5

Apple Features

TO DRIVE EDUCATION

jamf

Open doors and new opportunities with an enhanced educational experience.

Among a multitude of leading platforms to choose from, Apple excels when it comes to multifaceted collaboration, creativity and critical thinking, as well as security and privacy.

With both a deep history and commitment to education, Apple unveils classroom-altering education features with every operating system release to enhance the teaching and learning experience, while making it easier for you to empower your users. And, by unlocking this Apple functionality with a mobile device management (MDM) solution, you can maximize the potential of Apple — all without adding additional resources.

Whether you are evaluating if Apple is right for your school, or you have Apple but haven't implemented the latest education features, read on to learn:

✓ 5 Apple education features currently available

✓ How to take full advantage of each offering for in-person or at-home education

5 Apple education features currently available

1 **Apple School Manager**

2 **Flexible Deployment Models**
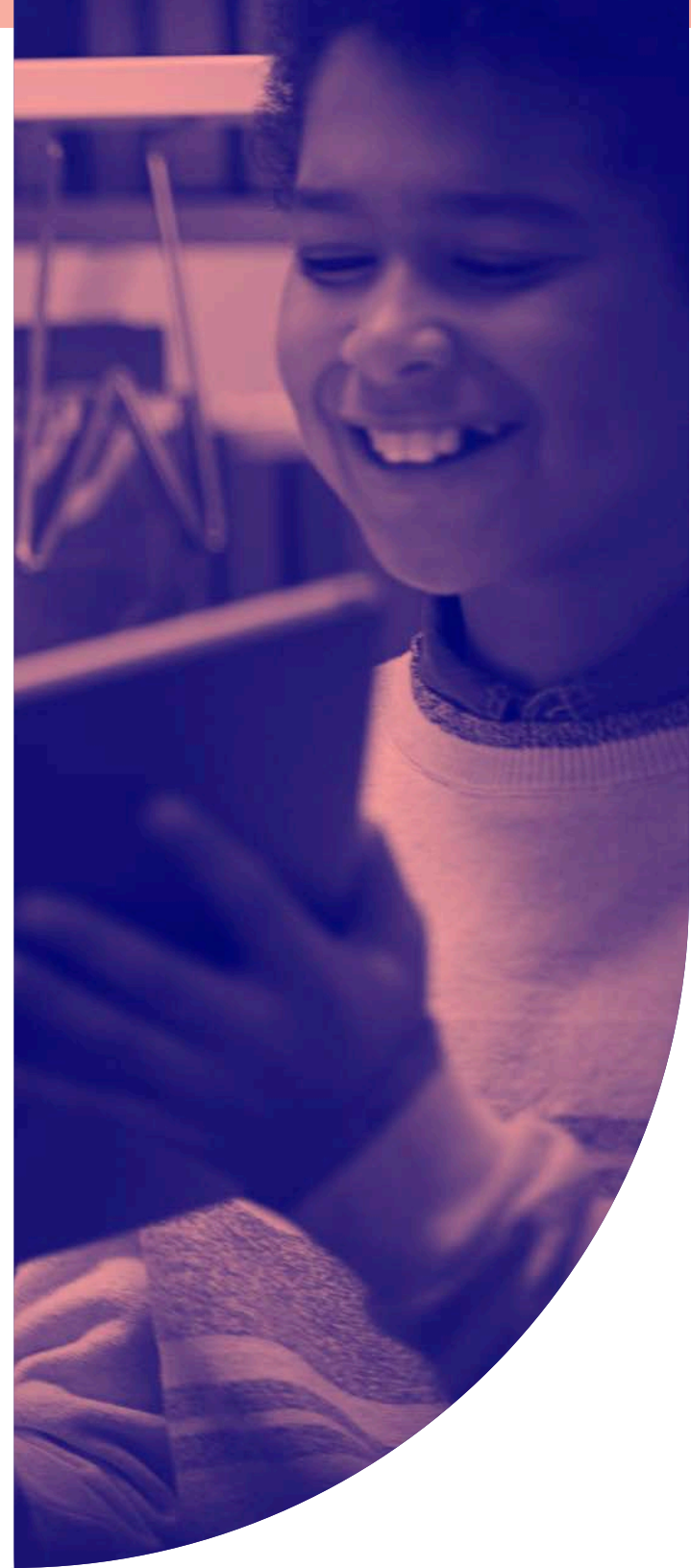
3 **Classroom Management**

4 **Device Management**

5 **Ecosystem of Apps**

But first, let's cover device management basics

Early education technology programs were not without their challenges. Student device programs required IT to deploy, secure and manage hundreds, if not thousands, of devices manually, which was both time-consuming and lacked quality assurance measures. In 2010, Apple delivered — and improved upon every year — a robust management framework called mobile device management for managing macOS, iPadOS and iOS devices.

