

Plano ISD selects DLP[®] projectors for thousands of classrooms, achieving lower total costs, improved display quality.



Client: Plano Independent School District, a Pre-K-12 school system of 68 school sites serving more than 53,000 students across 100 square miles.

Challenge: Implement display technology that strengthens the district-wide curriculum while reducing costs, minimizing maintenance issues, and improving display quality.

Solution: 1,800 fixed-mounted PLUS U2 and U5 model DLP[®] projectors that display on 84-inch screens, providing clarity and visibility from anywhere in the classroom.

Results:

A lower overall cost to Plano ISD, improved display clarity, higher reliability, greater simplicity for faculty and students, and a display solution that enhances the classroom learning experience.

Serving 53,000 students at 68 sites across approximately 100 square miles, the Plano Independent School District strives to remain at the forefront of primary and secondary education through strong commitments to both curriculum and underlying classroom infrastructure. During peak growth periods in the past 15 years, the district has grown by as many as 2,500 students annually, drawing from seven different communities, making it the 14th largest district in the state.

Over that same period, Plano ISD has undertaken a comprehensive revamp and standardization of its curriculum across every school in the district, an effort that continues even today. According to Jim Hirsch, associate superintendent for academic and technology services, the connection between curriculum and infrastructure is very strong. “Our goal is to deliver a consistent and complete curriculum – with the same classroom resources for every teacher at all grade levels and content areas,” he said. “Today, when a student moves from one school to another, he can enter the new classroom and join in the same activities covering the same content. There will be the same facilities and infrastructure as well. For example, any first-grade classroom in the district has the same lessons and resources available for teacher and student use. That’s a hallmark of our district.”

“Although we had dozens of basic LCD projectors, we were dissatisfied with the performance we’d seen. The brightness on those systems lasted for about a year – at most. They yellowed and dimmed, even when we replaced bulbs.”

To maintain that unusual consistency and equity in its facilities, Plano renovates its schools as they reach 20 years of age. “That’s not merely painting and landscaping,” Hirsch said. “It means computers, audio-visual materials, library resources, classroom layouts, and more. In our district, we have schools that are 50 years old that look as current on the inside as our brand-new schools.”

Integrating visual display with enhanced curriculum

One of the key philosophical principles of this convergence of curriculum and infrastructure was a commitment to incorporate technology in each classroom – and not require students to move to a separate, centralized “technology” room. “In the mid-1990s, we were bucking the prevailing trend by making each classroom a multitasking environment,” said Hirsch. “We wanted to truly integrate technology experiences into the curriculum – and you can’t do that unless the resources are right there in the classroom.”

Early efforts relied on 27-inch television monitors – generally on carts and later mounted on walls. At first, teachers struggled with the limitations of that solution. “They couldn’t put up, say, a word-processing document and expect people to read it,” said Hirsch. “We had to teach them to change font sizes in Web browsers.”

Jim Hirsch,
Associate Superintendent
for Academic and
Technology Services
Plano ISD

Texas Instruments DLP® technology: a lower TCO, a better display

“One of the key quotes that keeps coming back to us from teachers has been a variation of ‘This is the best piece of technology that has been provided to me in all my years of teaching.’ Our students echo that sentiment in surveys we’ve done by suggesting that the DLP projection systems have created a more engaging classroom for them to learn in.”

Jim Hirsch,
Associate Superintendent
for Academic and
Technology Services
Plano ISD

In 2000, voters passed an important school-funding issue, a key component of which included monies for equipping classrooms with projection systems, including 84-inch screens. “This was a tremendous statement from our community – that they wanted us to adopt the best possible technology to educate our children,” said Hirsch. “We took that commitment very seriously. We designed a complete audio-video system for each classroom – with projection, audio, amplifiers, video inputs, and even CD/DVD players. We were seeking an 8-10-year minimum total life for these components.

“When it came time to choose projection technology, the decision was fairly easy for us. “Although we had dozens of basic LCD projectors, we were dissatisfied with the performance we’d seen. The brightness on those systems lasted for about a year – at most. They yellowed and dimmed, even when we replaced bulbs.

“So we designed our RFP to specifically require Texas Instruments’ DLP technology in our projectors. We’d tested DLP and – even though it was relatively new in the market – we concluded that it offered the best value and best long-term performance. Yes, there was a bit of an outcry from certain vendors – ‘Why won’t you consider other technologies?’ – but we’d done our research and I was confident that I could go to the school board and our community and say, ‘This is the best long-term value and has the lowest total cost of ownership.’” We place a significant value on picture and color quality over the life of these projection systems and the actual available use time in the classroom, in addition to initial cost and warranty cost. With these and other value of investment variables taken into account, the DLP technology is estimated to save our district \$700-\$1,000 per projector over the life of the devices.”

‘The best piece of technology in all my years of teaching’

Since 2000, Plano ISD has purchased 1,800 PLUS U2 and U5 model DLP projectors for installation into secondary-school classrooms. These projectors boast more than 1,000 lumens of light with a 500:1 contrast ratio. Plano also provided PLUS UP-1100 projectors for its elementary schools on a checkout basis and for conference rooms. “Within the next year, we plan to go back to the elementary schools and take out the monitors and replace them with DLP projectors as well,” explained Hirsch. “We can install about 500 projectors during a typical summer and we also work at night to install during the school year.

“When we wrote our RFP, we decided to specify longer-than-typical warranty and service

agreements,” he continued. “Maintenance and inventory isn’t necessarily a critical consideration – we have an inventory of spares. If we have a burned-out lamp, it gets replaced within 24 hours. If a projector goes out, we take one out of our depot within 24 hours.”

According to Hirsch, the DLP technology has been extremely well-received across the district by the faculty. “One of the key quotes that keeps coming back to us from teachers has been a variation of ‘This is the best piece of technology that has been provided to me in all my years of teaching.’ Our students echo that sentiment in surveys we’ve done by suggesting that the DLP projection systems have created a more engaging classroom for them to learn in.”

“With an 84-inch, bright, clear display, you've created an entirely new way of teaching. We've developed our curriculum expressly to take advantage of this new environment and it's been a resounding success.”

Jim Hirsch,
Associate Superintendent
for Academic and
Technology Services
Plano ISD

“That’s pretty remarkable when you realize that includes things like handhelds, laptops, software, Internet access, and streaming video. But the reason for that great response, I think, is because this was really a foolproof adoption. Even our ‘less-receptive’ teachers have been very successful in their use of classroom projection systems.

“The teacher turns on the DLP projector and engages the students in a simpler, more natural manner than before. Combined with wireless keyboards and mice, the teacher and the students can take far better advantage of computing in the classroom. You don’t have to be in the front of the classroom to lead the discussion of, for example, editing a document. With an 84-inch, bright, clear display, you’ve created an entirely new way of teaching. We’ve developed our curriculum expressly to take advantage of this new environment and it’s been a resounding success.”



www.dlp.com/edu