

Creating equity among students with Apple

Being a teacher is hard. Classrooms are filled with kids who come from a variety of socioeconomic backgrounds and have varied levels of learning abilities. These factors alone create challenges for educators who strive to deliver the same quality education to all of their students. Sewanhaka Central High School District, too, struggled with this reality. Then they implemented iPad devices.

Comprised of five high schools that serve a diverse population of 8,600 students on Long Island, New York, Sewanhaka knew they needed to shift their teaching mentality to better meet the needs of their student population. An extensive search for the most comprehensive tool brought them to Apple - a progressive change for the district's teachers and students.

AT A GLANCE













Sewanhaka uses Apple technology to meet all students where they're at in their learning journey. Sewanhaka uses Jamf Pro to manage roughly 9,000 iPads and 400+ Apple TVs across five high schools. Special education teachers find immense value when using the iPads with students who struggle with learning differences. The district was the first in the state to use the GeoGebra graphing calculator app on a paper-based test.

The district maintains a low one to two-percent breakage rate across all of their iPad devices. Teachers find huge time savings with the iPads, especially when it comes to grading and photocopying notes.



SELECTING THE TOOL FOR STUDENT LEARNING

"I was told this would never be an iPad district," said Brian Messinger, district coordinator of classroom instructional technology and student achievement, Sewanhaka Central High School District. At the time, in 2015, the district was piloting Microsoft Surface tablets with teachers. But Messinger said they knew they needed a better option. That's when they began a decision analysis - a process where teachers, students, parents and administrators weigh in on which devices would ultimately best serve the students.

During a technology expo at the district, representatives from Google, Microsoft and Apple presented how their tech would meet the district's specific needs to 250 members of the selection committee. "We went through a detailed, mathematical process to rank the devices against our criteria, and the iPad won by a landslide," Messinger said.



Sewanhaka started a pilot with teachers and a small number of students in each school. The following year, all seventh and eighth grade students received iPad devices. Each year, two more grades got devices, until the final rollout in the fall of 2018. Now, every Sewanhaka student has an iPad - a total of nearly 9,000 across the district.



SEEING THE IMPACT IN SPECIAL EDUCATION

While there's no doubt that implementing a one-to-one iPad program helps bridge the socioeconomic gap between students, Sewanhaka special education math teachers, Caitlin Wheeler and Susan Bach, said the devices arguably benefit their students the most. And when it came to defining the biggest benefit to this student population, they commented in resounding agreement, "The iPads help our kids with organization."

"Some of our students tend to need extra support with organization and executive functioning," Bach explained. This all changed with the iPad devices. Prior to the implementation, Bach, who's been with the district for 11 years, said she received many phone calls a year from parents looking for answers. "Most of the time they were calling to say they couldn't find their child's notes," she said. "They asked, 'Without them, how can I help my child?' And it was a fair question." She sought out the answer and found it with OneNote, a digital note-taking app. "Now with this technology, it allows us to not only have notes all the time, but it also enables us to make tutorial videos. There's a lot more support with the organization piece, which is fantastic for our students."

The parents are grateful, too. Bach provides all of her students' parents with the iPad login information so they can easily access their child's homework and notes - a simple, yet valuable way to help parents make sure their child is achieving a higher level of success. And all those calls from parents... Bach said they dropped to just one in the past two years.

Using iPad devices as equalizers among students

The Sewanhaka Central High School District has a diverse group of students with varied learning abilities from all socioeconomic backgrounds. They implemented a one-to-one iPad program as a way to help bridge the gap between students and create a level paying field for all learners. Here are some of the ways they feel the devices help close the equity gap.

- Access to Information: Prior to using the iPad devices, students looked to their teachers and textbooks as their main sources of information. "Now students have access to pretty much any information they want at the touch of a finger," said Kevin Dougherty, principal, Elmont Memorial High School, Sewanhaka Central High School District.
- Strategic App Usage: About 70 percent of Dougherty's students couldn't afford a graphing calculator. "The GeoGebra graphing calculator app has single-handedly changed the game for my kids," he said. "Now they have a tool they can take home with them on a daily basis to complete their work."
- Translations: Prior to having iPad devices, Dougherty said students who studied English as a second language faced obstacles to learning. He said, "It's a huge help that teachers no longer have to provide translated materials. The students can use the iPads to translate themselves."
- Increased Participation: While some students are never shy about raising their hand in class, Dougherty said technology helps those who are. "We always defined a raised hand as active participation, and therefore rewarded that behavior. The iPads help our quiet students show participation in a way that's more comfortable for them."
- Learning Differences: When kids aren't singled out for their differences, Dougherty said it creates a more anonymous playing field. "This eliminates the ability for students to perceive and unjustly assume that something is wrong with some of their classmates."





GIVING TEACHERS THE GIFT OF TIME

As an additional bonus, Wheeler said digital notes save her loads of valuable time. She explained that almost all of her students have a modification on their individualized education program (IEP) that allows them access to class notes. "You used to have to make a photocopy, give it to the student, and the student puts it in their folder never to be seen again," she explained. "Now students can find our class notes, and they're categorized and organized by the teachers." Wheeler said this functionality alone gives her more time to focus on other areas of teaching.

Both Wheeler and Bach said the iPad is also a valuable tool when it comes to grading. "If I can do their 20 multiple-choice questions on the iPad, and they get their feedback right away, then I can grade their long-answer problems with extra time," Wheeler said. She then uses the extra time to build lessons that support the areas where most students struggled on the test. She said, "That freedom for us as educators is huge."



