

Unleash the Power of Digital Learning with Scalefusion MDM for Education

Insights into how MDM is critical to upholding the dynamic landscape of education



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Overviews

Elevate the digital learning and remote education experience for K-12 and higher education. Seize control over the digital devices used in schools and universities and ensure a distraction-free, safe learning environment with Scalefusion.

Benefits

- Uninterrupted access to educational resources
- Access limited to educational and school apps
- Parental control over content browsing and device usage
- Remote device troubleshooting for remote learning
- Device sharing support for seamless sharing of devices among kids





Introduction

The educational landscape has transformed beyond imagination over the past decade. By 2025, the e-learning market is projected to be worth 325 USD. Digital devices such as computers have now found a permanent place in schools and universities, opening up new arenas for the students to take a deep dive into the readily available knowledge pool. From creating interactive projects that help the students' creativity to shine through to using computers to actually attending lectures, accessing course materials as well as appearing for exams, laptops and desktops bring fluidity to the entire learning process that is encouraged by the educators, the parents as well as the students.

The pandemic ushered remote learning in 2020 has further sealed the necessity as well as the effectiveness of digital learning, it being the only viable option to continue education in times of global crisis. Using digital devices such as smartphones, tablets, iPads along with desktop and laptop computers is no longer limited to schools or universities with lofty budgets. Schools across the globe have now found innovative ways to ensure that students access the online classes from home, using a device that is either exclusively reserved for the students or a device that is shared between siblings or parents.

One way or the other, digital learning has found its way into mainstream classrooms and this might truly transform the conventional definition of classrooms in the near future.

As the world navigates towards online learning, making it a safer, secure place for the students is critical. In this whitepaper, we will discuss the evolution of online learning and digital education, the challenges it brings forth and how Scalefusion MDM steps forward to solve them.

Evolution of Online/Digital Education

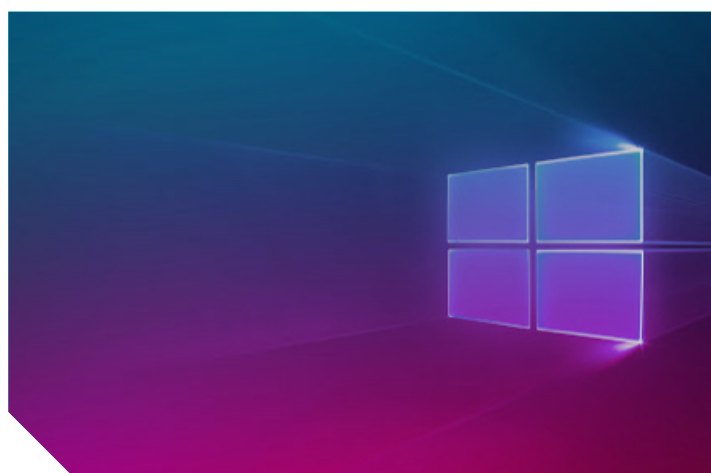
Birth of e-learning

The term e-learning was first mentioned in 1999, at a Cognitive Behavioural Therapy (CBT) seminar and was then perceived as the newest, freshest way of learning. While the term distance education has been around for a long time, it involved the students studying the curriculum from home, at their convenience, only with the help of written material that was shared with them. With the dawn of the internet, distance learning was sped up with the use of CD ROMs and PDF text files, which eased the process of accessing the latest information.

The e-learning material was still restricted to converted files of the paper-based material but it gained popularity nonetheless. This was the time when personal computers or accessing online environments for learning was catching up in the developed countries.

In the developing countries, computers were initially restricted to enterprise use, available for disposal only for the knowledge workers. In schools, computers were taught merely as a subject, limiting the interaction students had with the devices.

A new feet introduced with Windows OS



The introduction of PowerPoint can be considered a milestone in the digital learning journey. It brought forth the much-needed features and capabilities where students and educators could not just type in, but draw, use graphics, vectors and illustrations to make learning more fun and immersive. Over the next decade, there was a rapid revolution in terms of learning management systems (LMS), educational games, digital libraries with e-books, social media for learning such as YouTube as well as new platforms such as podcasts to make learning more accessible than before.

