

Illinois School District Brings Wireless Technology to Classrooms



Indian Prairie School District 204 installs a wireless network to advance education technology and assessments.

Executive Summary

Indian Prairie School District 204

- **Industry:** K-12 Education
- **Location:** Naperville, Aurora, Bolingbrook, & Plainfield, IL
- **Enrollment:** 29,000

CHALLENGE

- Need to support new statewide standards in assessments and testing
- Desire to adopt and sustain bring your own technology (BYOT) program
- Wish to increase use of district-owned devices in the classroom

SOLUTION

- Refreshed network foundation to support new services and devices
- Provided access to a cloud-based community learning management system for students, parents, and staff
- Offered a scalable solution to support student enrollment growth

RESULTS

- Outfitted 30 classrooms with wireless teaching and learning technology in less than one year
- Increased student engagement by enabling collaborative and self-directed learning
- Scaled to 900 access points within a year facilitating district-wide wireless coverage

Challenge

As the third largest school district in the state, Indian Prairie School District 204 (IPSD) represents 33 schools across 46 square miles in portions of Naperville, Aurora, Bolingbrook and Plainfield, Illinois. The future of education came speeding into their classrooms in 2010. That year, IPSD's Assistant Superintendent of Technology, Stan Gorbatkin, led an in-depth investigation to align IPSD's technical resources with a long-term education strategy. The effort involved teachers, parents, and students. When the project was complete, Gorbatkin knew the answer was a scalable wireless enterprise network.

IPSD was in the process of developing an action plan for integrating more technology into instructional settings. Concurrently, Illinois adopted a new approach to student achievement as a part of the Partnership for Assessment and Readiness for College and Careers (PARCC) consortium, a 22-state working group that develops next-generation K-12 assessments in English and math. Under PARCC, student scores are compared across each state, helping to revise instruction and offer preparatory tools.

Gorbatkin and IPSD needed a way to meet both state and national assessment standards while offering a borderless learning environment for students. Inundated with priorities and lacking the resources to act immediately, the school district took Gorbatkin's analysis and committed to preparing for a bring your own technology (BYOT) environment, mandating online assessments, and increasing overall use of district-owned computers within classrooms.

A stable infrastructure was the prerequisite for this undertaking; IPSD would be supporting a surge of users on the network that the school district had never experienced before. But IPSD did not want to simply deploy a solution. It wanted to prepare its students for the future through innovative and collaborative means and offer the best available education technology programs. With old access points, a proliferation of wiring, and an overall unplanned approach to technology in the classroom, IPSD decided to pilot a new wireless infrastructure.

Solution

In 2011 IPSD technology leaders, including Gorbatkin and Superintendent Dr. Kathryn Birkett, attended BYOT presentations, reviewed successful implementations at school districts of similar size, and conducted teacher, parent, and administrator focus groups. By 2012, IPSD had a pilot program in place for BYOT and mandated online testing.

"Refreshing was an important endeavor for us; we needed to invest in a strategy that would continue to evolve and involved scalability, reputation, refinement, and a wide range of upgrades," said Gorbatkin. "Cisco has proved to be highly collaborative, striving to truly understand our educational needs. Within all of the nuances and complexities of our system, Cisco proved to be a leader, and that gave us a level of confidence from the start."

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IPSD chose Cisco® Catalyst® Series Switches at the edge, Cisco Aironet® Access Points, and wireless controllers to increase the speed of the wireless network and provide the most robust coverage, and uninterrupted access, possible. “We felt it was best to go with someone who was a proven partner for us and for others,” said Gorbatkin. For IPSD, the Cisco switches enable secure and reliable connectivity while allowing the school district to adapt to and support new application deployments. The access points offer a range of control features and benefits for the wireless system.

IPSD’s pilot program extended across two sites in the school district over 90 days, and was enacted to make sure that IPSD realized the results it needed in the classroom. Complementing the pilot program with a combination of new staff resources and other equipment, Gorbatkin and his staff saw immediate results, including increased speed, enhanced reliability, larger capacity, and uninterrupted service. “After the pilot, it was clear that our new network would achieve our most important goal, which was to enhance learning without getting in the way,” said Gorbatkin. The full equipment order arrived and was deployed in summer 2012.

Results

IPSD’s current use of wireless technology is pervasive. “We’ve just scratched the surface with our new Cisco network, but believe it or not, the technology is even better than expected,” said Gorbatkin. Regardless of location within IPSD, any user can connect to the network on their own device in seconds.

In response to a survey issued in 2012, 90 percent of teachers indicated that they had received positive feedback from students on the new BYOT experience, and 81 percent of instructors believe student engagement has risen as a result of the new wireless program. From the student perspective, 70 percent believe BYOT has helped in learning activities and 90 percent of students felt it would be beneficial to have the borderless program offered in more classes.

“Cisco has been a true partner in supporting our educational mission,” said Dr. Birkett. “We appreciate their expertise and interest in helping us progress with integrating technology into the instructional process.”

IPSD’s new switching and access points grant students access to a number of education technology tools, learning applications, and academic resources. Students can check, submit, and reply to content in IPSD’s community learning management system at the click of a button. This gives them access to a range of other curricular resources. In addition to helping with individual assignments, reliable wireless network access promotes group activity and collaboration both in the classroom and back at home.

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With the availability of more technology in the classroom, teachers receive data instantly. Students are able to deliver questions wirelessly, and anonymously, which aids in efficiently providing feedback to teachers. “Students love using their own tools and school-owned devices within the classroom environment; they want to use them more every day, and they are further inspired to collaborate and help each other,” said Gorbatkin.

Next Steps

IPSD’s five-year plan for education technology includes both data center and voice upgrades to complement the wireless success it has experienced. In fact, Gorbatkin reports that over 350 teachers are now using the wireless network to enhance instruction, with more faculty using the network each academic quarter.

IPSD also believes that cloud-based learning will continue to foster collaboration and, in turn, the integration of more types of technology into the classroom. “We’re shifting from a teacher in a traditional classroom to teachers facilitating students who are engaging in self-directed learning, and technology is what will help students take more ownership,” said Gorbatkin. “We want to do that systematically and on a grander scale, which we are starting to experience, but the answer is using technology as the vehicle.”

For More Information

To find out more about Cisco wireless solutions and control features, go to: <http://www.cisco.com/go/wireless>

To find out more about Cisco switches, go to: <http://www.cisco.com/go/switching>

Product List

SWITCHES

- Cisco Catalyst 3750-X Series Switches
- Cisco Catalyst 2960-S Series Switches

WIRELESS

- Cisco Aironet 3500 Series Access Points with CleanAir™ Technology
- Cisco 5508 Wireless Controllers