ELIMINATING THE STIGMA OF PERSONAL DIFFERENCES

While the benefits the iPad devices provide teachers are undeniable, Wheeler said it's more important to recognize that the iPad can help eliminate the stigma students face when they differ from their peers.

Many students, she said, previously had to leave the room to have readers for tests and quizzes - a modification on their IEP. "Now they just put in their headphones and listen to the question," she explained. "This not only allows those students to remain in class, but it also levels the playing field for students with different reading levels."

Christopher Carmody, the assistant principal at H. Frank Carey High School, part of the Sewanhaka Central High School District, couldn't agree more. He said, "Whether it's a differentiation in terms of a learning style, the ability to accommodate certain disabilities, a hearing impairment or a vision impairment, teachers are instantly able to cater to all different learners through the iPad."

"There was a time when a student would go home and maybe they wouldn't have access to a computer - maybe they wouldn't have Wi-Fi access. Perhaps they even had to go to a local library in order to complete a project or assignment. Now, we've completely eliminated any disparity and inequity technologically, because every student has an iPad. That has been such a powerful tool in making sure that all learners can achieve high levels."

Christopher Carmody, Assistant Principal,
H. Frank Carey High School, Sewanhaka Central
High School District.



IMPLEMENTING A NEW FORM OF OLD TECHNOLOGY

But the benefits of the iPad, Wheeler said, span even further. When it comes to testing, she explained, having the right technology can make or break a student's success. Last year, for instance, Wheeler said she didn't give any homework to her algebra class - not because they didn't need the practice, but because most of her students couldn't afford graphing calculators. "And some of them didn't have Wi-Fi at home," she added. Thankfully, things changed with the addition of GeoGebra in 2018.

The district added the GeoGebra graphing calculator app to the district's iPad devices as a way to encourage digital equity for all students. Their first large success with the free app came in early 2019 when more than 250 students completed their Algebra I, Geometry and Algebra II New York State Regents exams with support of the app. The district used Jamf Pro to lock each device into exam mode and restrict all other device functionality.

"Without Jamf, this wouldn't have worked," Messinger said. "From the start, Jamf recognized this was a unique project, and they invested resources to help us succeed. We never could have done it without that partnership." As the first district to have a significant number of students take a paper-based New York state exam with iPad devices, Messinger said he's proud of Sewanhaka for using technology to break down equity barriers.

Robert Pontecorvo, coordinator of mathematics, Sewanhaka Central High School District, said in one of the district's schools, 300 kids didn't have graphing calculators for a previous test - an unacceptable disparity between students. "It's a very different feeling to be a kid who has to borrow a calculator after school in order to complete homework, versus that kid who goes home with a calculator," he said, "That wasn't right, and that's thankfully changed now that we have GeoGebra."





ENSURING STREAMLINED DEVICE MANAGEMENT

A small team of three uses Jamf Pro on a daily basis - the only way Messinger said the district can support their nearly 10,000 devices. "Jamf allows us, in a moment's notice, to provide our teachers and students with whatever they need, when they need it," he said. "So when we make a decision that's in the interest of students for education, Jamf allows us to do that quickly and seamlessly."

Messinger, and his small team, live in configuration profiles, as well as device and app records. He said it's these functionalities that allow them to streamline the district's device management in ways no other competing MDM could. But there's more to Jamf than the power of Jamf Pro, Messinger said. "Jamf has become more than just another company we do business with," he explained. "It's become a true partnership, where if we have something we need to figure out, Jamf offers us the solution and works with us."

Whether it's in the IT office or the classroom, district administrators and educators continuously work together to deliver an elevated level of learning to their students. And while they agree the iPad devices support their mission of creating modern classrooms, they also recognize it's important to continually examine how technology can enhance traditional teaching methods. Only then, they said, will their students truly benefit from the district's iPad implementation.

The value of Jamf Premium Plus Support

In a span of just three years, Sewanhaka went from having no mobile devices to nearly 10,000 - all with just three administrators to manage the technology. "We discovered we were spending a lot of time trying to figure things out," said Brian Messinger, district coordinator of classroom instructional technology and student achievement, Sewanhaka Central High School District. "We invested in Premium Plus Support, and it's the best investment we've made."

Messinger said he relies on his dedicated team of Jamfs to answer questions quickly and thoroughly. And they always do. "They usually return my emails within five minutes," he said to the team's impressive response rate. But more than that, Messinger said his Premium Plus Support team is more than Jamf experts on the other end of a call or email. "They are essentially part of our very small tech staff," he said. "They're literally just like Jamf genies in a bottle."





ENCOURAGING TEACHERS TO EMBRACE TECHNOLOGY

While Kevin Dougherty, the principal at Elmont Memorial High School, part of Sewanhaka Central High School District, said they've made big steps in providing students with 21st century skills, they need to continue to live in a could-first environment.

"Giving them that space to work on projects, to collaborate and communicate on the iPad, gives students a sense of what they're going to have to do after they leave us, in college, but more importantly, after college when they're in the workplace," he said. "They're going to have a leg up on other students, because they will have some of that experience under their belt, as opposed to students who are still working with just paper and pencil."

Of course, setting the paper and pencil aside for an iPad is easier for some than others. Even still, Bach tells hesitant teachers, "Once you take that first step and get out of your comfort zone, the benefit that will come from it is invaluable." Like she often does in her own classroom, Bach encourages her fellow educators to test new apps and explore the extensive functionality of the iPad. While everything she does isn't perfect, it's still part of the educational journey. "We're becoming learners, so we need to change too," she said. "We ask students to do it all the time, so now it's our turn."



