

How One California School District Tackled Digital Disparity Districtwide

...and boosted student engagement by 22% with interactive technology

Just five years ago, the Palmdale School District faced a major digital divide within its schools. Historically, the district operated under site-based school management, enabling each school to make many of its own technology decisions. This structure eventually resulted in only some of the district's 28 schools benefitting from technology, while many campuses with higher poverty rates didn't have any technology at all.

Around the same time, the California school system was about to receive money from the state's Proposition 98 Fund, much of which it decided to earmark for equal, district-wide technology. What Palmdale School District needed was affordable technology solutions for all its schools, and the training for teachers to utilize it. The district found the solution with Promethean.

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Making good of the Palmdale Promise

In October 2014, Palmdale School District staff and board members started mapping out a strategic plan focused on student outcomes. In early 2015, this plan - the "Palmdale Promise" - was underway with the overarching goal of providing its 19,000-plus students with a wellrounded education for global competitiveness, which included competency in technology.

"Some of our school sites were fairly welloutfitted with technology and others had absolutely nothing, so there was a huge disparity," said Christine Jones, coordinator of Educational Technology at Palmdale School District. "And part of our Palmdale Promise [initiative] is access and equity for all students, regardless of their school."

So, the search for consistent technology solutions for all its schools began. Jones and colleague Jim Smith, Manager of Information Services, attended conferences including the International Society for Technology in Education (ISTE) and the Science Education Partnership Award (SEPA) program; and invited several vendors to install their products for trial use.

The district reviewed a variety of technology – from interactive whiteboards to projectors to audio systems. Once several systems were set up for comparison, administrators, teachers, and staff attended an open house to weigh-in on their favorites.

The majority chose Promethean's ActivPanel, an interactive flat panel with a tablet-like user interface that enables teachers and students to collaborate with ease. The solution includes Promethean's ClassFlow[™], a cloud-based lesson delivery software that allows teachers to build and access interactive lessons from any web browser.

The district mounted ActivPanels on mobile stands so teachers could move freely around their classrooms and raise or lower them depending on classroom needs.

"Having them mounted on stands takes up a larger footprint in the classroom, but it also allows them to be put anywhere a teacher needs them," Jones said. "The ability to lower them allows small children to interact with the board, whereas mounting them high on a wall prohibits their use for some students. At the end of the day, we're shifting to more of a studentcentered environment."

How teachers are immersing themselves in technology

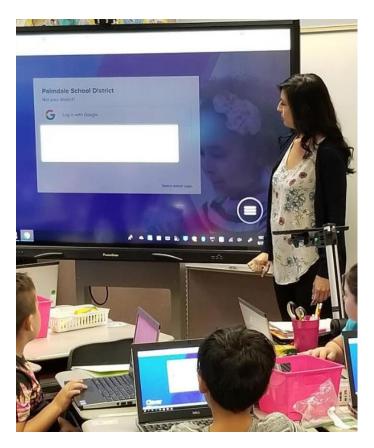
Thankfully building a student-centered environment doesn't mean teachers are left floundering with all this new technology. The Palmdale School District provides regular training, which includes lessons from full-time Promethean coaches focused on ways to better use features of the ActivPanel and ClassFlow. Sometimes these sessions take place during "Tech Tuesdays" and "Tech Thursdays" afterschool sessions designed to help teachers better implement technology.

"These sessions allow teachers and staff to collaborate, share best practices, and get pointers about all our technology," said Scott Whitney, teacher and media technician at Oak Tree Learning Center, the district's alternative school for sixth-, seventh-, and eighth-grade students working through disciplinary or behavioral issues. "The district has given me the technology tools I need, so I'm going to jump into the deep end and swim." Whitney is such a fan of the new technology-in-the-classroom tools that he's gone paperless. "All of my books are online, and all of the lessons are digital," Whitney said. "Students used Google™ classroom on their Chromebook™ notebook computers, and I project all my lessons through the Promethean board. And if a student misses a lesson, I can simply deliver it to them using ClassFlow, just like it was a piece of paper. I love it and the students love it. We're using 21st century learning, so when they go to high school and have to use digital portfolios, they'll have that experience."

His colleague, Penelope Wilson is a seventhgrade math teacher at Cactus Medical Health and Technology Magnet Academy. Her favorite tool is the ClassFlow creative poll, which allows teachers to poll students about a subject and have them answer using their tool of choice, such as a pen, text, shape, or camera. "It gives instant feedback that's so helpful," she said. "If a student does a great job or comes up with a creative answer, I can use it as an example – which they love – and can save it to use another time."

Additionally, Wilson said pupils of all abilities can learn and retain new skills better through interactive learning provided by ClassFlow. For instance, students with auditory or visual processing challenges or attention deficit disorder can answer a question with a tool other than pencil and paper.

"ClassFlow allows them to add their own unique spin," she said. "They might have solved a problem differently than I would have, but I can see their thought process when they push a poll back to me."



Continuing to strive for digital equity

The partnership with Promethean is helping the Palmdale School District level the technology playing field across its district - providing more opportunity for all students and teachers to improve engagement and outcomes. "Our teachers have widely adopted the use of the Promethean panels in their classrooms. Having immediate access to digital content and resources has enabled them to quickly create and present more exciting and rich lessons for their students," said Jones. "On our annual district technology survey, student engagement has increased an average of 22% districtwide with a few sites reporting a more than 40% increase. Teachers have been excited to learn new skills. You just cannot minimize the effect of happy, engaged teachers on the learning environment!"