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Overview

LOCATED IN DRAPER, UTAH, the 57-acre Skaggs Catholic Center is home to Juan Diego Catholic High School, St. John the Baptist Middle School and Elementary School, a day care center, and a church. A total of 2,000 students attend the three schools.

In 2013, the high school prepared for bring-your-own-device (BYOD). “We decided to embrace BYOD rather than resisting it,” says Jim Duane, director of educational resources for Skaggs Catholic Center. “No high school student would consider coming to school without a phone today, and middle school students are catching up.” High school students would be required to bring a personal laptop or notebook to school to download class materials, submit assignments, and work on individual and group activities. Middle school and elementary school students would use school-owned iPads and Google Chromebooks wheeled into the classroom on carts. Most students also have smartphones, so Skaggs Catholic Center needed a Wi-Fi network that could connect at least 4,000 devices while providing an excellent user experience.

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Xirrus Wi-Fi: Better Experience, Fewer Access Points

SKAGGS CATHOLIC CENTER chose Xirrus Wi-Fi. “Xirrus [Wi-Fi] access points can contain up to eight radios, so each one can cover more than one classroom,” says Eric Browning, systems administrator. “We saved money on access points, cabling, and switch ports.”

In classroom areas, Xirrus Wi-Fi access points in hallways cover two or more classrooms. The 1,350-seat auditorium needs just seven Xirrus Wi-Fi access points; the 400-seat cafeteria needs just two. With a few clicks in the Xirrus Management System – Cloud (XMS Cloud) portal, the IT team configured all radios in classroom areas to operate in the 5 GHz band, which can connect many more devices than the 2.4 GHz band. MacBooks, Chromebooks, and newer Windows devices all support 5 GHz, and students with older Windows laptops can buy an inexpensive adapter.

Basis for the Digital Classroom

THE FAST, RELIABLE XIRRUS WI-FI NETWORK enabled the schools to adopt Google Apps for Education, a set of free productivity tools for teachers and students. All students and staff receive a Gmail account, exclusively for school use. Students submit assignments online to Google Drive over the Xirrus Wi-Fi network. If students insert high-res photos in their documents, Google Docs automatically reduces their size, preventing network congestion. “We encourage teachers to post all class materials online, and we’ve completely replaced memos with email,” Duane says. “Everything is digital, and the Xirrus Wi-Fi network makes it possible.”
Basis for Blended Online Courses

**HIGH SCHOOL STUDENTS CAN ENROLL** in more than a dozen “blended” online courses, including English, Economics, and Advanced Placement Biology. Blended means that teachers post all course materials (documents, podcasts, and videos) online — but students still meet with the teacher four hours a week. Class time is very productive because teachers don’t have to spend time handing out materials or collecting homework. “Our Xirrus Wi-Fi is an enabler for blended online courses,” Duane says. “Teachers can confidently administer online quizzes because they know that all students can connect at the same time with a good experience.”

Students on athletic teams especially appreciate the online courses because they need to leave school early to travel to away games. Approximately 99% of students complete the courses on time.

Very Little Work for the IT Team

**THE TWO-PERSON IT TEAM** appreciates the ease of management. The Xirrus Wi-Fi network doesn’t require a central controller, and XMS-Cloud has an easy-to-use web interface. “With XMS Cloud we don’t need an on-premises management server, and we know that the management software is always up to date,” says Duane. IT saves more time because parents and other visitors self-register for temporary Wi-Fi access using Xirrus EasyPass. Using Xirrus Application Control, the IT team blocks websites with inappropriate content. Currently the schools also block Netflix during class hours.

Prepared for More Devices, Larger Files

**FROM XMS-CLOUD REPORTS,** the IT team knows that bandwidth usage increases by 30% each year. The Xirrus Wi-Fi network scales easily, and Skaggs Catholic Center has already doubled capacity. The IT team plans to extend coverage to the football field, track-and-field area, and baseball and softball dugouts. “As people begin connecting with more devices, our Xirrus Wi-Fi can scale to keep pace,” Duane says. “Management will remain just as simple.”