Dell Latitude 2120
netbook

Dell Inspiron duo convertible tablet

Dell Latitude E6520
laptop

Mobile platforms open up a new world **of Connected Learning**

By Adam Garry and Casey Wilson

Are your students consumers or producers? How do they go about learning? As school districts map out a 21st-century curriculum, mobile computing platforms play a pivotal role in inspiring children to reach for the stars—with a bright educational outlook.

Gone are the days when teachers required students to flip the "off" switch before entering the classroom. The pervasiveness of computers in daily life and in the workplace is making technological fluency an essential aspect of school curriculum from the earliest grades. Access to information is critical to the learning process. Given a diverse mix of mobile devices to choose from, it is important to recognize the capabilities that empower learning both inside and outside the classroom.

Educators are already achieving breakthrough results by studying—and embracing—how children use personal technology in their daily lives. Technology engages students. It broadens the curriculum by allowing children to absorb and produce information according to

their own learning styles and needs. It enables teachers to personalize learning for each student. And it supports dynamic communication and collaboration, enticing students to learn from each other and acquire valuable skills such as self-direction and critical thinking that will serve them well in their college and career decisions.

School districts are looking to invest in technologies that deliver the best educational outcomes and leverage existing investments for the lowest total cost of ownership.[1] It is imperative that the vision for a digital learning environment be developed with the assistance and support of technologists, curriculum departments, education specialists, administrators, teachers, students, and parents to achieve the desired learning outcomes.

Many portals to the Connected Classroom

Instructional goals, student outcomes, student learning styles, student abilities, and the way students at different grade levels naturally interact with technology are key factors determining which types of computer learning devices to introduce into the classroom. Many devices excel in one area—for example, e-book readers are suitable for viewing but not authoring content. With limited technology funding, school districts may find that versatile mobile computers lead to the most productive student outcomes.

Netbooks: Compact and durable for content creation

Light and ultracompact netbooks designed specifically for education are an excellent way to introduce students to digital learning. The Dell™ Latitude™ 2120 netbook enables easy collaboration, quick connectivity, and simple access to digital content that expands learning horizons. Student-friendly design features include an extra-durable rubberized case, optional carrying handle, and optional tamper-resistant keyboard featuring antimicrobial protection.[2] Up to 9.6 hours[3] of battery life enable students to complete a full day of classes without recharging the netbook—and three customizable color options allow schools to show their colors. To learn about an efficient way to store, charge, and centrally manage software updates for Dell Latitude netbooks, see the sidebar, "Teacher's pet."

Three optional anti-glare LED displays enhance the viewing experience with optional

Dell Streak 7 slate

high-definition resolutions, allowing multi-touch natural gestures and 90/180/270-degree image rotation for comfortable e-reading. Optional Intel® Atom™ Processor N550 dual-core processors enhance application and multitasking performance. Preinstalled Blio eReader software provides easy access to a large library of educational content. In addition, commercial-grade support options (available for Dell Latitude products) include remote systems management, accidental damage protection, and managed transitions—helping ensure that district IT staff can get help when they need it.

Laptops: Powerful performers for complex applications

Appropriate for students who need heightened content creation and collaboration capabilities, laptops offer mobile, full-featured versions of powerful desktop computers. In particular, laptops support large, complex applications that are designed to run more efficiently on a local system than over the network, such as video editing software.

For example, the Dell Latitude E6520 laptop strikes a balance between mobility and performance for students with advanced computing needs. A 15.6-inch, anti-glare LED display with an optional dedicated video card makes this laptop an outstanding educational tool for students doing intensive graphics or video work. This third-generation E-Family laptop now comes standard with a numeric keypad on the keyboard, and offers an optional touch screen. In addition, the Dell Latitude E5420 laptop offers a 14.1-inch screen and rock-solid mobile performance.

Convertible tablets: Versatile presenters flip between slate and laptop

Designed primarily for content consumption, tablets are an exceptionally versatile category of devices that come in several varieties. Teachers and students often prefer tablets for tasks such as reading classic literature or reviewing notes.

[1] For an overview of infrastructure requirements, see "Assessing technology readiness to support digital learning initiatives," by Martin Yarborough, in *Dell Power Solutions*, 2011 Issue 1 *Connected Learning* special edition, content.dell.com/us/en/enterprise/d/business~solutions~power~en/documents~ps1q11cl-20110197-anthony.pdf.aspx.

[2] Keyboard surface treated with Agion® antimicrobial protection, an ionic silver technology that is registered with the U.S. Environmental Protection Agency. Antimicrobial protection is limited to the treated article. Such protection does not extend to the user.

