

An Educated Choice: Georgia's Largest School District Upgrades In-Classroom Technology with NEC Projectors & Displays

Facility:

- Gwinnett County Public Schools

Vertical:

- Education

Location:

- Gwinnett County, Georgia

Challenges:

- Replace aging equipment and standardize classroom technology across a large school district

Solution:

- 9,464 NEC NP-P401W projectors across the entire district and 200 to 250 E Series NEC flat-panel displays

Result:

- Successful installation of thousands of NEC projectors and hundreds of NEC flat-panel displays, with more to be installed



A good teacher tells his or her students that even after they graduate, they should never stop trying to improve themselves – a lesson that any organization striving to succeed should learn as well. So when Georgia's largest school system retrofits its classroom technologies, the district is always looking to upgrade from the prior technology, to provide years of enhanced learning and student engagement.

The award-winning Gwinnett County Public Schools (GCPS), located in a suburb of Atlanta, served more than 178,200 students in the 2016-2017 school year, and expects to keep growing. The system comprises 139 schools and approximately 13,500 classrooms – so its sheer enormity adds a layer of complexity to any school-wide project to update or standardize technology.

The Major Challenge: Thousands of Projectors Needed

Putting technology into classrooms has been a GCPS focus for decades, first using overhead or slide projectors, and then televisions. Before the district made the broad decision to add projectors to all classrooms, schools would buy a few on their own, but there was no standardization across all the schools.

In the early 2000s, the district decided to replace all CRT TVs in classrooms with digital projectors, beginning with the middle schools, but GCPS saw mixed results with the type of projector and brand they used for the middle school as the years went by.

"We were using DLP [digital light processing] projectors, but [the manufacturer] couldn't get a particular chip stabilized, and the projector would prematurely pixelate at times," said Greg LaHatte, director of GCPS' Broadcast and Distance Learning department. "We needed something to last longer, and that started our search."

For the next retrofit – the elementary schools – GCPS had a refined list of needs and requirements it wanted for its classroom projectors.

Gwinnett's Projector Wish List

The elementary schools in the district would require 5,184 projectors, and the school couldn't afford to take the decision lightly. They engaged a local integrator, Summit Systems (now Summit Solutionz, Inc.), to help them in their quest for new LCD projectors to replace the DLPs.

"When you're deploying [that many of] of anything, you want to make sure it works," said Tim Gorisek, president of Summit Solutionz. "Otherwise, if there is an issue, you don't just have one problem – you have [thousands of] problems."

LaHatte and his team had a number of requirements when searching for a solution, including a certain caliber of vendor.

"We wanted a tier-one manufacturer – a company that makes their own product," LaHatte said. "We didn't want a company that buys projectors and puts its brand on them. We have such a large amount of projectors that we wanted to be able to lean on the company itself to help us work through any issues. When you deal with tier one, they own the problem and respond better to challenges."

Other requirements included selecting a bright, commercial-grade product with a good value for the price, and a large footprint and robust chassis to disperse less heat – and, of course, longevity.

"We needed something with the potential to last a long time," LaHatte said. "We were gunshy about that after the DLP chip issues. We need our tech to last a long time, because we don't have the money and resources to replace them every three years. We need five, six or even seven years out of a projector."

Summit Solutionz helped present some products, and other vendors showed their own products to LaHatte's team on site, including a sales team from NEC Display Solutions, which hosted a demonstration of the NEC projector offering. Summit and the tech team together evaluated a handful of manufacturers, and finally chose NEC Display Solutions' NP-P401W as the winner.

"There were some specific features to that model that made it Gwinnett's choice, including that it was a proven model, which gave them a lot of confidence in it," Gorisek said.

"The lens shift for moving the image up and down was a real plus for us, which is important because of all the different environments we would be putting it in, and also that the image would work with either a screen, whiteboard or interactive whiteboard," LaHatte added.

The versatility of the projector model and its zoom range and optics capabilities meant that the school could deploy the NP-P401W in classrooms as well as larger venues like cafeterias and gymnasiums.

"The zoom range and automatic lens shift gave us a great deal of flexibility, and we found more variety in zoom choices with NEC than the other vendors," LaHatte said. "NEC is an established, well-known company with a reputation for standing behind its product."

