

NAVIGATING THE DIGITAL SHIFT: Mapping the Acquisition of Digital Instructional Materials





Founded in 2001, the **State Educational Technology Directors Association (SETDA)** is the principal nonprofit membership association representing US state and territorial educational technology leaders. Our mission is to build and increase the capacity of state and national leaders to improve education through technology policy and practice. For more information, please visit: setda.org.

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About this Report

With support from the Bill and Melinda Gates Foundation, this report was launched under the leadership of Christine Fox, SETDA's Director of Educational Leadership and Research with guidance from SETDA's State Action Committee, membership, and private sector partners to provide a comprehensive overview of state practices related to the procurement of digital instructional materials. As part of the research, SETDA interviewed lead educators from a variety of educational and government organizations, state instructional materials leads and state procurement officers. Through the survey and independent data collection, SETDA gathered information for all 50 states, Guam, and the Commonwealth of Northern Mariana Islands (CNMI) regarding state policies and guidelines for the acquisition, vetting, and funding of instructional materials, for a total of 52 respondents.

This report complements the Digital Instructional Materials Acquisition Portal (DMAPS), an online database with details regarding each state's policies and practices regarding the acquisition of digital instructional materials. dmaps.setda.org

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Executive Summary

In 2015, SETDA administered the Digital Instructional Materials Survey regarding state policies and guidelines for the acquisition, vetting, and funding of instructional resources. Based upon this survey, independent research, and interviews with educators from a variety of educational and government organizations, this publication strives to inform educators, non-traditional instructional materials publishers, technology developers, and investors on the increasingly supportive environment of states with respect to innovation around digital instructional materials.

Based on the research, states, districts, and schools are making progress regarding the acquisition and implementation of digital instructional materials. In 2015, seven states reported that they have statutes requiring the implementation of digital instructional materials in the next five years. This is a dramatic shift in state policy, as legislators are now recognizing the benefits of digital learning and the need for instructional materials that are available via devices anywhere, anytime. Additionally, all states that have a textbook definition now include digital materials as part of that definition. Last, states are working towards ensuring a vibrant marketplace with more than half of states reporting that they are creating policies and specific procedures for companies to follow when selling digital instructional materials.

As the education community continues to invest in digital learning opportunities, SETDA encourages educators, policymakers, and the private sector to support the transition strategically, and highlights several next steps for consideration as leaders move to advance the learning experiences in the digital age. Specifically, states and districts should work to make the procurement process more transparent and provide specific procedures to help educators and the private sector navigate the process. All stakeholders (both public and private) should recognize that often there are multiple interested parties, such as district and school leaders, with differing needs. Next, strategic short- and long-term budgeting for bandwidth, devices, and digital instructional materials is fundamental as states, districts, and schools move towards digital learning environments. The costs associated with access to broadband and devices are a pivotal factor. Finally, states have the opportunity to encourage the acquisition and implementation of digital instructional materials by providing:

- guidance for schools and districts regarding best practices related to instructional resources adoption
- professional learning for educators
- recommended vetting practices for any instructional materials regardless of delivery platform or licensing type

In this publication, SETDA also identifies the following next steps necessary for the successful acquisition and implementation of resources to support digital learning.

- 1. Essential Conditions:** Support the essential conditions necessary for the successful acquisition and implementation of digital instructional materials for successful digital learning.

Leadership: State and local leadership is vital for developing a shared vision, empowering leaders, and cultivating a culture of collaboration and innovation for digital learning environments.

Equity of Access: Both high-speed broadband and device access, in and out of school, are critical to fully implementing digital instructional materials to meet college and career goals

Accessibility for All Students: Providing accessibility for all students must be a consideration when acquiring, developing, and implementing digital instructional materials.

Interoperability Considerations: The acquisition of complementary systems that work together is a necessary condition to efficiently implement digital instructional materials and resources and maximize the benefits of those resources.

Student Data & Privacy: Developing and enforcing policies that supplement federal laws to protect the privacy, security, and confidentiality of student data is critical.

- 2. State Acquisition Policies: Conducting Business with States:** States and districts should work to make the procurement process more transparent, and develop specific procedures to aid educators and the private sector in navigating the process. All stakeholders (public and private) should commit to working together and develop relationships with a variety of decision-makers, recognizing that there are multiple interested parties with differing needs.
- 3. Funding and Budget Implications:** Strategic short- and long-term budgeting for bandwidth, devices, and digital instructional materials is fundamental as states, districts, and schools move towards digital learning environments. The coordination of state purchasing contracts and the encouragement of consortia purchasing can support the transition to digital as well. When acquiring digital instructional materials, the cost associated with access to broadband and devices is a pivotal factor.
- 4. State Policies: Implementation, Adoption, and Vetting of Digital Instructional Materials:** States have the opportunity to encourage the acquisition and implementation of digital instructional materials by providing guidance for schools and districts regarding best practices related to instructional materials adoption, professional learning for educators, and recommended vetting practices for any instructional materials regardless of delivery platform or licensing type.

Introduction

As schools and districts across the United States transition to digital learning environments, comprehensive planning around infrastructure, devices, and digital instructional materials is critical for success. The [National Education Technology Plan](#) (NETP) challenges policymakers implement technology and digital content to provide engaging learning experiences for students¹. Focusing on how digital tools, resources, and instructional materials can positively impact teaching and learning to achieve school-wide goals and support college and career readiness is essential for both school leaders and policymakers.

Shifting from print to digital has been a SETDA focus since the organization's inception in 2001. Most recently, SETDA advocated for change via the publication, [Out of Print: Reimagining the K-12 Textbook in a Digital Age](#). Published in 2012, the release of [Out of Print](#) made the case for how digital instructional materials can positively impact student learning and engagement, support personalized learning, and provide accommodations for students with special learning needs². In support of [Out of Print](#), SETDA published a series of [policy briefs](#) focused on the support of digital materials, including [accessibility](#), [ownership](#) and [quality](#). In addition, SETDA published the [Content and Software](#) section in the [Guide to Implementing Digital Learning](#) to support school and district leaders as they implement digital learning environments.³ Finally, SETDA has worked extensively to promote open educational resources (OER) across the country, to ensure cost effective, diversified, and personalized instruction that will improve teaching and learning.

This report provides details to help educate school and districts administrators, policymakers, and the private sector on the flexibility of state policies related to the procurement of digital instructional materials. SETDA strives to educate non-traditional instructional materials publishers, technology developers, and investors on the increasingly supportive environment of states with respect to innovation around digital instructional materials. In addition, SETDA developed the Digital Instructional Materials Acquisition Portal (DMAPS), an online database to provide a state snapshot of procurement processes related to digital instructional materials in every state. dmaps.setda.org

What are Digital Instructional Materials?

Digital instructional materials (digital instructional materials) can have broad applications and include everything from snippets of video to full-year textbooks in digital formats, along with video, audio, text, animation, simulations, and assessments. digital instructional materials can include smaller “chunks,” such as individual chapters or lessons.

What is OER?

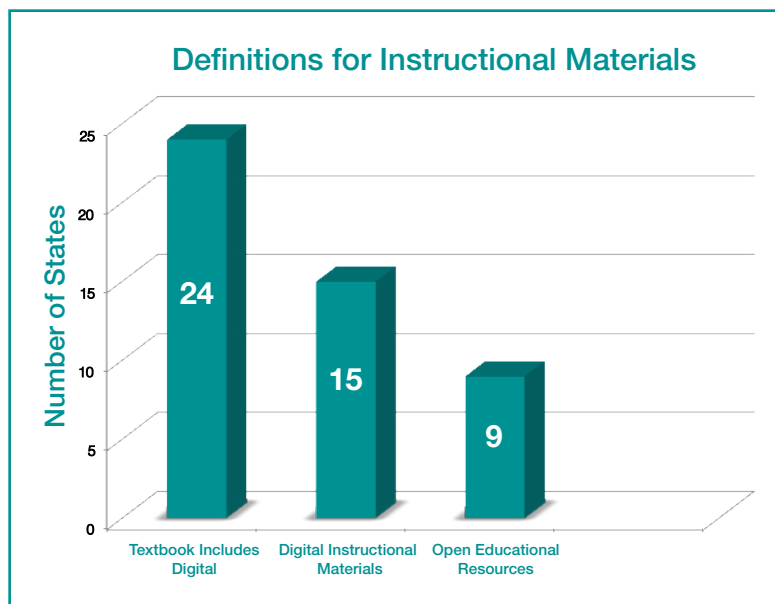
Open Educational Resources (OERs) are any type of educational materials that are in the public domain or introduced with an open license. The nature of these open materials means that anyone can legally and freely copy, use, adapt, and re-share them. OER include print and digital, and range from textbooks to curricula, syllabi, lecture notes, assignments, tests, projects, audio, video, and animation. [UNESCO](#)

This report is organized around the following six areas:

- 1. Essential Conditions:** Effective Use of Digital Instructional Materials
- 2. State Acquisition Policies:** Conducting Business with States
- 3. Funding and Budget Implications**
- 4. State Policies:** Adoption, Implementation and Vetting of Digital Instructional Materials
- 5. Current Progress** on SETDA's [Out of Print](#) Recommendations
- 6. Next Steps**

1. Essential Conditions: Effective Use of Digital Instructional Materials

As states, districts, and schools continue to support digital learning, new policies around the acquisition and use of digital instructional materials are emerging. States are revising or expanding their definition of textbooks or instructional materials to include digital resources, including OER. In 2015, SETDA administered the Digital Instructional Materials Survey (DMAP) regarding state policies and guidelines for the acquisition, vetting, and funding of instructional materials. SETDA's DMAP survey results show that a plurality (24) of states have a textbook definition that includes the option for digital textbooks. Fifteen states have a definition for digital instructional materials/learning resources/digital text. Nine states reported that the state has a definition for OER. By broadening the textbook definition, states can use traditional textbook funding for the acquisition of digital instructional materials. In the [10 Elements of High-Quality Digital Learning](#), a framework of policies and actions around the integration of technology into public education, one of the metrics of quality content is that “instructional material funding may be used for purchasing digital content and systems.”⁴



As the movement towards using digital resources increases, state policymakers and businesses must consider the following essential conditions for the effective acquisition and use of these materials:



Leadership

With the movement towards the use of digital tools and resources in K-12 education, state and local leadership is a key element in changing state and local policies, programs, and funding to support digital learning. SETDA's [Out of Print](#) report stated that the most critical part of a successful digital learning conversion is strong leadership and the ability to communicate with multiple stakeholders about the digital learning vision.⁵ The International Society for Technology in Education (ISTE) identifies the [Essential Conditions](#) necessary to effectively use technology for learning. Several of the conditions reflect the need for effective leadership at the state and local level, including a shared vision among education stakeholders, as well as empowering leaders in effecting change.⁶ In Eric Sheninger's blog post, creating a vision

“Great leaders are never satisfied by just developing a shared vision. They work tirelessly to model expectations during the planning and implementation phases of the change process while empowering others to embrace change.”⁷

–Eric Sheninger,
[When Vision Isn't Enough](#)

is only the first step—developing and implementing a strategic plan is essential for sustainable change⁸ According to the Alliance for Excellent Education’s [Future Ready framework](#), “leaders within a district must be empowered to think and act innovatively, they must believe in the district’s shared, forward-thinking vision for deeper learning through effective uses of digital, 21st Century technologies.”⁹ Furthermore, a culture of collaboration, innovation, capacity building, and empowerment are elements of innovative leadership.¹⁰

State Leadership: The Opportunity

States have the opportunity to lead the shift to digital even when the state does not make procurement decisions for the districts. Many states in which the district has the constitutional authority to procure digital resources provide leadership and guidance in the acquisition and use of digital instructional materials. For example, in Maine, each district has the constitutional authority, from state and/or local resources, to procure and use digital resources and innovative educational technologies as they deem appropriate to meet educational goals and requirements. However, the Maine Department of Education sponsors or cosponsors some efforts related to digital instructional materials, including small OER and other curriculum identification and creation initiatives intended to provide model instructional materials. The largest of these efforts is the Maine Learning Technology Initiative (MLTI), which has provided 1-to-1 devices for students and teachers in seventh and eighth grade, since 2001. Additionally, Maine coordinates one of the most robust, statewide, high-speed broadband networks for K-12 in the country.



High-Speed Broadband Access

Bandwidth capacity determines which online content, educational applications, and digital learning services students and educators can employ effectively for learning. Therefore administrators must strategically plan to ensure adequate broadband infrastructure for the use of digital instructional materials. Broadband access is now as vital a component of K-12 school infrastructure as electricity and water, and this access must be seamless to maximize digital learning opportunities. For specific recommendations, review SETDA’s [Broadband Imperative: Recommendations to Address K-12 Education Infrastructure Needs report](#).¹¹ In 2014, 45% of school districts surveyed by the Consortium of School Networking (CoSN) indicated that they did not have the bandwidth capacity for a 1-to-1 initiative.¹² Without adequate bandwidth, schools cannot maximize the potential of digital instructional materials and resources.

In 2014, after over a year of deliberation, the FCC updated the Universal Service Program for Schools and Libraries (E-Rate) by implementing programmatic changes to increase the efficiency and effectiveness of the program. The FCC included SETDA’s broadband capacity targets, enumerated in SETDA’s [Broadband Imperative](#) report, as goals for broadband access. To see the latest information visit the FCC website, [Modernizing E-Rate](#). SETDA and Common Sense Kids Action developed several [E-Rate Modernization Resources](#) to support state and local policymakers and digital leaders as they navigate the modernized [E-Rate program](#). The goal is to assist state and local leaders to achieve high-speed connectivity in their jurisdictions and to support the national goal of connecting every classroom and library in America to high-speed internet by 2018. While the modernized E-Rate program is expected to improve bandwidth access with new funding¹⁴, states and local school districts should also consider additional innovative options to provide adequate broadband access, including building public/private partnerships.

“The most immediate and expensive barrier to implementing technology in education is inadequate infrastructure, including high-speed internet connectivity and suitable internet-enabled devices.”¹³

—[LEAD Commission](#)



Device Access

In parallel, when focusing on digital instructional materials, education leaders must ensure that students have seamless device access. Equity of access is one of the five recommendations in the Aspen Institute Task Force on Learning and the Internet, [Learner at the Center of a Networked World](#), “every student [has] adequate connectivity—including reliable broadband connections—as well as access to the hardware, applications, digital age literacy and high-quality content necessary to support their learning.”¹⁵ States and local school districts are utilizing innovative strategies to help put devices into the hands of students, including shifting policies and budgets to ensure device access, Bring Your Own Device (BYOD) programs, and state grants to support digital instructional materials.

Kaynor Technical High School, Connecticut

Kaynor Technical High School is the first technical school in Connecticut to fully incorporate a 1-to-1 device structure. All teachers use an online system to post, receive and grade assignments in a paperless environment. The vast majority of the textbooks have transitioned to online digital instructional materials, to create a “backpack-less” system for students. This school-wide coherent approach provides students with equity of access, as well as enhancing student organization and collaboration. For staff, this initiative was accompanied by whole group, small group, and individual professional learning, and has enhanced staff technological capacity and professional culture as a shared learning community. Indicators of success include student and staff surveys regarding ease of use, capacity to access the technology, and effectiveness of training. School walkthroughs with district administrative teams have provided observational evidence of improved student engagement.



Home Access

Equity of access includes access to devices and digital materials outside the school day, as recommended in SETDA’s [Broadband Imperative](#). Lack of digital equity is amplified when some students do not have the same level of access as other students. As the use of digital resources continues to increase, it is essential that students have access to instructional materials outside of the school day, which includes both device and broadband access.

U.S. Census Bureau’s American Community Survey data reports that “some 5 million households with school-age children do not have high-speed internet service at home. Low-income households—and especially black and Hispanic ones—make up a disproportionate share of that 5 million.”¹⁶

[Pew Research Center](#)



Accessibility for All

With the shift from print to digital, education leaders must proactively consider the accessibility of digital resources for all students, including students with disabilities.

Some students have difficulty using traditional instructional materials, whether it is a student’s decoding ability or a visual impairment, adversely impacting their ability to learn and achieve. As required by federal statutes, including IDEA and civil rights legislation, state and local education agencies must “ensure that students with disabilities access, participate, and achieve in the general educational curriculum and receive accessible educational materials.”¹⁷ [Universal Design for Learning \(UDL\)](#), a set of principles for curriculum development that is flexible and can be personalized to meet individual student needs, including those students with disabilities, should be considered when developing and purchasing digital instructional materials. Additionally, [accessible educational materials \(AEM\)](#) are print and digital materials designed or converted to multiple formats (print, digital, graphic, audio, and video) so that all students can use the materials regardless of format.¹⁸ All students who need and qualify for AEM must be provided these materials. The

[AEM Center](#) offers leadership to state and local policymakers and other stakeholders in an effort to ensure that all students can use accessible instructional resources to increase learning and achievement.¹⁹ To learn more about the legal context and the statutory requirements of AEM, visit [AEM Policies & Systems](#).