MDM offers a clear path to streamline large- and small-scale device deployment, enrollment into management, inventory collection, consistent app and content distribution, and device security.

What MDM Offers

DEPLOYMENT

INVENTORY

CONFIGURATION PROFILES

MDM Technology

Enroll devices through different methods:

1. Automated Enrollment (preferred)
2. Device Enrollment
3. User Enrollment
4. Tethered Apple Configurator Enrollment

Capable of querying devices to collect:

- Hardware details
- Software information
- Management status and security configurations
- User assignment

Configure settings on devices:

- Passcodes, restrictions, Wi-Fi, content filter
- Email, Exchange and LDAP
- AirPrint and AirPlay
- Lock Screen Messaging, Notification management

Purpose

Automated Enrollment through **Apple School Manager** simplifies the process of enrolling devices, as IT never has to touch the device. Enrollment initiates when the device is powered on and makes a network connection. There is no step 3.

Collect up-to-date device information, enabling informed management decisions and immediate action based on the data collected. No student data is collected via MDM.

Configuration profiles allow for settings management across all Apple devices. These help solve for connectivity, personalization and ensure proper use of the device. Easily pre-populate email address and other account information.

What MDM Offers

MDM Technology

Purpose

MANAGEMENT COMMANDS

Send remote commands to:

- Enable Lost Mode
- Lock and wipe a device
- Clear restrictions and passcodes
- Update iOS and set the device name

Management commands allow you to perform instant actions on devices. These range from troubleshoot options to features that wipe, lock and locate lost or stolen devices — all without compromising student privacy. When Lost Mode is activated, the iPadOS device receives a customized Lock screen message, is disabled from use and sends its location to you.

APP DEPLOYMENT

Purchase and deploy apps:

- Assign to devices or users — no Apple ID required
- Prevent apps from exporting data
- Pre-configure settings within apps

School-owned apps are deployed directly to devices with no Apple ID required. These apps can be recalled and redistributed at the end of the year. Some apps even support AppConfig to allow settings management within apps deployed with MDM.

SECURITY

Enforce security policies for compliance:

- Passcode with enabled 256-bit encryption
- Per-app VPN to tunnel internet traffic securely
- Remotely wipe a missing device
- Prohibit access to inappropriate sites and apps

With the capability to enforce encryption and configurations through MDM, school-owned devices will meet security standards on campus or at home.

Supervision

Supervision is a higher form of management and gives admins greater MDM control over Apple devices.

A growing number of configurations are only available if a device is supervised. It is recommended that school-owned devices are supervised through Automated Enrollment.

Examples of Supervision-only commands:

- Disable camera
- Disable App Store
- Disable Safari
- Disable modifying wallpaper
- Disable adding email accounts
- Plus many more

