

Identifying the Right Technology Solutions

An IT procurement checklist for K-12 schools

Do you need to stay within budget limitations while addressing user needs and ensuring sustainability?

These 14 questions can help you determine the appropriate mix of technology solutions for your learning environment.

Meet with your team to review the checklist before you make any investment in hardware or software.

The goal is to maximize resources and avoid pitfalls while building a long-term, cost-effective technology platform that meets the needs of both users and IT.

1. **Student grade levels: What factors should you consider with respect to grade levels?**

Younger students may need computing devices with greater durability and ease of use, as well as different levels of security. They may be better served by external rather than on-screen touch keyboards, depending on your teaching and learning objectives. Older students, in contrast, will probably need the power and performance to run more sophisticated applications and multimedia programs.

2. **Portability: How much wireless mobility do you need for a successful implementation?**

Mobility is likely to be one of your top priorities, as in most K-12 schools, and it is important to determine the right mix of PCs, laptops, and tablets. Consider whether you still need to support some computer labs with desktops or even high-powered workstations, depending on the requirements of your schools and grade levels.

3. **Durability: What are your expectations for ruggedness in devices?**

Students—and teachers—can be tough on computers. Ask your vendors to provide you with evidence of their devices' durability. Find out whether the devices have withstood rigorous durability tests such as the MIL-SPEC military specification testing. Given the potential for drops, dings, and spills in a school setting, evaluate warranty and service options to minimize replacement and repair costs.

4. **Operating system: Which is better for your environment?**

Many schools already rely on the Windows® computing platform, while others rely on tools and applications from Apple® and Google™ for both traditional (MacOS®, Google Chrome™) and PC

Consider factors such as **portability**, **durability**, and the need for **multimedia graphics**.

Plus (Apple iOS™, Google Android™) needs. Windows and Android choices are growing in popularity with users and IT teams due to their flexibility and easy app customization, in contrast to the Apple system, which relies exclusively on the iTunes® store. Remember the OS will also influence your data storage choices, so make sure you factor in server versus cloud storage preferences. Lastly, be sure to consider issues of existing network compatibility and security—Windows devices more easily integrate with your existing security and management tools than Android or Apple devices.

5. **Size: What is the appropriate mix?**

The larger screens of desktops and all-in-ones give students more “real estate” to work with, while laptops, notebooks, and tablets offer a wide range of screen sizes. Consider factors such as portability, durability, and the need for multimedia graphics when determining the appropriate mix of screen sizes for your environment. You also need to understand any digital assessment requirements—screen size matters.

6. **Connection ports: Which peripherals will your students and teachers need?**

Which external devices will your users need to plug into their computers? How many USB or HDMI ports will be necessary? Desktops and laptops typically offer more options than tablets, and some consumer-focused tablets like iPad® lack USB support. For maximum flexibility, look for devices with built-in HDMI ports that can connect to projectors, large screens, and other multimedia devices, as well as SD card slots for fast and easy file transfers.

7. **Multimedia: What capabilities do you need?**

Do you want to enable robust student interaction, group collaboration or distance learning? Do you need laptops with the power and memory to support video editing and gaming? No matter your needs, make sure your hardware choices have the graphical capabilities, cameras, speakers, displays, audio technology, and processing ability you need to meet your objectives. Make sure you check if your preferred software applications are available on the platforms you are considering.

Battery life problems can become a major disruption, so plan accordingly.

8. Connectivity: What do your students and teachers need to access?

Even with Wi-Fi available on most devices and in many schools, you often need to go one step further. If your students require access where there is no connectivity—at home or in the community—you may need to add WWAN. New innovations like wireless display (WiDi) and Near Field Communications (NFC) can also transform how digital classrooms are managed.

9. Battery life: How long should devices work between charges?

Some mobile devices have batteries that last six hours, while other batteries last eight or nine hours or more. Although this may appear sufficient, battery life problems can become a major disruption, so plan accordingly. Consider whether you have enough electrical outlets per classroom, if external power sources or surge protectors are needed, mobile carts also offer portable charging and new device innovations like RapidRecharge can extend student productivity.

10. IT management: How much control do you need over your devices?

If you need to maintain strict control over deployment and maintenance, look for devices and services that support zero-touch configuration and easy remote management. Powerful Microsoft and Intel® tools, along with solutions like webNetwork from Stoneware, help IT deliver superb end-user productivity without compromising security or manageability.

11. Security: How much security do you need to protect your data and devices?

To protect your investment, look for comprehensive security tools that include secure components and advanced security features. Windows 8.1 Pro comes with robust BitLocker disk encryption built right in, and fingerprint readers protect data and anti-theft options such as Absolute Software's Computrace can aid in recovery if a device is stolen or lost. New ideas like webNetwork also let you unify important applications and resources inside a secure, single sign-on cloud platform.

Extended warranties negotiated before you buy **are extremely effective** in the long run.

12. Energy savings: How does energy usage affect your operating costs?

To drive down energy consumption and operating costs, select technologies that meet ENERGY STAR® requirements. Also look for device utilities that shut down and boot the devices on a set schedule, to reduce energy consumption.

13. Warranties: Is extra protection really necessary?

In making this decision, consider the availability of your tech support staff and their ability to service current and future purchases. Also bear in mind that extended warranties negotiated before you buy are extremely effective in the long run. Schools that demand a lot from their computers should opt for a three-year extended warranty, particularly on mobile devices.

14. Price points: How can you maximize your computer budget?

First, carefully compare prices and features. Then consider total cost of ownership, looking beyond the initial price to issues like durability and projected up-time that dramatically impact long-term costs. Always take advantage of pre-negotiated contracts, and carefully compare costs when you are looking at general service contracts. Public schools should find out if vendors participate in any state contracts such as WCSA, and take advantage of the available discounts, while independent schools should consider banding together for volume purchasing.

For more information about on building your IT infrastructure, visit www.lenovo.com/education or contact a Lenovo rep at eduteam@lenovo.com.