

How K-12 schools use iPads and mobile apps to create acustomized and personalized learning experience for students

There's something very personal and useful about tablet computers. Maybe it's the way they fit nicely into the human hand and allow for portability, or how the spacious screen enables a broader view of the digital world than the average smartphone. Perhaps it's a tablet's "always on" status that gives comfort to their users, or it could be the direct connection these devices have to huge repositories of valuable mobile apps. Regardless of the reasons why students gravitate to these portable devices, the impact that iPads have on K-12 environments is clear.

As technology usage continues to expand at both public and private K-12schools, some students are receiving their own device in a 1:1 setting, while others share an inventory of school-owned devices and use them when needed.

IN THIS WHITE PAPER, YOU WILL:

- Discover how technology is transforming learning in the K-12 environment
- See how iPads create new opportunities for customized learning
- Understand the role of mobile device management (MDM) in enhancing technology initiatives
- Gain insight from one district whose classrooms and IT department have been transformed by iPad

TECHNOLOGY'S ROLE IN TRANSFORMATIVE LEARNING

Known for improving student engagement, encouraging collaboration, and motivating children to learn, the first tablets started making their way into K-12 classrooms not long after iPad was introduced to the market in 2010.

From the teacher's perspective, the ability to educate young minds via a portable, Wi-Fi-enabled device presents both opportunities and challenges. On one hand, the technology places a world of resources at students' fingertips, allowing for collaboration and sharing amongst pupils, engaging youth in an environment that they're already comfortable working in, and encouraging even the most introverted students to participate in classroom activities. On the other hand, devices lack a native workflow that incorporates traditional teaching methods (i.e., receiving, organizing, and grading work) and can be a cause of distraction in the classroom (i.e., the plethora of apps and webpages the device has access to). Compounding this issue, technology adoptions are often rolled out before much thought is given to exactly how the devices will facilitate and enhance learning. These gaps can present challenges both at the outset and over the long run when it comes to effectively using the devices in the classroom.

With all of this to consider, school districts and educators are adopting technology at a breakneck pace, rolling out initiatives using one of two tools: iPad or Chromebook. While Chromebook comes with a lower upfront price tag and full-sized keyboard, iPad is simply preferred by students and known for its quality, including a longer

shelf-life. However, what truly sets the iPad apart from its rival is the vast App Store. With over 1.5 million apps available, educators have an abundant amount of resources and content to promote creativity, facilitate interaction with content and collaboration, and ultimately deliver a differentiated learning experience for their students. And, because most iOS apps do not require online access for full functionality, iPad provides an unprecedented level of engagement over Chromebook, which has limited functionality without Wi-Fi.

WHAT IS PERSONALIZED LEARNING?

Personalized learning is defined as a unique educational experience for each student. It is accomplished through a diverse array of educational programs, learning experiences, instructional approaches, and academicsupport strategies.

With the goal of meeting every student's needs, personalized learning helps students on an individual basis. It gives teachers the ability to address each student's needs without disrupting others and provides students with the freedom to learn at their own pace. By adding technology tools like iPads and apps to the learning quest, districts can better engage students, improve outcomes, leverage a variety of teaching approaches, and even track and compare a student's progress and understanding. Consider the following tools that leverage iPads and apps to achieve personalized learning:

- iTunes U: Gives teachers a streamlined approach to deliver lessons, grade assignments, and stay connected.
- eSpark: Curates the best available educational applications, bundling them in personalized learning plans for students so they are challenged, yet learn at a pace that is right for them.
- Socrative: Provides teachers with the ability to administer quick assessments and receive instant feedback on student understanding.

BECOME ACQUAINTED WITH NEW TECHNOLOGY

For personalized learning to be effective, it must be orchestrated in an efficient manner. After all, both IT and teachers are already strapped for time and resources and are hardly in the position to orchestrate 1:1 instruction in their ever-burgeoning classrooms. Enter mobile device management (MDM) software.

For IT, an MDM solution removes the barriers to supporting iPads in the classroom by automating the tasks associated with iPad deployment, content distribution, and security. While it only takes a few minutes to get started with an Apple device, repeating the set up and configuration steps for hundreds of students is a time-consuming task. With an MDM solution, IT can automatically enroll and deploy iPads without having to actually touch the devices. This saves IT hundreds of hours at the start of each school year and as students leave or join a district or class.

