Today’s students are immersed in technology in nearly all aspects of their lives, except when they are in school. Yet, the digital revolution provides new learning opportunities that are increasingly abundant, in which students are learning all the time—online, offline, in classrooms, as well as after school in homes, community centers, libraries and museums. With a vast array of knowledge and resources available at the click of a mouse or the touch of a screen, students can truly learn at any time, any place, and at any pace.
Advancements in technology and productivity over the last decade demand new ways of integrating current and future technological innovations into public education. Policymakers are working to provide all students with high-quality learning options, regardless of where they live or which school they attend. Many states are exploring the role laptops and other mobile computing devices can play both in and out of the classroom. They are funding upgrades to technology infrastructure to support multiple computers using the Internet at once. And, they are helping teachers and other educators incorporate technology in ways that engage and excite 21st century learners.

As technology becomes an increasingly invaluable tool in today’s classrooms, state legislatures are designing policies to fund and support its use in schools. Digital learning tools have the potential to enable personalized learning, in which students and teachers have access to learning at any point, so students can move on to the next level or get additional help when they’re struggling. Yet there is a lot more to personalized learning than simply ensuring that every student has access to a computer. Teachers need to be adequately trained to incorporate technology into the daily curriculum and instruction. Students will be better served if they are using technology as an ongoing part of the learning process, rather than as a separate activity. Schools serving low-income families in both urban and rural communities often have fewer resources, which may increase the opportunity and achievement gaps between well-off and disadvantaged students.

Providing or Enabling Digital Devices and Content

States are increasingly providing or enabling digital devices and digital content for students and faculty to use in school and at home.

**UTAH**

- **SB 150** (2014) authorizes the state Education Task Force to make recommendations for funding and implementing a technology initiative that would provide a digital learning device for every student state-wide.

**OREGON**

- **HB 2426** (2013) allows students to use their own personal electronic devices in academic settings, requires students using their own personal devices to be given access to the same technology as students not using their own electronics, and encourages school boards to consider textbooks that include online resources that are free of charge to students.

**ALABAMA**

- **HB 165** (2012), relating to public education grades nine through 12, would provide all students and teachers with approved textbooks and instructional materials in electronic format (where available). It would also provide a pen-enabled tablet, mobile computer or similar wireless electronic device for storing, reading, accessing, exploring and interacting with digital textbooks and other instructional materials (where feasible). In addition, the bill provides for funding sources through bonds.

**KENTUCKY**

- **SB 95** (2012) directs the Legislative Research Commission to establish the Task Force on Student Access to Technology to develop a strategy and funding mechanism to provide fifth and sixth graders with access to devices such as laptops, tablets, netbooks and e-readers for school and home use. It also requires a review of the statewide availability of broadband necessary for students to be able to use their computing devices at home, identifies task force membership, and directs the task force to report its findings to the Legislative Research Commission.
Using Textbook Funds for Digital Devices and Content

At least a third of states have changed the definition of a textbook to include digital content and the devices necessary to deliver or experience digital content.

CALIFORNIA
• **AB 133** (2014) requires a publisher or manufacturer that submits printed instructional material for adoption by the State Board of Education or for adoption or use by the governing board of a school district to ensure that it is also available in an equivalent digital format during the entire term of the adoption. It also requires the format to conform to certain standards and guidelines.

INDIANA
• **HB 1427** (2013) replaces the word “textbook” with “curricular materials” and defines “curricular materials” to include digital media.

NORTH CAROLINA
• **HB 44** (2013) states the intent of the General Assembly to transition from funding textbooks to funding digital learning in the public schools.

OHIO
• **HB 153** (2011) establishes a new definition of electronic textbook as any book or book substitute accessed via a computer or other electronic medium, or that is available through an Internet-based provider of course content, or any other material that contributes to the learning process through electronic means. It clarifies that monies paid to districts for textbooks may also be used to purchase computer hardware and related equipment.

