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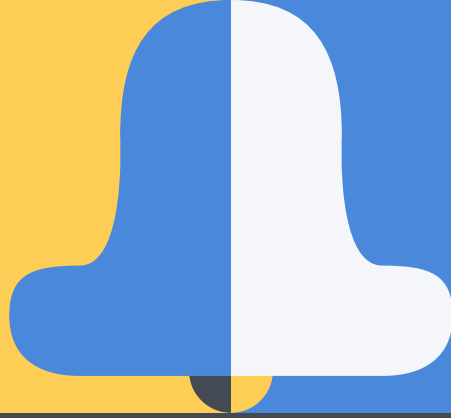
Technology Mistakes

to Avoid

this **Summer**

A Guide for Districts,
IT, Educators and
Curriculum Owners

When the final bell of the school year rings for students, it's a time of joy and freedom.



When the final bell rings for IT, it's time for another round of strategic technology implementations.



The most successful iPad rollouts are thoughtful and planned in advance. From how to collect old devices to when to wipe and re-enroll outgoing technology.



Success often comes with experience and lessons learned.

You've most likely heard (or experienced) stories of education technology failures. All too often, the fear, uncertainty or doubt of botched technology programs leave some schools skittish of potentially following suit.



But the failures of the past should not prohibit the accomplishments of the future.

Schools and their IT and educators simply need to learn from past mistakes — theirs or others' — and ensure that best practices and proven strategies are followed and implemented.

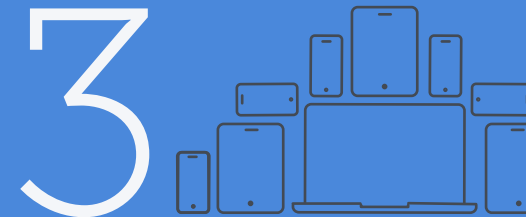
So, before you roll up your sleeves and get to work, let's learn from five scenarios that have plagued other schools and left them scrambling to get the most out of their education technology. Scenarios include...



**Don't worry,
we've got time**



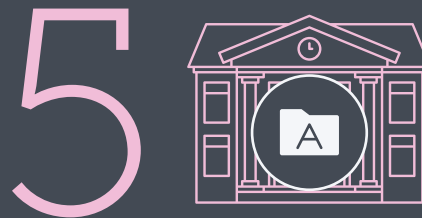
**No Device Enrollment
Program (DEP) for us**



**All or nothing with
Apple School Manager**



**Device lock (and iCloud)
missteps**



**Who needs access to what
and when**

**With insight for school district
leaders, IT, instructional
technologists and teachers,
this e-book provides a blueprint
for delivering the education
experience students deserve.**



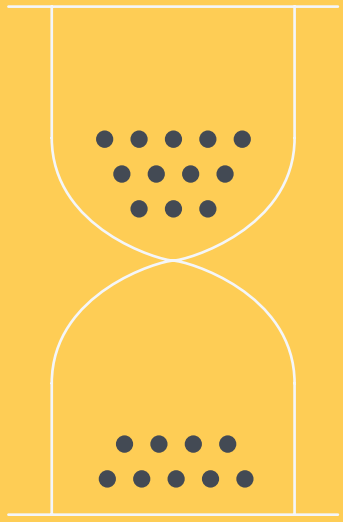
Don't worry, we've got time.

You're nearing the end of the summer. It's time to get your devices enrolled and apps deployed, and you want (need) this done today because the start of the school year is just around the corner. You begin the enrollment process, but things aren't running as fast as you want. You can't get apps deployed before devices are enrolled, so you wait. At last, devices are enrolled. Now, on to app deployments. But, you're running into the same, slow issues you were before. What gives?

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You're not alone. From serving schools and their technology departments for more than 16 years, we've seen this scenario countless times. IT has a seemingly endless list of tasks to accomplish in the three months that students are away, so all too often, device enrollments and deployments are saved until the very end.



Why waiting until the end of summer is risky

First off, most networks struggle to handle this type of workload in a single sitting. Putting this much strain on your network opens the door for partial deployments because the full process may not have completed for every device prior to moving on.

Second, there are many schools in the country and around the world just like yours; looking to conduct enrollments and deployments at the same time. Apple services are robust, but consider that millions of devices from thousands of schools are hitting its server at the same time requesting access and assets.



Plan and execute

Instead of being last on the summer to-do list, IT needs to be methodical about readying devices for incoming and returning students. Also, they need the right management tools, so they are not going it alone.