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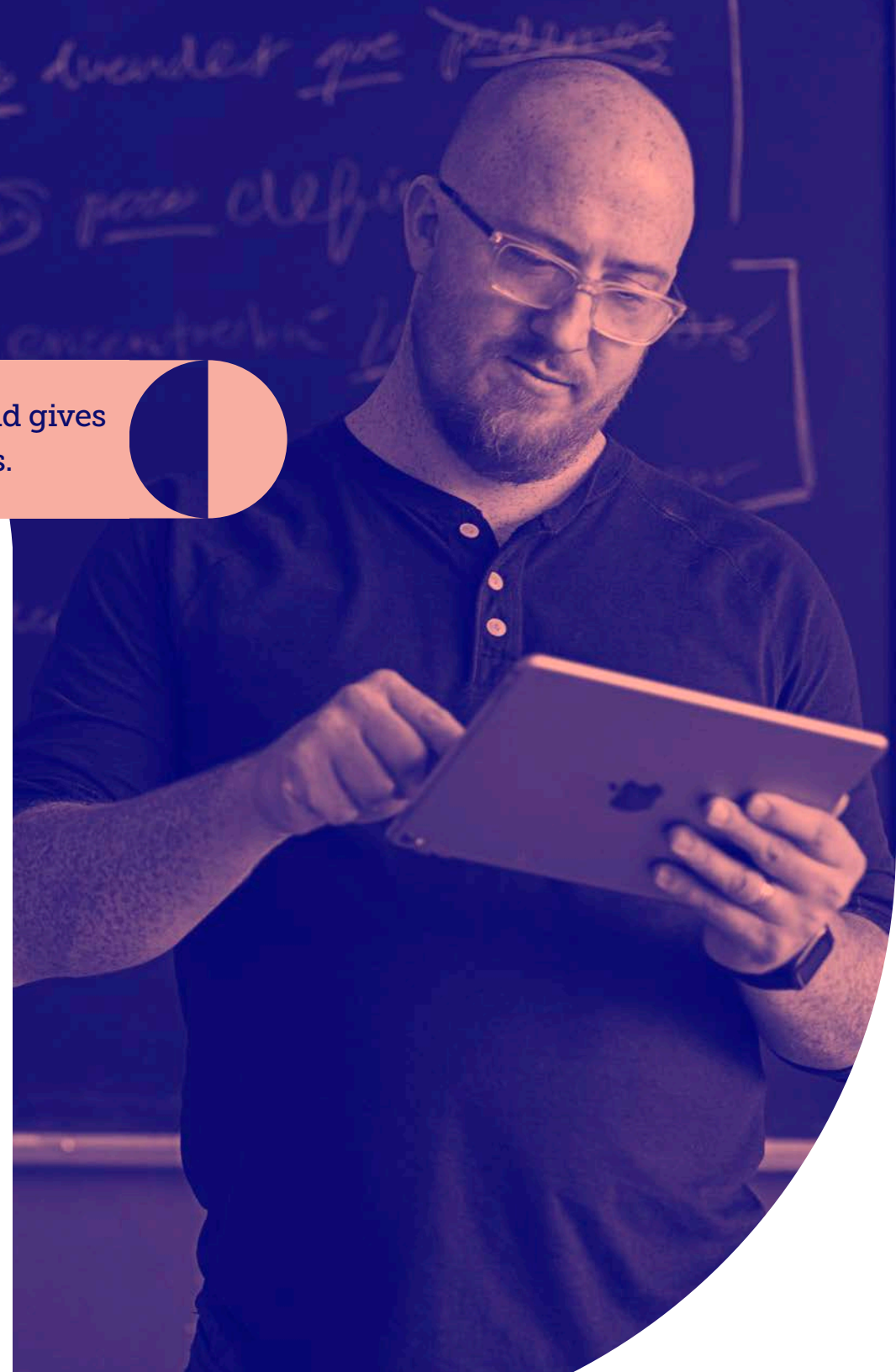
Apple School Manager:

An education solution for any environment

No two schools are exactly alike. Class size, demographics and budgets vary by school, and even among grades within a given school. Plus, students come and go. Turnover is something you must take into account. But, you are not alone in this situation.

Apple made it easier than ever for you to empower students and teachers, while staying efficient and current with the latest education tools available at the same time.

Apple School Manager is a simple, web-based portal for IT administrators to manage people, devices and content all from one place.

Consolidate the Apple experience through Apple School Manager

Built exclusively for education as a foundational tool for you to specifically manage your education devices, Apple School Manager is a powerful way to manage common education tasks and achieve greater control over accounts and classes. This consolidated portal ensures that no one person is solely responsible for a school's deployment programs — greatly reducing the risk of a staff departure disrupting management workflows.

Did you know?

Apple School Manager integrates directly with Powerschool, SunGARD eSchoolPLUS and Infinite Campus. Many other SIS offer pre-formatted exports for SFTP upload. Apple School Manager provides CSV templates to integrate with any other SIS vendor.

With Apple School Manager and MDM, you can:

✔ Create Managed Apple IDs, dynamically update user information and organize classes through integration with your school's Student Information System (SIS). These Managed Apple IDs can be used for Shared iPad, providing a great experience for all students.

✔ Automate device enrollment and configuration for students and teachers. Ensure everyone's equipped with the learning resources they need on day one, with no need for IT to touch individual devices.

✔ Purchase apps and books for mass distribution through your MDM, without requiring an Apple ID on the device. Apps can be pushed silently or made available through Self Service, a curated app store specific to your organization, featuring only apps that have been approved by IT.

2 **Flexible Deployment Models:**

Selecting the appropriate deployment model

Choosing whether a 1-to-1 or shared-technology program is right for you depends on many factors, including your school's goals, student population and budget.

Apple School Manager and MDM allow you to set up iPad devices for shared use. The Shared iPad model is ideal when a 1-to-1 iPad ratio isn't possible and schools are scaling their iPad deployments, but still want to offer students the best ecosystem education has to offer.

No matter which path you choose, Apple has made it easier than ever to accommodate your needs.