Mobile devices replace computers

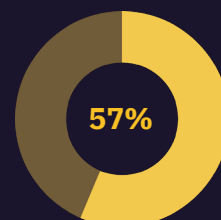
Computers or laptops started finding an irreplaceable place, first in universities, then in K-12 classrooms. Furthermore, the bulky desktops have slowly been replaced by iPads and tablets that extend the same (or even enhanced, in some cases) functionality in a smaller size. Students love having these devices since they are easy to maneuver, fit easily into their backpacks and can be logged around with ease.

Clearly, digital learning is gaining traction across the educational realms and is adored for fostering curiosity, creativity within the students, while also helping out with learning disabilities in ways more than one.

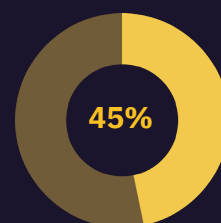
3 Million +

students are now studying higher education fully online

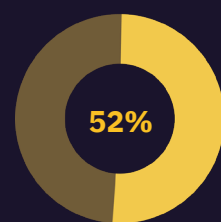
Few Stats around Evolution of Education



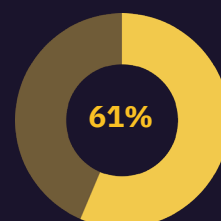
of students are assigned personal mobile devices for school use



of elementary school students said that their favorite learning methods are playing digital learning games and watching online videos



of K-12 students consider online tutoring to be part of an ideal learning experience



K-12 students are interested in using mobile apps for learning

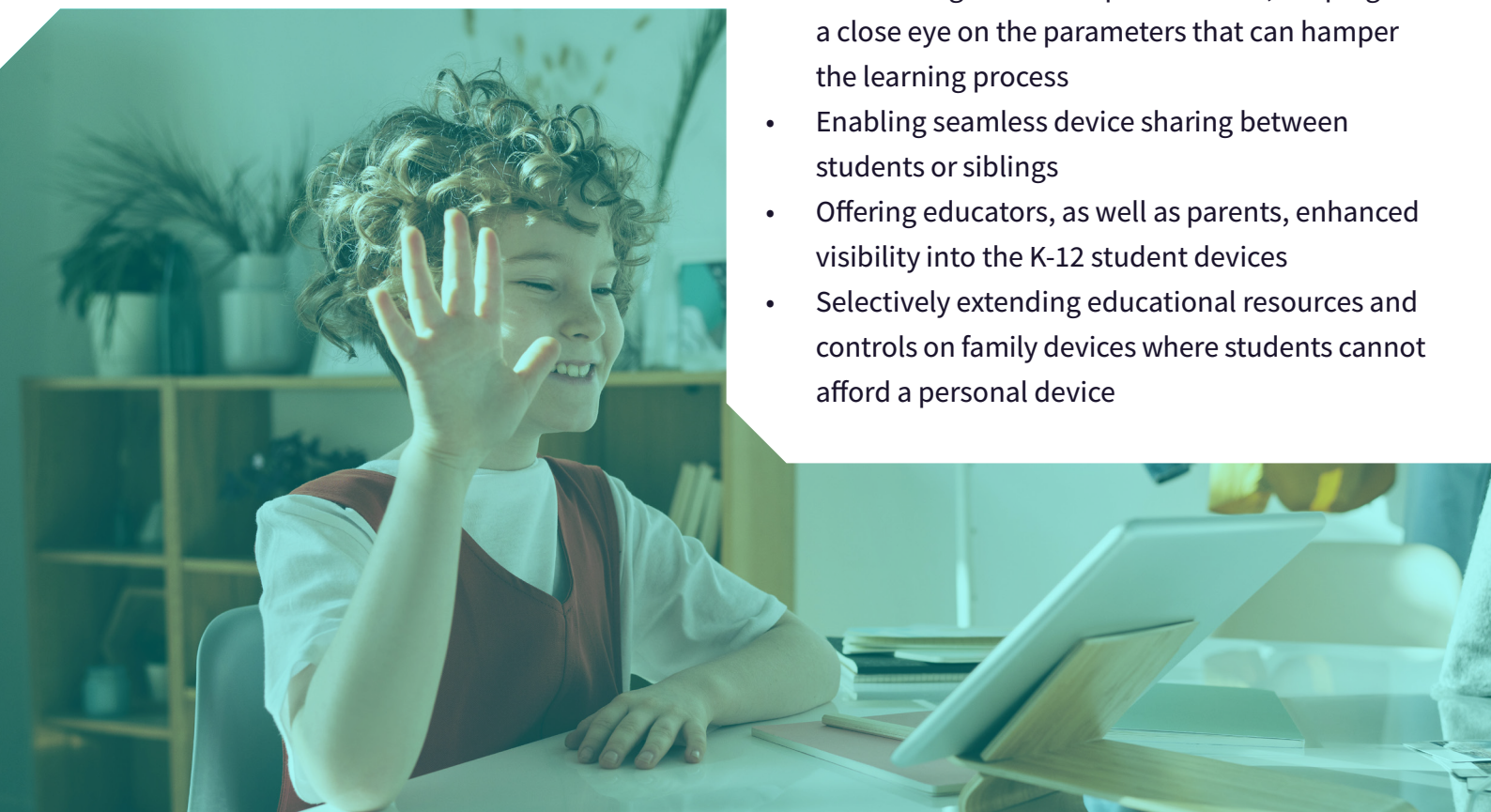
Challenges in online education and remote learning

