



### Flattening the **Distance-Learning Curve** with a 1-to-1 iPad Program

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The COVID-19 pandemic brought renewed attention to 1-to-1 mobile device programs as technology-enabled distance learning became the solution to a global education problem.

1-to-1 programs are digital learning initiatives that provide one device per student, and provide a bridge to interactive and personalized learning in and outside of the classroom. Studies show that 1-to-1 programs enhance student achievement in writing, problem solving, reading and math, and create a more equitable learning environment. The benefits for teachers include more individualized instruction.

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## Why 1-to-1 programs are paramount ::

## When COVID-19 forced the closing of almost every K-12 school in the U.S., students began distance learning.

Schools with 1-to-1 learning environments and tools to properly manage their devices remotely saw themselves at a distinct advantage. Their students and teachers were already adept at using digital learning devices — such as iPad — for daily lessons, and were able to transition more smoothly than those without dedicated technology for students.

Even with the benefits of 1-to-1 iPad programs, many schools around the country feel a device for every student is still a far-off dream due to budgetary constraints. While most schools today use digital learning devices, many share them amongst students. It's not uncommon in some districts to have one device for every five students. This may work for students in a traditional classroom setting, but it isn't an option when devices need to go home.

Even when the pandemic is over and a semblance of normalcy returns, students inevitably may still miss in-class instruction for extended periods of time for a multitude of reasons:



Illness



Weather emergencies (snow, tornado, etc.)



**Disasters** 

(wildfires, flood or earthquakes)



Other reasons, such as building system failures

This means the desire for many to roll out a complete 1-to-1 program goes beyond this current pandemic and into using technology as a means to create a modern learning environment that offers flexibility and sustainability for future scenarios — seen and unforeseen.



of schools have implemented a 1-to-1 program

of schools without a
1-to-1 program plan to
implement

\*Source: 2019 K-12 Digital Content Report co-sponsored by ASCD and OverDrive Education

### One-to-one success story:

### Pulaski CSD





In March 2020, when school closures due to the pandemic were ordered by the state of Wisconsin, Pulaski Community School District mobilized its 3,700 students and more than 350 employees to a learn-at-home environment in just three days.

The district made a commitment to a 1-to-1 iPad initiative in grades K-12 about five years prior, and they offer iPad at the pre-K level (although not 1-to-1).

"Since our older students all have a device and are familiar with digital learning, the transition to distance learning went smoothly."

### **Amy Uelmen**

Instructional technology coordinator,
Pulaski Community School District

### Potential challenges to 1-to-1

Despite the clear advantages of 1-to-1 digital learning environments, barriers remain that need to be taken into account at the onset for a successful rollout.

### School and community acceptance

School administrators must be on board in order for parents and taxpayers to get behind the initiative. Administrators also play a crucial role in changing school culture and budgeting for technology.

#### Fear of change

Many teachers today graduated high school before digital learning became mainstream. Teaching a curriculum that includes digital learning may be scary for teachers and will require additional training to build confidence and acceptance.

#### Infrastructure

Implementing a successful 1-to-1 program requires reliable internet connectivity. Wireless networks must be ubiquitous on school campuses and there needs to be enough bandwidth to allow access for students, teachers and administrators at the same time.





#### Home environments

Students need access to reliable
Wi-Fi at home to facilitate remote
learning. If Wi-Fi is not available
to all homes, schools often solve
this problem by working with local
internet providers to deliver free/
reduced cost connections, providing
hotspots in parking lots of community
buildings, and parking buses
outfitted with hotspots in affected
neighborhoods.

#### Staff

A 1-to-1 learning environment requires additional resources to fix broken equipment, coach students and teachers on how to use devices, troubleshoot issues, and refresh fleets of devices at regular intervals. Resources are also required to design digital learning curricula, train teachers, and to stay current on tools and digital teaching methods.

#### **Funding**

Digital learning requires sustainable budgeting in order for students and teachers to have current devices and tools. The best way to accomplish this is to sell back used devices and use the residual value to defray the cost of the next fleet of devices.

### Ways to fund 1-to-1

When a district commits to 1-to-1 digital learning, it's important to also commit to refreshing devices regularly. In order to do this, districts often believe they should buy the cheapest equipment or use the devices until they die.