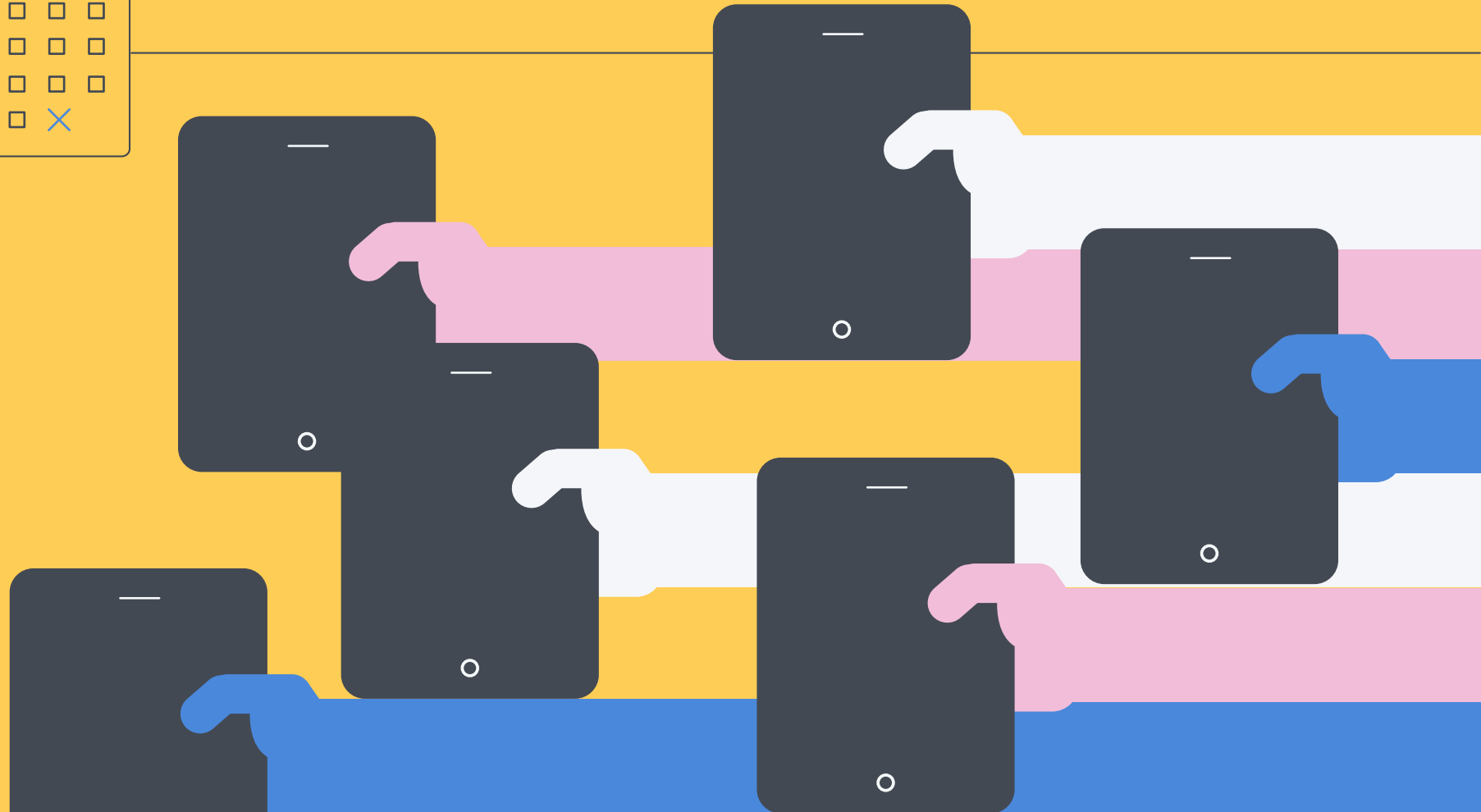
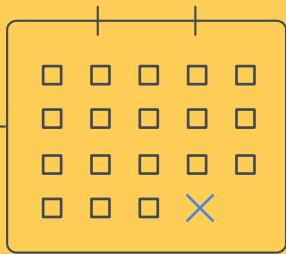
Mobile device management (MDM) solutions are key to integrating with Apple deployment programs, providing streamlined onboarding and offboarding enrollment workflows and maximizing IT efficiency. An MDM solution dedicated to Apple management will also provide strategic advice on the best timeline for your deployment.



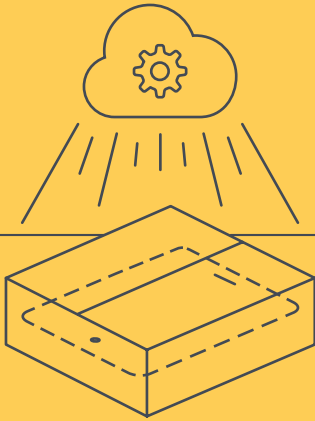
Not all management solutions are created equal. Select one with a proven track-record of providing efficient enrollment and app deployment workflows.

End of school year: Collect student and faculty iPad devices (if applicable)

Collect devices prior to the last day of school, and ensure students sign out of their iCloud accounts (more on that later). Most schools collect devices a week prior, giving them a buffer to collect missing devices. If allowing students to keep their devices over the summer, notify them of any changes that may be coming over break that could impact the assets and apps available to them. Schools often send a note home or send a mass communication to parents a week prior to any major remote changes.