In addition to the federal requirements for students with disabilities, SETDA recommends that states and districts develop policies regarding the development, use, accessibility, and distribution/sharing of digital instructional materials to improve ALL students' learning experiences to include:

- Establishing a clear vision for the use of accessible digital learning materials and communicating that vision to relevant stakeholders, including content creators and content users
- Encouraging the development and use of accessible open educational resources to maximize flexibility and customization options available for educators to meet individual student needs
- Providing educators with professional learning opportunities
- Ensuring that educators have access to online repositories of quality accessible digital content
- Investing in research and evaluation to assess the impact of accessible digital learning materials on student achievement and engagement and to share best practices
- Exploring fiscally sound ways to support the creation and use of digital content.²⁰

Washington Elementary, Wisconsin

In Janesville, teachers personalize technology tools and resources especially for those students with disabilities. 3-5 grade students have 1:1 access to provide a variety of options for instruction and learning. As part of the Universal Design for Learning strategies, the schools assess students for their strengths and seek to discover how they learn best. Now, teacher record lessons so that students can watch them again for clarification or to chunk lessons. Students are also provided audio books or apps as needed that provide print materials with audio support. Students at Washington Elementary have increased their reading scores; some even doubled their scores. washington.janesville.k12.wi.us



Interoperability of Systems

The systems used in schools and districts to collect, manage, share, analyze, and report data can vary based on vendors, policies, and local decisions. Interoperability—the sharing of content, data, and services among applications or systems—is one of SETDA's five priorities and is an essential condition for successful implementation of digital instructional materials. States, districts, and schools should consider developing policies regarding interoperability standards and encourage the acquisition of complementary systems that work together to maximize the benefits of digital learning and reduce the need for separate, sometimes redundant, systems. CoSN states that “for cost efficiencies, as well as teaching and learning effectiveness, interoperability standards are a necessary component of emerging systems.”²¹ Additionally, as noted by the Aspen Institute, it is important that learning networks are maximizing interoperability so that innovations can be shared across networks.²² Information generated through digital learning and various applications should track a specific student's progress over time; then information can be made accessible to teachers and parents through real-time reporting tools.²³ Likewise, students should also have access to the data so that they

“The seamless integration of a broad spectrum of instructional, administrative, and communication tools is an essential foundation for an environment that addresses the needs of all learners.”²⁴

—[Access 4 Learning \(A4L\) Community](#)

can manage their own learning goals. The [Access 4 Learning Community](#) collaborates daily about digital learning, including interoperability considerations between dissimilar applications to help educators implement digital tools and applications.²⁵



Student Data and Privacy

As the collection and shared access to data increases, it is essential that states, districts, and schools have an understanding of data privacy, confidentiality, and security practices related to uses of student data. The [Privacy Technical Assistance Center \(PTAC\)](#), created by the US Department of Education, developed a best practice resources toolkit to help states, districts, and localities understand student data. Resources are organized by topic area and updated regularly. In 2014, PTAC released the [Protecting Student Privacy while Using Online Educational Services](#) report, which included recommendations to schools and districts with respect to privacy, security, and transparency when using online educational services, including software, mobile applications, and web-based tools.

Federal laws that serve as the basis for state and local policies on student data include:

- [Family Educational Rights and Privacy Act \(FERPA\)](#)—protects the privacy of student education records
- [Children’s Online Privacy Protection Act \(COPPA\)](#)—Protects children’s privacy and puts parents in control
- [Children’s Internet Protection Act \(CIPA\)](#)—Addresses concerns about children’s access to obscene or harmful content over the internet

In addition to these federal laws, states play an important role in developing and enforcing policies that supplement these laws to protect the privacy, security, and confidentiality of student data. The Data Quality Campaign states that “state policymakers need to understand their role and implement policy mechanisms to ensure that quality data are used while keeping sensitive information secure.”²⁶ Additionally, communication with parents and the community about the collection and safeguarding of data is a key component of safeguarding student data.

2. State Acquisition Policies: Conducting Business with States

Widespread access to digital instructional materials is often dependent on successful navigation of the purchasing process. State procurement is often like the peeling of an onion—there are multiple layers to go through. In education, the buying and selling of merchandise and services, whether it is furniture, technology equipment, paper, broadband connectivity or instructional materials, typically requires following some level of state or local procurement laws. Some states have a procurement office specific to the department of education, whereas, other states may use statewide central purchasing as a standard. At the district level, some districts utilize cooperative purchasing through regional consortia and other districts may provide flexibility at the school level to make decisions regarding the acquisition of products and services. This is true for all purchases including instructional materials. For example, in Utah, school districts make local decisions regarding evaluating and acquiring instructional materials; however, the state does provide resources for districts including a general list of approved materials as an option.²⁷ In Utah's Nebo School District, the acquisition of instructional materials is even more decentralized, with each high school selecting and purchasing their own textbooks and/or digital instructional materials. Some states and districts might have policies for obtaining office furniture, but not for the acquisition of instructional resources. Other states may have policies for textbook adoption, but not for acquiring digital tools and resources or OER.

“Current purchasing practices were designed for print-based resources, not modern technology. The result is that at times, teachers and students don't end up with the best learning technology tools to meet their needs.”²⁸

[Improving Ed-Tech Purchasing, Digital Promise and Education Industry Association](#)

North Carolina

In North Carolina, through the [state-wide Instructional Improvement System \(IIS\)](#), the state is able to purchase statewide licensing to instructional materials that are delivered through the IIS platform. This [procurement process](#) follows the requirements for NC state agencies. NC Public School Law (115C-89) requires the State Board of Education to make all necessary rules and regulations concerning requests for bids, notification to publishers of calls for adoption, execution and delivery of contracts, requirement of performance bonds, cancellation clauses, and such other material matters as may affect the validity of the contracts.

Funding for digital instructional materials is determined locally by the LEA or Charter School based on how they intend to use the various state funds.



Local Control

Many states label themselves as “local control” indicating that purchasing of digital instructional materials is done at the local level. SETDA investigated details about several “local control” states via procurement specialists at the state level who did not work at the state department of education, but have responsibility for much of state procurement. Typically, each state has a purchasing office that may or may not be a part of the state department of education, which has options for state contracts and/or buying consortia. Below is an example of procurement processes in Georgia and additional examples are available via Appendix C.

Procurement in Georgia

State procurement specialists indicated that the state does have the ability to purchase goods and services (including digital instructional materials) on behalf of the Local Education Agency's (LEA). Additionally, they indicated that there are [funds available](#) for purchase of digital instructional materials or textbooks. Georgia indicated that there were several buying consortia operating in the state with details available via the [state purchasing site](#). This is typical of many states, as central procurement often has responsibility for developing, (with department of education and LEA input) offering and managing the RFP process. Georgia State Procurement Division lists consortia, RFP listings, technical assistance, and training opportunities for statewide and local purchasing. LEA's can also acquire learning resources through any [state approved contracts or non-state approved contracts](#). [State Master Contracts](#) and the State Procurement Manual provide additional details for providers and districts.



Procurement Challenges

The absence of policy for the acquisition of digital instructional materials, coupled with the complexity of the procurement process, presents obstacles for schools and districts and the companies that want to sell digital instructional materials at any level. Often, schools or districts do not have the option to simply purchase a digital resource they deem valuable; instead they review state preferred resources, state and regional purchasing consortia, and may be required to issue an RFP. Investigating options, and issuing and reviewing RFPs can take weeks or months. Similarly, it is often difficult for companies to understand the intricacies of the procurement process as it varies considerably among states, districts, and schools. It is also difficult to determine who to approach—the state, district, or school. If a state has procurement policies, acquisition of digital instructional materials may be easier—or it could make the situation more challenging.

Procurement Challenges

- Navigating the procurement process
- Multiple stakeholders with differing needs
- Long sales cycles
- Raising capital for research and development

In 2014, in conjunction with Johns Hopkins University, the Digital Promise and the Education Industry Association surveyed 300 education leaders and technology executives to identify key obstacles and potential solutions for the acquisition of K-12 personalized learning tools. In this report, researchers found that there was a gap between how districts perceive the procurement process and how educational technology providers view the process. Only 6% of educational technology providers were satisfied with the procurement process compared to 68% of district administrators.²⁹ Providers

reported that it is difficult to navigate the procurement process, especially since it is different in each state, district, and school. This is especially true for new providers trying to penetrate the market when there are already established providers who have relationships with decision-makers.³⁰

Statewide RFPs

Districts in Maine, Vermont, Idaho, and Nevada benefited from the RFP and the responses to the RFP published by the Maine Department of Education in coordination with the National Association of State Procurement Officials to purchase their devices and/or model their RFPs for devices.