No doubt that the use of technology opens up new opportunities and pathways for students and helps bridge various socio-economic gaps that would otherwise hinder their learning processes. With technology, every student across the globe can have equal access to learning material irrespective of geographical boundaries.

However, this black hole opened by technology can also create havoc in young minds if not used judiciously. And the responsibility to ensure that technology is not counter-productive for students lies with schools and educational institutions, the educators and the parents.

The challenges in online education can be summarized as follows:

- Enabling access to the digital devices
- Ensuring consistent access to the internet
- Making educational applications and course material available on every device
- Ensuring that the devices are used for educational purposes only, eliminating the possible distractions caused by the use of digital devices
- Creating a safe browsing environment for students to avoid cyberbullying and online impersonification
- Maintaining the device performance, keeping a close eye on the parameters that can hamper the learning process
- Enabling seamless device sharing between students or siblings
- Offering educators, as well as parents, enhanced visibility into the K-12 student devices
- Selectively extending educational resources and controls on family devices where students cannot afford a personal device





Scalefusion MDM for Education: The Way Forward

There can be no argument against the usage of digital devices for learning, especially in the post-pandemic world of uncertainty and ‘remote everything’. However, several institutions, as well as parents, need convincing when it comes to investing in a mobile device management solution for education. The apprehension does not arise because they doubt the effectiveness of the solution. Considering the challenges that are to be mitigated in digital education, the use of MDM is imperative and schools and educational institutions are well-aware of this.

The premonition against the use of MDM is most likely because of the complexity that MDM platforms bring about. Not all schools and educational institutions are well-equipped to manage a large number of devices, do not necessarily have the IT expertise or would not want to invest heavily in expanding the IT infrastructure.

Scalefusion resolves this by extending an easy-to-navigate MDM platform for education that can be used by a seasoned as well as a novice IT, has capabilities that reduce IT cognitive load, is cost-effective, all at the same time while mitigating the challenges of using digital devices for educational purposes.

A holistic approach to Device Management

Scalefusion amalgamates the legacy desktop management with modern mobile device management, understanding the need of having both for education. While some schools exclusively make use of iPads and Android tablets, there are institutions that still use Windows desktops and laptops. Having a one-stop solution for management of the entire device inventory across diverse operating systems is crucial and Scalefusion MDM for education does exactly the same.

So no matter which ecosystem the students or the educators choose to use, Scalefusion can be used consistently. The cross-platform support offered by Scalefusion enables provisioning and management for iOS, macOS, Android and Windows devices belonging to diverse make and model.

a) Simplified provisioning of devices

Enrolling devices into the MDM platform can be a pain point for school IT teams, considering the huge number of devices involved. Scalefusion resolves this concern by extending Out of the box enrollment for devices using the best-in-class enrollment options.