[3] Battery life results for the Dell Latitude 2120 netbook equipped with optional six-cell battery and optional solid-state drive are based on MobileMark® 2007 benchmark tests. For more information about this benchmark, visit bapco.com. Battery life may vary significantly depending on product configuration, software, usage, operating conditions, power management settings, and other factors. Maximum battery life decreases with time and use.

Teacher's pet

Designed to charge up to 24 Dell Latitude netbooks at once, the Dell Mobile Computing Station 2.0 also provides an efficient way to centrally manage security and software updates. Wake-on-LAN capability allows the IT team to deliver updates remotely while the netbooks are locked up and charging. During the school day, a wireless access point with a rugged work surface puts the Mobile Computing Station at the head of the class.

Dell Mobile Computing Station 2.0 keeps student computers charged and ready

A productivity suite for unfettered creativity and collaboration

By running Windows® 7 together with Microsoft Windows Live® Essentials and Office 2010 suites on Dell Latitude and Inspiron systems, schools can equip students and teachers with a powerful set of educational tools. These learning platforms advance productivity, collaboration, and creativity in the classroom and beyond. Familiarity with these tools will also vest students with lifelong skills, given the pervasive use of Microsoft software in college and career venues.

Windows Live Essentials—which comes preinstalled at no extra cost on Dell Latitude netbooks, laptops, and tablets that ship with Windows 7—delivers a set of applications that inspire creativity and communication, from touching up photos and producing beautiful slide shows to connecting with others through e-mail, instant messaging, and social networks.

Photo and video editing tools let students and teachers create engaging, entertaining content with course material, while Windows Live Mesh keeps photos and documents in sync so groups and classes can collaborate easily. Microsoft Messenger supports access through virtually any tool—including mobile phones and Web browsers—helping classmates, teachers, and parents stay in touch. The Writer publishing tool encourages students to publish their own material on the Internet with integrated photos and videos, maps, widgets, and metatags. At the same time, parental control features enable Web site filtering with a watchful eye on students' online activities.

Office 2010 gives teachers and students helpful ways to stay productive and collaborative using the Microsoft PowerPoint®, Microsoft Word, and Microsoft OneNote® applications. In addition, this version extends the Office suite seamlessly from the desktop to the Web and to mobile devices with Web Apps—enabling collaboration, creativity, and learning to take place anywhere from a supported Web browser.

Complimentary classroom resources from Microsoft also help make lessons interactive and engaging. For example, Mouse Mischief integrates into PowerPoint 2010 and PowerPoint 2007, letting teachers insert questions, polls, and drawing-activity slides into lessons. Students can actively participate in these lessons by using their own mice to click, circle, cross out, or draw answers on the screen. For budding astronomers, WorldWide Telescope turns student computers into virtual telescopes designed to show images from the world's finest ground and space-based telescopes.

Full-featured convertible tablets like the Dell Latitude XT2 Tablet PC feature a hinge that lets users convert the device into either tablet or laptop mode. The touch screen allows input through fingertip or charged stylus. Coupled with a sleek, ultraportable design, these options make convertible tablets an excellent platform for tasks such as note taking, classroom evaluations, and projector-based lessons—as well as intuitive content browsing.

The Dell Inspiron™ duo convertible tablet provides a cost-effective alternative when robust full-featured laptop performance is not required. Its innovative design, with a single hinge that lets users flip the screen while keeping the bezel in place, makes the Inspiron duo a good candidate for classroom activities that emphasize both content consumption (in tablet mode) and content creation (in traditional clamshell mode).

For peak portability, the Dell Streak 7 is a pure slate device without a keyboard. The Streak 7 is an exceptional educational offering that features a 7-inch touch screen and the Google Android™ 2.2 mobile technology platform, which is a Flash-compatible OS to make browsing, reading, and watching content easy. A forward-facing Webcam and a rear-facing 5.0 megapixel camera make the Streak 7 suitable for video chatting and live collaboration between students and teachers. Moreover, a shortcut to BrainPop—an animated Web site with a wealth of educational content—comes preinstalled on Streak tablets.

Focus on function

Determining the most appropriate mobile learning devices for students at different grade levels, and with different learning styles, is key when transitioning to digital content and collaboration technology in a Connected Learning environment. By carefully considering how the curriculum calls upon students and teachers to interact both with educational tools and with each other, schools can enrich the learning experience and enhance educational outcomes seamlessly and cost-effectively. PS

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dell.com/connectedclassroom

Dell K–12 education:
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Microsoft classroom resources:
microsoft.com/education/teachers