Companies also have to deal with multiple stakeholders, including policymakers, school board members, superintendents, curriculum specialists, IT staff, and school-based administrators. Getting buy-in from all the stakeholders can result in a long sales cycle, often between 8 and 18 months.³¹ Researchers report that just 6% of providers surveyed are satisfied with their access to district decision-makers and only 20% are satisfied with the timeline to complete the procurement process.³² Education providers also find it challenging

to raise money for research and product development compared to other industries.³⁴ Education companies reported that it is hard to figure out what districts and schools need, since often they are unclear about their own instructional needs. Nearly two-thirds of companies say that product development is directly influenced by procurement rules and not necessarily by innovative solutions.³⁵

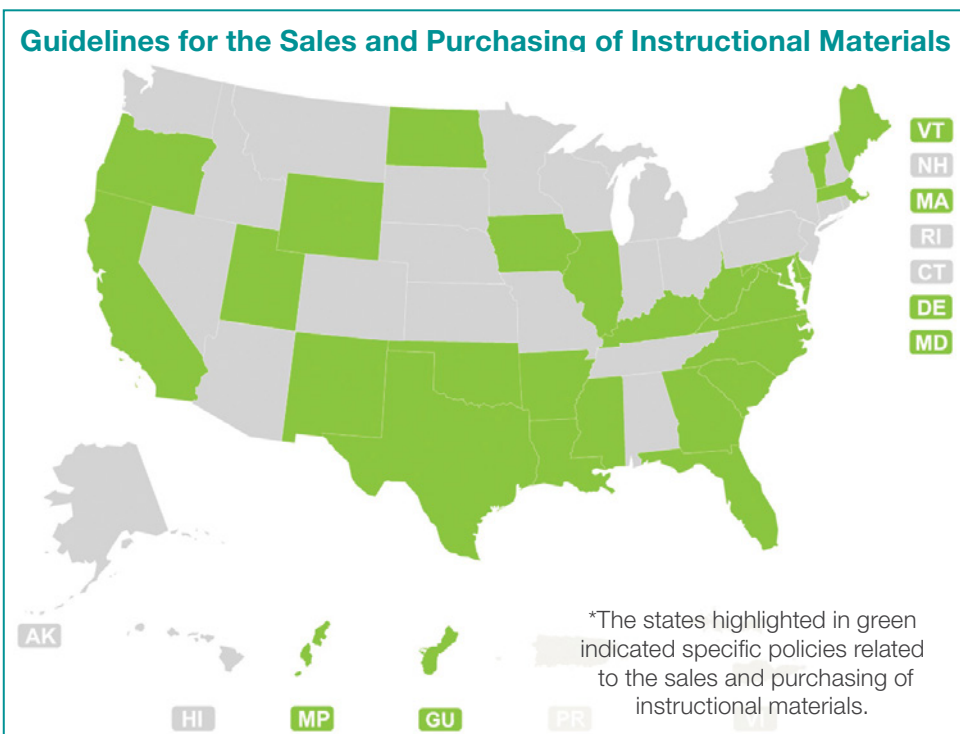
Sales process involves winning support of policymakers, school boards, CIOs, principals—most of whom are authorized to say “no” but have no budgetary authority to say “yes.”³³ –LEAD Commission

Working Together: Businesses and Decision Makers

The [Improving Ed-Tech Purchasing](#) report provides the following recommendations to improve the procurement process:

- Better guidelines for conducting needs assessments and including end users in the process
- Faster methods of evaluating products and better ways of sharing results
- Simplified Request for Proposal (RFP) processes to ensure a level playing field and high-quality results
- Pilot approaches that increase rigor and drive purchasing decisions without over-burdening teachers
- Incentives for providers to get results and show evidence, such as performance-based contracting and prizes
- Websites with trusted information about educational technology tools and district procurement policies and better ways to match providers and products with educators
- More research about funding strategies for acquiring educational technology products³⁶

The SETDA survey reports that 27 states have guidelines for the sale and purchasing of instructional materials. However, only eight states have policies and/or guidelines specifically addressing the procurement of digital instructional materials. For example, in Massachusetts, companies can register to sell through [COMMBUYS](#), a state-of-the-art electronic market center to support online commerce between government purchasers and business. In Maryland, vendors may apply to the MEEC Consortium for competitive pricing throughout the state. The Arizona Procurement Office (APO) provides all purchasing functions for the Arizona Department of Education. Vendors need to register with the APO and select commodity codes to receive notice about solicitations. In Washington, the procurement of devices and instructional materials is primarily conducted at the district level. However, districts may choose to buy off of state master contracts, as well as make use of optional-buy contracts from several buying consortia.



Shifting to Digital: Sample Procurement Scenario



When a school principal, Martha Jackson decided, with her leadership team, to launch digital learning as a seamless part of instruction, she never anticipated the challenges and amount of time required to purchase the devices and materials needed for digital learning. Apart from preparing her staff and students, building the broadband and WiFi infrastructure, and purchasing devices, she had to work to figure out how to fund the acquisition of digital instructional materials.

After selecting materials aligned to standards and vetting the materials to ensure quality, she contacted her district's procurement office regarding available funds and procedures. They indicated that in her state, districts have the option to use textbook funds for digital instructional materials and the state provides options for purchasing.

First up was to review the state department of education (DOE) resources to see if there were any of the desired materials available via a state contract and to contact the instructional materials and educational technology DOE leaders to check on other options. Unfortunately, the specific resources Ms. Jackson's team wanted to implement were not available through a statewide contract, district contract, or the state's educational technology set of online resources.

This left several options via the district's procurement office. The district belonged to a buying consortium with other schools in their region through which they jointly purchased items with their county government and, according to the state law, they could buy products/services using another district's contract with the vendor. Fortunately, some of the materials Ms. Jackson's district wanted to implement had been purchased via the consortia, and those items were then bought through that consortia contract. However, neither the county nor the consortium had ever procured some of the other desired materials so a determination was made to issue a Request for Proposals (RFP).

After much back and forth about specifications, the procurement office took several weeks to issue the RFP. Once the responses were submitted and reviewed, the top vendor was selected and then the school was able to purchase the selected product. Fortunately the resources the school had originally deemed the best option won the competition, but if not, another product would have been the only option for purchase.

In this instance, a persistent principal was willing and able to navigate a complex process. If the chosen resources had not been selected via the RFP, the vendor could have worked to prequalify via a state contract or approach the DOE, county government, or a buying consortium to prequalify. All in all, both selling and purchasing instructional materials can be a challenging process for schools, districts, states, and companies.

3. Funding and Budget Implications

To promote effective and efficient uses of digital tools and resources, spending should align with the statewide/district vision for digital learning.³⁷ Strategic short- and long-term budgeting is essential as states, districts, and schools continue to make investments in bandwidth, networking, devices, and digital instructional materials to support effective digital learning. State leaders are uniquely equipped to help districts and schools provide consistent funding sources and flexibility for innovation.³⁸ Cost savings can take place when technology based tools and resources are not viewed as additional costs but as an opportunity to shift funding to digital learning opportunities.

The New Jersey Department of Education's 2015 paper, *Transformative Budgeting for Digital Learning*, includes the following considerations to shift budgets in support of digital learning.

- **Alignment of technology expenditures with the goals in the district's strategic plans.** Ideally, budget development activities occur after the annual academic planning process. A budget is developed that translates strategic plans into actions and specifies the financial resources necessary to implement the plan.
- **A cross-functional budget leadership team that brings together finance, technology, curriculum, and instruction.** Using teamwork from the start to collaboratively investigate options for cost savings, efficiencies, and options for alternative funding streams. By working together and not in silos, the team ensures priorities for budgeting are transparent and have the support of key stakeholders.
- **Transformative zero-based budgeting—a process through which education leaders begin each budget cycle at zero in each category, and then add costs to the budget only when there is evidence that such costs are required to meet goals.** That process includes identifying the metrics and methodology to ensure accountability for learning returns on investment. CoSN offers a [Value of Investment Tool \[VOI\]](#) for objectively analyzing the anticipated costs and benefits of a proposed project, which includes a return on investment worksheet and project benefits worksheet.)

Funding and Budget Challenges

- Robust connectivity
- Providing every student with a device
- Reallocation of textbook funding toward digital instructional materials

“Last year, out of 115 school districts in North Carolina, you (Mooresville Graded School District) ranked in the bottom ten in the amount of money you spend per student, but you ranked number two in student achievement. So you're spending less money and getting better outcomes.”³⁹

—President Barack Obama, [Speech, Mooresville, North Carolina June 2013](#)

Bandwidth

When acquiring digital instructional materials, educators need to consider the bandwidth necessary to effectively utilize digital tools and resources and the associated costs. Without adequate bandwidth and connectivity, teachers will not be able to maximize the benefits of using digital instructional materials to personalize and engage students. SETDA's [Broadband Imperative](#) recommended **the need to build state leadership**: “all states provide direct leadership in the development and implementation of programs to provide adequate and equitable bandwidth to K-12 schools, homes, and publicly accessible institutions, such as libraries and community centers.”⁴⁰ According to CoSN's 2nd Annual E-Rate and Infrastructure Survey, affordability is the biggest barrier to robust connectivity in schools with 58% of school systems reporting monthly ongoing expenses as a top concern.⁴¹ The implementation of digital instructional materials cannot happen without access to robust broadband.