Both of these approaches actually reduce the quality of instruction and increase the time and money needed to constantly repair the failing devices. Plus, this is detrimental to learning as students are not able to take advantage of the educational features that are only found on the latest hardware.

The more economical solution is to buy quality digital learning devices, such as Apple iPad. While Apple's iPad can come with a higher upfront cost, these devices retain significant value, and there are companies, like Second Life Mac, that are willing to purchase them after three years. If timed correctly, schools can sell a current fleet of iPad and recoup enough residual value to pay off the last year of their lease.

### Here's how it works.

An iPad is generally worth about \$115 after three years of use. A district with 2,000 iPad devices can typically sell their three-year-old fleet for about \$230,000, and put that money toward paying down a lease or purchasing the next fleet.

This reduces the cost to own or lease devices to about \$179 a student over three years, or under 35 cents per school day. It may surprise you to know, this is about \$70 per device less than Chromebook, which has almost no residual value after three years.

\*All stats provided by Second Life Mac

Value of iPad after 3yrs

<sup>\$</sup>115

Selling back 2,000 iPad

\$230,000

Cost to own an iPad

**\$179** 

Or 35¢/day

Chromebook cost \$70 more to own than iPad

## Role refreshes play in budgeting



Budgeting for large capital expenses every three to five years is a vicious cycle. Who wants to ask for a half million dollars or more every three years?

Instead, technology should be budgeted like other operating expenses, such as water, electricity and salaries. Under this model, schools can become creative in how they supplement these costs with programs such as student technology funds. Even a nominal technology fund of \$50 per student annually can nearly offset the cost of digital learning devices and promote a better learning environment.

### Coping without 1-to-1:

### Windsor CSD

Windsor Unified School District in Sonoma County, California, has about 5,000 students in pre-k through high school.

Classrooms have a device to student ratio of about 1-to-5.

When schools closed due to the pandemic, the district offered one device per household to be shared among all the students living there, and ramped up training for teachers. The goal was to keep students learning as much as possible, and keep them connected with their teachers.



"The school board is beginning to see the need to view technology as a necessity, much like electricity. It's a cost of doing business, not a luxury."

### **Chris Moghtaderi**

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Instructional and information technology service director, Windsor Unified School District

### Regular refreshes are key

### How can you tell when you should refresh devices?

The best time generally is the point when devices are just beginning to lose their teaching value, and residual value is still high.

This typically is around **year three**.

As education technology devices age, they lose their effectiveness. Older operating systems either can't keep pace with learning software and apps, or they no longer are supported by the software creators. This leads to problems in the classroom.

- ▶ Teaching becomes more difficult
- Software no longer works
- ▶ Students miss out on important educational content
- State testing platforms phase out support of older devices
- ▶ IT becomes burdened with repair and troubleshooting

Regularly refreshing devices is not only economical for budgets, but innately prevents the frequency in which you have to deal with antiquated device models.

### How to time your refresh

When devices are refreshed, IT directors must collect devices from students and teachers, and prepare them to be sold to a sellback company. While summer may seem like the ideal time to do this, other times during the year may be more lucrative.

If possible, districts should plan refreshes for the middle of the school year. At this time, devices are in demand and sellback companies will pay more for them.

Refreshing devices mid-year can net school districts as much as 12 percent more for their devices. On a fleet of 2,000 iPad devices, this can translate to \$34,000, which can be reinvested in new technology, such as 115 additional iPad devices.

\*All stats provided by Second Life Mac

#### \$180 \$160 **iPad** Pro 2016 Summer 2019 Fall 2019 trade-in value trade-in value

**iPad** 





### **Buyback Supply and Demand**

A good sellback company can reduce downtime. Look for a partner that will review your devices in advance, give you a guaranteed buyback figure, and work alongside your staff to quickly inventory, pack and ship devices.

Most technology refreshes of 4,000 or fewer devices can be done in a week. Timing them for fall and spring breaks will minimize disruptions and net a higher payout.

<sup>\*</sup> Device prices are higher in off-peak months

<sup>\*\*</sup> Prices are for devices in good working condition

## How to manage your device///refresh and 1-to-1 iPad program

A mid-year device refresh and rollout can feel like a very daunting task. The idea of collecting devices, redistributing them, and having them provisioned with the apps and tools students need could be enough to make any school hesitate. This is where having a partner like Jamf in this process makes all the difference.