**Shared devices**
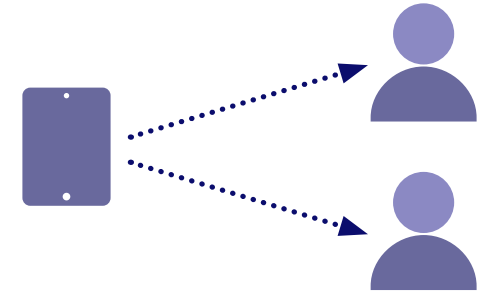
1-to-1 devices
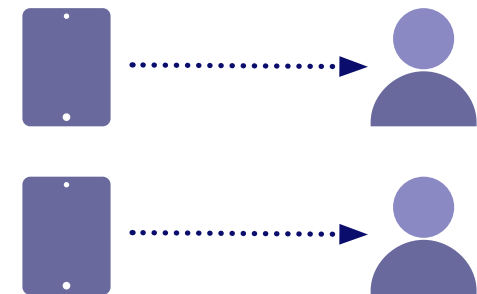
1-to-1 iPad program

Through a 1-to-1 program, students are given their own iPad and allowed to utilize it for learning during and outside of school hours, creating a continuous learning environment where students can access materials at any time. iPad can be tailored to each student's individual needs and class load, allowing for the most personalized, rich educational experience a student can have. Plus, when provided their own device, students are given a larger sense of ownership and accountability over their educational tools.

1-to-1 programs also help facilitate remote learning, as each student is allowed to bring their device home or have the device shipped directly to them.

Jon Baudek, associate principal, Longfellow Middle School, School District of La Crosse, said the ability to provide the same device to everyone is imperative to providing consistent educational experiences.

"It has taken away the feeling of the haves and the have-nots," he said. "It's giving kids equal access in the classroom and at home."
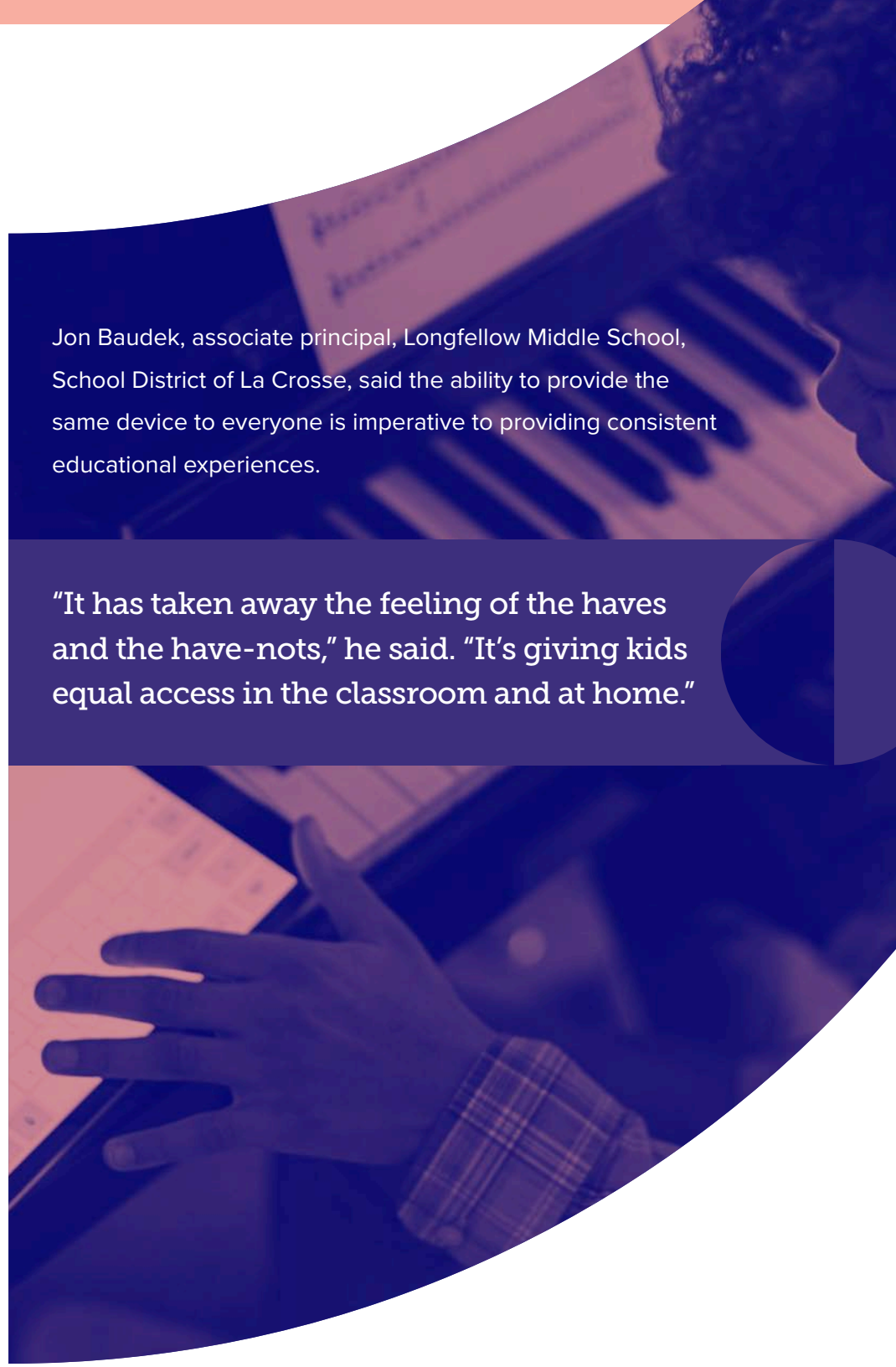
Shared iPad

