Achieving Return on Education: Optimizing Your K12 Device Deployment

Simple Multi-Platform Solution Empowers Teachers, IT, Students

The K12 Technology Landscape

Today's K12 device landscapes are rarely single platform. Even if they begin that way, the gradual replacement of aging tablets and computers, whether via regular device refresh cycles or low-bidder purchases to fit budget constraints, are introducing new device and OS types, creating a complex multi-platform environment.

Many districts are purposefully introducing device diversification strategies: most importantly, to boost student learning in different subjects or grade levels, but also to take advantage of new educational technology such as Augmented Reality (AR) and Virtual Reality (VR), or to overcome device-specific limitations such as network or Bluetooth connectivity.

Whatever the reasons for new device adoption, limited budgets often prevent districtwide replacements. With the continued, rapid proliferation of available devices, managing diverse endpoints has become the standard for K12 school districts.

In addition, IT teams are often encumbered by having to manage each device type with a management solution specific to each device or operating system. Specialized tools originally intended to reduce complexity now instead add another layer to it. Over time, this results in a "Complexity Gap" as the number of controls and devices outpaces the staff needed to manage them all.
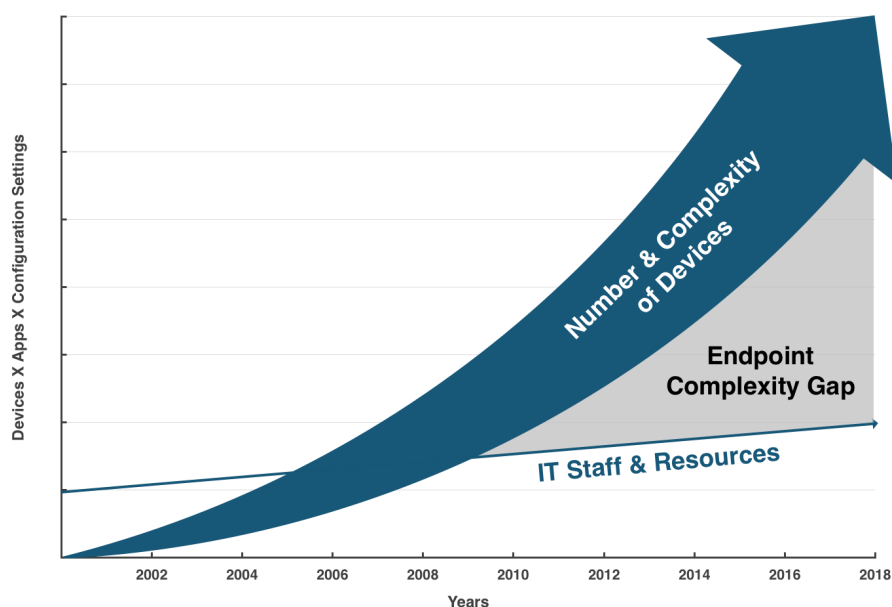
Centralized management can overcome the complexity of managing multi-platform device deployments and ensure districts are no longer limited by past decisions, but can instead consider the devices best suited to meet current needs.

Technology in the Classroom

23 billion devices purchased in 2013/2014	$8 million per year Spent on hardware/software	$3 billion per yr Spent on digital content[1]

The rise in 1-to-1 student computing has led to an explosion of new devices entering the classroom, including laptops, two-in-ones, and tablets. Chromebooks and iPads may be dominant today but as we've seen that can change quickly. Unfortunately, 99% of school technology initiatives fail to meet certain key performance indicators[2], often because the technology decision was driven primarily by an interest in the technology itself. In many cases, little thought of pedagogy takes place early in the process of envisioning new educational technology programs.

Yet pedagogy is the foundation of delivering a solid Return on Education (RoE) for any edtech investment. Districts require clear vision and leadership on how teaching and learning are supposed to change, and how best to support that vision at both the IT and classroom level.

In order to achieve more innovative teaching, learning, and engagement, teachers must first believe in the technology, and its potential to improve outcomes. Leadership is critical here. Second, they must be well-trained on how to leverage the new tools. For districts investing in 1:1 programs, this shift in teaching and learning will not happen overnight.

Even when teachers embrace new technology in the classroom, it quickly becomes apparent that additional challenges must be met in order to maximize RoE.

