

Bombay School Chooses G Suite and Chromebooks, Learning Outcomes Improve



At a Glance

What they wanted to do

- Modernize the school, but keep its traditional roots
- Increase personalized learning
- Expand the use of technology in the classroom
- Save on IT costs

What they did

- Created a Bring Your Own Device (BYOD) policy
- Transformed laptop access— from 1:25 device-to-student ratio to 1:1 in less than three years
- Safely and securely managed all students' Chromebook devices with Chrome Education licenses
- Transitioned IT and network infrastructure to the cloud

What they achieved

- Overcame parental and teacher concerns about tech
- Contributed to 12% increase in test scores across all grades
- Saved more than \$40,000 per year on IT costs

Background

The world around Bombay, New Zealand is changing. A proud agricultural community since its founding in 1863, the town sits in the foothills twenty-five miles southeast of Auckland. In the last decade, the expansion of the big city's suburbs into Bombay has been accompanied by an increase in school enrollment. As the rolls increased, the local school board made a strategic decision to review its curriculum and modernize its technology, while looking to preserve its traditional roots. Paul Petersen, the principal of Bombay School, and the board needed a plan to prepare its 384 kindergarten through eighth-grade students for success in the 21st century.

Challenge

Three years ago, Bombay School had 15 computers in its computer room— or approximately one for every 25 students. Each child could expect about an hour per week of computer access.

School leadership knew they needed a plan to make technology more central to their educational strategy, but concerns about costs as well as potential resistance from parents and teachers presented real obstacles.

Solution

After extensive research, Petersen and the school board embarked on a plan that would transform their approach to pedagogy, the curriculum, and the school's level of engagement with technology. As part of that plan, leadership decided to pursue a Bring Your Own Device (BYOD) strategy. A cost-effective, reliable, and safe solution, Chromebooks and the Chrome Education license in partnership with G Suite for Education presented the best option. With help from a reseller, the school would facilitate each student's purchase of a Chromebook package (a Chromebook laptop, a Chrome Education license, headphones, and a laptop bag).



About Bombay School

Bombay School serves 384 students in grades K–8.

To learn more, visit

www.bombay.school.nz

To implement the school's digital transformation plan, Bombay School focussed on four areas:

1. Extend staff education and professional development around technology
2. Prioritize parent buy-in and education
3. Establish reliable technology infrastructure
4. Change its pedagogy and classroom environments

Reaching out to teachers

To support the first element of their plan, Petersen and his team made a concerted effort to communicate with and educate teachers through all-staff and 1:1 meetings. Before doing this though, they needed to get a good understanding of competency, confidence, and barriers for teachers to engage with technology.

To get this understanding, a survey was conducted across teaching and leadership staff to assess their knowledge of and confidence with technology. The results included a broad spectrum of responses, which informed the professional development (PD) plan, allowing them to identify 'early adopters' as well as those who would work better with more personalised support.

The early adopters were resourced with external professional development, and five of these teachers became [Google Certified Educators](#), which helped open the door to fundamental training resources for later adopters and practical lesson ideas for more advanced users. Positioning these early adopters as technology advocates enabled a peer-to-peer education program, where teachers would share learnings in group PD sessions as well as in 1:1 meetings.

Re-engineering staff meetings to build capability and capacity of staff members by having them engage with G Suite and Chromebooks regularly was also a key component to the program. Teachers were required to bring along their Chromebooks to each meeting and collaborate on a Google Doc for meeting contributions, minutes, and reflections on pedagogical approaches. Gradually, they saw all levels of Bombay staff increase their confidence and competence working with Chromebooks and all of the G Suite applications.

"It's a journey together. It's scary, but it's exciting at the same time, because that's where new learning comes from, when you move out of your comfort zone," Petersen concludes.

"Chromebooks and G Suite for Education opened up an amazing new highway of learning for Bombay School."

— Paul Petersen, Principal, Bombay School

Winning over parents

Persuading skeptical parents took a more vigorous campaign for which school leadership engaged in 1:1 meetings, group discussions, and all-parent nights. "Initially, there was quite a bit of opposition to students getting laptops," says Petersen. "We spent a lot of time talking to parents. Showing them how Chromebooks and the Education license worked. How parents could track their child's blogs, assignments, and homework. How digital learning could help improve students' education and keep parents more informed about their child's progress." Additionally, families with financial hardships were offered support from a non-government program.

To help sustain parent engagement, the school also migrated its printed, four-page newsletter to a digital format, using Google Forms. The email newsletters featured stories about collaborative teaching, flexible learning spaces and

videos of student work. They also included surveys so parents had a consistent voice in their children's education and the school could stay abreast of parents' input and ideas.

Building out the infrastructure

Finally, to ensure the school's network would support the addition of hundreds of new devices, wireless access points were installed across campus. And since they moved their knowledge hub to G Suite and use the Chrome Education license to effectively manage Chromebooks and monitor access, the school eliminated more than \$40,000 per year in server and external IT support costs. "The savings were enormous," recalls Petersen. "It was a no-brainer."

