



**Scottsdale Unified
School District**

Scottsdale Unified School District deploys hundreds of DLP-based Mitsubishi projection systems across 32 school campuses.

Client:

Scottsdale Unified School District serves more than 26,000 K-12 students in 32 schools across 112 square miles. SUSD is Arizona's "Most Excelling School District," with 21 schools earning the state's highest rating, *Excelling*.

Challenge:

Upgrade/expand and standardize its classroom projection capabilities by deploying high-quality display technology in 1,720 classrooms while minimizing maintenance issues and costs.

Solution:

A fast-track deployment of fixed-mounted Mitsubishi projectors based on Texas Instruments' DLP technology that provide superior clarity and visibility in a variety of classroom environments with varying light levels.

Results:

Dramatically improved clarity, universal accessibility for teachers and, most importantly, a near-zero maintenance burden to reduce operating costs.



Serving more than 26,000 students in 32 schools across 112 sq. mi., Scottsdale (Ariz.) Unified School District (SUSD) is committed to high standards of excellence in academics, athletics, and modern facilities. As part of that commitment to superior classroom environments, the District has embarked on a multi-phase program to integrate a variety of networking, computing, and display technology into all aspects of its educational programs. The goal is to enable staff and students to be academically successful, technologically literate, motivated, and engaged in the learning process.

"We want to prepare our students for the 21st century," said Dave Peterson, assistant superintendent of schools for SUSD. "That means instilling the ability to define tasks, access information, manipulate data, synthesize concepts, evaluate results, and creatively express ideas. We believe that technology in the classroom promotes

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cooperative learning, improves problem-solving and critical-thinking skills, communication and cognitive growth."

Aiming to continue to execute that mission, SUSD has undertaken an ambitious build-out program for every classroom in every school in the district, all funded by a voter-approved capital override. The makeover includes interactive white boards or wireless slates, wireless audio, document cameras, DVD/VCR/TV tuners, and ceiling-mounted video projection – a dramatic improvement from their previous equipment.





“Before, we were using a hodgepodge of equipment that had gradually been assembled over several years,” said Tom Clark, executive director of information systems and technology for SUSD. “We had some TVs, a few overhead projectors, and other random equipment. Only 15-20 percent of the classrooms were equipped, so there was a lot of equipment on carts. With different pockets of people doing different things, the projection technology became difficult to maintain and support. There were a variety of different replacement and maintenance schedules – it quickly became unmanageable.”

Seeking a standardized solution

Given the large-scale deployment it was contemplating, SUSD recognized it was essential to select a common bed of technology to deploy uniformly across the district. “We knew that a standardized solution was the only feasible choice,” said Clark. “And with an exponentially larger deployment of video projectors, we also knew that maintenance could be a huge issue. Our goal was to minimize the number of

touches. The fewer times we require a technician to touch that projector, the better.”

According to Peterson, there were a range of considerations that factored into SUSD’s evaluation of projection technology – including DLP from Texas Instruments. “First, frankly, the acquisition cost of DLP-based products has come down to a very competitive level with LCD – that started the conversation,” he said. “But as we continued to analyze the choice, it became the total cost of ownership was also significantly less. The lifespan of the devices and the lamps, in particular, is longer than what we saw with LCD. The cost of lamp replacement was lower as well.”

Because it’s a filterless technology, DLP also eliminates the labor-intensive maintenance that LCD systems require. “There are no filters to clean several times a year,” Clark said. “And when you’re talking about hundreds and hundreds of projectors mounted on ceilings, that’s a huge cost issue.”

It’s all about the image

But despite these economic advantages, SUSD wouldn’t make its decision without carefully

evaluating the primary factor: picture quality. Assembling a select group comprised of IT experts, educators, support personnel, and librarians, SUSD performed an intensive side-by-side comparison of the pluses and minuses of different technology and brands. The winner: the Mitsubishi XD221, powered by DLP.

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“By far, the DLP projectors had the demonstrated quality advantage,” Clark said. “They provided better ‘lumens for the dollar’ and projected an excellent image in all types of lighting environments.”

With the evaluation process complete, SUSD quickly completed a trial deployment that confirmed its decision. The district has been deploying the Mitsubishi projectors at a furious pace – as many as 20 classrooms in a single day – in its quest to get high quality projection into all of its 1,720 classrooms. “We’re very impressed that Texas Instruments had the capacity to supply that many screens in our compressed timeframe,” Peterson said.

From a curriculum perspective, the impact has been significant. “This is a central focal point for delivering instruction in our schools,” he said. “As a result, we have instituted an entire spectrum of professional development for our faculty and staff. To be

honest, some are intimidated that this is becoming the centerpiece of their classrooms – and that’s understandable for teachers who’ve been in the profession for several years and have developed their own methods and practices. But as they complete the training fundamentals, they start to see the possibilities and become increasingly comfortable with the shift and excited by the potential that this learning style holds.”

Moving forward, SUSD foresees using the DLP projectors in 3D mode, which requires no hardware or software changes. “In the sciences and geography, 3D is a very exciting opportunity,” Peterson said. “We’re looking forward to deploying 3D applications in our science lab, for instance.”

“Given the significant cost and quality advantages we’ve found with DLP technology, we’re very pleased with our early results and look forward to completing our district-wide rollout,” added Clark.

The result? DLP technology projectors offer an enhanced learning environment that helps teachers teach and students learn.



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