TEXAS
• **HB 2488** (2009) permits the use of “open-source electronic textbooks” that can be substituted for traditional paper textbooks. It defines “open-source textbook” as an electronic textbook that is available for download from the Internet at no charge to a student. It allows the state or universities to develop open-source textbooks. Faculty from state research universities and accredited private univer-
Universities can create and edit open-source textbooks as long as they comply with state academic standards.

**Investing in Professional Development for Educators**

States are investing in training for teachers to better incorporate technology to deepen and enhance the learning process.

**FLORIDA**

- **HB 5101** (2014) outlines the details of the state’s $40 million digital classroom allocation, including requiring the Department of Education to develop a five-year strategic plan for implementing technology in classrooms for learning and teaching. The Florida Digital Classrooms plan will describe how technology will be integrated into learning and teaching to improve student performance and allow all students to become digital learners who have access to digital tools and resources. The plan will also establish minimum requirements for professional learning opportunities that help educators integrate technology into the classroom and identify the types of digital tools and resources that can help educators manage, assess and monitor student learning and performance.

**LOUISIANA**

- **SB 622** (2014) requires the Department of Education to develop and implement a statewide educational technology plan for public elementary and secondary schools. The plan must include a strategy to provide training and ongoing professional development to ensure that teachers and other school-level staff have the skills necessary to effectively and efficiently utilize the technology infrastructure, software, data management and online resources to enhance and improve student engagement and learning.

**SOUTH DAKOTA**

- **HB 1164** (2013) creates a classroom innovation grant to allow teachers to use technology in the classroom in creative and innovative ways in order to enhance students’ learning and achievement.

**MAINE**

- **SP 161** (2011) requires the commissioner of education to develop a program of technical assistance for instruction in digital literacy, including offering professional development and training for educators in the effective use of online learning resources. It establishes a clearinghouse of information on using online learning resources, including open educational resources and open-source textbooks.

**Considerations for State Policymakers**

The state policy examples discussed here encompass a wide range of approaches to providing technology in schools in order to expand learning experiences. Effectively integrating technology to transform teaching and learning requires a willingness to invest in new technologies and technical support, a commitment to ongoing evaluation and adjustments, and continuing professional development. The roles of teacher and learner are evolving to meet the expectations of the 21st century classroom, and so must the systems and policies that support them.

State legislators are leading the movement to embrace technology as a powerful learning tool, both in and out of school. Learning institutions such as schools, libraries, museums and community centers are finding new ways to increase opportunities to engage the 21st century learner. Other briefs in this series explore how state legislatures are adjusting policies to expand broadband access for all learners, protect student privacy and promote digital literacy so that young people know how to communicate, collaborate and behave ethically online.
Policy Questions to Consider

1. What is the state’s vision for digital learning? Will some students or all students have access to digital devices and content? Should all students and teachers have wireless electronic devices for school and home use?

2. What is the state’s strategy for providing ongoing funding and support for devices, software, broadband, technology support and professional learning opportunities? Are there existing funding streams, including textbook funding, that might be redirected toward digital resources? Does the state have the broadband necessary for students to be able to use their computing devices at home? How will the state support educators’ professional development for effective technology deployment?

3. Are standards in place for schools and districts deploying technology in the classroom? Are schools required to meet digital teaching and learning standards? Do schools and districts provide training for educators in the effective use of online learning resources?
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Recommended Resources

*Learner at the Center of a Networked World* is the 2014 report of the Aspen Institute Task Force on Learning and the Internet.

The Connected Learning Alliance is a network of organizations, projects and people working to make learning relevant by integrating personal interests, peer relationships and the tools of the digital age.

The Alliance for Excellent Education’s Center for Digital Learning and Policy focuses on the effective implementation of technology to improve student learning outcomes for success in college and a career.

NCSL Resources

State legislative involvement has been an important factor for successful implementation of a variety of education technology projects. NCSL closely tracks education technology legislation here: www.ncsl.org/research/education/education-bill-tracking-database.aspx

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