At least three weeks before new school year: Enroll devices into management



Before you can manage your devices, they must be enrolled into your MDM solution. The benefits of an MDM tool include easy enrollment into management, consistent app distribution, and enforcement of security and privacy protocols. Three methods are available to enroll your iPad devices:



Automated deployment with Apple School Manager (recommended)



Apple Configurator



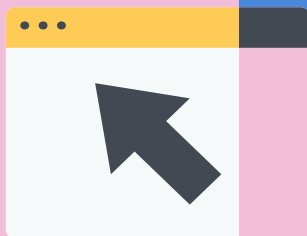
User-initiated via URL

With schools primarily deploying iPad devices to students, automated or zero-touch enrollments are the preferred method. This style of enrollment requires Apple School Manager, a simple, web-based portal for IT administrators to manage people, devices and content all from one place. Choose a management solution that integrates with Apple School Manager, so you can immediately take advantage of this workflow for your summer enrollments and deployments.

Once you have your solution purchased, all you have to do is:

1

Sign up for Apple School Manager via <https://school.apple.com/> and add your MDM server to the Apple School Manager portal.

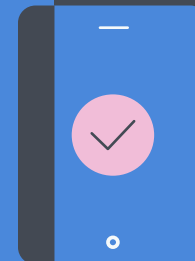


2

Purchase devices through Apple or an authorized Apple reseller and link them to your Apple School Manager account. No need to unbox devices before the school year begins. If devices are not purchased through Apple or an authorized reseller, there are additional steps to enroll devices into Apple School Manager. See *scenario two*.

3

As a user turns on their iPad for the first time, the device will automatically be enrolled — no additional interaction is needed.



At least two weeks before school year: Configurations and app deployments

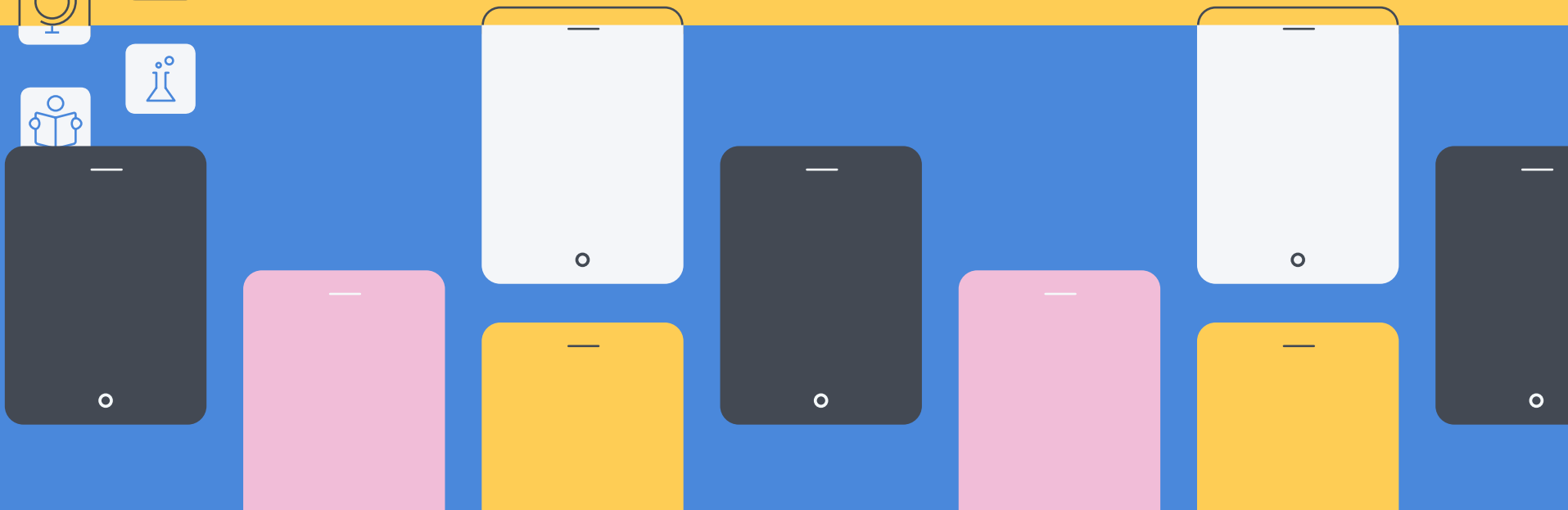


Once the device is enrolled, you can leverage your MDM solution and Apple School Manager to configure and deploy apps.

Configuration profiles tell your managed iPad devices how to behave. Profiles are built and deployed via your management solution and can configure settings, Wi-Fi passwords and restrict items you may not want students accessing such as the Camera or Safari web browser.

What sets iPad apart from other education technologies — and most likely the reason you chose Apple to begin with — is the endless supply of educational resources in the App Store. Leverage MDM and Apple School Manager to purchase, configure and deploy apps to one or all of your devices. Apps can be sent to individual Managed Apple IDs for single or Shared iPad use, or directly to the device.