Bombay School knew that by electing to go down the BYOD route, they would need to ensure they could efficiently and safely manage all the new devices coming onsite. Choosing the Chromebook Education license allowed the school to pre-install the apps they wanted—and block the ones they didn't want. They could control who used Chromebooks, disable lost or stolen Chromebooks, blacklist sites, and easily add and remove student users. On this element of their plan, Petersen says, "Well, for us, as a school, we want to be able to ensure the safest possible deployment of devices onsite and easy management of them. We want to know what our children are accessing, and the best way to control that is with the Education license. We don't allow any machines on site that don't have the Education license on them".

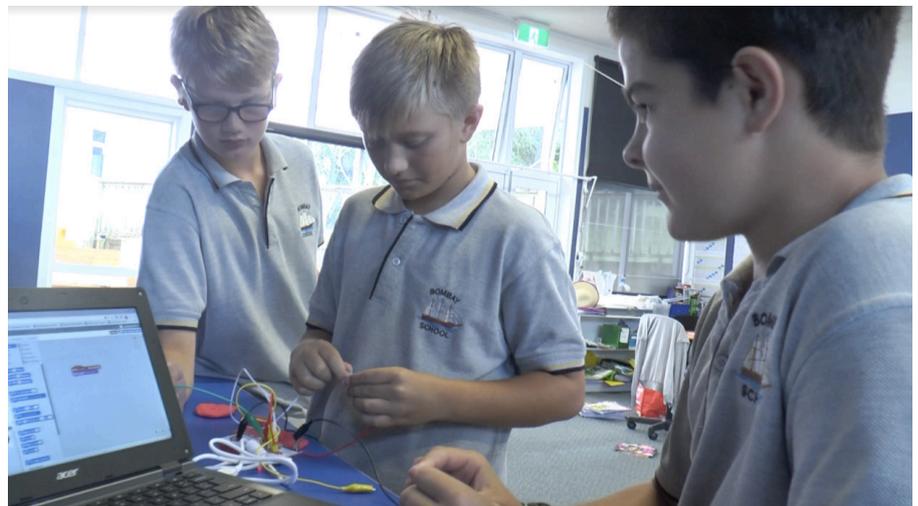
Benefits

Personalized learning

With every student gaining access to technology, teachers began seeing immediate benefits in their ability to provide personalized instruction.

"When we talk about personalized learning, I talk about my own experience as a student," notes Petersen. "When I didn't understand multiplication, for example, and my teacher was trying to explain it, I was too proud to go and ask for clarification. I didn't want to appear stupid to my mates. One of the greatest things about technology, however, is that it overcomes those constraints. If I don't understand multiplication today, I can learn about it online. I can look for help. I can practice at my own pace, anywhere I am." Because nearly every Bombay School student in the 4th grade and above now had a Chromebook, students gained the flexibility to learn at their own pace and get teacher support when they needed it most.

Today, students are finding novel ways to bring education to life with a range of digital tools. "We studied the local Maori culture, looking at Maori fortifications," a



About Chromebooks for Education

Chromebooks for Education give students, teachers, and administrators a simple solution for fast, intuitive, and easy-to-manage computing.

Chromebooks provide access to the web's education and collaboration resources, as well as offering centralized management and low total cost of ownership.

Using Chromebooks, teachers spend more time teaching and less time managing classroom technology, and schools can get more computers into the hands of their students and teachers.

To learn more about Chromebooks for Education, visit

edu.google.co.nz/products/devices

student recalls. "We did extensive research, collecting and refining our discoveries in Google Docs and Google Slides, as well as saving and sharing them on Google Drive. And then, as a group, we built a Maori fortification in Minecraft, which required us to learn new mathematical and engineering skills. And finally, we printed out a model of the Maori fortress on a 3D printer!" Not only do students now have the technology to explore the world in new and novel ways, but, thanks to Bombay School's digital transformation, students are benefiting from an approach to teaching that values personalized learning. This approach is giving students the chance to develop new skills, and it's giving teachers the space to tailor the curriculum more than ever to students' specific interests.

Results

In the end, Petersen says, "It's all about our ability to prepare students to thrive in the 21st century." Since the roll out of their digital transformation program, Bombay School has seen student performance increase significantly. In 2014, for example, the seniors collectively scored at the 78th percentile for reading. In 2016, they scored at nearly the 90th percentile. Additionally, 90% of students in year 8 are all above the national standard for reading, writing, and maths. Students with special needs have also improved in overall engagement and making progress with the curriculum.

Today, Bombay School's students are using technology to create, instead of consume, and to pursue academic excellence. When Petersen thinks about the obstacles he faced when rolling out Bombay School's technology plan, and how he pushed through the challenge, he's crystal clear: "Every principal, every leader, has to ask themselves, 'What is my mindset?' If you have a growth mindset, then you'll climb over any barrier, any mountain. Nothing will stop you. Nothing."