- Android Zero-touch enrollment for Android devices.
- Apple Device Enrollment Program within the Apple School Manager for iOS and macOS devices.
- Windows Autopilot Program for Windows desktops and laptops.
- Samsung KME-based Enrollment for Samsung devices.

b) Zero touch enrollment

With this type of enrollment, the devices are prepped and configured before unboxing and can be directly shipped to the student. On the first power-up, the devices are auto-enrolled into the Scalefusion management platform and the students can get started with using the device almost instantly.

On Scalefusion, the zero touch device enrollment is ushered in by:

c) User-initiated enrollment

This enrollment method involves user-initiation, either by scanning a QR code on the device or by using the URL-based enrollment. The step-by-step instructions for the same are received over the email by the student and they can voluntarily enter into the device management.

d) IT-driven bulk enrollment

For this enrollment process, the school IT team has to initiate the enrollment process but can enroll hundreds of devices in one go. The bulk-enrollment process on Scalefusion MDM is driven by:

- IMEI-based or Serial Number-based enrollment: IT can simply upload a CSV of IMEI or serial numbers on the Scalefusion platform and apply policies
- ROM-based enrollment: The Scalefusion is pre-configured in the device at the ROM level
- Active Directory (AD)-based enrollment: IT teams can invite student users to management by adding them directly from the ADs such as G Suite, Office 365 and Azure AD.

e) Other enrollment types

The other enrollment methods that IT can use to deploy policies include AfW (Android for Work) based enrollment where brand new or factory reset devices can be entered into Scalefusion management by tapping six-times on the screen and scanning the QR code.

For iOS devices, the enrollment can also be done using the Apple Configurator 2 method where devices are first supervised and then enrolled using the Apple DEP.



Policy Enforcement and Controls

Scalefusion extends exhaustive policy application on student devices to ensure a safe and secure online learning environment. These policies are not simply limited to device access but are also extended to content access and can limit the activities students can perform on the devices meant for educational purposes.

The policy management includes:

- Enforcing passwords for ensuring only authorized students can access the device
- Adding parental controls, web content filtering and blacklisting websites that are not age-appropriate
- Blocking social media access and access to gaming and entertainment applications
- Location tracking and geofencing if applicable to track student movements
- Tracking device usage, app-wise usage, battery, data and storage usage on the student devices
- Selectively applying controls to the school apps and content for BYO devices
- Enabling dynamic policy application based on location or time for seamless sharing of devices



Comprehensive Application Management

For the devices to be truly useful for educational purposes, the primary need is to configure the educational and other school apps on the device. With Scalefusion MDM, application management is a breeze. IT administrators can publish, configure, update and unpublish devices with no to minimum student intervention.

Scalefusion Application Management supports:

- Apps from google play store and Play for Work Apps for Android
- Apps from the App Store, licenses for which can be purchased in bulk using Apple Volume Purchase Program (VPP)
- Applications from Windows Business Store for Windows devices
- Private app publishing from Scalefusion enterprise store. IT admins can upload Android APK files (for Android), Plist Link/IPA files (for iOS), PKG files (for macOS) and MSIX/ APPX bundles (for Windows)

To ensure that the learning process is uninterrupted, the application installation and updates can be scheduled in a maintenance window.



Content Management

Collaboration is critical for digital learning and Scalefusion MDM facilitates the same by extending secure file sharing. Educators can push content files in the text, PDF, audio and video formats on the student devices and enable students to access the same on their devices via native apps by Scalefusion. The documents can be remotely updated or deleted ensuring that students always have access to the latest educational content.

For browsing, websites that are not age-appropriate can be blacklisted, while the trusted websites and forums can be whitelisted at the root level to enable students to access the online knowledge repository.



Security

Scalefusion eliminates the need of having any additional security software to maintain the security of the devices used in the educational environment. Scalefusion enhances the existing security features offered by the devices and builds upon the same to create a robust learning environment.