Schools that use Apple School Manager have the option to create a personalized Shared iPad experience for all students. Shared iPad allows students to have a continuous learning experience from class to class and day to day, picking up exactly where they left off. This personalized iPad experience allows students to pick up any Shared iPad and simply click on their photo to log in. Students then gain access to all the learning resources that the school deems applicable for their specific learning needs. Once the lesson is through, students simply log out and the iPad is ready for the next student to use in a similar, yet customized experience.

Personalized Shared iPad through Apple School Manager is an ideal experience since student data is synced to iCloud and optional on-premises caching servers. It allows students to pick up any Shared iPad, log in and resume their work from the previous session.

3

Classroom Management:

An array of teaching tools

Apple unveiled the **Classroom app** with iOS 9.3 and provides teachers with the ability to launch apps, lock student devices into a specific app or webpage, and view a student's iPad screen. With iOS 10.3, Apple released Classroom 2.0.

One of the main features of Classroom 2.0 is that Supervision or MDM is not required for use, creating an opportunity for schools planning a small-scale iPad deployment or considering a pilot program to experience this Apple technology.

While MDM is not required, it can still enrich the Classroom experience. Jamf School and Jamf Pro are two MDM solutions that solely focus on Apple devices. Each helps automate Mac, iPad and Apple TV deployments, simplify ongoing device management and empower teachers, students and parents with the tools they need to facilitate in-class and at-home education.

With Apple's Classroom app, Jamf School or Jamf Pro, you can:

- ✔ Classroom without MDM support
- ✔ Classroom with basic MDM support
- ✔ Classroom with full MDM support

Classroom app functionality	No MDM	Basic MDM	Full MDM
Manually create unmanaged classes	✔	✔	✔ Only with Jamf School Teacher app
Deploy settings and configurations to devices		✔	✔
Deploy apps to students		✔	✔
SIS integration			✔
Automate class generation			✔
Prohibit students from manually joining or leaving a class			✔
Reset Managed Apple ID passwords			✔
Education Profiles (defines the classes, which contain students and instructors)			✔
Power Shared iPads used with Apple School Manager to continuously monitor for updates any time a class or user information changes.			✔
Automate managed class creation			✔

Jamf School Teacher app

The Jamf School Teacher app gives educators even more tools to manage their students' devices. Using the intuitive interface, teachers can focus students to a particular app or group of apps, allow or restrict particular websites, and answer students' questions with Messages.

Jamf School Teacher is a great companion app to Apple Classroom while in proximity to students, and a great replacement for times of distance learning. It leverages the same class data as Apple Classroom, so IT can make both available for teachers.

Key Jamf School Teacher features:

- ✔ Restrict and allow apps (including games and social media)

- ✔ Create ad-hoc groups that are reflected in Apple Classroom

- ✔ Manage settings such as Bluetooth

- ✔ Answer student questions with Messages

- ✔ See student device information like battery and connectivity

- ✔ Restrict or allow websites to encourage proper internet use

- ✔ Remotely install apps on student devices

Best Practice:

Integrate Apple School Manager with your SIS

Integrating Apple School Manager with your Student Information System is not a required step to manage iPad devices. However, there are features for teachers, students and admins that can only be unlocked by accomplishing this task, bringing out the best in iPad. This education-specific feature was built to securely bring information about student enrollment and class structure into your MDM.

