

# Choosing a Complete Technology Solution for the Classroom

## Executive Summary

Technology continues to play an important role in the classroom, providing teachers and students with innovative tools to expand and enhance the learning process. In a recent Microsoft survey conducted in September 2015, Parents and Teachers on Education, 88 per cent of teachers and 84 per cent of parents agree with using tech in the classroom; and 84 per cent of teachers reported the use of technology leads to higher student engagement with lesson plans.

However, the vast number of devices and services available on the market may make choosing the most appropriate and cost-effective solution a daunting task for some educational institutions. Issues such as mobility, power, functionality, accessibility, ease-of-use, productivity and learning tools all need to be considered in order for the right decision to be made. Technology product and service providers can work with schools in order to properly assess their needs to build and deliver a tailor-made, end-to-end solution.

## Power and Mobility

Choosing the right hardware can be just as important as selecting the proper software. Traditional desktops offer robust systems, but lack the mobility that is necessary for students to function in multiple classroom environments. While tablets are easily portable, they lack the power, functionality and memory necessary to conduct intensive operations. As a result, many schools prefer the use of laptops which are mobile and offer the necessary adaptability and functionality.

There are a wide range of laptops on the market that are ideal for school use, not only from an affordability perspective, but also because they offer a robust set of capabilities and features. Low-cost leading brands include select models of the Acer Aspire Switch 10, ASUS EeeBook, ASUS Transformer T100HA, Lenovo

N22, Lenovo B50-80, HP Probook 11E G2, and HP Stream 11 Pro G2. These devices have the power and capacity to handle the most arduous student tasks.

Many of these devices are ruggedized and can easily be subjected to the wear and tear that invariably occurs in the school environment. Additionally, laptops such as the Lenovo N22 have water-resistant keyboards for the occasional accident-prone student, and a 180-degree camera that is ideal for hosting Skype in the Classroom sessions. Many of these devices also have a Trusted Platform Module (TPM) chip for enhanced security, and 2x2 wireless to better handle large bandwidth use.

Most importantly, these laptops are Windows-enabled. According to the Parents and Teachers on Education survey, 86 per cent of teachers and parents consider Microsoft Office to be the best productivity tool to prepare students for post-secondary readiness, above similar offerings from Google and Apple. Eighty-five per cent also consider Office applications to be the best tool for career readiness, recognizing the important role the solution plays in today's job market. Additionally, a recent IDC study revealed Microsoft Office to be the third most looked for skill by employers in high growth/high wage positions.

Yet the appeal of Windows goes beyond its impressive feature set. A recent study by Principled Technologies examined a series of school-related media tasks by different operating systems, paying close attention to network traffic. It found that systems running on Windows used significantly less bandwidth than the leading competition. The reason for this is simple: Windows does not use Web-based software as many of its applications are installed on the device. As a result, many tasks can be performed without an Internet connection or a local wireless network.

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Competing devices that use Web-based software must be constantly connected in order to function. While the cost of the hardware may be low, the non-stop need for network access can prove costly in the long-run. Since most school systems have limited funds and limited broadband access, Windows systems offer a wiser investment. In addition, having multiple devices frequently connected simultaneously in order to conduct simple operations puts a strain on the network, and could slow down processes.

### Learning Tools

Microsoft Office 365 is one of the most desired Windows applications by teachers, due to its vast array of features that can broaden the education experience. Windows 10 supports a wide range of learning peripherals and education apps. Microsoft Edge is an interactive internet experience that allows the user to mark-up webpages and read online articles free of sidebar distractions, while also having enhanced backward compatibility for older sites. Cortana, a voice-activated personal assistant, can help with faster online and device searches, as well as reminders. And with Snap Assist and virtual desktops, teachers are able to stay organized and greatly increase work output.

There are also built-in tools that can read screens aloud, convert voice to text, or magnify displays, greatly improving accessibility to students of all abilities. Split screen functionality, file-hosting service OneDrive, and OneNote, a digital notebook app that can be shared across multiple devices, can further increase collaboration and provide dynamic and interactive lessons.

The Skype in the Classroom section at Microsoft's education page enables teachers and students to communicate with over 70,000 other classrooms around the world, for the ultimate in inter-school collaboration. All these solutions are brought together in one convenient application for a creative, collaborative and productive learning environment that is quick and easy to set up and deploy.

### Training and Professional Development

While students are reaping the benefits of more effective learning, teachers can vastly improve their teaching arsenal with time-saving tools, more impactful classroom experiences, enthralling lesson plans and easier classroom management. For example, wireless projection, digital inking and content, as well as pen and touch functionality provide the ability for engaging lessons, quicker and natural feedback, full classroom mobility and easier collaboration. Teachers can also take advantage of training programs, such as Microsoft in the Classroom workshops, and

no-cost, self-directed professional development resources found on the Microsoft Educator Network.

### Simplified Deployment

A complete technology education solution is not just the concern of students and teachers. The school's superintendent and principal, as well as its IT department, also have priorities. Along with driving improved student performance and professional development, school leaders are also looking to keep costs low when possible. IT professionals need to make sure new solutions are not only safe and secure with adequate data protection, but can also integrate with existing technology.

Lightspeed Systems Management Bundle for Windows is a low-cost, end-to-end solution made just for schools, that saves precious instruction time and IT resources with delegated management, personalized dashboards, and one-click policies. With cloud-based management and multi-OS support, schools can choose the package that best suits their needs. Packages range in price from \$30, \$40 or \$50. The complete bundle includes:

- Mobile Manager: Admin/Teacher dashboard; push apps and policies; and, lock devices for testing – teachers can easily manage all classroom activity, and Microsoft Office 365 gives them the ability to create quick and effective lessons.
- Classroom Orchestrator: View student screens; remote control/manage screens; and, screen broadcast – allows teachers to manage devices and expand or restrict web access, to ensure students are kept on task.
- Web Filter: Teacher-controlled timed policies; report on web activity; and, off-network CIPA compliance and security – administrators can control hundreds of device policies with easy controls, for enhanced security, and student online safety on and off-campus.

### Creating the Solution

The importance of technology in the classroom cannot be overestimated, both as a device for better learning and as a management tool for education professionals. However, finding the best solution for individual schools can be difficult, especially given the number of products and services on the market. Technology product and service providers, like CDW Canada, can work with schools in order to properly assess their needs. CDW Canada has experienced technology experts who can collaborate with leading device, software, and service partners to build and deliver the ultimate tailor-made, end-to-end solution while accommodating timing and budgetary needs.