The security capabilities of Scalefusion include:

- Restricted access to the device powered by passcodes
- Certificate management-driven user authentication
- Disabled access to the App Store, the Play Store and the Windows Business Store to prevent malicious apps from being downloaded
- Web content filtering to block access to non-trusted websites
- Authorizing only selected devices for pairing
- Pushing email and exchange settings for safe communication
- Preventing changes to system settings, peripherals such as camera, connection to other devices via USB and Bluetooth, connecting to cloud-based services
- Preventing copy of data from school apps to personal apps on BYO devices
- Disabling device reset to avoid device misuse or handle device theft or loss
- Ensuring app updates and OS updates driven and initiated by the IT only
- Device lock, device wipe and device reboot to address any security concerns

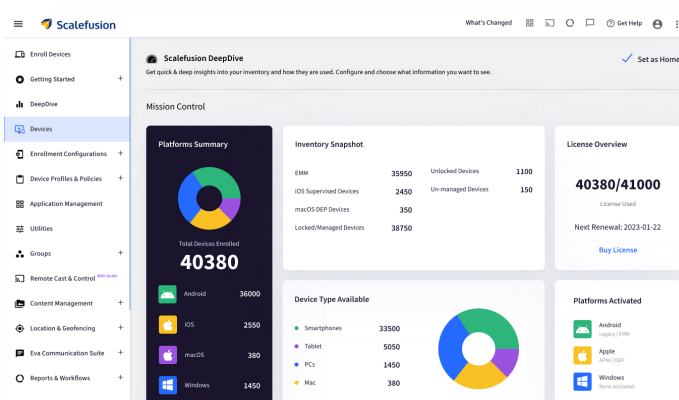
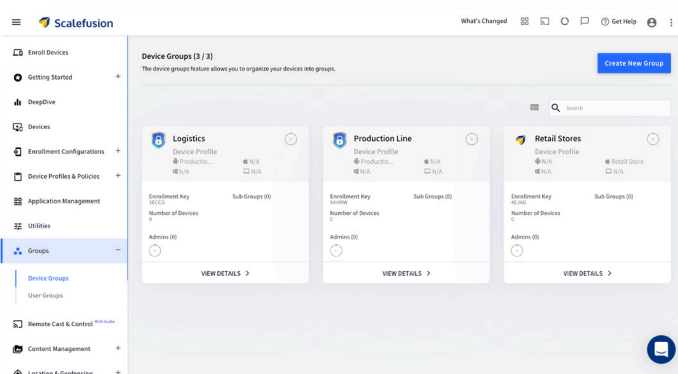
Inventory Management

Managing a large device inventory for a school or an educational institution goes above and beyond provisioning and configuration. The IT teams have to be on their toes to ensure all devices are functioning smoothly, the processes are hiccup-free and students have access to everything they need for learning-remotely or otherwise. To facilitate the same, Scalefusion MDM for education extends the following capabilities

a) Groups and subgroups for devices and users

IT teams can bifurcate the devices and the students in respective groups and drive management specific to groups. This can enable them to quickly deploy apps to a selective class or grade, or narrow it down to a smaller group of students who have taken up a particular course or a subject. IT admin can apply custom policies to devices within a group or subgroup without making changes to the policy settings for the entire device inventory.

For instance, a class has been given a mobile photography assignment, the cameras on the student iPads can be temporarily made accessible for that particular group and later the permissions can be retrieved.

