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Windsor Southeast Supervisory Union rolls out 1:1 Chromebooks program to increase collaboration

WSESU | Windsor Southeast SUPERVISORY UNION

About Windsor Southeast Supervisory Union
- Located in southeast Vermont
- 1,200 students
- Comprised of four schools from pre-kindergarten to 12th grade

Goals
- Increase collaboration using technology
- Introduce a 1:1 model to bring technology to all students

Approach
- Piloted Chromebooks in grades 5-6
- Adopted Chromebooks 1:1 in grades 3-11
- Increased the number of Chromebooks 1000 percent over the past 3 years

Results
- Increased collaboration and student engagement with both students and teachers
- Encouraged use of technology in the classroom
- Taught technology skills for the future
- Easily managed 900 devices with only a handful of IT staff

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— Larry Dougher, chief information officer

About Windsor Southeast Supervisory Union
On the banks of the Connecticut River in southeast Vermont sits Windsor Southeast Supervisory Union (WSESU). The union is similar to a school district; its four schools serve more than 1,200 students in pre-kindergarten through 12th grade. WSESU's mission is to prepare all students to become responsible and contributing members to their communities.

Challenge
WSESU has a small IT team that supports many student devices and the schools' IT infrastructure. Chief Information Officer Larry Dougher needed a technology solution that he didn't need to manually backup and that could scale as WSESU expanded. Shortly after WESU schools adopted Google Apps in 2011, teachers, students and administrators were buzzing about 1:1, but year after year it never quite came to fruition. Dougher wanted to increase collaboration using technology and introduce a 1:1 model without the financial or technical burden.

Solution
In 2012 WSESU piloted Chromebooks with fifth and sixth graders at Windsor Schools. Students liked having a device available whenever they needed it, and teachers appreciated not having to schedule a computer cart. Since the pilot was so successful, Dougher got the board's approval to gradually roll out a 1:1 program that would equip every student with a Chromebook to take home.

"After the board took the Chromebooks home as a trial, they understood just how much students would be able to do and learn with 24/7 access to devices," Dougher says. The next school year, students in grades 5-8 at two schools received Chromebooks, and the following year every student in grades 3-11 had access to Chromebooks. The 1:1 program not only empowers students to learn anytime anywhere, it also supports WSESU's mission to provide equal education to all students by providing them with digital learning resources.

Benefits
Increased collaboration
Since students started using Chromebooks and Google Apps for Education including Classroom, teachers have noticed students are more engaged and participate more frequently by sharing their comments in response to documents, videos and other content. Students also peer edit and help each other produce quality work. "Chromebooks have opened the doors for collaboration," says Kate Ryan, fourth grade math teacher. "Students hold each other accountable for peer edits in language arts writing, share ideas about science labs and create slideshows to share what they've learned."

Students are also empowered to interact with teachers through technology. Students who aren't apt to raise their hands during class can communicate with teachers via email or Classroom. Technology removes the intimidation factor of approaching an unfamiliar teacher or the embarrassment of asking a question in class, Dougher says.

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- Google Apps is a free suite of communication and collaboration tools for schools including email, calendar, and documents accessible from any device, at any time.
- Chromebooks—fast, secure, portable computers that allow students to collaborate and share their work. Devices start at $249 and are easy to set up and manage.
- Android tablets—a variety of affordable tablets that are easy for schools to set up and manage, and designed for students to share.
- Google Play for Education—a content store built just for schools, so teachers can get the right apps and books to the right students, right away.

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Invisible technology

The first thing teachers noticed about the Chromebooks is how fast they boot up. Students simply open the devices at their desks and they're ready to learn. Whether they're accessing information online or in Google Classroom, students can seamlessly transition from one to the next without having to re-enter login credentials. "Since the process is so seamless and quick, teachers are using technology in their classrooms more often," Dougher says.

Chromebooks let teachers focus on the curriculum, rather than the distribution of technology. Teachers have seen a paradigm shift — students are learning technology skills at a younger age, so teachers can focus on more advanced content in their lesson plans. "By the time students are in middle school, I spend less time teaching them how to make graphs and presentations and more time digging into the data and content," says Owen Campbell, junior high school science teacher.

Learning career skills for the future

Chromebooks expand the school library to encompass any information online. With technology at their fingertips, students can find primary sources and conduct research without leaving their seats. But all online information isn't necessarily reputable enough to cite. Students learn how to identify trustworthy sources, which helps them in writing reports but also serves them later on when they're asked to conduct research in their careers.

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Ease of management

While Dougher's team is small, it continues to grow to support the more than 900 devices that the schools introduced in three years. He only had three employees helping him with IT operations for student and staff devices, but the team is welcoming a new member to help them scale. "The fact that I'm able to support a 1000 percent increase in devices without adding 10 more IT staff is significant," Dougher says.

Part of what makes that possible is the zero-touch deployment. The IT team can roll out upgrades without touching a Chromebook. The unlimited storage of Google Drive and backup of Google Vault makes IT's job easier. When, for example, a high school student lost her report and couldn't find it in Google Drive or Classroom, Dougher was able to locate the document in Google Vault. "Now I have the peace of mind knowing I don't have to worry about manual backups," Dougher says.

Introducing a 1:1 program with Chromebooks lets WSESU focus on providing equal learning opportunities to all students. With digital learning, students are able to do homework or research whether they're on the soccer field, in the classroom or at home. The schools are proud to dig deeper into learning and provide students with more advanced content.