Out-of-School Access and the Homework Gap

States are beginning to address the need for access to digital instructional materials outside of the classroom. Out-of-school access requires broadband, device, and content access. To support increased broadband access at home, the White House recently launched the [Connect Home initiative](#), a pilot initiative to help accelerate broadband adoption by children and families living in HUD-assisted housing. In addition, a variety of organizations are working to increase home broadband access, including [Internet Essentials](#), [EveryoneOn](#), and several ConnectED corporate participants. Next, as noted, some states are providing direct funding for devices and others are increasing flexibility of instructional materials or other state funds to include the option for districts to purchase devices. Finally, some states are providing access to digital instructional materials outside the classroom. Delaware hosts [UDLibSEARCH](#), a virtual library of online resources for all K-12 public schools, which can be used at home. In Virginia, the Digital Textbook Marketplace is available online for access anywhere, anytime.

Devices

As districts and schools move towards a 1-to-1 (student/device) digital learning environment, student access to devices at school and at home is another important consideration. Based on the SETDA survey, only six states/territories have state policies related to purchasing digital devices (Guam, Georgia, Kentucky, Massachusetts, New York, and West Virginia). In Rhode Island, the state does not have a specific policy, however, they have a [master purchasing agreement](#) that schools may use to purchase devices. Based upon the SETDA survey, 40 states reported that they do not provide *dedicated* funding for the purchase of digital devices. Northern Mariana Islands, South Carolina, and Virginia reported that they provide state funds directly to districts for the acquisition of digital devices. Texas and West Virginia reported that state funds are provided to districts for obtaining instructional materials that includes the flexibility to purchase digital devices. Some districts and schools, in an effort to ease budget pressures, are implementing BYOD programs where students have access to mobile devices, laptops, or smartphones. The [Nevada Ready 21](#) program provides for every student in middle school to have access to a personal, portable device that is wirelessly connected to the internet. Although some funding will be needed for students who do not own a device, schools and districts can reallocate funding for technology device purchases to other areas, such as acquisition of high quality digital instructional materials. The Maine Learning Technology Initiative provides 1-to-1 devices and learning solutions to seventh and eighth grade students and teachers statewide. Districts are encouraged to implement digital learning devices, and, although free to purchase any digital device, have the option to opt in to MLTI solutions at any other grade level.

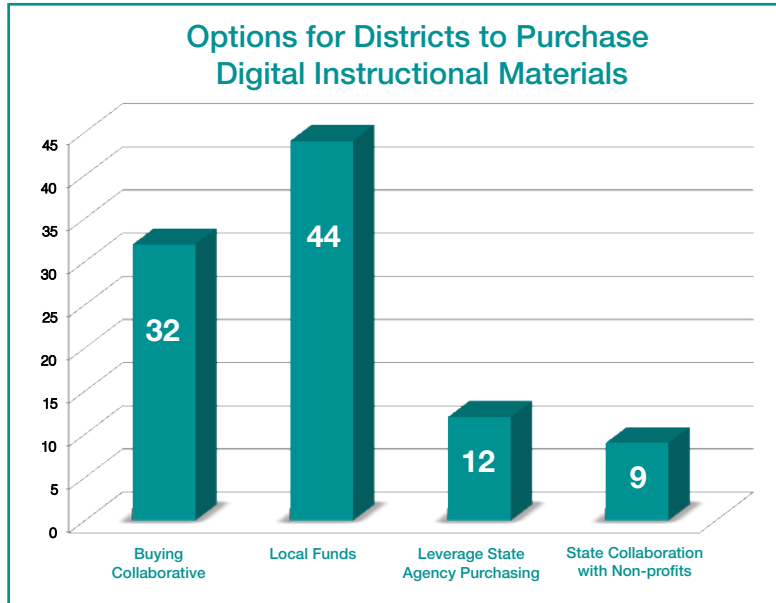
Burlington Public Schools, Massachusetts

Burlington Public Schools launched the 1:1 Learning Program for students in grades 1-12 in 2011. The goal of the program is to provide students with real-world learning environments that mirror working environments in the digital age. Student engagement has increased across all grades and in all content areas. Students report that having access to a 1:1 mobile learning device is not only a dynamic catalyst for learning, but an extraordinary tool for organizing their academic and extracurricular lives. Class structures have shifted from focusing on traditional methods of lecture and assessment, to project based, flipped classroom, and blended learning models. The schools are in the process of shifting to digital with some fully digital classes at the high school level. <http://www.bpsedtech.org>.



Digital Instructional Materials

Districts and schools are acquiring digital instructional materials through purchase arrangements and/or via access to OER. Thirty-two states reported that districts benefit from a buying collaborative to purchase digital instructional materials. Although, most states (44) report that districts use local funds to purchase digital instructional materials, 24 states with a textbook definition are leading by example by expanding the definition to include the option for digital instructional materials and resources. For example, North Carolina is moving from funding for textbooks towards funding for digital materials. In Arizona, “textbook” means either printed instructional materials or digital content.



Reallocating funding is an effective method for encouraging the use of digital instructional materials. In Texas, the amount of digital instructional materials purchased, as well as the amount of money spent on digital content increased significantly from 2014 to 2015.



Texas	2014	2015
Proportion of Instructional Materials Purchased in an Electronic Format	41%	87%
Proportion of Instructional Materials Allotment Funds Spent on Digital Content	43%	93%

Source: SETDA Digital Instructional Materials Acquisition Policies for States Public Webinar
<http://www.setda.org/events/webinars/public-events/>

4. State Policies: Implementation, Adoption, and Vetting of Digital Instructional Materials

Digital Instructional Materials Implementation

SETDA survey results show that seven states (Arkansas, Florida, Georgia, Louisiana, North Carolina, West Virginia, and Wisconsin) have statutes requiring the implementation of digital instructional materials in the next five years. This is a dramatic shift in state policy, as legislators are now recognizing the benefits of digital resources. In 2015, Georgia passed Senate Bill 89, known as the “Digital Classroom Act,” which requires the implementation of digital instructional materials. The legislation also requires that local boards of education provide wireless electronic devices for students to access instructional materials and content. In Arkansas, the Digital Learning Act of 2013 requires the implementation of digital instructional materials as well. In North Carolina, it is the intent of the General Assembly by 2017 (Law 2013-12, House Bill 44) to transition from funding traditional textbooks to funding digital materials, including textbooks and instructional resources, and to provide educational resources that remain current, aligned with curriculum, and effective for all learners.

There are major shifts in state policy as more states are **requiring** the implementation of digital instructional materials in the next five years.

SETDA Survey 2015

Understanding Licensing for Digital Resources

As states and districts explore the new ecosystem of digital instructional materials, most notably in the free digital learning resource space, there is a need for districts to educate teachers and students on the varying degrees of permitted uses associated with different licenses. Practically speaking, as educators search the internet for resources, they are often making the incorrect assumption that any

SETDA’s set of [OER case studies](#) demonstrates how the policies and practices at the state level have provided the avenue for the implementation of OER in [New York](#), [Utah](#), and [Washington](#).

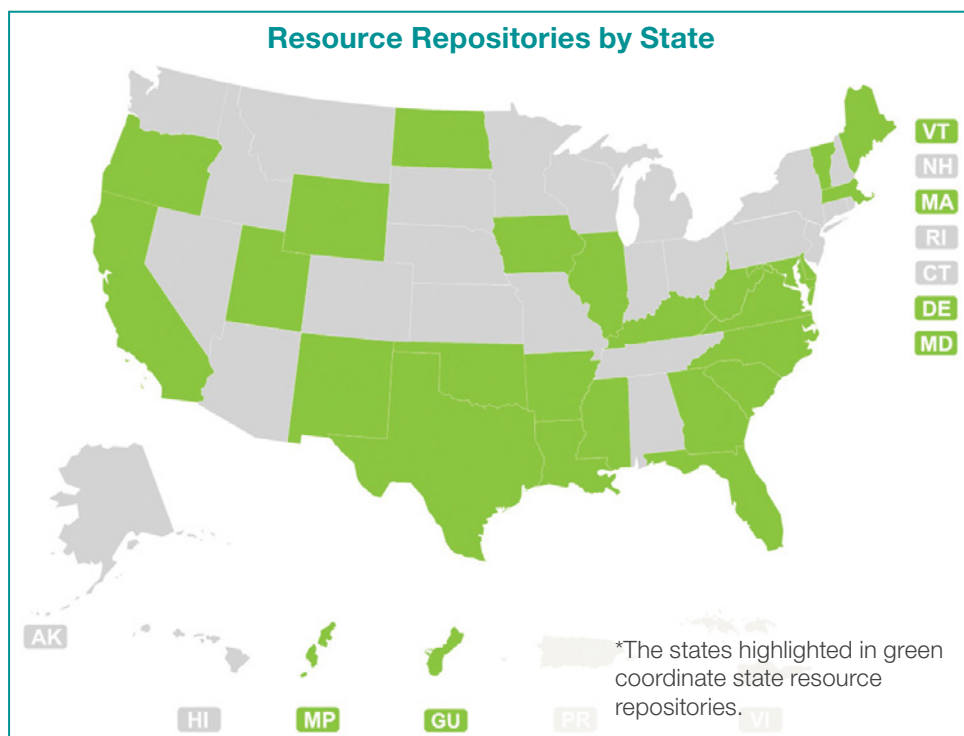
digital resource posted on an accessible website is open and fair for adaptation and use. Districts are finding that there is not a specific person responsible for “policing” copyrights as they gather resources.