All of this is done without ever physically touching the device.



A proper deployment and device configuration takes time.

Hastily doing things right before the school year starts is a recipe for disaster. Putting the aforementioned timeline in place ensures everyone benefits:



District leaders

The technology investment is working as it should from day one. No technology complaints from teachers and parents.



IT

Allows time to test and ensure all devices are enrolled and configured properly with apps tailored to each student.



Instructional technologists

Can safely plan curriculum knowing that the technology will work as anticipated.



Teachers

Ability to get comfortable and confident with the technology before hundreds or thousands of students are present.

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2

No Device Enrollment Program (DEP) for us.

Your devices were purchased through a retailer like Best Buy and not enrolled into DEP (now called Apple School Manager). You're being told that not all is lost, you can manually enroll your iPad devices into Apple School Manager using Apple Configurator. Great, but you're not completely up to speed on the process. How does it work and what do you need to do to move forward?



What you've been told is true. Apple Configurator 2.5 allows you to add iOS devices to Apple School Manager, regardless of where the devices were purchased. One thing to note, once the device is added to Apple School Manager, it is considered "provisionally managed" for 30 days where the user/device can leave management during this grace period. After 30 days, this option is no longer displayed.

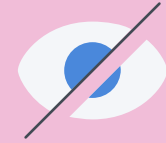


With these steps, all iPad devices running iOS 11 or higher can be enrolled in Apple School Manager.



1

Connect the iPad to the host Mac using a Lightning to USB cable. If prompted, tell the Mac to “trust” the computer.



2

In Apple Configurator, verify that the device is displayed and that the iPad is not currently supervised.

Make a note of the device’s serial number; this is needed when linking your MDM server to Apple School Manager.



3

Select the device and hit the “Prepare” button. Select the following options:

- Prepare with Manual Configuration.
- Add to Device Enrollment Program (now Apple School Manager).
- Allow devices to pair with other computers.



4

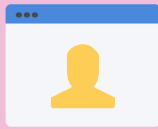
Enroll the device into your MDM server.

- Select “New Server” and define the server name and host URL.
- If you are prompted with an “Unable to verify the server’s enrollment URL”, you can skip past this message and simply hit “Next”.



5

Add the trust anchor certificates for your MDM server by selecting the appropriate certificate(s) displayed.



6 Sign into Apple School Manager using the same Apple ID and password you use to enroll in Apple School Manager.



7 Generate (first time using Apple Configurator) or choose an existing supervision identity.



8 Select "Prepare" to prepare your iPad for enrollment.



9 Log into deploy.apple.com to assign the Apple School Manager managed device to your MDM server. To do this, leverage the device serial number you noted earlier.



10 Turn on the device and walk through the Setup Assistant. You will be prompted by the Remote Management screen, indicating your enrollment has been successful.

Voila!

Your independently purchased iPad is now a part of your Apple School Manager instance and can be managed right alongside your Apple-purchased iPads.

A win for all in the form of:



District leaders

No need to buy new Apple hardware to provide a consistent learning experience to students.



IT

All management can be established simply and consistently; no need to manage Apple purchased devices differently from non-Apple purchased devices.



Instructional technologists

Help teachers seamlessly integrate technology into their lesson plans knowing that all devices have consistent access to learning materials.



Teachers

Have the ability to assist students with their learning regardless of how the device was initially purchased — one less stress and consideration for educators.

SCENARIO

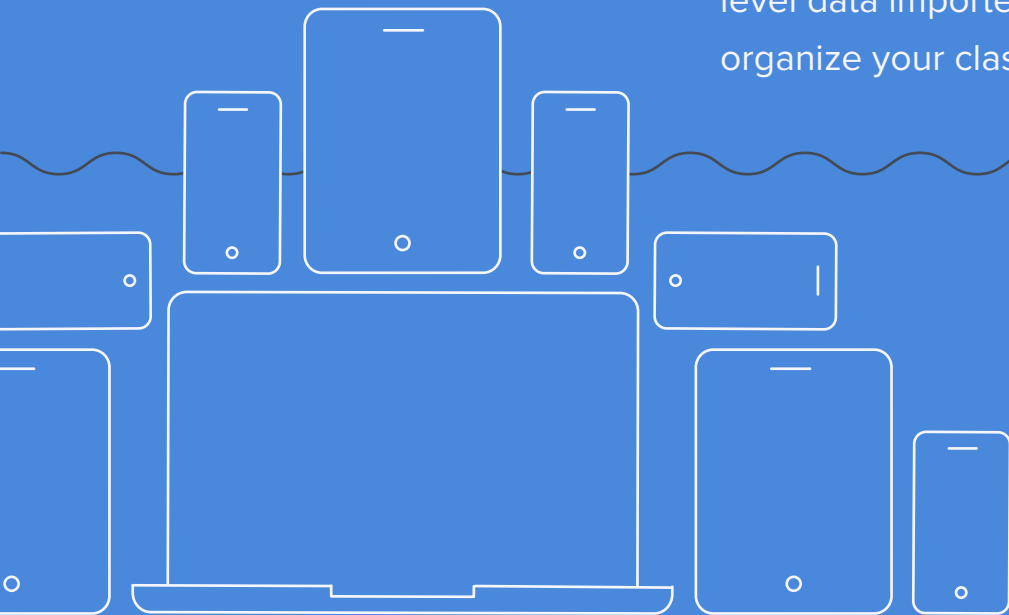
3

All or nothing with Apple School Manager.