Teachers

✔ Pre-populated class structures in Classroom app and Jamf Teacher app

Students

✔ 200 GB of free iCloud storage with Managed Apple IDs

IT admins

✔ Regular updates from SIS flow to Apple School Manager and Jamf automatically

✔ Enable Shared iPad with Managed Apple IDs and Jamf

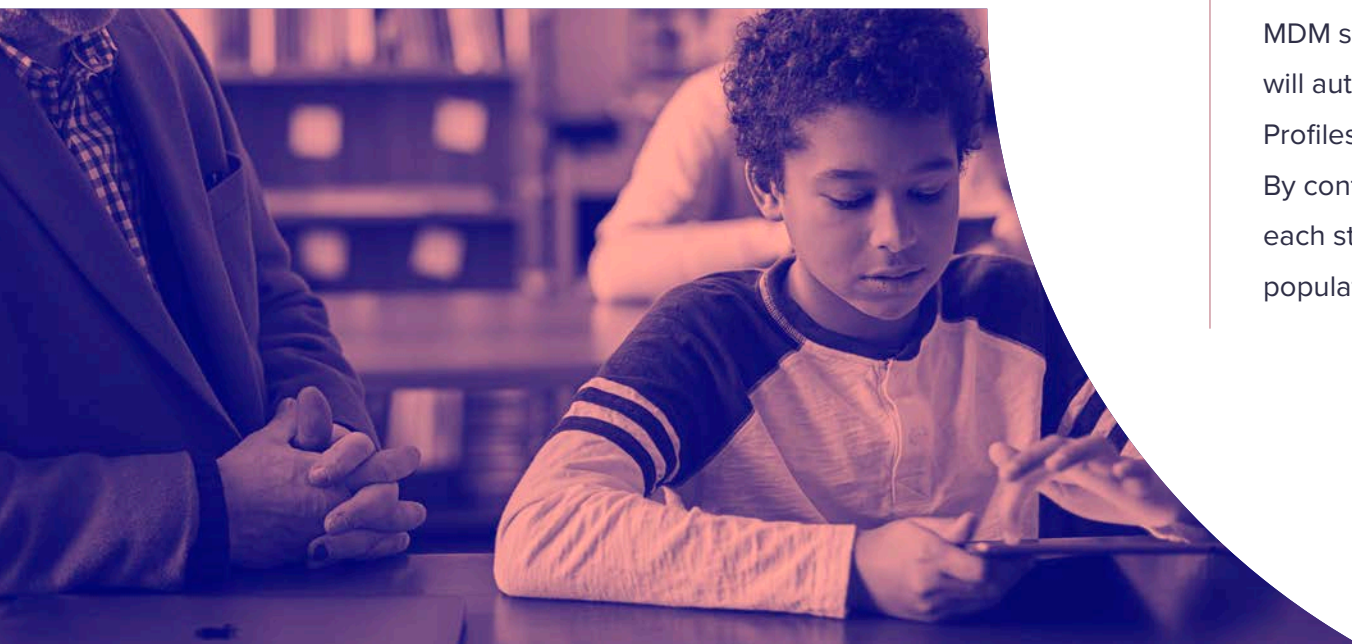# Utilize Shared iPad with Apple School Manager and Classroom

To combine three powerful aspects of Apple's education offerings — Shared iPad, Apple School Manager and Classroom — and eliminate the manual IT work, ensure the Shared iPad hardware is linked to your school's Apple School Manager instance for automated device enrollment. Configure enrollment options in your MDM, including Supervision and Shared iPad.

1 You will need to specify the number of user partitions when configuring Shared iPad. If this number ever needs to be changed, the iPad must be erased and re-enrolled into management. It's best to add more users than you anticipate. Shared iPad can accommodate any number of users, but note that the user experience may suffer if you utilize too many user partitions and your Shared iPad runs out of space.

2 Next, import users and classes from Apple School Manager, and associate one or more Shared iPad devices to the classes within the MDM solution. An MDM solution, such as Jamf Pro or Jamf School, will automatically deploy the appropriate Education Profiles to each student, teacher and Shared iPad. By configuring these Managed Classes with Jamf, each student's Managed Apple ID is automatically populated.

3

On the Shared iPad, students will be presented with all of the classes currently configured on the device. Selecting a class will allow them to select their user. They will simply tap on their user icon or photo and type their Managed Apple ID password to log into the Shared iPad.

4

You can leverage your MDM to automatically set the proper passcode type for Shared iPad users (i.e., four digit, six digit or complex). This passcode setting will specify the proper keyboard layout for each user that logs in on Shared iPads.

Did you know?

In the lower left hand corner of every Shared iPad is the option for an "other" user to log in. Any users from the school's Apple School Manager instance can type their full Managed Apple ID and password to log in on any Shared iPad.