Districts and schools are acquiring and implementing digital instructional materials through purchase arrangements, access to free digital learning resources and OER, and through state repositories:

- **Purchased Digital Instructional Materials:** States, districts, and schools purchase instructional materials in a variety of formats for instructional needs. Materials may include specific apps based on subject areas, online textbooks, interactive gaming, or lesson plans embedded within content. Some resources are purchased individually, some companies offer subscription services on a per pupil basis for one specific resource, whereas others offer learning resource library subscriptions with vetted resources aligned to state standards for a variety of subject areas and grade levels.
- **Free Digital Learning Resources:** Free digital learning resources are available for students, teachers, schools, or districts via nonprofits and for profit companies. Free resources are copyrighted and not openly licensed. [Smithsonian Education](#) and [Common Sense Media](#) offer free digital learning resources; however they maintain the right to control copying and dissemination.
- **Open Educational Resources:** OER are teaching and learning materials that are free and may be used, reused, mixed, and otherwise customized to meet specific needs.⁴² OER materials can be in digital or print formats, and one of the benefits of OER is that districts don’t need to wor-

ry about copyright issues. The implementation of OER is climbing as states, districts, and local schools modify their current policies for approving curricula to encourage the use of, and in some cases develop OER. SETDA DMAPS survey results show that 22 states reported that the state developed OER for districts and schools, 23 states reported that the state developed OER in collaboration with others, and 5 states reported policies specific to OER. In Tennessee, the textbook adoption policy specifically includes OER. Although Idaho does not have a specific policy for OER, in 2015, the state began using [Creative Commons licensing](#) of units, and all professional development materials created by teacher leaders are openly licensed.

- State Digital Learning Repositories:** State digital learning repositories may include both copyrighted and open licensing. These resources are free, although some states require state credentials for access. State digital learning repositories exist in 24 states. An independent contractor manages Oregon’s Northwest Textbook Depository. The Iowa Department of Education, Iowa Public Television, and Iowa’s Area Education Agencies manage [Iowa Learns](#), digital resources for teaching and learning. The Colorado Department of Education’s Standards and Instruction Unit manages the [District Sample Curriculum Project](#), which provides educators with access to standards-based projects. Although New Hampshire does not host an instructional resource repository, the state supports [New Hampshire Educators Online](#), which provides digital and online educational and instructional resources.



Professional Learning

The implementation of digital instructional materials enables educators to choose the technology tools and resources most appropriate for their instructional practices that best meet the needs of students. When implementing digital instructional materials, it is imperative to provide professional learning opportunities in digital content, programs and applications, as well as ongoing, sustained on-site support for teachers. Sustainable professional learning models, geared specifically to aid teachers in student centered, digital learning environments can positively impact the teaching and learning experiences⁴³.

The US Department of Education, Office of Education Technology developed the [Stories of EdTech Innovation](#) tool. Users can search for stories by state, grade, community size, and topic. The Office of EdTech hopes that educators will connect with one another to learn from their experiences.

Fairfax County Public Schools, Northern Virginia

Fairfax County Public Schools, located in Northern Virginia, is the 10th largest school system in the country. Fairfax has developed the FCPS eCART tool that gives teachers access to curriculum, resources, and tools that support K-12 teaching and learning. This tool provides anywhere and any-time access for up-to-date programs of study, curricular resources, and formative assessments to support student learning. Additionally, FCPS has a wide variety of [instructional resources](#) available to support learning. One key to the effective use of technology is School Based Technology Specialists (SBTS) in each school. These specialists serve as instructional technology coaches and support the effective use of technology in instruction. In their role, SBTS are able to provide in-time professional development and are able to work in partnership with collaborative learning teams in their schools to further student learning.



Digital Instructional Materials Adoption

Fifteen states have formal adoption policies for instructional materials. In Florida, beginning in the 2015-2016 academic year, all [adopted instructional materials](#) for students in K-12 must be provided in an electronic or digital format. In West Virginia, instructional resources approved for [adoption](#) are found on the state multiple list and can include print and electronic resources. Although Washington does not have guidelines or policies on the adoption or use of specific digital content, the Office of Superintendent of Public Instruction (OSPI) has worked with the [Washington State School Directors Association](#) on their newest model [Instructional Materials Selection and Adoption Policy](#), which recognizes both digital and OER. This policy defines instructional materials as “all materials designed for use by students and their teachers as learning resources to help students to acquire facts, skills, and/or to develop cognitive processes. These instructional materials, used to help students meet state learning standards, may be printed or digital, and may include textbooks, technology-based materials, other educational media, and assessments. They may carry different licensing types from open to all rights reserved.”

Vetting Digital Instructional Materials

Digital materials provide benefits to educators and students and can offer interactive functions that pique student interests.⁴⁴ Ensuring the high quality of digital instructional materials is a critical step in providing teachers and students with access to the best possible resources for teaching and learning, and to personalize instruction. Educators and stakeholders must develop policies on how to select, judge, use, and refine digital

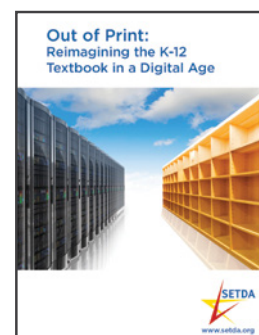
instructional materials. The [State Instructional Materials Review Association \(SIMRA\)](#) lists several rubric tools on their website that states, districts, and schools can use to vet digital instructional materials.⁴⁵

According to the SETDA survey, 14 states have a review process for digital instructional materials. In California, the state conducts an instructional materials review and does not favor one media format over another. Publishers may submit materials in print or digital format. In Louisiana, digital instructional materials, whether purchased or OER, are reviewed using the same process and criteria. Other states vet and approve instructional materials at the state level and require district adoption of approved materials.

Policies for vetting OER are in place in 14 states. Alabama has a review process for OER that is different than the review process for other instructional materials. The review process is available for any ALEX registered user and the OER criteria checklist includes components of the [Educators Evaluating Quality Instructional Products \(EQuIP Rubric\)](#). Materials are either returned to the creator for edits with feedback, or approved and posted to the website. Illinois uses the EQuIP Rubric to evaluate OER and is in the process of recruiting and training teachers to support the vetting process. In order to identify high-quality instructional materials, Kentucky has adopted eight of the EQuIP rubrics created by [Achieve, Inc.](#) to evaluate materials for state submission into CIITS.

5. Current Progress on SETDA's *Out of Print* Recommendations

Based on our research, states, districts, and schools are making progress towards implementing recommendations outlined in SETDA's *Out of Print* regarding the acquisition and implementation of digital instructional materials, as well as ensuring a vibrant marketplace. In 2015, seven states reported that they have statutes requiring the implementation of digital instructional materials in the next five years, which is one of the recommendations in the report. This is a big shift in state policy, as legislators are now recognizing the benefits of digital instructional materials. SETDA also recommended that states, districts, and schools revise and revamp their processes for the acquisition, implementation, and creation of instructional materials. In 2015, nearly fifty percent of states reported revising or expanding their definition of textbooks or instructional materials to include digital materials. Furthermore, 15 states reported that they have a review process for digital instructional materials and policies. Regarding OER, nine states reported that the state has a definition for OER, and vetting policies are in place in 14 states. The education community is moving towards a dynamic marketplace for digital instructional materials, with more than half of states creating policies and specific procedures for companies to follow when selling digital instructional materials. For example, in Massachusetts, companies can register to sell through [COMMBUYS](#), a state-of-the-art electronic market center to support online commerce between government purchasers and business. However, it is often still difficult for companies to understand the intricacies of the procurement process and who at the state, district, or local level to approach. The [Improving Ed-Tech Purchasing](#) report provides recommendations to improve the procurement process, including a simplified RFP process and websites with information about better ways to connect companies with educators.⁴⁶ Twenty states post adopted instructional materials.



6. Next Steps

As the education community continues to invest in digital learning opportunities, SETDA encourages educators, policymakers, and the private sector to support the transition strategically, and highlights several next steps for consideration as leaders move to advance the learning experiences in the digital age.

- 1. Essential Conditions:** Support the essential conditions necessary for the successful acquisition and implementation of digital instructional materials for successful digital learning.

Leadership: State and local leadership is vital for developing a shared vision, empowering leaders, and cultivating a culture of collaboration and innovation for digital learning environments.

Equity of Access: Both high-speed broadband and device access, in and out of school, are critical to fully implementing digital instructional materials to meet college and career goals

Accessibility for All Students: Providing accessibility for all students must be a consideration when acquiring, developing, and implementing digital instructional materials.

