A Buying Guide for Education

Teaching and Learning Platforms

It can be challenging to find the best learning and teaching platforms for students and teachers in today's schools. These platforms must often support a wide range of in-school and out-of-school activities, while being affordable, manageable, durable, and secure.

When schools buy platforms based primarily on price, they often find it difficult to adapt the platforms to meet the daily learning and teaching requirements of students and teachers. Analyzing how students and teachers will use the devices, determining the lifecycle of the equipment, and looking at current and future application and operating system requirements will help you to make a solid platform decision. By examining more than the up-front capital cost, you are much more likely to drive a better solution set for your school.

There are many different education technology solutions available today. Combined hybrid approaches—where platforms are supported by servers delivering a mix of installed and streamed applications and operating systems—offer the best in flexibility, performance, and cost efficiency. Whatever your decision—from desktops to tablets to cloud computing —Intel has the technologies and products to meet your needs.

Here you will find some basics to help you get the right fit for your school population, curriculum, pedagogical repertoires, and IT requirements.

> Start Here

There are two essential questions you will want answered when making your purchase decision. The answers will depend on what's going on in your school.

How will the platforms be used?

Learning	Teaching	Administration

You need a platform that supports:
The full spectrum of learning activities, including content creation, research, collaboration, demonstration of knowledge, and access to lessons and Internet materials.

You need a platform that supports:
A wide range of classroom management and pedagogy—from creating curricula materials and providing digital feedback to online collaboration and Internet research.

You need a platform that supports:
Front office tasks by the administrative staff, such as data entry, recordkeeping, communications, and scheduling.

Your Platform Choices:
For learning platforms, mobility is a key feature to consider. Students move throughout the classroom and the school during the day, then return home and do homework. For learning, as for teaching, tablets represent the ideal form factor, as students can more readily engage in math and science (this is difficult on a keyboard, e.g., sketching the cooling curve). While you can choose between desktops housed permanently in libraries, labs, or classrooms, and mobile tablets or laptops that may be used either within school, or both in and outside of the classroom (e.g., library checkout models and/or carts)—in an ideal 1:1 learning environment, each student has their own mobile platform for use at school and at home.

Your Platform Choices:
For teaching platforms, mobility is a key factor. Teachers work throughout the classroom space, the school, the district, and at home. A mobile laptop or tablet will work well, as long as it has the performance and capability to support the full range of teaching activities and systematized professional development.

Mobile: A full-featured tablet is ideal, as it provides the ability for the teacher to easily annotate student work—it is the best fit for the full repertoire of rich pedagogy. Netbooks or laptops can get the job done, but do not enable digital pens, which truly enhance teaching efficacy. In all cases, mobile devices with enhanced manageability and security are recommended.

Desktop: A full-featured desktop with enhanced manageability and security is an option. (However, lack of mobility represents a significant limitation.)

Your Platform Choices:
For administrative platforms, mobility is generally not a requirement, so desktops, laptops, and netbooks are all good options depending on budget and desired level of performance.

Entry Level: Netbook or laptop

Advanced: Desktop or laptop with enhanced manageability and security

Mobile

Grades K–6: Tablet, notebook, tablet style netbook, or netbook

Grades 7–8: Tablet, notebook, tablet style netbook, or netbook

Grades 9–12: Full-featured tablet or notebook laptop

In all cases, enhanced manageability and security are recommended

Desktop

Grades K–6: Desktop

Grades 7–8: Full-featured desktop with enhanced manageability and security

Grades 9–12: Full-featured desktop with enhanced manageability and security

How much performance and manageability do I need?

Performance	+ Manageability	= Type of Processor
Grades K–6: Need an energy-efficient, durable platform to complete lesson activities, use Internet for research and collaboration, and use school software applications	No integrated management capabilities required	Intel-powered classmate PC or Intel-powered convertible classmate PC with the Intel® Atom™ processor
Grades 7–8: Need an energy-efficient, full-sized, capable platform to support graphics, video, research, collaboration, and multitasking across multiple applications	No integrated management capabilities required Or Basic integrated management capabilities	Intel® Atom™, Intel® Core™2, or Intel® Core™ i3 processor Intel® Atom™, Intel® Core™ i3 or Intel® Core™ i5 processor Optional with Intel Core: Include Intel® vPro™ technology for out-of-band management of platforms
Grades 9–12: Need an energy-efficient, high-performance platform for adult workloads, data analysis, modeling and visualization, video encoding and editing, Internet usage while managing other content, research, collaboration, and multitasking across multiple applications	Basic integrated management capabilities	Intel® Atom™, Intel® Core™ i5, or Intel® Core™ i7 processor Optional with Intel Core: Include Intel® vPro™ technology for out-of-band management of platforms
Teachers and Higher Education: Need an energy-efficient, high-performance platform for adult workloads, classroom management (for teachers), data analysis, modeling and visualization, video encoding and editing, Internet usage while managing other content, research, collaboration, and multitasking across multiple applications	Advanced integrated management capabilities	Intel® Core™ i5 or Core™ i7 processor with Intel® vPro™ technology

Going Mobile

If you select a mobile platform, you have some exciting options.

Tablets (Convertibles)

Offer a keyboard, as well as a stylus for drawing and annotating. Ideal for a wide range of software applications, Internet and email access, and integrating technology across the curriculum, including mathematics, science, and engineering coursework.

Netbooks

Offer a smaller screen and keyboard, along with the lightest-weight mobility. Ideal for using software applications, and for Internet and email access. Recently, tablet-style netbooks have been made available.

Laptops (Notebooks)

Offer a full screen, keyboard, and the capability to view video. Ideal for a wide range of software applications, videos, gaming, and Internet and email access.

What about Budget?

Now that you've determined the type of platform and processor, you can make a final decision based on budget.

Good:

Reliable basic computing based on the Intel® Atom™ or Intel® Core™2 processor.

Better:

Smart performance, content creation, and an improved visual experience are supported by the Intel® Atom™ or Intel® Core™ i3 processor.

Best:

Smart, high-performance, optimal multitasking, and room for new applications are fully supported by the Intel® Core™ i5 and Core™ i7 processors, with the added security and manageability of Intel®vPro™ technology.

Moving Forward

We hope this quick guide has been useful in understanding some of the key decisions in selecting the right platforms for your school. Your Intel representative or technology solution provider can help you take the next steps, as well as answer questions about deployment, service, support, and regulatory compliance.

For more information visit **www.intel.com** or contact the technology solution provider of your choice.