Device Management:

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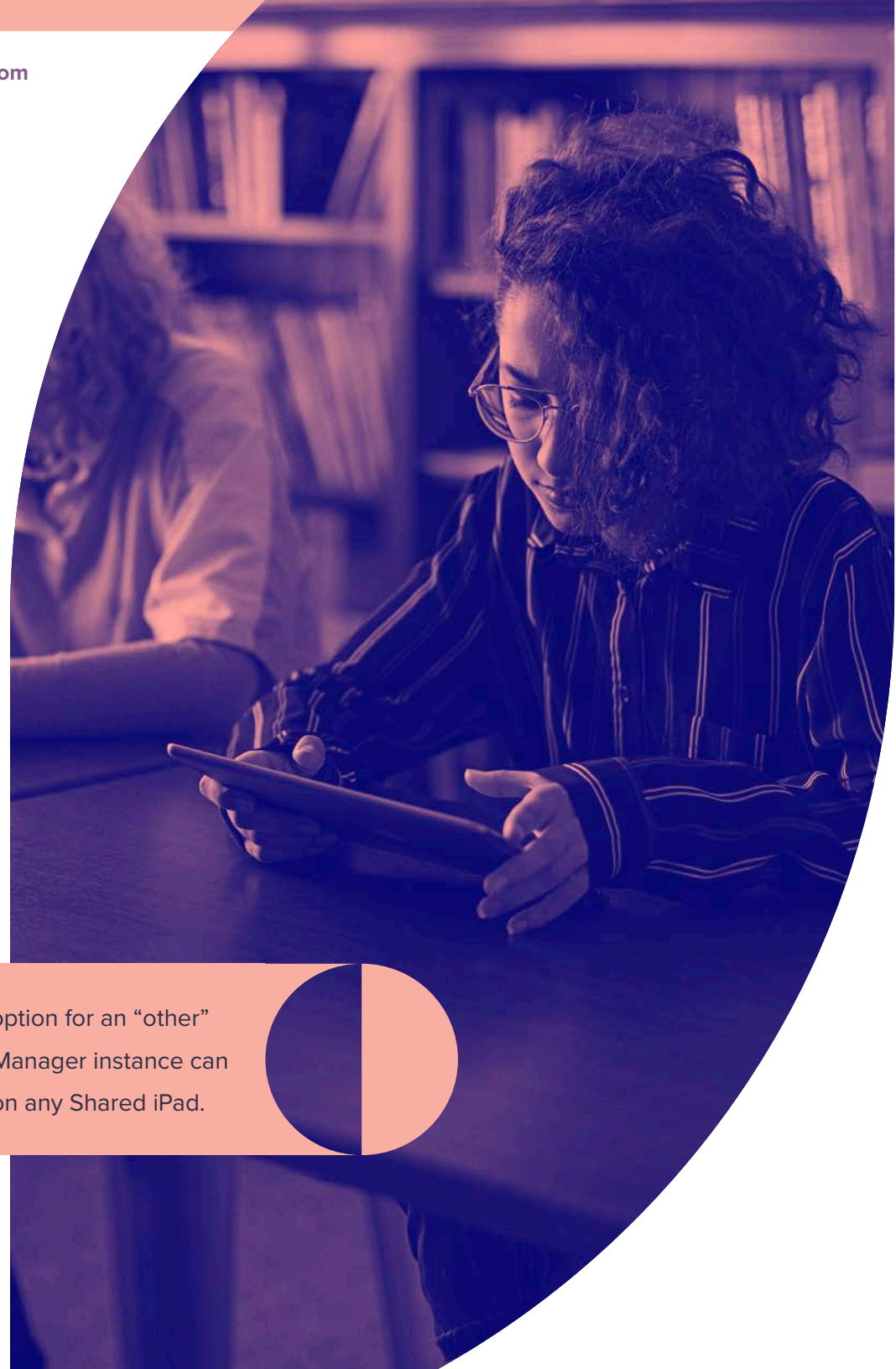
Configuration profiles and management commands

Configuration profiles give you the ability to tell your devices how to behave. Prior to MDM, you had to manually configure your devices, but now you can automate the process of configuring passcode settings, Wi-Fi passwords and more. Apple is adding new, pertinent configuration profiles and management commands for education all the time.

Management commands are specific actions that you can apply to individual devices to ensure security of student data. Leverage this capability within MDM to take action on lost or stolen devices by locking or wiping the iPad completely. Additional commands allow you to send push notifications, update iPadOS to the latest version, and change the device name to make it easier for you to manage your fleet of 1-to-1 or Shared iPad devices.