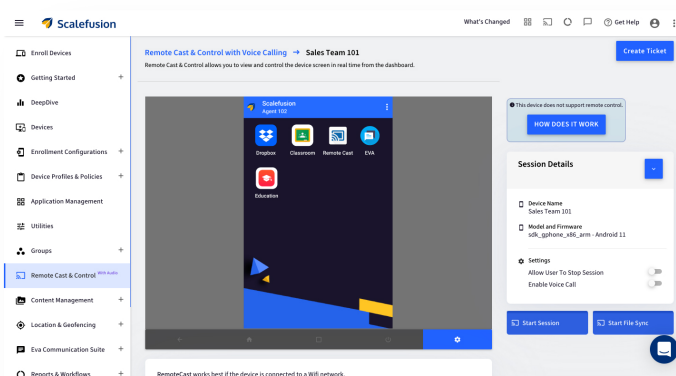
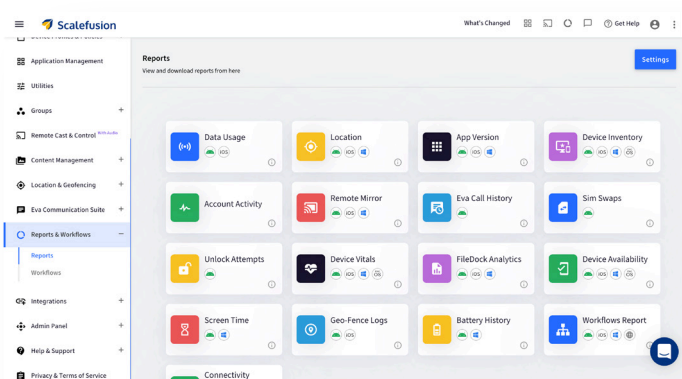


b) DeepDive for device vital monitoring

IT administrators can keep a close eye on the device vitals, location and security of the student devices using Scalefusion DeepDive. They can have a 360-degree view of the student devices, the OS versions running on them, the application versions and the make and model of the device. IT technicians can further track battery, data, storage usage on each device, quickly tap into security alerts such as multiple failed password attempts and take action.

c) Workflows and reports

To ensure smooth functioning of student devices, IT teams can automate alerts on the devices for data, battery and storage usage. This can prompt the students to take swift actions before school hours. IT can also schedule a device reboot or regularly check for security and compliance issues with appropriate workflows. Comprehensive reports can be auto-generated to keep track of everything that's happening with the device.



d) Remote support

If the student device or an app runs into an error, it can cause a major hindrance to the learning process. To quickly address this, IT teams can leverage Scalefusion Remote Cast and Control where the student device screen is mirrored on the dashboard, on select devices, IT can navigate and perform actions, sync files and resolve the issues. IT teams can also create context-aware support tickets with screenshots and screen recordings on integrated third-party ITSM platforms. This ensures that the students do not miss out on learning because of technical glitches and the issues are addressed quickly and at minimal physical efforts and costs.





Case Study 1

Scalefusion's comprehensive solution helps an EdTech solution to provision and manage tablets for distance learning.

Who?

World's most-valued EdTech company with more than 15 million users providing Educational content along with devices for K-12 education and competitive examinations.

Key Challenges

- Bulk device provisioning
- App & website whitelisting
- Enabling device sharing
- Remotely updating apps and OS
- Monitoring device usage
- Limited parental controls
- Remote support

Scalefusion Solutions

- Customized & dedicated Parent Portal
- Disable Play Store access
- Configure browser settings
- Prevent uninstall of EdTech apps
- Block Factory Reset to avoid misuse
- Remote device monitoring & troubleshooting



Case Study 2

Scalefusion MDM for education helps an educational institute in managing devices used for K-12 learning.

Who?

An educational institution focussing on early childhood education to high school, based out of Rio De Janeiro, Brazil.

Key Challenges

- Blocking non-educational apps
- App download restriction
- Monitoring device usage
- Publishing school apps
- Avoiding device misuse and unauthorized access
- IT cognitive load in device management

Scalefusion Solutions

- Password Protected Kiosk Mode
- Authorized & secured usage of the devices
- Cloud-based remote monitoring and management of their devices
- Application Whitelisting
- Private app publishing via Scalefusion Enterprise Store
- Streamlined management with easy to use dashboard



Case Study 3

Scalefusion helps a UK-based school to extend flexible access to learning resources to its students.

Who?

