



FUTURE READY CASE STUDY #9



Sanford,
Florida



Seminole
School District



66,134
Students



76
Schools



Suburban

Addressing Robust Infrastructure Through Collaboration

Seminole County School District is the 12th largest district in Florida and is located northeast of Orlando. The district serves students in grades Prekindergarten through 12. As of 2015–16, the student population was 53% White, 24% Hispanic, and 15% Black. Approximately 47% of students qualify for free or reduced-price lunch, and 4% are classified as English language learners.¹

Dr. Walt Griffin began his service as Superintendent of Seminole County School District after previous tenures as a high school principal, middle school principal, and mathematics teacher in the district. One of Superintendent Griffin's immediate goals was to focus on good teaching and learning, and integrating technology in instruction was seen as a means to meet this goal as well as to increase equity of access to opportunities for all students. To facilitate that integration, Seminole's district leadership began a concerted effort to improve the existing infrastructure. The [Future Ready Schools \(FRS\) resources](#), available after the work had begun, served to validate the district's path and connect staff with leadership of other districts as well as one another. Through ongoing collaborations between instructional and technology staff, efforts to increase staff knowledge of technology infrastructure, and the involvement of multiple stakeholders (from students to district support staff to community members), Seminole County School District leaders reported they bolstered both the infrastructure and its safe utilization by students, teachers, and other district staff.

FUTURE READY FOCUS AREA

- Collaborative Leadership
- Personalized Student Learning
- Robust Infrastructure
- Personalized Professional Learning

¹ Source of district statistics is the 2014–15 Common Core of Data, the most recent year available at time of publication.

Transition to Digital Learning

Prior to improving the technology infrastructure, digital connectivity varied throughout the district. For example, seven schools were not connected to the fiber network to which others were connected, making it a challenge for those schools to access adequate network bandwidth for technology use for students and teachers. The central office faced bandwidth challenges, and the network equipment at many schools was more than 10 years old and could not fully support the necessary bandwidth for technology access. The district technology team was focused on stopgap measures to address connectivity challenges as they arose.

Today, the infrastructure is enhanced; all schools and the central office have equal access. All schools now connect to one another via a dedicated, county-operated, fiber-optic Wide Area Network. High schools and middle schools connect at 10 Gbps while elementary schools enjoy 1-Gbps connectivity. District leadership forged an interlocal agreement with Seminole County's Department of Traffic Engineering several years ago. This creative partnership is unique among school districts in the state, is e-Rate eligible, and enables fiber connectivity for district schools at a fraction of the cost of traditional commercial providers. The district also advanced in its infrastructure focus, emphasizing proactive planning for the next several years, rather than the next year or two, and preventing interruptions in connectivity. Technology staff gained an awareness of the needs of a large district network and the requirements to keep the Internet and intranet highly available for students. Varied tools help the district technology staff maintain active monitoring and planning. For example, technology staff examine wireless heat maps to plan for growth in areas of high use, assess Internet bandwidth usage to plan for expansion, and establish additional infrastructure resources—such as a second data center—that will allow for load-balanced data and voice communication during normal operations and serve as a backup in the event of Internet loss at the district's primary data center.

The district increased safe and secure use of the Internet across its schools by educating students and staff on Internet safety in addition to employing standard filters and firewalls. To recognize the roles and responsibilities of Internet users in ensuring safe and secure use, district leaders conducted an overhaul of their "acceptable use" policy and shifted to a "responsible use" policy. The focus began with students but expanded to staff after leadership recognized that many staff did not have a strong understanding of cybersecurity. For example, many staff did not recognize the need for personal security measures, such as strong passwords, secure storage of passwords, and avoidance of hacking or phishing. District leaders realized that they cannot separate these learning opportunities between students and adults; all people are learners, regardless of age, and need to meet the same expectation of appropriate and responsible Internet use. The district employed varied approaches to help students and staff understand how to be better digital citizens; leaders discussed security threats; and the district is developing an online, self-paced digital citizenship module to inform students and staff of security and privacy issues.

