



At a Glance

What they wanted to do

 Increase access to technology and teach 21st century workplace skills

What they did

 Provided Google Chromebooks on a one-to-one basis to middle and high school students, along with access to Google Apps for Education

What they accomplished

- Increased engagement and appetite for learning amongst students
- Increased academic achievement, particularly among lower-achieving students
- Increased access to technology and information for students in a district where few have access at home



Passaic City Public Schools expands the classroom with Google for Education

Background

Passaic City Public Schools employs roughly 1,100 educators to serve 13,700 3rd to 12th grade students in New Jersey. The district has a strong focus on raising academic achievement among its students and improving career opportunities through education. The district is especially committed to providing great services for the very high proportion of Passaic's students eligible for free or subsidised school meals.

Challenge

In the 2011–2012 school year, the leadership team at Passaic realized that they faced a major challenge: how to ensure the district was both raising the personal academic achievement of all the students while also preparing them for higher education and the changing work environment.

In order to meet this ambitious mission, it was essential that students learned how to collaborate and research on the internet in order to become tech-literate and adept digital citizens. As only a few students had resources to explore beyond their neighborhoods, the Passaic team also wanted to give them opportunities to engage with peers and experts from around the world.

Furthermore, Passaic needed to prepare the students for the newly required online state academic assessments. They wanted to use technology more widely in lessons to ensure that their students were comfortable using it during standardized testing. School leaders also realized that these changes would allow staff to teach a wider range of 21st century skills, such as working collaboratively with others. To provide all students with the full benefits of the technology, Passaic decided that a 'one-laptop-per-student' model was best.

"The most obvious benefit of using Chromebooks at Passaic is that students now have a real personal stake in their learning experience. Rather than a teacher dictating facts to their class, the students can build their own learning experience, working together to solve problems."

—Joshua Koen, District Coordinator of Technology, Passaic City Public Schools

Solution

Passaic had already adopted Google Apps for Education, the free suite of communication and collaboration tools for schools, in the 2011–2012 school year. Since the district was looking for ways to maximize collaborative learning and online resources, Google Chromebooks seemed like a natural fit. Chromebooks are fast, secure, affordable laptops designed to make computing easy and make information accessible to everyone. And with complete compatibility and access to Google Apps, they were ideal for Passaic to expand their students' access to collaborative learning.

The low total cost of ownership of Chromebooks meant that Passaic could fulfil its goal of giving each student his/her own device, which was not affordable with comparable PCs with desktop apps. With Chromebooks, they wouldn't have problems with lost data as students' work was saved in the cloud. Also the Chrome operating system updates automatically for free—something that isn't possible with traditional desktop computers.

About Google for Education

Google for Education provides open technologies to improve learning for everyone, anywhere.

- Chromebooks fast, secure, portable computers that allow students to collaborate and share their work.
 Devices start at \$249
- Tablets with Google Play for Education an affordable 1:1 tablet solution that you can set up and manage in minutes. Explore thousands of teacher-approved apps, books, and videos.
- Google Apps a suite of communication and collaboration tools free for schools including email, calendar and documents accessible from any device, at any time

For more information visit:

google.com/edu/gogoogle

Benefits

"We've seen a noticeable improvement in the grades of students using Chromebooks and Google Apps for Education," says Joshua Koen, District Coordinator of Technology for Passaic City Public Schools. "In particular, we've seen a significant improvement in those students who had previously demonstrated very low academic achievement."



Connecting with other countries

Chromebooks helped teachers deliver learning outside the traditional four walls of the classroom. For example, Vida Fernandez, a Special Education 9th grade English teacher, taught a lesson on Frankenstein using Google+ Hangouts to connect with another class in Germany. The two classes represented the prosecution and defense in a 'trial' of Dr. Frankenstein, and both developed a sophisticated understanding of the narrative and characters of the book.

Connecting with experts

Similarly, students studying the concept of buoyancy in their science class were able to use Google+ Hangouts to connect with a group of professional boat builders. They were able to ask questions about the real-life applications of what they had learned in class, and gain insight into a type of work that many had not been exposed to before.

"Many of our students don't get the chance to leave their city very often," says Koen. "However, using Google Apps and Chromebooks to work online with students overseas, and learning from real-life experts, we've seen many more of our students express a desire to study and work beyond their hometown."

Better communications

The benefits aren't confined to just the students either, says Koen. "We have more efficient communication between the different school sites thanks to Google Apps, and we're able to complete processes in hours that would have previously taken days." He cites the example of a working group assigned to compile interview questions. "Before Google Apps, this would have been a very laborious process" says Koen. "Using Chromebooks, however, it was done very quickly, using something as simple as a shared Google Doc."

Future plans

The original Chromebook pilot with 400 students and 30 teachers was so successful that it is now being expanded to 5,500 devices. Passaic eventually plans to roll-out 13,700 devices to all students by the end of the 2014–2015 school year, representing one of the largest educational deployments of Chromebooks in the US.

"Passaic Schools is no longer a paper and pencil institution", concludes Koen. "Students and staff are both taking advantage of 21st century working methods. Teachers can use Google Apps technology to increase their own effectiveness, and students can take part in lessons that expand their experience of the world beyond their immediate environment."