Apple is telling you to start using Apple School Manager to manage your devices. You have everything enrolled in DEP. How do you transition?

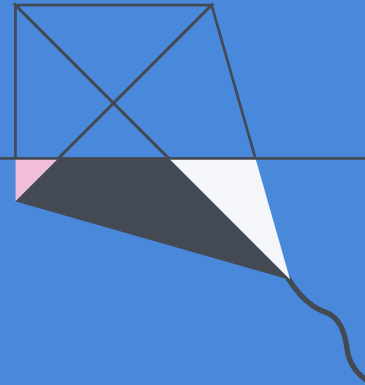
Also, Apple School Manager is a super robust service. Do you need every single feature? You're offering 1-to-1 iPads, do you need to leverage Managed Apple IDs and Shared iPad?

Oh, and how do you get your student, classroom and grade level data imported properly? Once imported, how do you organize your classes within Apple School Manager?



For starters, adoption of Apple School Manager is a good thing.

This education-specific portal consolidates DEP and Apple's Volume Purchase Program (VPP), giving you a centralized location to manage education tasks and achieve greater control over accounts and classes.



With Apple School Manager and MDM, you can:



Create Managed Apple IDs and dynamically update user information, as well as organize classes through integration with your school's Student Information System (SIS).



Set up iPad devices for shared use and allow students to log in to their device. Upon logging in, students can pick up right where they left off and benefit from a customized experience on their shared device.



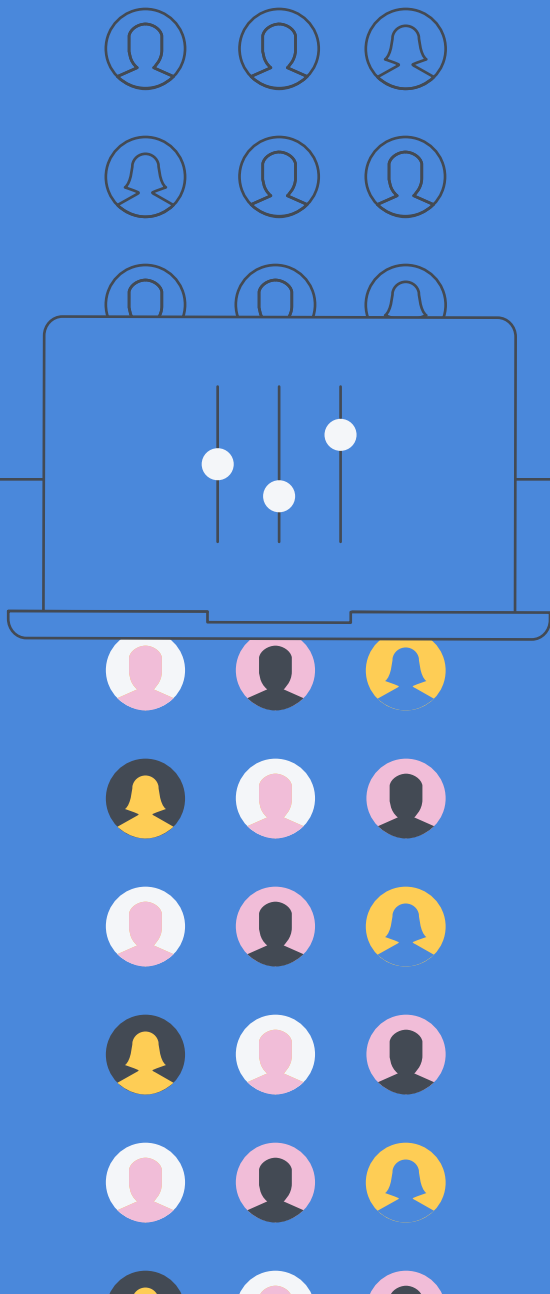
Automate device enrollment and deployment of iPad, iPhone, Mac and Apple TV devices in schools so students are equipped with the learning resources they need the minute they turn on their device.



Strengthen a teacher's ability to utilize Apple's Classroom app and guide students to the appropriate website or app, share work to an Apple TV, and perform routine management tasks such as password resets.