Interoperability Considerations: The acquisition of complementary systems that work together is a necessary condition to efficiently implement digital instructional materials and resources and maximize the benefits of those resources.

Student Data & Privacy: Developing and enforcing policies that supplement federal laws to protect the privacy, security, and confidentiality of student data is critical.

- 2. State Acquisition Policies: Conducting Business with States:** States and districts should work to make the procurement process more transparent, and develop specific procedures to aid educators and the private sector in navigating the process. All stakeholders (public and private) should commit to working together and develop relationships with a variety of decision-makers, recognizing that there are multiple interested parties with differing needs.

- 3. Funding and Budget Implications:** Strategic short- and long-term budgeting for bandwidth, devices, and digital instructional materials is fundamental as states, districts, and schools move towards digital learning environments. The coordination of state purchasing contracts and the encouragement of consortia purchasing can support the transition to digital as well. When acquiring digital instructional materials, the cost associated with access to broadband and devices is a pivotal factor.

- 4. State Policies: Implementation, Adoption, and Vetting of Digital Instructional Materials:** States have the opportunity to encourage the acquisition and implementation of digital instructional materials by providing guidance for schools and districts regarding best practices related to instructional materials adoption, professional learning for educators, and recommended vetting practices for any instructional materials regardless of delivery platform or licensing type.

All in all, a collaborative environment in which educational leaders from both states and districts support the personalization of instruction through the implementation of digital tools and resources is critical to best prepare students for college and careers.

Appendix A: Endnotes

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Appendix B: Website: Digital Instructional Materials Acquisition Policies for States (DMAPS)

The Digital Instructional Materials Acquisition Policies for States (DMAPS) is an online database providing state and territory policies and practices related to the acquisition of digital instructional materials in K-12 education. The tool offers the opportunity to view details regarding individual states and national trends via an interactive map.

The screenshot shows the website's main interface. At the top, the SETDA logo is on the left, and the title "Digital Instructional Materials Acquisition Policies for States" is in the center. Below the title is a navigation menu with links for "STATE PROFILES", "EXEMPLARS", "BACKGROUND", "RESOURCES", and "GLOSSARY".

Below the navigation menu, there is a section titled "Show which states/territories:" with a dropdown menu labeled "Select One Or More Topics". To the right of this is a "Refine view by" dropdown menu.

On the left side, there is a text block: "The Digital Instructional Materials Acquisition Policies for States (DMAPS) is an online database providing state and territory policies and practices related to the acquisition of digital instructional materials in K12 education. This work supports state and district leaders' understanding of state policies related to procuring instructional materials to best meet the individual needs of students and can potentially impact policy changes. In addition, publishers of instructional materials, technology developers, and investors can learn more about the relative friendliness of states to encourage innovation with respect to digital instructional materials."

Below the text is a "Site Highlights" section with a bulleted list:

- Overview of states policies/practices
- State trends via heat map
- Compare up to 5 states by topic
- [Individual state profiles](#)

On the right side, there is a map of the United States with state outlines. Several states are highlighted in green, and their abbreviations are listed in a column to the right of the map: VT, NH, MA, RI, CT, DE, MD, AK, HI, MP, GU, SA, and VI.

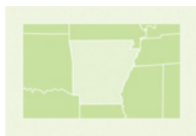
The goal of this portal is to deliver a clear picture of each state's instructional materials, policies, and practices to help encourage increased implementation of digital instructional resources. Educators, policymakers, and private sector executives have the ability to review state policies and practices regarding the procurement and implementation of instructional materials in multiple ways, including: the ability to access individual state profiles, to compare up to five states, and to make further comparisons via an interactive map that displays national trends. This work supports state and district leaders' understanding of state policies related to procuring instructional materials (including non-traditional materials, such as digital content) to best meet the individual needs of students and can potentially impact policy changes. In addition, publishers of instructional materials, technology developers, and investors can learn more about the increasingly supportive environment of states with respect to innovation around digital instructional materials.

Site Functions

A row of six site function icons with descriptions:

- Overview of state policies/practices**: Icon of an open book.
- State trends via heat map**: Icon of a map of the United States with a plus sign and a magnifying glass.
- Individual state profiles**: Icon of a location pin.
- Download spreadsheets by topic**: Icon of a downward arrow.
- District exemplars**: Icon of a briefcase.
- Compare up to five states by topic**: Icon of a bar chart.

Appendix C: State Digital Instructional Materials Policy Highlights

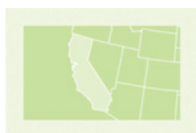


Arkansas

In Arkansas, state procurement indicates that school district purchasing functions under separate laws from those at the state level. Options for digital learning material procurement is based upon the guidelines and authority formulated by the local school board. These laws are enumerated through A.C.A. §6-21-301 through 306. An example of procurement at the local level is illustrated by reviewing [Fayetteville Board of Education](#) meeting notes.

The Arkansas Department of Finance and Administration does not utilize cooperative contracting vehicles. State procurement develops procurement documents, but ADOE and localities are responsible for development of specifications and administration of contracts/services or resources. Bids solicited by state procurement are published [here](#).

Arkansas does not have a state procurement manual, but does publish [extensive information](#) for vendors, and conducts monthly procurement classes. Arkansas students have the opportunity to learn in a quality digital learning environment that will provide a solid foundation for succeeding in a digital world. The department's mission is to provide resources and support to schools and stakeholders during the planning, implementation, and evaluation of quality digital learning environments. Beginning with the 2014-2015 school year, every student in Arkansas must take one digital course by the time of graduation per [Act 1280](#).



California

The state of California funds local educational agencies (LEA) with one state entitlement. The LEA will utilize this funding for nearly all state-funded educational expenditures, including instructional materials ([Local Control Funding Formula](#)). It is incumbent upon the LEA to determine local needs. LEAs are subject to the [California Education Code \(EC\) Section 60119 law](#), which requires instructional materials to be aligned to the state-adopted academic content standards in the four subjects of English language arts/English language development; history/social science; mathematics; and science. The [Instructional Quality Commission](#) supervises the instructional materials reviews, utilizing state-trained volunteer teachers and administrators to establish a list of materials meeting 100% of the state-adopted standards in addition to other evaluation criteria. California posts this list of [state-adopted programs](#) for LEAs to consider, as well as details on requirements for materials via the [Curriculum Frameworks Adoption Process—CalEdFacts](#). LEAs do not have a definite timeline to implement any specific instructional materials. The State conducts such an adoption on an eight-year cycle per subject. LEAs may conduct their own local reviews in consideration of piloting and adopting such materials.

The State Superintendent of Public Instruction (SSPI) encourages California school districts, county offices of education, and charter schools to be innovative in the use of technology to improve instruction, student learning, and teacher professional development. The SSPI encourages the use of digital instructional materials to support learning, and the use of technology devices for instruction. The SSPI continues to explore technological innovation in education with public and private sector partners. A local school district governing board may adopt relevant technology-based materials, if the materials are both available and comparable to other, equivalent instructional materials, as defined in education code [section 60010](#) (h). A publisher or manufacturer that submits printed instructional material for adoption by the state board, or a school district governing board, or for use by the governing board of a school district, on or after January 1, 2014, shall ensure that material is also available in an equivalent digital format during the entire adoption term. The printed instructional material in equivalent digital format shall conform to the most current, ratified standards under the federal Rehabilitation Act of 1973, and the Web Content Accessibility

Guidelines—World Wide Web Consortium for accessibility. A revised state Department of Education policy also notes digital instructional material availability. <http://www.cde.ca.gov/ci/cr/cf/imagen.asp>.

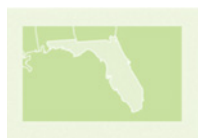


Delaware

Delaware does not have textbook adoption policies. [Delaware Code Chapter 10](#), section 1049 provides for the ability of districts to select, purchase, and distribute free of charge such textbooks and other materials of instruction, stationery, furniture, equipment, apparatus, and supplies as are necessary for the function of the schools. Delaware does provide guidance for the district regarding instructional materials, including:

- [State Content Standards and details regarding aligning of content to those standards—14 DE Admin Code](#)
- [Alignment of Local School District Curricula to the State Content Standards](#)
- [Instructional Program Requirements](#)

The state of Delaware provides funds to support the purchase of instructional materials via [14 Del Code Chapter 17, Section 1706](#). In addition, the Delaware Department of Education is implementing a learning management system (LMS) that 55%-60% of the LEAs will use during the 2015-2016 school year to organize high-quality digital instructional materials for use in K-12 schools.