TOP REASONS EDTECH PROJECTS FAIL

1. Device purchases fail to meet curriculum needs.
2. Infrastructure limitations (bandwidth, Bluetooth, home connectivity).
3. Deployment and management issues.
4. Lack of leadership on educational vision.
5. Stakeholders are not engaged beyond the initial launch of new devices.
6. Devices are used passively within the classroom (a failure to shift to new pedagogy models).

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[1] https://www.edweek.org/ew/issues/technology-in-education/index.html

[2] https://www.k12blueprint.com/blog/elliott-levine/reasons-why-94-us-superintendents-are-making-technology-mistakes

USER ACCESS

Teachers need a way to associate users and devices with classes, both for a shared device environment and for 1:1 programs.

APPLICATION MANAGEMENT

Teachers need a way to distribute new apps to learners in a specific classroom, but it's just as important that these apps meet stringent privacy and security standards. Because teachers can't be expected to be technicians, they need an easy way to find and distribute pre-approved apps without calling the help desk. At the same time, IT needs an easy way to vet, test, and make available all needed apps.

ENGAGEMENT

Classroom management is a core skill of effective teachers, and the digital transformation of the classroom must provide tools to enable it. Teachers need a way to quickly share content across all devices, mirror device screens, or mute devices to maximize instruction time and minimize distractions.

COMPLEX DEVICE ASSORTMENT

As discussed previously, while technology deployments are often uniform to begin with, over time devices are replaced and complex multi-platform environments emerge. Teachers need a way to support their classrooms on multiple platforms.

TECHNOLOGY SETUP & MANAGEMENT

Teachers are not trained to set up, troubleshoot, or manage the technology in their classrooms, nor do they have the time. How do you ensure there is a reliable solution in place to quickly address issues?

> Over 4000 schools use FileWave to support and engage more than a million students.

All-in-One Endpoint + Classroom Management

Reduce complexity, extend visibility, empower teachers, and enable learning

FileWave's multi-platform solution is designed to manage devices in today's educational technology landscape. FileWave makes it easy to deploy, track, manage, and report on devices across multiple platforms; to manage software licenses; and to help maintain compliance with children's privacy and security regulations. FileWave gives administrators a method to provide users easy access to

applications at the moment they're needed, and gives teachers a quick way to manage their own classroom needs, *without requiring them to become IT technicians themselves.*

FileWave Engage provides modern management for the modern classroom, seamlessly connecting teachers and students across multiple devices, with streamlined content delivery and easy setup. Teachers can take advantage of advanced classroom features designed to support the needs of a digital classroom, including the ability to direct students' attention, encourage student interaction, and adjust instruction based on student needs, all from an easy- to-use interface.

Multi-Platform Endpoint Management

FileWave offers complete client management capabilities for macOS and Windows computers, along with mobile device management for iOS, Android, and Chromebook devices. By reducing the number of management tools, FileWave increases visibility, reduces complexity, improves security, and enables learning.

> "It's more than multi-platform, it's unified endpoint management."

Automated Deployment Processes

Imaging is a complex and time-consuming process, even on a single operating system. FileWave simplifies and shortens the process through a variety of automation tools adapted to multiple operating systems. FileWave Lightning, our local imaging tool, easily clones macOS devices; Network Imaging deploys images and updates to Windows and older Macs across the network; and scripted installations using Filesets enables you to continue imaging even macOS High Sierra devices.

Zero Touch Deployment

Apple DEP takes the operating system out of your environment, requiring you to manage the process between users, your organization, and the Apple ecosystem. Using FileWave to manage DEP, now you can have completely zero-touch deployments of macOS and iOS devices. The base operating systems and preferences will be configured as part of the user's out-of-box experience.

Hand out devices still in their shrink wrap with confidence that they will be properly managed and compliant with company standards. And with Smart Groups, applications are pushed down to the users who need them - Mac, Windows, and mobile.

SIS Integration

Seamlessly connect with your existing SIS (student information system) via Clever.com for an easy and reliable experience. Clever.com is compatible with most SIS systems and does the heavy lifting for you.

IT Asset Management

You are accountable for every device connected to your network, whether that device is managed or not. In addition to managing large fleets for 1:1 programs, you must have an easy way to find, track, manage, and report on devices across multiple platforms, including the identification of unmanaged endpoints.

FileWave's License Management helps you track licenses and installations, get warnings when licenses run low, detect unused licenses, and manage Apple VPP licenses.