Migrating to Apple School Manager



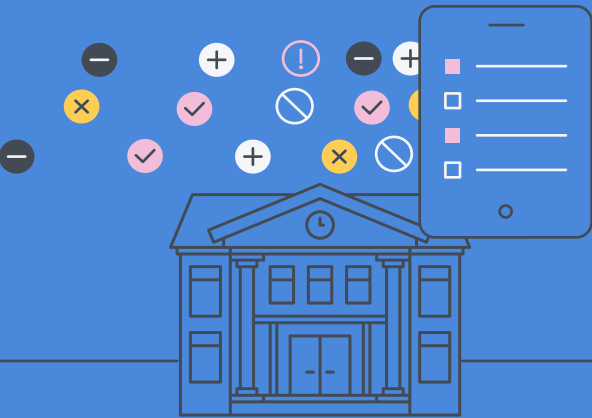
Per Apple’s guidance, prior to upgrading to Apple School Manager, you need to consolidate your existing DEP and VPP accounts (if you have any) under a single Apple Deployment Program account. If you can log in at deploy.apple.com, you have an existing Apple Deployment Program account. Your account may include DEP, VPP or both.

If the same Deployment Program Apple ID is used for DEP and VPP, you’re all set to upgrade. If you use different Apple IDs for your various DEP and/or VPP accounts, you’ll need to contact AppleCare and ensure all accounts get associated to your main Apple Deployment Program account prior to upgrading to Apple School Manager.

If your school doesn’t have an existing Apple Deployment Program account, you can enroll and upgrade your existing VPP account to prepare for migration. When you upgrade your Apple Deployment Program account to Apple School Manager, you’ll be asked to enter your school’s website. Apple School Manager uses a school’s website as the base for the default domain for their Managed Apple IDs.

For new Apple customers who have never used DEP or VPP, you can simply sign up for Apple School Manager and get started. *See scenario one.*

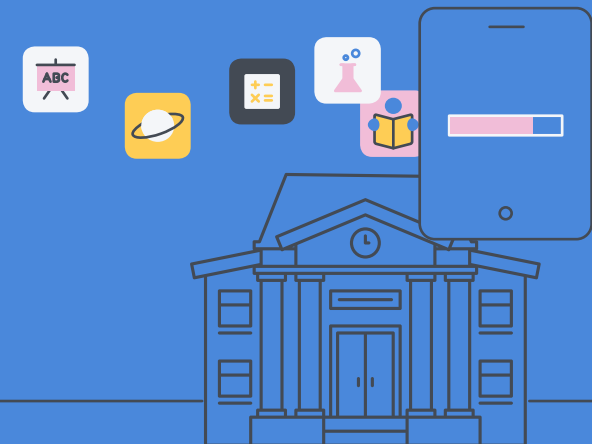
You may not need everything in Apple School Manager



If your school is deploying a 1-to-1 iPad program, you may not need to leverage the Shared iPad features. And that's OK! No need to add unnecessary management capabilities to your server. Simply use what you need and save the rest for a rainy day.

Apple wants to meet all schools where they are at. That's why Apple School Manager comes with so many incredible features. Some may use them; some may not. But they are readily available if a school's technology initiative evolves.

Importing classes with Apple School Manager



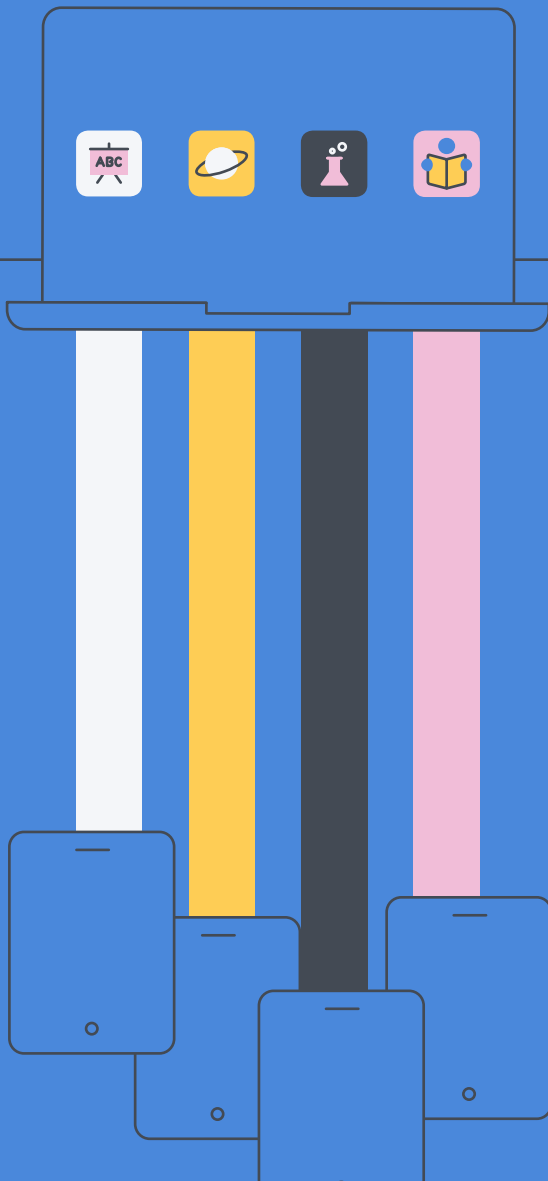
Apple School Manager integrates directly with **Powerschool**, **SunGARD eSchoolPLUS** and **Infinite Campus**. Many other SISs offer pre-formatted exports for SFTP upload. Apple School Manager provides CSV templates to integrate with any SIS vendor.

