Project Overview
Edinburg Consolidated Independent School District
Edinburg, Texas

Speed and Simplicity
In 2016, as part of a lighting retrofit, the Edinburg Consolidated School District (ECISD) in Edinburg, TX, replaced existing fluorescent lighting systems at six elementary schools with T8, LED Tube retrofit kits. When they began to experience electrical and code-compliance issues with safety implications, the district had just weeks to select and install a new lighting and control system in order to ensure a safe and productive learning environment for every student.

The Challenge
ECISD immediately developed an action plan to replace the T8, LED Tube Retrofit lighting system, assembling a team consisting of ECISD staff, engineers and electrical contractors to deliver a solution that met the available budget, time constraints, and energy-saving goals. To ensure a safe learning environment, the fire marshal gave the district an eight-week window to implement changes. The solution needed to be installed in multiple schools simultaneously, using several different contractors to give teachers, staff, and school administrators greater control over classroom lighting.

The Solution
Sigma HN Engineers, with the assistance of Bell and McCoy Lighting and Controls, specified a Lutron Vive Wireless lighting control solution to meet performance requirements. The wireless solution also reduced installation time, complexity, and cost, and with the addition of wireless hubs, enabled centralized control and monitoring.

“When project requirements changed, it was no problem to quickly make adjustments without purchasing or installing additional materials.”  
Tony Nicanor, Principal, Sigma HN Engineers

The wireless nature of the system was instrumental in helping to meet the project’s aggressive timeframe. José Antonio “Tony” Nicanor, a principal at Sigma, noted that he chose to use Vive because it was extremely easy to configure – and even reconfigure – system setup, “We were able to quickly design and program the wireless hubs, and when project requirements changed it was no problem to quickly make adjustments without purchasing or installing additional materials.”
The selected control system had to be scalable and flexible, providing simple switching control in some areas and dimming control in others. Vive Wireless systems make it easy to meet all these requirements, and provide the ability to monitor, evaluate, and adjust lighting from within the space, or from a remote location, using a smart device.

Multiple electrical contractors were hired to complete the lighting and control retrofit while ensuring the schools remained up and running for students.

The Vive Wireless solution offered a fast learning curve, enabling contractors to quickly become familiar with system components, installation, and setup.

Ralph Rodriguez, from Zitro Electric, installed Vive Wireless in three of the school district’s elementary schools. “I was very impressed with the Vive system,” Ralph reports. “It’s easy to install and program, and the wireless installation really saves time. We had no problems with this system.”

The classrooms were outfitted with local wireless controls as well as occupancy and daylight sensors to maximize the energy-saving benefits of LED lighting, and comply with the code. Mr. Nicanor praised the system’s flexibility, “Wireless Pico remote controls can be placed wherever they are needed, and wireless occupancy sensors could be easily added or adjusted as teachers and staff learned more about what they need in their classrooms.”

Not only does wireless control reduce installation cost, but it ensures that the wireless hubs and the Vive Vue software create a networked system that can be centrally controlled and fine-tuned by the District Facility and Maintenance team using smart phones, tablets, or computers.

The Zitro team programmed the system with very little help. It was easy to address, easy to synchronize, and the software program walked them through all the necessary steps.

“We even used three different devices to do system set up – an iPhone, an iPad, and an Android tablet – the setup went equally well on any device. That’s a huge advantage because you’re not tied into any one type of device,” said Mr. Rodriguez, “The word is out with other contractors, and I’ll definitely use Vive Wireless again.”

Results

The lighting and controls in the six elementary schools are now safe, efficient, and actively contribute to creating the right learning environment. The facilities team can easily assign different layers of control based on the different space requirements. Pico wireless remote controls in the classrooms give teachers individual control at the touch of a button.

Zitro Electric was also able to quickly train the ECISD maintenance staff on the system in just a single orientation session. This translates to savings for the district, and praise from the contractor, “We haven’t had a single call back on this system, and it’s been months since we completed the installation,” said Mr. Rodriguez.

The new lighting retrofit ensures a safe, productive learning environment, and gives students, staff, and teachers the tools they need to put kids on the right path to a bright future. The new Vive Wireless lighting control system helps enhance the learning environment, sets a standard that can be easily replicated and scaled in future retrofits, and saves energy to help ensure valuable dollars can be used for educational programs rather than higher electric bills.

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Ralph Rodriguez, Zitro Electric

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