The Arlington Independent School District breaks down barriers of access with Google Apps and Chromebooks

Goals
- Better integrate technology into teaching and learning
- Improve communication and collaboration between faculty, students and staff

Approach
- Introduced one class set Chromebooks for every two teachers in grades 3-12, creating a minimum classroom standard for technology access
- Migrated students, faculty and staff to Google Apps for Education

Results
- Improved access to technology for all teachers and classrooms, and for students across socioeconomic levels
- Enhanced cross-departmental learning opportunities spanning core content areas
- Improved efficiency and saved time for faculty and staff

Background
The Arlington Independent School District (AISD), located in the Dallas-Forth Worth-Arlington metropolitan area of north Texas, serves a student body of more than 64,000 in grades K-12. The district focuses on developing its students' research skills and preparing them for future success through diverse learning experiences and technology-rich environments. The AISD uses a framework called SAMR to transform teaching and learning. One of the goals of its strategic plan is to use technology to promote critical thinking, creativity and achievement.

Challenge
While the AISD made efforts to use technology as part of its strategic plan, the district struggled with collaboration. Sharing information involved numerous back-and-forth emails with attachments created in different versions of Microsoft Word. Accessing and sharing documents during class ate up valuable instructional time.

The district also faced the challenge of truly integrating technology into teaching and learning. Schools had computer labs with PCs and Macs, as well as netbooks, iPads, and laptops in classrooms, but lesson plans didn't integrate devices and technology into learning.

Two years ago, Arlington residents passed a levy to bring more technology into local schools, primarily by introducing more devices into classrooms for students and teachers. The AISD used the newly-raised funds to create a minimum standard for technology access in every classroom, prioritizing the addition of devices for students to use on a daily basis.

Solution
The AISD chose Chromebooks for students in grades 3-12 because of their affordability, ease of use, battery life and ability to meet student needs across schools and grade levels. After the introduction of Chromebooks, teachers led the charge with Google Apps for Education. Early adopters used Google in their classrooms, and administrators quickly caught on to its effectiveness and ease of use. Now, everyone from the top down uses Google Apps for Education.

The simplicity of Google Apps for Education has helped spread adoption. "Teachers are instantly sharing documents with students through direct links and Google Classroom," says Barry Fox, director of instructional technology at the AISD. "Students hop on board, create and work in small groups. It's increased collaboration tremendously."

"On any given week during the school year, we see 50,000 to 80,000 Docs created," says Jim Holland, an instructional technology specialist at the AISD. "Google has become an expectation. Students, admins, teachers — all users are expected to know their Google login because so many things are tied into the platform."

Benefits

Chromebooks and Google Apps for Education have helped the AISD expand technology access to all students and allow for more connected learning opportunities across departments and core content areas. "Google allows us to transition into modifying and redefining [teaching and learning] because it enables sharing, collaboration and seamless feedback between various groups," Fox says. "We now have concrete strategies and tools to achieve our goals. Google helps us step forward and break down some of the barriers."

Expanded access

Chromebook affordability has allowed the district to make more devices available through 1:1 and shared cart models. Now that student devices are readily available, teachers have more opportunities to integrate technology into their classrooms, says Susan Anderson, an instructional technology specialist. "It's not just a scheduling issue; it transforms how you teach because you know you have access to devices on a regular basis."

Google Apps for Education and Chromebooks have also increased access to technology across the socioeconomic divide. Holland points to the district's 1:1 program for targeted populations and the ability for students to access devices at the point of need, rather than only in the computer lab during assigned hours. Even students who have limited technology at home can access Chromebooks and Chrome apps.

Teachers can also adapt how they use Google Apps for Education to suit specific students' needs. Some ESL classrooms, for instance, are entirely paperless, and teachers use Google Docs to provide comments on students' work in real time. The immediacy of this feedback helps students clarify their writing and become more proficient in English.

Connected learning

With Google Apps for Education, students collaborate with their peers on campus and across others in the district — and with industry experts around the world. High school Chemistry students, for example, get feedback on their work from experienced employees at The Dow Chemical Company, using Google Docs to share information and get input.

"Google Docs is the thread that bridges the gap between different core content areas."
— Barry Fox, director of instructional technology at the Arlington Independent School District

Google Apps for Education also expand the possibilities for project-based learning. For one physical education class, students used Xbox Kinect and Ekho heart monitors to measure their heart rate while doing different types of exercises. After collecting the data using Google Sheets, they analyzed the data and shared it with their peers — an exercise that transcended multiple subjects. "Google Docs is the thread that bridges the gap between different core content areas," Fox adds.

Time savings

Chromebooks and Google Apps for Education also helped the AISD save its most valuable resource: time. "We don't have to wait five minutes for the computers to boot up — six seconds and you're up and running. It's maximized instructional time," Fox says. "Because everyone is on the same browser, teachers save troubleshooting time," Holland adds. "We take those technical barriers away by using Chromebooks."

The AISD is in the process of adding more Chromebooks to its fleet of 30,000, and hopes to continue adding thousands of devices over the next two to three years. Meanwhile, the district is using multi-level surveys to understand how stakeholders perceive technology in the district and is using this data to measure impact. "It's more than just introducing shiny objects — it's about what we want students to do and how we want them to engage with content, master material and demonstrate mastery," Fox says. "We're focusing on the learning outcomes we want kids to more effectively meet. That's where technology really comes in."

Google for Education

A solution built for learning and designed for the classroom that includes easy-to-manage, affordable devices like Chromebooks, productivity tools like Google Apps for Education with Classroom, and limitless educational content in Google Play for Education. Together these tools help teachers inspire curiosity, while students learn better together, wherever they are.