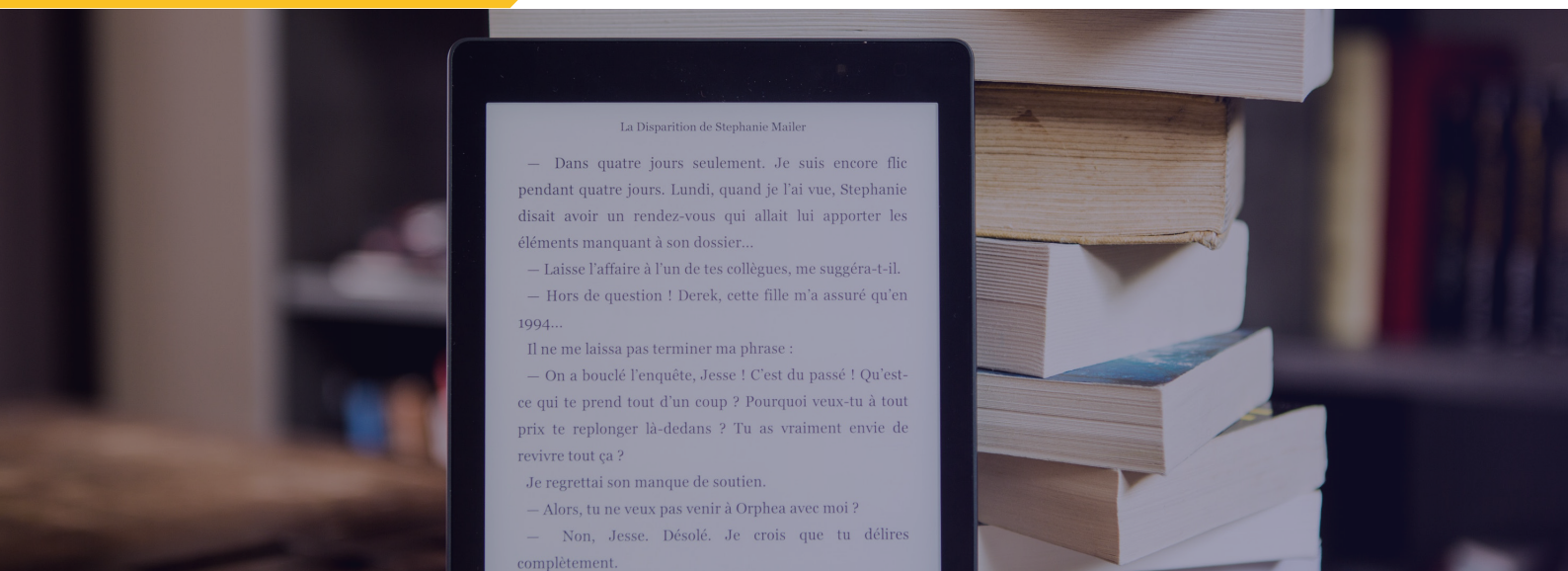
One of the top secondary schools in Salisbury, South Wiltshire, England providing high-quality education to more than 1000 students, including over 376 students in the sixth form.

Key Challenges

- Remote management of Android tablets
- Blocking non-educational apps
- Disabling unmonitored access to the web on school WiFi
- Reflecting school branding on the devices
- Device security against loss or theft

Scalefusion Solutions

- Application whitelisting and blacklisting
- Controlled browsing with Scalefusion kiosk browser
- Website whitelisting
- Custom UI and branding with Android kiosk mode
- Real-time location tracking
- Remote wipe for lost or stolen devices



Summary

Scalefusion MDM for education opens up opportunities and possibilities for student enablement via digital devices. Understanding the futuristic demands of digital education, Scalefusion manages to offer capabilities that perfectly fit the needs of schools, educators and educational institutions across the globe. Scalefusion's dedicated support makes the device provisioning, onboarding and management journey a cake-walk for the IT teams, in turn facilitating a quick turn-around time for digital enablement of students for K-12 and beyond.

Try it now for free

Register for a free 14-day evaluation at www.scalefusion.com

Get a Demo

[Request a demonstration and see how Scalefusion can help you in managing your devices and securing your corporate data.](#)

Book a Demo

About Scalefusion

Ambitious companies around the world trust Scalefusion to secure and manage endpoints including smartphones, tablets, laptops, rugged devices, POS, and digital signages. Our mission is to make Device Management simple and effortless along with providing world class customer support.

Enterprise Sales & Partnerships

sales@scalefusion.com
partners@scalefusion.com

Call Us

(US) +1-650-273-5999
 (INDIA) +91-8499-835020

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