



Texas Schools Create New Network for Learning

Socorro Independent School District uses Cisco Meraki to digitize education and create a 1:1 program

Executive Summary:

- **Customer Name:** Socorro Independent School District
- **Industry:** K-12 Education
- **Location:** El Paso, Texas
- **Number of Students:** 46,500



Challenge:

- Need to provide technical support to low-income and at-risk students
- Desire to create an academy focused on specialized student learning
- Desire to create a 1:1 learning network for incoming freshman students

Solution:

- Updated wireless network foundation to support more devices
- Designed new wireless infrastructure to increase and expand Internet coverage
- Deployed more access points to bring new resources to classrooms

Results:

- Improved engagement between teachers and students
- Granted access to educational materials in otherwise remote locations
- Expanded academy to 20 additional sites in less than one year

Challenge

Socorro Independent School District is located in the El Paso region of West Texas, close to the border of New Mexico. The district is comprised of 47 schools serving more than 46,500 students. As a high-performing K-12 district, Socorro ISD's focus has always been on student access and achievement. Even though areas of the district house low-income families, the school's leadership is concentrated on providing all of its learners with the same tools as a more affluent district.

Eight years ago, Socorro ISD began to focus on 21st Century Learning (C21), a program that enforces core competencies (such as collaboration, digital literacy, critical thinking and problem solving) to help students thrive in today's digital world. In order to accommodate a C21 instructional model, the school district needed a most robust, flexible, and scalable technology network. Socorro ISD relied on wireless, but the aging access points (APs) in its classrooms did not meet the school's expectations.

"About five years ago our new superintendent made it a priority to commit to curriculum changes and provide devices and laptops to students," says Chief Technology Officer Hector Reyna of Socorro ISD. "Together we introduced an initiative to work with students from low-income families and at-risk youth to ensure they had the best access to a brighter future."

Part of this push behind C21 was formalized as the "Win Academy." This program was created to bring groups of learners together for three years across the district's elementary schools, with one class of learners in the academy at each grade level. In addition, the district also hoped to grant each student with a digital device. "Our goal at that point was

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the same goal we have today: to make sure we have a solid infrastructure in place to support the most promising and essential educational programs within our district," says Reyna.

Since Socorro desired a stronger digital curriculum across its schools and needed to prepare for the Win Academy, its leaders decided to reinvest in the district's infrastructure to support Internet access and mobile learning. In addition to new types of personalized learning, the district also wanted to keep schools open after hours to promote out-of-class learning.

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Hector Reyna
Chief Technology Officer
Socorro Independent School District

Solution

An infrastructure upgrade was essential in building its new educational programs, so Socorro ISD used E-rate funding and local sources of revenue to help meet its technological needs. Socorro ISD is divided into two areas that encompass a diverse demographic. As a 76-percent free and reduced lunch district, Socorro ISD is eligible for significant E-rate discounts, including discounts on cabling and switching, both eligible services under E-rate Category Two. As such, the school district's E-rate Administrator Tricia Dominguez worked with the IT team to put together a compelling plan to leverage Category Two funding for the needed technologies at each campus.

Chief areas of concern within the plan were price, reliability, value, scalability, and service. "Socorro ISD is a passionate district, one that cares deeply about the role it plays in a child's education," says Reyna. "With this upgrade we needed to make sure that every child on campus had access to the Internet on demand with no questions asked."

Reyna and Ben Ross, network director at Socorro ISD, issued an RFP for new network solutions. Within the RFP, the priority was connecting the right solutions with the right price. In 2013, Reyna and Ross began reviewing vendors and evaluating competitive solutions.

During the review process, Cisco stood out among the other solutions—the company was a major player in West Texas, and showed a strong ability to meet all of the goals laid out in the RFP. Since Cisco's network came with a reputation of reliability, Reyna and Ross decided to pilot some wireless solutions and quickly found that Cisco was easy to maneuver and competitively priced.

"In 2013 our first deployment target was our high schools, and we wanted to hit the ground running," says Reyna. "We needed to provide robust wireless to these campuses at least 10 hours out of every day, without the need for excessive professional development."