Classes can be populated automatically by linking your SIS or by manually creating classes within your MDM solution. Student photos are an optional enhancement that IT admins can host and configure for Classroom and Shared iPad.

Automating Apple School Manager class creation

To accomplish a seamless Apple ecosystem integration, link your MDM solution to Apple School Manager. By importing classes from Apple School Manager, users will be added and updated as SIS changes are propagated through Apple School Manager. These imported classes can be used with the Classroom app, Shared iPad, device assignment, app deployment and more.

Importing classes first will automatically import the users associated with those classes. Any new students or instructors that get added to a class within Apple School Manager will sync to the MDM solution.



For schools with a significant number of users or classes, you can segment your imports. For instance, it's possible to import all first graders, followed by all second graders. Similarly, you can import a subset of classes at a time. Importing users and classes separately can improve the speed and integrity of large imports. The best results are achieved by limiting user imports to fewer batches at a time. Importing users before classes can also streamline the class import performance.

Long story short, embrace and use Apple School Manager as it best fits your needs. Those that you support will thank you (and you'll be thanking yourself):



District leaders

School is using the latest and greatest in education technology and empowering teachers and students to do their best work in the classroom.



IT

One management portal to manage all users and devices, with automated workflows structured along the way.



Instructional technologists

Simple classroom creation and SIS integration so students and teachers are empowered with the curriculum assets they need.



Teachers

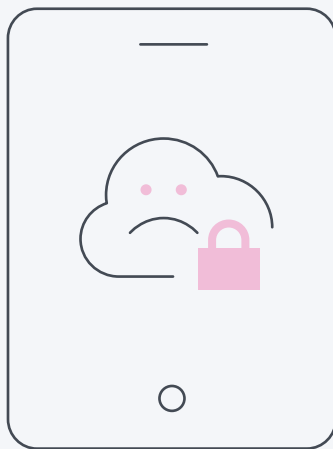
Leverage Classroom app and enjoy the easiest way to manage student devices and guide them to the appropriate learning resources.

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4

Device lock (and iCloud) missteps.

Your students turned in their devices at the end of the school year. You've now got piles of devices that need to be wiped and readied for the next student. The problem? Most of your students didn't log out of iCloud, they simply shutdown the device and turned it in. Now your devices are in Activation Lock. Help?

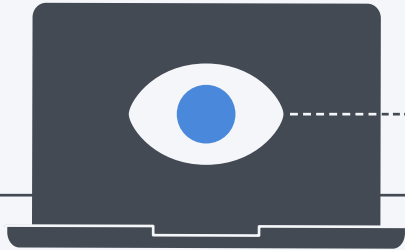


Activation lock is designed to prevent the theft of iPad and iPhone devices. They both require an Apple ID and password, which means only those with that information can activate the devices. This feature is great for theft prevention, but it can also cause problems for IT admins if they are not using Managed Apple IDs for students.

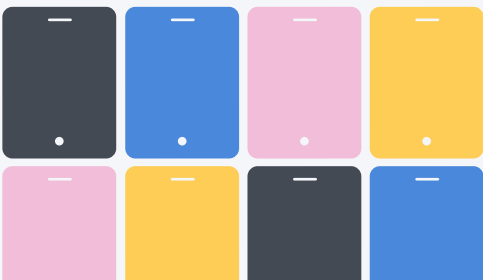
However, this is easy to manage when pairing Activation Lock with an MDM solution. If a device is enrolled in an MDM, and is supervised, an Activation Lock Bypass Code will allow IT to unlock the device.



Steps to make your device lock issues disappear:



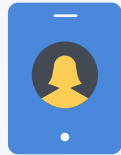
What is device supervision?



0 1 0 1
1 0 0 1
0 1 1 0



When the device is already enrolled in an MDM server and is supervised, an Activation Lock Bypass Code is generated and stored in the MDM server.



If a locked device is returned to IT, they retrieve the Bypass Code stored in the MDM server.

IT reboots the device into the Setup Assistant, and the first screen asks for the previous student's Apple ID and password. To bypass the Activation Lock, IT enters the code in the password field and leaves the Apple ID blank. The device is now unlocked.

Supervision is a special mode of iOS that enables deeper management by an MDM solution. A growing number of configurations require the device to be supervised. It is recommended that school-owned devices are put into supervision mode.

An incredibly simple process with an MDM solution in place. An incredibly frustrating one when an MDM solution is not. **Benefits of being able to unlock a device are plentiful:**



District leaders

Students will not be getting locked out of their devices, so our education technology will not be collecting dust while the problem gets sorted out.