Use of FRS Resources

Although their work toward future readiness had already begun, Seminole district leaders reported that they leveraged the FRS resources to validate and inform their efforts. Early on, they attended a Future Ready Summit, during which they took advantage of the opportunities to learn with and from leadership from other districts. Through their experience, Seminole's leaders recognized the value in these opportunities; despite widely different district contexts, such as size, districts have much to learn from one another. One Seminole district leader explained, "There are a lot of good people doing a lot of good work.... We could work smarter [together] by sharing and getting best practices out [to the field]."

District leadership coordinated the completion of the District Leadership Self-Assessment with a group of approximately 40 key stakeholders, including representatives from district leadership and technology staff. The group collaborated to complete the survey, and the results informed policy revisions and decision making, such as the change from an "acceptable use policy" to a "responsible use policy." However, district leaders noted that the most substantial benefit from this process was the collaboration itself. They reported that previously, there was a perception that departments should not approach each other. However, the ease with which individuals collaborated during the self-assessment process "made it apparent that people were approachable and willing to work together to solve problems."

The district employed a similar approach to bring together the instructional staff and the technology operations team to discuss technology infrastructure. The effort assisted teachers in understanding cybersecurity issues that could arise in their instruction and learn troubleshooting techniques to address basic technological challenges, such as checking if cords or cables are completely plugged in or rebooting equipment in the event of technical difficulties during a lesson. In addition, echoing a realization from the self-assessment, the collaboration increased cooperation between instructional and operations staff. Many instructional staff were reluctant to contact technology support staff for assistance. By introducing one another, the perceived barrier was reduced. Third, many instructional staff did not fully understand technology connectivity in the district. The efforts demystified the concept and process by sharing the district data center with the instructional staff. Instructional staff viewed the logistics and equipment associated with network connectivity, such as cabling and virtual connections between computers, and increased its understanding, familiarity, and comfort with technology.

Results

One of the first quick wins shared by Seminole district leaders was the involvement of students in supporting the district's increasingly robust infrastructure. An existing internship program with high schools evolved to allow students to help with infrastructure upgrades, such as course websites. Leaders reported that without the support of students in these efforts, the district would not have experienced the infrastructure improvement it did.

In terms of the broader effort to integrate technology across the district, another quick win was the expanded collaboration and involvement in technology conversations among a variety of stakeholders, including community members and business partners. The district hosted Future Ready events with the parent community and parent-teacher association, inviting members to collaborate with students and teachers, and kept those parents involved and informed at the ground level.

Lessons Learned and Recommendations

Seminole district leaders shared several lessons learned and recommendations for other districts relative to digital learning. They emphasized the importance of forging connections across departments and using those connections to facilitate conversations around future readiness. These efforts can support the recognition of shared responsibility and the need for collaboration in building an effective infrastructure for technology use. Leaders recommended that districts involve all users affected by infrastructure in conversations, including representatives from facilities, transportation, dining services, and finance. Most important, leaders reported, districts should ensure that the student voice is heard. Districts developing new curricula or resources, including technology, completely forget about the students who will be using them. Commit to ensuring that students are involved in technology decision making



“Many of our successes can be directly related to our improved communications, project management training, and building relationships across all teams. Many of our challenges feel less like roadblocks these days as we have learned to come together to solve problems.”

About This Case Study

This is one of nine case studies that examine and document districts' uses, applications, and perceptions of the Future Ready Schools (FRS) professional learning resources in their efforts to become Future Ready. The resources of interest include the Future Ready District Pledge, the Future Ready Interactive Planning Dashboard (and District Leadership Self-Assessment), and the Future Ready Summits. The FRS resources are built on a Future Ready Framework with a set of seven Gears to support a comprehensive transition to digital learning.

Visit <http://futureready.org/> for more information on Future Ready Schools and the resources discussed in the case studies.

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