Configuration Profiles

- Wi-Fi Restrictions
- AirPlay Pairing
- Hide/Show Apps
- Lock Screen Message
- Passcode
- Restrictions
- Home Screen Layout
- Notifications
- Network Settings
- Single App Mode

Management Commands

- Shutdown Device
- Lost Mode Sound
- Lock Device
- Logout User
- Update Inventory
- Send Notification
- Clear Passcode

- Restart Device
- Lost Mode
- Wipe Device
- Delete User
- Update iOS
- Change Name
- Clear Restrictions

5
Ecosystem of Apps:

Enhance learning for all

What sets Apple apart from other ecosystems is its array of educational materials found within apps. Apple's Schoolwork app now makes it easy to direct students to the specific activities within the right app.

Teachers can browse Schoolwork for activities inside popular education apps installed on their device like Tynker, Duolingo and GeoGebra to find content that fits the curriculum. Once they find or build the activities, they can share them directly to a student or students' devices via a Handout. When the student receives the Handout with the activity the teacher has chosen, they can go straight to the activity with a single tap. And as the student progresses through the activity, the teacher can track their in-app progress.

ClassKit

This is all made possible by a new framework called **ClassKit**. Many popular educational apps are already using ClassKit, **click here for a list**. Schoolwork (or as it's referred to in some countries, Classwork) also supports distribution and collection of standard resources like PDFs, links, files and other documentation — making it perfect for assignment turn in.

There are thousands of educations apps available; Apple recommends some as part of their **Education Partner Program** and makes it easy to find Education collections through the App Store, like this one focused on apps to help you **Learn and Study From Home**. Here a few apps that bring out the best in iPad, and solve real-world challenges in the classroom.

Explain Everything provides teachers a tool to prepare lessons and provide examples to support all learners and parents. It also supports Schoolwork for activity distribution and Managed AppConfig, allowing administrators to customize the in-app experience.

Pair Explain Everything with your video conferencing platform of choice to offer a synchronous collaborative experience, simulating a classroom in many ways. Click here to read **Explain Everything's 3 Collaborative Whiteboard Strategies**.

Explain Everything

Interactive whiteboard for sketch noting or real-time collaboration

Physical whiteboards give students a space for expression and demonstration. Explain Everything updates this concept by allowing students and teachers to bring audio and graphics into its limitless digital canvas.

Enable interactive learning and real-time instruction that's fun and engaging whether in the classroom or remote. Beyond collaboration, Explain Everything can be used as a formative assessment tool, encouraging students to explain and re-teach concepts in their own words, and with their own visual elements.

Sphero EDU

Take your skills #BeyondCode

Sphero Edu is your hub to create, contribute and learn through unique STEAM activities. From draw and drive commands to block-based or JavaScript text programming, Sphero Edu focuses on learner progression.

Accessible from almost any smart device or computer, you can program your robots anytime, anywhere.

GeoGebra 3D Graphing Calculator

Perform advanced calculations and render beautiful graphs

Traditional graphing calculators are expensive, clunky, and yet another thing for students to carry around. They're also not all the same, creating an equity gap between students with advanced calculators and those that can't afford them at all. Equally importantly, they don't provide the best possible learning experience.

GeoGebra is a free app that allows students to graph, plot, visualize, and manipulate data with a modern tool. And those graphs will literally jump off the screen with GeoGebra's Augmented Reality. ClassKit support allows teachers to easily incorporate app-based activities into curriculum. Managed AppConfig provides additional options to ensure the security of the app and device in **high-stakes testing environments**.

Click here to learn more about **Sewanhaka Central High School District**, who leveraged GeoGebra and Jamf to provide an equitable experience every day — including on a New York State assessment.

Tying it all together with Jamf

To offer virtual synchronous learning, Jamf School Teacher app can restrict visible apps to a predefined list on a schedule. This classroom management tool is unique because it is network-based and works perfect for students with an internet connection at home.

Here's an example scenario:

A 5th grade teacher is getting ready for the first week check-in to ensure students are adapting to remote learning, as well as maintaining a personal connection.

Prior to the scheduled meeting, the teacher could ensure that all students have the proper apps by requesting the apps and have them installed on their devices directly from the Jamf School Teacher app.

The teacher could also create a lesson in Jamf School ahead of time, which includes a collection of apps, websites and settings required for the activity. This lesson can also be easily shared with other teachers.

When it's time for the session to start, the apps not required for the activity will automatically disappear from view, leaving the device ready for the FaceTime the teacher is about to initiate. And with the multitasking features of iPadOS, both teacher and student can seamlessly participate in the video stream as well as the specific apps being discussed.

Succeeding in education with Apple

Apple is committed to education and so is Jamf. Jamf is the standard in Apple device management and stays in complete lockstep with Apple to always support new features and operating systems on the day they are released.

Ready to join the nearly 38,000 global customers who rely on Jamf to help them get the most out of Apple?

Start Your Free Trial