Leveraging a mobile device management (MDM) solution from Jamf, such as Jamf School or Jamf Pro, the process for preparing your devices for refresh is a painless one.

- Use Jamf to run an inventory report of the device serial numbers to give to a refresh partner like Second Life Mac
- ▶ Remove enrollment token from Apple School Manager
- Disable Activation Lock
- Remove student Apple IDs (dependent on your school's Apple ID model: device-based or user-based assignment)
- Wipe the device and reset to factory settings (ensuring no student data is ever shared)

All of this can be done with Jamf. Schools can even leverage MDM to turn on Lost Mode, allowing them to uncover any missing or late iPad turn-ins.

### jamf SCHOOL

#### What is Jamf School?

Jamf School is purpose-built for education and includes Student, Teacher and Parent apps to simplify education technology workflows.



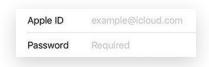
#### What is Jamf Pro?

Jamf Pro is the standard in Apple device management and delivers everything IT needs to maximize Apple investments.



#### What is Apple School Manager?

Apple School Manager consolidates
Apple's deployment programs and is
exclusive to education. Apple School
Manager is a simple, web-based portal
for IT administrators to manage people,
devices and content all from one place.



#### What is Activation Lock?

Activation Lock is an iPad feature designed to prevent device theft. Activation Lock ensures that an Apple ID and password are both required to access the device.

MDM allows for the management of Activation Lock and empowers IT to institute an Activation Lock Bypass Code to unlock the device.

### **Touchless Trade-In**™

Distance learning has created new challenges for districts collecting used devices from students.
Suddenly, the process of collecting iPad is more difficult and riskier.

To help, Second Life Mac developed Touchless Trade-in<sup>™</sup>, a drive-though process for students to return devices while maintaining social distancing and keeping device handling to a minimum.

#### Here's how it works:

- Students receive a unique

  QR code on their device from

  Second Life Mac.
- The code is scanned, identifying the student and device, and the device is removed from Apple School Manager.
- New devices are handed out by another rep.
- If a device cannot be refurbished, it is recycled with zero e-waste in landfills.

- At the Touchless Trade-in™ event, students or parents drive up and show the QR code.
- The student places the old device on a conveyor belt, where it is received by a rep and placed in a box.
- When the box of used devices is full, Second Life Mac seals it and sends it back to the company's warehouse, where the devices are sanitized and refurbished.

Refreshed and ready:

### Kanawha CSD

Kanawha County School District in Charleston, West Virginia covers about 900 square miles, and has just over 25,000 students in grades pre-k to 12 in 68 schools.

When the governor made the decision to close the schools due to the pandemic, the district was on spring break. Since the district has 1-to-1 iPad devices for students in grades 4-12 and 1-to-1 devices in most K-3 schools, the move to distance learning was seamless.

At the end of the school year, the district had planned to refresh 16,000 devices. This required the district to collect the used iPad and provide students new devices.

The pandemic made this difficult and risky. The district needed a way to collect devices while maintaining social distancing and limiting the handling of the old devices. What's more, they needed it to be easy for parents.

Second Life Mac's Touchless Trade-in™ allowed the district to set up drive-through locations that got cars through the process in just a few minutes.

Administrators didn't have to worry about sanitizing the old devices. Second Life Mac boxed them up, and shipped them to their warehouse, where devices were sanitized and refurbished.

## How to deploy your new devices

With new iPad devices purchased at a lower rate due to the trade-in value you received from Second Life Mac, you must next deploy your new hardware to students — no matter where they are located.

The school's IT team should create a deployment plan and consider logistics, personnel capacity and the end users. Much of the deployment process can be automated once again by utilizing Jamf. With an MDM solution like Jamf Pro or Jamf School, you can partner with the customer support team to help prepare your environment, get devices enrolled into management and run inventory reports to ensure everything went off without a hitch.

To migrate the data from old devices to new, leverage iCloud for a quick path to device data restoration. However, there are other methods of data migration. Consult your mobile device management vendor's support team to choose the method best for your environment.

# Ready to learn more about how to afford 1-to-1 in your district?

Second Life Mac and Jamf allow you to seamlessly refresh devices at the most profitable time — safely and easily.

If you're ready to economically deliver an iPad to every student — and empower them to truly learn from anywhere — we're ready to help. Contact us to get started.





Contact SecondLifeMac