IT

Quick remediation process for devices in Activation Lock. Ability to spend more time on strategic initiatives and less on unlocking devices.



Instructional technologists

Education technology curriculum will not be bogged down while devices are in Activation Lock and unusable.



Teachers

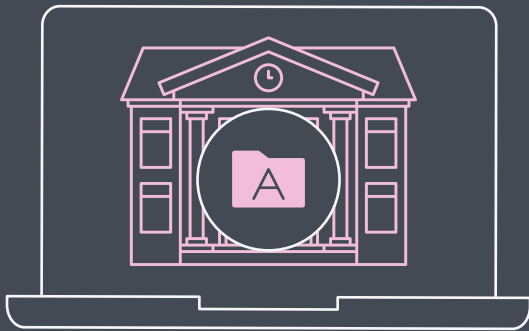
If a student gets locked out, IT has a quick path to get the device back in service.

SCENARIO

5

Who needs access to what and when.

With graduating students leaving and new students coming in, what do you do with all of your apps? How do you get this group of students what they need on their devices the minute they turn them on? If a student drops a class and doesn't need a particular app anymore, do you need to reset the device and start over?



With more than **75,000** education apps available in the **App Store**, the possibilities are nearly endless — but can seem daunting at the same time.

With an MDM solution in place, school-issued apps can be deployed directly to devices or users. The apps are owned by the school and don't require Apple IDs. School data is secure and can't be exported. Apps can even be pre-configured with settings to customize apps for personalized learning.



When deploying App Store apps via Apple School Manager, you gain extra security and configuration for that app. Here's what's possible:



Managed Apps

Introduced in iOS 5, managed apps differ from a standard app because they are flagged as owned by a school. Specifically, managed apps are distributed via MDM technology and can be configured and reassigned by MDM.



Managed Open In

Managed Open In takes the concept of managed apps a step further by controlling the flow of data from one app to another. With MDM, schools can restrict what apps are presented in the iOS share sheet for opening documents. This allows for truly native data management without the need for a container.



App Configurations

Sometimes deploying an app isn't enough and you'd like to pre-customize some of the settings. This is the premise for app configurations. App developers can define what settings can be pre-configured by an MDM server for their app. For example, you could deploy the Socrative app with the server URL pre-populated, so users only need to enter their username and password to get the app up and running.





Quickly go from app purchase to deployment

Another case for Apple School Manager to help you streamline your app purchases and deployments: you can go from start to finish in four steps.



Add your MDM server to the Apple School Manager portal. To learn how to sign up for Apple School Manager, see scenario three.

Find and purchase app licenses from the Apple School Manager web store. You will also need to “purchase” free apps.

Add your app licenses to your MDM server, including free apps.

Apps are deployed directly to the device. No interaction or Apple ID required.

If a student drops a class or leaves school, simply retract the app license and redistribute as needed.



On-demand access to apps and resources

To make it even easier on students and teachers to access the apps they need, when they need them, you can create your own app catalog. To do this, ensure your MDM solution provides the ability to create a custom app catalog, so you can pre-populate apps and assets and make them available to users.

Instead of submitting a help ticket for app installs, students and teachers simply navigate to your app catalog and download the IT-approved resource.

With an automated way to put apps on user devices, and an efficient way to empower teachers and students (**while saving you time**), app dilemmas will be a thing of the past, and leave people saying:



District leaders

We know that our app purchases are going to good use, and we can even save money by redistributing apps.



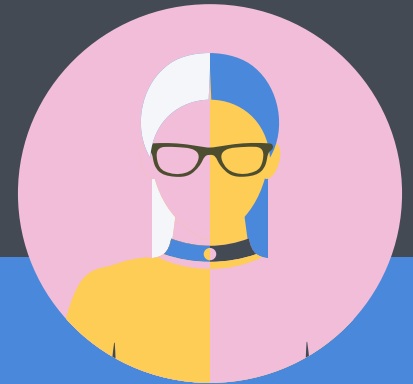
IT

Love that we're eliminating routine help tickets and getting the apps to our students and educators exactly when they want them.



Instructional technologists

The App Store is our oyster. We have our pick of purchasing, distributing and leveraging thousands of education apps for our curriculum.



Teachers

Apps are there when we and students need them. No more bugging IT and wasting precious classroom time.



A tool up for the education task.

By conquering these five scenarios, you're well on your way to delivering the best education experience to your users, but your school is most likely going to need more down the road (or now).

When it comes to Apple device deployment and provisioning, configuration and app management, inventory capabilities and security enforcement, one solution rises to the head of the class — **Jamf Pro**.

With Jamf, IT and the students, teachers and district leadership they support have a best-of-breed Apple management solution with a strong heritage and proven commitment to education.

More than 6,000 schools rely on Jamf to help them manage over 7 million devices. So, whether you need help with one of the scenarios discussed, or have a whole new situation on your hands, we can help.



Take Jamf Pro for a free test drive and start getting more out of your education technology today.

[Request Trial](#)