Deployment is simply the first step in the iPad management equation. The IT department is also responsible for helping departments and classes get the software and content they need for their lessons. IT can purchase apps in bulk from the App Store and then use MDM to either distribute those apps directly to devices or create a custom app store where educators and students can download IT-approved apps on their own and when they need them.

What is on each device can dynamically change to meet the needs and privileges of students and staff. The one-size-fits-all approach struggles to resonate in today's modern classroom, but an individualized model via managed applications or Self Service, eliminates this issue and makes every device and student special.

While iPads promote user empowerment and creativity, protecting teacher and student data is critical. From common requests—such as a password reset, device activation lock bypass, and remote lock and wipe—to

enforcing security policies and restricting software, an MDM solution is the key to reducing risks while still preserving the user experience.

For teachers, an MDM solution removes the barriers to using and supporting iPads by putting the power into the

instructor's hands. Teachers can easily perform classroom management tasks, such as resetting passwords or assigning students to a specific iPad without assistance from IT. Going one step further, they can transform their classrooms and labs into interactive, mobile learning spaces. Leveraging apps such as Casper Focus, teachers can focus students on a specific app or webpage, lock iPads into testing apps for secure assessments and quizzes, send customized messages to individual or groups of student devices, and quickly display student work on an Apple TV.





Sara Speicher has seen the future and knows the role her students will hold in a technology-lush world. Such knowledge has driven Speicher, a reading coach at West Junior High in Hopkins, Minn., to continually promote creativity and innovation for each student in her reading classrooms. By blazing the trail for the flipped-classroom approach for Hopkins Public Schools, Speicher helps students eliminate the time constraints on their education. And, by integrating technology like iPads into her classes, she enables students to view a lecture anywhere and at anytime, while presenting information in more engaging ways.

For her flipped reading classes, Speicher takes what would normally be considered "homework," brings that work into the classroom, and then moves traditional, classroom-based "direct" instruction over to a videobased format. iPads support Speicher's flipped classroom initiatives by helping to create a very personalized and individualized experience for her students. "It's an environment that engages students where they're at," she says, "and gets them excited about where they're going."

A leader in innovation and the ongoing implementation of technology, Hopkins Public Schools is an award-winning school district with a K-12 population of about 7,200 students. The district has integrated STEM (Science, Technology, Engineering and Math) into its elementary,

junior high, and high school core curriculum, with all students exposed to STEM concepts starting as early as preschool.

Hopkins Public Schools has also put time, effort, and resources into ensuring that its teachers have the necessary skillsets and expertise to successfully integrate technology into their day-to-day instructional activities. The basic premise behind those efforts make a lot of sense: When teachers get excited about technology and have that "Ah-ha!" moment, students will also get excited about learning and become more engaged in the process.

Using the Jamf Pro, teachers across all grade levels can better leverage device usage in the classroom without the need for constant oversight, classroom disruptions, or IT support. For example, a third-grade reading teacher can assign a book to the class, knowing that some students will get through the material quickly and others will need more time to digest the content. Using the platform's leveled text capabilities, the teacher can ensure that everyone is reading and making progress at his or her own level. This helps to create an extremely personalized learning experience that wouldn't be supported by traditional instructional materials.

John Wetter, Hopkins Public Schools' technical services manager, says integrating Jamf Pro into the district's iPad deployment has freed his department up to focus on critical tasks and projects. "When you're talking about a deployment of this size, you have to have some type of tool or support in place to manage the devices and the usage," says Wetter. "Jamf Pro manages the process seamlessly in the background. My staff can keep working on other tasks critical to keeping technology available in the classroom."

These and other benefits help Hopkins Public Schools' teachers and staff connect students with learning, their teachers, and other students—not with technology. "The technology is so integrated that we don't think of it as a separate entity," says Wetter. "It is all just a part of the instructional strategies that we use every day in our classrooms."

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Conclusion

Combining iPads, apps, and an MDM solution such as Jamf's Jamf Pro, makes for a powerful and compelling education offering. Schools can deliver a personalized learning experience that keeps each and every student focused, on task, and engaged. These efforts also encourage spontaneous interaction, maximize district technology investments, and fully leverage instructional time.

As K-12 schools and districts continue to invest in iPads—and as the technology that drives these devices continues to evolve—the need for a robust MDM that supports and facilitates transformative learning will grow exponentially. After all, what student or teacher doesn't smile the moment he or she opens a new iPad? Getting to that smile and ensuring long-term, sustainable success takes plenty of planning. And, equipping IT with the right management solution is the first step to offering teachers and students the devices that make them more productive and happy.

