

## White Bear Lake Schools prepare students for lifelong learning and achievement with the help of Google Apps and Chromebooks

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### About White Bear Lake Area School District

- Located near Minneapolis, Minnesota
- Public school district serving 8,900 students
- Has used Google Apps for Education since 2010, Chromebooks since 2012, and Google Classroom since 2014

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### Goals

- Prepare students for future careers and encourage lifelong learning
- Support community objectives of academic achievement in local schools
- Encourage creative learning projects that let students learn on their own
- Increase student engagement and integration of the 4Cs: Communication, Collaboration, Critical Thinking, and Creativity

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### Approach

- Collaborative projects let students learn by tapping into social networks and online resources
- Technology in classrooms helps district meet state's "World's Best Workforce" initiative
- Teachers become skilled at technology and pass knowledge on to students
- Classrooms become more interactive, with students and teachers sharing knowledge
- Sharing teaching innovations with community members helps garner support for future technology initiatives

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### Google for Education

Google for Education provides open technologies to improve learning for everyone, anywhere. Solutions consist of affordable devices, innovative tools, and educational content designed for learning and built for the classroom.

### The district

The White Bear Lake Area School District serves several communities near White Bear Lake and White Bear Township in the suburbs of Minneapolis-St. Paul. The district serves about 8,900 students and has 650 teachers.

### Connecting with the community to create future leaders

The communities surrounding White Bear Lake are passionate about their local schools. "Education has a strong place here," says Mark Garrison, director of technology for White Bear Lake Area Schools. "These are communities with a strong work ethic." Residents are very supportive of innovative teaching and learning programs at their schools.

When the Minnesota state legislature announced its "World's Best Workforce" initiative to ensure students were prepared for college and careers, Garrison and other district leaders saw it as the perfect pathway to frame technology integration while measuring its effectiveness.

Google for Education tools, Garrison says, have been a big part of innovating the classroom experience. The journey began with a strategic plan in 2010. When Garrison arrived at the district that year he helped implement a learning management system (LMS). But soon he and his colleagues decided they needed a more user-friendly solution—starting with email—that would serve as a platform for more collaboration.

### Changing ownership of teaching and learning

As use of the collaborative features of Google Apps became more pervasive for faculty, district staff wanted to use technology to improve the way students were learning, too. "We wanted to level the playing field so that whole classes could be part of learning projects, where ownership isn't just limited to a few students, or to one teacher," Garrison says.

Instead of teachers directing how students learn—and students taking it in without much interaction—the classroom environment now percolates with ideas. For example, Amanda Vernon, a math teacher at the North Campus school, told her 9th and 10th grade math students to use their social networks to ask people around the world about the pitch of their roofs, as a way to calculate slope and also better understand what types of roofs work best in different parts of the world.

"These are students who have struggled with math in the past, and I thought connecting with the concept in a different way might help it stick," Vernon says. "We used Google Earth so that students could actually see what roofs look like in different regions. Then we solved problems about the slopes of the roofs and the best materials to use in each region. It brought math to life."

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*"Bringing Google Classroom and Chromebooks into our schools, and giving teachers the right training, are designed to work together, and all are at the heart of what we're trying to accomplish."*

*—Mark Garrison, director of technology, White Bear Lake Area Schools*

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## Equipping students for creativity and collaboration

When teachers saw that collaborative digital tools could help students become more enthusiastic and engaged with their studies, Garrison talked to teachers about ways to bring these tools directly into the hands of more students. This led to the development of a 1:1 device program starting in 2013.

"We initially gave teachers some iPads, and they were only somewhat enthusiastic," Garrison says. "But when we gave them Chromebooks, they said, 'Can I have 20 more?' They saw the potential of Chromebooks for helping them teach, especially since Chromebooks are integrated with Google Apps." As of late 2014, the district has 3,500 Chromebooks, and plans to make sure nearly every student has access to a device.

"Chromebooks give me the ability to try new things," says Sadie Johnson, a family and computer sciences teacher at White Bear Lake Area High School. "If my typical lesson isn't going as planned I can make a change really quickly. Having Chromebooks in the room saves work time since we aren't walking back and forth from my room to the lab."

## Melding online engagement into the classroom

It was clear to teachers that having more technology in class could help them be more productive. "It takes teachers a lot of time to answer every student's question, and [causes them] to take up class time solving a single student's problem before moving on to the next student," Garrison explains. "We wanted to change the structure of our classrooms so that teachers could provide more individualized attention."

Once White Bear Lake teachers started using Google [Classroom](#), their interactions with students changed for the better. Teachers tell Garrison that they can be in the room giving one-on-one feedback as students work at their own pace on projects, which is more effective than stopping the entire class to answer one student's question. "Now we see students working in groups together, and teachers walking around more to help students individually," Garrison says.

"Using Classroom to walk my students through the process of writing our personal narratives was so much more motivating and engaging," says LuAnne Oklobzija, a 3rd-grade teacher at Otter Lake Elementary. "It also made me more efficient. I used comments and editing to assist my students, and we completed our writing a week ahead of my teaching partners."

These tools, says Garrison, create students who are more engaged and better prepared for school, work, and life. "We want a White Bear Lake Area Schools diploma to carry serious weight. We want our students to be prepared for everything life will throw their way."