The Ongoing Installation

LaHatte said installation of projector technology has been almost ongoing since they first started installing classroom projectors in 2007. The latest elementary school retrofit project to install the NP-P401Ws began in 2014 and finished in early 2017.

"When we get all the way done with a school level [elementary, middle school or high school], we go back to the beginning – 15 projectors a night, every night, 52 weeks a year," he said. "We almost never stop, apart from some brief breaks between installation cycles."

The NP-P401W was able to adapt to the existing harness already in many of schools' ceilings, which LaHatte said made it easy to swap them out with the previous projector.

Despite the challenges that can arise in the supply chain from a manufacturer needing to fabricate and ship thousands of additional units, Gorisek said that NEC never missed a single shipment.

"We never missed any deadlines because of product delays," he added. "NEC nicely forecasted our project and rose to the challenge on the production and supply chain aspects. From a service aspect, they were great to work with, too. Everything about their service offering works exactly as they describe it to the customer. They're doing their job, which makes my job easier."



One Technology Led to Another

The NEC NP-P401W projectors are used in GCPS classrooms to help teachers educate and students learn more effectively. Every classroom has a pull-down screen on which the projector can display, and additional whiteboards for projection display as needed. Some classrooms add interactive whiteboards to combine with the projectors to boost student engagement. The school can also show live broadcasts like schools' daily or morning news shows, as well as content from other sources.

"The projectors provide a window into a world that the kids want to see and interact with," LaHatte said. "What is shown in the classroom is based on a teacher's creativity, and the options are extensive."

With the elementary schools finished, the high schools are now in line for another 3,107 NEC NP-P401W projectors, with that installation ongoing through April 2018. Other schools will get a total of 1,173 units. The NP-P401W has also satisfied GCPS' needs for most of the larger rooms, like libraries and cafeterias. For the largest rooms – the high school theaters – LaHatte's team is installing new NEC NP-PX803UL-WH laser projectors as they retrofit those schools. Four have been installed so far, with 14 more to go.

"We have had a good experience with the NEC projectors in our classrooms, with few technical or replacement issues since our decision to change to NEC in January of 2014," said Joe Leonard, coordinator of AV and media development in the Broadcast and Distance Learning Department.

The success of the NEC projectors also steered GCPS toward NEC flat-panel displays, with about 75 50-inch and larger commercial-grade flat panels already in schools, public areas and conference rooms.

"We felt like the support and backing from NEC we got with the deployment of thousands of projectors would extend to our flat-panel display needs," Leonard said.

As the high schools are retrofitted, they will exclusively use NEC's E Series flat-panel displays, with a final count somewhere in the hundreds once all schools are finished.

"For our previous elementary school retrofit project, we used consumer-grade panels, which were not NEC; they were brands you would buy for home use," Leonard said. "[This is because] the elementary school buildings are not in use for as many hours a day as the high schools, but when we started planning for the high schools, we re-evaluated our display needs."

GCPS high school buildings are in use from 6:00 a.m. to as late as 10:00 p.m., and often have weekend activities going on, which mean any displays in the common areas of the school can get up to 100 hours of use per week.

"We felt panels like NEC's would serve our purposes better, and prove to be more cost-effective in the long run," Leonard said. "We can set a start-up and shut-down time for them independently, depending on location in the school. The NEC displays also have a better selection of inputs to feed the display than the competitors [we looked at]."

In addition to classrooms, GCPS is also using the E Series displays in smaller school conference rooms and various meeting rooms in central office locations.

"We are using the NEC panels in a majority of the applications we have in high schools, [including] in high-visibility areas like lobbies, commons [cafeterias], media centers and smaller conference rooms that do not have room for projectors," Leonard said. "The image from the panels is excellent and works well for the display of spreadsheets and other data necessary in meeting room applications."

"[The E Series are] one of the more highly rated products in the world of commercial operations with a lifespan that exceeds that of many others," LaHatte added.

LaHatte added that NEC's service and support staff helped GCPS feel confident that they made the right decision their projector and display purchases.

"NEC has always been a partner to us, checking in to make sure things are going well," he said. "In a school district this size, we need to be sure we can get that kind of support."



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