After the testing period, Socorro ISD decided to purchase Cisco Meraki—which offers a complete cloud-managed wireless network that's built to simplify the challenges of modern, device-centric networks. "Following our testing, we knew Cisco Meraki would be easy to teach to our instructors, and the claims behind the technology lived up to its performance – both on the power side and the support side."

As Socorro ISD began to deploy more than 2000 Cisco Meraki APs in the district's high schools, Cisco made sure an engineer from the company was on-site at all



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times to support the transition. In addition, Cisco and the district worked with partner agency Desert Communications, and account manager Sara Quiroz, to make sure that the plan and funds from E-rate matched the implementation flawlessly.

Overall the deployment timeline was one year, ensuring that by the 2014–2015 school year, Socorro ISD was ready to reach its students with a new wireless network intact. “One year may seem like an extended deployment, but it was critical for our team to spend time troubleshooting and reallocating, especially in such a large district,” says Reyna. “We wanted to launch a highly functioning, top-of-the-line network to match the potential of our students.”

Once the school year was underway, Socorro ISD and Reyna also decided to invest in Cisco Catalyst Switching to bolster the school’s new 10 gigabyte network.

Results

Since its deployment of Cisco Meraki Access Points and Cisco Catalyst Switching, Socorro ISD has experienced large gains in performance – both technically and academically.

In terms of digital curriculum, Socorro ISD is now at the forefront of schools in the nation. Each instructor develops lessons online daily, and students can follow this curriculum page-by-page on mobile devices – a feat that would not be possible without a reliable wireless infrastructure with consistent uptime.

“When we look at our teachers and our students we see that the engagement is better, the attendance is higher and discipline is down on nearly every campus,” says Reyna. “These types of gains, and the ability to implement new programs that take our students in new directions, are thanks in large part to our new wireless environment.”

One of the main reasons Socorro ISD has experienced such success is due to the vision of district Superintendent José Espinoza. Espinoza encouraged the district to work closely with Reyna and the IT department, and vigorously campaigned for more funds to be poured into technology. As a result, Socorro ISD students are confident that they get an equal, even superior, global education.

“We really want every child to have access to everything they deserve, especially our lower-income students,” says Reyna. “We want our students to be well-prepared for a global economy, and we want them to launch into a range of diverse industries; that’s why C21 skills are so critical, and wireless is the backbone for that type of learning.”

Specifically, Socorro ISD has experienced better wireless coverage in all the schools with new APs. Cisco Meraki provides the district with access to resources that students might not have otherwise had, as well as easy troubleshooting, constant uptime, zero-touch provisioning and future-proof technology. The new accessibility for students, and increased bandwidth, also provides more learning opportunities during off-peak hours. The surrounding community is even able to connect at local parks, ensuring that school resources are available on the playground if needed.



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Product List

Wireless

- Cisco Catalyst Switching
- Cisco Meraki Solutions

Thanks to its new wireless environment, Socorro ISD was also able to stand-up the Win Academy, which expanded to 20 campuses in 2016. The data that evaluates both low-income and at-risk students within this program has shown major gains, which is due to the resources provided by the network.

Lastly, Socorro ISD launched a one-to-one (1:1) learning environment, thanks to its new network. A 1:1 environment is established when a school issues each specified student an electronic device in order to access the Internet, digital course materials and digital textbooks. With its new 1:1 environment, the district is able to provide a laptop to every matriculating freshman to prepare them for a digitally-intensive curriculum; 2016 is the third year of this program.

Next Steps

Moving into 2017, Socorro ISD is focused on leveraging E-rate to support digital learning initiatives in K-8 education. “We’ve made sure that all high school students have, or will have, a mobile device, and we are deploying APs in every elementary classroom,” says Reyna. “We want to expose our K-8 learners to digital learning in the same ways we’ve worked with high school students.”

In addition to what’s happening inside classroom walls, the district is also engaging local business to provide Internet access for students at restaurants and other companies to keep learning top-of-mind.

“Ultimately, this holistic approach—and our focus on technology—puts Socorro ISD on the road to crafting strong global citizens, and ones that can move into higher education without boundaries or limitations,” says Reyna.

For More Information

To find out more about the Cisco Meraki, go to: cisco.com/go/meraki

To find out more about Cisco Catalyst Switching, go to: cisco.com/go/catalyst



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