenge. The projector’s software was originally designed to work with smaller networks instead of one like DISD’s, which has controllers on different subnets. The robust network required a nontraditional solution to work in the 223 schools.

With the new school year just a little more than two months



away, the BOXLIGHT engineers got to work.

“Our software didn’t have the ability to work for their specific need. So we had to customize the program so the projectors could work on the district’s network,” said BOXLIGHT’s Business Development Manager Art Davis.

Engineering the software change required extensive discussion, network analysis and testing. The district and the vendor teams collaborated during the entire process.

“We had specs for what we wanted to do. Others could have done it but it took a partner who was interested and proactive enough to take the time to listen and go through the engineering and code change,” Shuman said.

“BOXLIGHT was willing to step up and go through that process with us to achieve it in a short time.”

BOXLIGHT President Hank Nance, who got to see the results of the project during a school walkthrough, said he was very impressed with DISD’s vision and the implementation of the technology.

“We took their ideas to our engineers to create software to support that vision,” he said. “We’re very appreciative of the partnership. Having the opportunity to be part of that vision and working together to achieve it is a great source of pride for us.”

## COST SAVINGS

The Dallas Independent School District will be saving major costs as a result of upgrading its network. In addition to paying \$5 million per year in network fees, the technology budget previously required money for equipment carts, cables and cable-maintenance costs, which could be quite high. Not only do wireless projectors eliminate those costs, but interactive projectors in general cost less than interactive whiteboards. Plus, classrooms already need projectors and whiteboards so the technology maximizes the use of resources and space.

Choosing BOXLIGHT as a vendor will amount to additional savings, thanks to the company's Lamps for Life program that provides free replacement lamps for a one-time fee.

The average cost of projector bulbs, depending on the manufacturer, is around \$300 and they typically need to be replaced every one to three years. That means a BOXLIGHT education customer can save an average of \$900 over the five-year lifespan of a projector. In the case of Dallas ISD, the savings will amount to \$100,000 every two to three years, according to Shuman.

"This technology's implementation saved us a lot of money," he said.

## MEETING TECHNOLOGY NEEDS OF TODAY AND TOMORROW

By implementing its new network infrastructure, the Dallas Independent School District has far surpassed President Obama's ConnectED challenge. In June 2013, the president announced an initiative to connect 99 percent of America's schools to next-generation broadband and high-speed wireless internet — at speeds no less than 100Mbps and with a target of 1Gbps — by 2017. Not only is Dallas ahead of the timeline, its speeds are also 10 times faster than the target.

"Driven by new digital technologies, the future of learning is increasingly interactive, individualized and full of real-world experiences and information," the White House said in announcing ConnectED. For DISD, using interactive projectors is an important way of making sure students are prepared for that future.

"We believe it's a great teaching tool to engage students," Shuman said.

Since deploying BOXLIGHT projectors with Microsoft Surface Pro tablets in classrooms at the beginning of the 2013-2014 school year, the school district has received positive feedback from teachers.

"They really like them. They like the whole idea of mobile, which was our goal —to set the teachers free and let them be mobile around the classroom," Shuman said.

One challenge with wired interactive projectors in the past was the placement of cables. Teachers have diverse styles

and preferences and the classrooms are arranged differently — so the IT staff had to struggle with the answer of what part of the classroom was best for the cables and the equipment cart. And the 20-foot cables could present a safety hazard, as well as requiring regular maintenance.

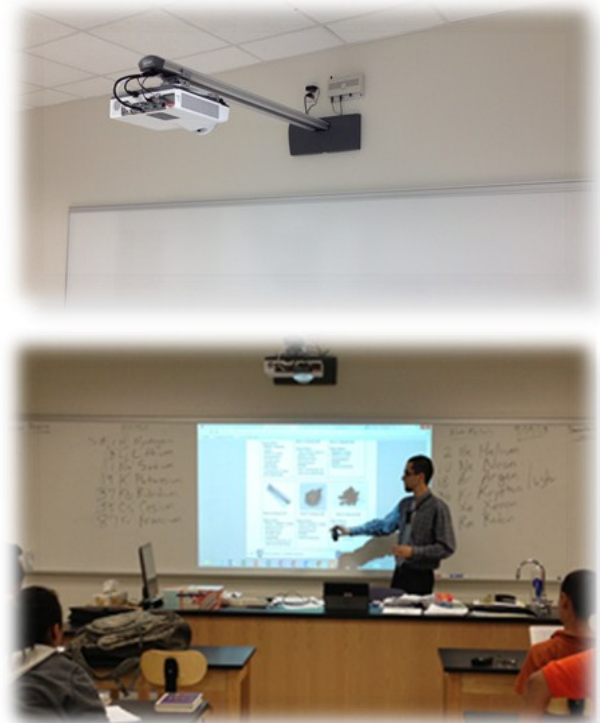
Now, teachers can be anywhere in the room.

As one example, a science teacher had his desk in the back of the classroom but the presentation table in the front. With a cable for a wired projector, he couldn't do his presentation in front of the students.

"Now he can teach from anywhere he wants. That flexibility, along with not being tied to one part of the classroom, enables teachers to teach in their own style," Shuman said.

To date, BOXLIGHT interactive projectors have been deployed at elementary and middle school levels. Dallas ISD plans to make interactive projectors standard technology in all 11,000 classrooms, which serve 158,000 students.

"BOXLIGHT's willingness to step in and be a partner and make changes to their product lines to meet our needs was impressive," Shuman said. "That's what made the difference."



**ABOUT BOXLIGHT** | BOXLIGHT has been developing and manufacturing award-winning projectors since its inception in 1985. We pride ourselves in offering industry leading technical support and service available 24 hours | 7 days per week | 365 days per year — for the lifetime of the product. | [www.boxlight.com](http://www.boxlight.com) | 360.464.2119