Shared Devices

Create custom profile settings and groups and pre-assign shared devices to students for a smooth login process. Comprehensive SIS integration, LDAP login credentials, and student photos integration improve the classroom experience.

Just-in-Time Support

Delays in support have a huge impact on the classroom. FileWave helps IT administrators easily troubleshoot problems, take control of endpoints, or remotely deploy solutions right when they are needed. With screen sharing, IT admins can provide just-in-time user training without having to send someone out to troubleshoot an issue or provide training.

The FileWave Self-Service Kiosk provides on-demand content for end users, including pre-approved applications and content tailored for individuals or groups of users.

Security and Privacy

School districts face a myriad of regulatory requirements when it comes to security, instituted at the school district, state, and federal level, including the Family Educational Rights and Privacy Act (FERPA), the Children's Online Privacy Protection Act (COPPA), and the Children's Internet Protection Act (CIPA). These regulations provide the base framework for security and privacy protections, but the pace of change of education technology and the risk landscape also place a significant burden on IT.

> "A well-managed device is a more secure device."

Multi-platform management helps you get control over unmanaged devices exposing your network to security threats. FileWave also makes it easy to identify and remediate unpatched systems, to enforce passcode rules, user access controls, geo-tracking, and remote wipe of at-risk devices. FileWave includes self-healing of critical security layers and block settings for YouTube, iMessage, explicit content, and more.

With common workflows across supported operating systems, it's easier to apply the configurations you need to remain compliant on all of your devices.

Multi-Platform Classroom Management
Make Technology Work for Better Education

iOS macOS

Technology can have a positive and significant impact on student learning, but only if teachers can control the technology - not the other way around. With today's rapidly increasing mix of device types and learning apps it's all too easy for it to quickly become a burden and distraction for teachers and students alike.

FileWave Engage empowers teachers by providing them with a reliable and user-friendly tool that seamlessly connects them with their students. FileWave Engage is multi-platform, ensuring all students and all devices are supported.

App Deployment & Management

IT departments can't predict every application their users will need, and loading all applications on every user's device isn't cost-effective, feasible, or advised. FileWave provides on-demand access to content and applications that meet district privacy and security standards. Additionally, FileWave provides classroom level management of basic functions such as turning on or off profile restrictions or guiding devices into a specific application.

Classroom Engagement with FileWave Engage

Teachers can take control of their lessons by directing students' attention, encouraging student interaction, and adjusting instruction based on student needs - all from one easy-to-use interface.

Eyes Up Front

With a single action, teachers can temporarily "blackout" / lock the screens and provide a custom message to an entire classroom of devices, directing students' attention to the teacher.

Single App Mode (iOS & Chrome OS only)

Minimize distractions by guiding devices into a specific application and ensuring all other apps are inaccessible.

Polls

Teachers can quickly and easily create polls to check for student understanding. These "pop" quizzes can be shared within seconds to students in order to gain immediate feedback and adjust instruction as needed. Student responses are made available to teachers in a way that makes it very easy to identify which student(s) may require additional help on a particular concept.

Content

Engage provides teachers with the ability to centralize course content and easily present it to students in a week-by-week planner-view. Teachers are free to use whatever system they are familiar with (iTunes U, Google Drive, personal websites - anything with a URL) to share content. If a content URL changes, teachers do not need to inform students, thus greatly simplifying the task of ensuring everyone is accessing the correct content.

Mirror Device (iOS only)

Mirror device allows teachers to share their screen, or select a student's screen, to be shared with the rest of the class via AirPlay for group collaboration – without having to share an AirPlay password.

Messaging

Teachers can send messages to selected students in their class. This method of communication enables teachers to interact with specific students, without disrupting the concentration of other students.

Apple Classroom

FileWave is fully compatible with Apple Classroom and enhances the overall experience by providing comprehensive Student Information Systems (SIS) integration with any SIS vendor greatly expanding the SIS-compatibility, ensuring your existing SIS is leveraged.

Here's just a handful of the many supported systems:

- PowerSchool
- Skyward
- Infinite Campus
- SchoolInsight

- Illuminate
- iNow by Chalkable
- And many more

filewave

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A pioneer in multi-platform endpoint management, FileWave was founded in 1992. Offering a single management solution for apps, devices, and configurations for Mac, Windows, and mobile, FileWave gives IT the ability to proactively and automatically provision and maintain every device. FileWave makes multi-platform endpoint management simple.