Florida

Florida does not procure resources for schools or districts on a statewide level. Each school district has the constitutional authority, from state and/or local resources, to procure and use digital resources and innovative educational technologies as they deem appropriate to meet educational goals and requirements. The state has state level contracts for [state adopted instructional materials](#) but does not procure those materials for districts. The adoption of materials is a statute driven process. There is a five-year adoption cycle and all bid materials are reviewed by two state or national content experts (in the event of a tie a third will review). District specialists also provide reviews and the review process is open to the public. All materials are reviewed online. [State statute](#) requires that beginning in the 2015-2016 academic year, all adopted instructional materials for students in kindergarten through grade 12 must be provided in an electronic or digital format. If a district certifies that it has met the obligation to provide digital instructional materials aligned to standards for core courses, then the district may use state allocated funds for the purchase of technology.



Georgia

Georgia does not procure resources for schools or districts on a statewide level. Each school district has the constitutional authority, from state and/or local resources, to procure and use digital resources and innovative educational technologies as they deem appropriate to meet educational goals and requirements.

The state does have the ability to purchase goods and services (including digital instructional materials) on behalf of LEA's. Several buying consortia operate in the state with details available via the [state purchasing site](#). Georgia State Procurement Division lists consortia, RFP listings, technical assistance, and training opportunities for statewide and local procurement. LEA's can purchase learning resources through any [state approved or non-state approved contracts](#). [State Master Contracts](#) and the [State Procurement Manual](#) offer additional details for providers and districts. [Funds are available](#) for purchase of DIM or textbooks. Georgia's Statewide Longitudinal Data System has a resource component called [Teacher Resource Link \(TRL\)](#). TRL provides high-quality, vetted, and standards aligned digital resources for teachers to use during instruction.



Indiana

Indiana does not procure resources for schools or districts on a statewide level. Each school district has the constitutional authority, from state and/or local resources, to purchase and use digital resources and innovative educational technologies as they deem appropriate to meet educational goals and requirements.

In 2009, the state board took action and included digital content in the textbook definition. The definition of a “textbook” for purposes of reimbursement is the same that applies to adoption. Computers and other data devices, instructional software, internet resources, interactive and magnetic media, and other systematically organized materials are eligible for reimbursement. Because computers or other data devices are necessary to deliver the content, the state board includes them within the definition. A digital curriculum is an instructional resource that consists of both content displayed in a digital manner and interactive activities or lessons that further a student’s understanding of the content. The definition of digital curriculum is broader than just a digital version of a book.

There was a waiver to all districts in 2009 allowing them to spend all or part of the money they previously spent on textbooks to purchase digital content or devices. That waiver became part of state law in 2011. The state encourages the use of digital instructional materials via the [Digital Content Cohort](#). Teachers from around the state collaborate to curate great digital resources aligned to Indiana standards. In addition, school corporations have been successful in working with the private sector to purchase devices and digital content. For example, some schools have purchased low cost, content-loaded mini-laptops; others have developed their own materials for use with devices. Districts and schools are encouraged to collaborate to lower the cost of acquisition of textbooks, computers and other data devices, and their content.

The Office of eLearning also supports the implementation of digital instructional materials through multiple [grants](#) and [professional learning opportunities](#) including the [Innovation Planning](#) grants for districts to develop a comprehensive plan to implement digital learning.



Louisiana

In Louisiana, districts make purchases locally as deemed appropriate. Laws which govern state procurement include a competitive bid process that may result in contractual agreements for vendors with materials that are ranked as Tier 1 or Tier 2. Districts may but are not obligated to purchase materials under a state contract. State contracts allow districts to make purchases without having to solicit and review bids locally. Districts are provided with state and local funding to cover operational costs through the [Minimum Foundation Program \(MFP\) block grant](#). Grants may provide funding sources, which must be in compliance with conditions of the specific grant. There is no line item allocation provided from the legislature for instructional materials.

Louisiana implements an online [instructional review process](#) that provides feedback and rankings, which reflect the degree of content alignment with state approved standards. Districts are free to make purchases of instructional materials with or without benefit of the reviews that are designed to support local purchasing decisions. Statute 17.8.2 urges the state board to express a need to utilize digital instructional materials. The review process only examines online/digital instructional materials, but still allows print versions to be purchased by districts.



Kentucky

Kentucky is a textbook adoption state. Basal textbooks (print or digital) follow [state guidelines](#) of review and notification as established by KRS 156.395-476 and 704 KAR 3:445. The State Textbook Commission members (teachers, administrators, and parents/lay persons) manage the review and selection process, which includes use of subject specific evaluation instruments to ensure alignment to current standards. Teachers in school districts review materials and make purchasing decisions at the local level. Districts have the flexibility in what they adopt/purchase.

Kentucky provides standards, purchasing contracts, and guidance on the types of devices for accessing digital content. Additional guidance is provided from the [American Association of School Librarians \(AASL\) statement](#) on mobile devices. While state funds have been reduced due to the economic climate, Kentucky has funds available to support the purchase of digital instructional materials. Funds, traditionally earmarked for textbooks, were recently recommended to purchase digital content and devices (in order to access digital content). In 2011, it was ruled that textbook monies could be applied to instructional devices (wireless reading devices contingent upon usage of the devices as instructional resources and text readers, not as computers). The funds are flexible in that allotted dollars can be used for textbooks or supplemental materials or funds can be transferred to a general fund to allow flexibility from regulations tied specifically to textbooks. Local education agencies (LEAs) can carry over funds from year to year. LEAs can apply funds to support adoptions in other subject areas than those in the current adoption cycle, including the purchase of wireless reading devices for students to access instructional content.



Maine

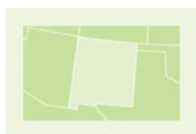
Maine does not procure resources for schools or districts on a statewide level. Each school district has the constitutional authority, from state and/or local resources, to procure and use digital resources and innovative educational technologies as they deem appropriate to meet educational goals and requirements. Materials should align with the Maine Learning Results (state content standards). Districts purchase their own instructional materials, but do receive varied levels of state general assistance based on the Essential Programs and Services funding model.

The Maine Department of Education sponsors or cosponsors some efforts related to digital instructional materials, including small OER and other curriculum identification and creation initiatives intended to provide model instructional materials. The largest of these efforts is the [Maine Learning Technology Initiative \(MLTI\)](#), which has provided 1-to-1 devices for teachers, and students in seventh and eighth grade since 2001. Currently, districts can opt in to MLTI for elementary or high school grades at their own expense. Considered a learning initiative, not just a technology access initiative, MLTI provides leadership development, professional development for teachers emphasizing learning through technology best practice. The state also enters MOUs with vendor partners identified as offering promising and relevant emerging technologies and services related to major initiatives and priorities.



Maryland

Maryland does not procure resources for schools or districts on a statewide level. Each school district has the constitutional authority, from state and/or local resources, to purchase and use digital resources and innovative educational technologies as they deem appropriate to meet educational goals and requirements. The state of Maryland allocates funding to each local educational agency that has the authority to determine spending. Maryland Education Enterprise Consortium (MEEC) has organized opportunities for its members to license the use of education hardware and software at competitive prices. MEEC also provides its members with technology-relevant services, including training and interaction with vendors. MEEC membership includes public and private K-12+ institutions, public libraries, and museums in the state of Maryland. In 2014, the state provided [Digital Innovation Grants](#). All local educational agencies are encouraged to submit a proposal. In addition, collaborative opportunities at state led meetings are provided to agencies to share digital resource experiences. As a state, Maryland is vendor agnostic. However, vendors may present at state led meetings if they offer free resources or are presenting with multiple vendors with like products.



New Mexico

The New Mexico Public Education Department (PED) is authorized under Sections 22-15-1 through 22-15-31, NMSA, 1978 Compilation, to adopt a multiple list of instructional materials and distribute funds directly to local school districts, charter districts, charter

schools, and state-supported schools. All education agencies (except non-public schools) are responsible for the processing of instructional materials purchases directly through the New Mexico Instructional Material Depository, [In-State Distribution Point \(iStar\)](#) and to the in-state publishers. In turn, all agencies (except non-public schools) are also responsible for the payment of invoices for instructional material purchases directly to iStar and to the in-state publishers when payment is due.

The instructional material fund is used to pay for instructional resources pursuant to the [Instructional Material Law](#). New Mexico has a textbook review process conducted the first full week of June each year where material is reviewed by highly qualified teachers. The subjects reviewed rotate on a six-year cycle. The Secretary of Education approves an adopted multiple list of core basal and supplemental instructional materials. Districts and non-public schools must expend a minimum of 50% of their instructional material funding from the adopted list. Charter schools have a waiver from this purchase requirement.

The [Instructional Material Fund](#) is available to purchase materials used as the basis for instruction. The [School Library Fund](#) is used for library and audiovisual materials purchased for use in operating libraries and Resource/AV Media Centers. The New Mexico [online procurement system](#) includes real time notification of solicitations and awards. While there is no state procurement manual, the state does have a [guide and registration system](#) for those wanting to do business with the state and localities.

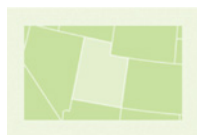


North Carolina

In the state of North Carolina, the procurement of devices and instructional materials is determined by the individual LEA or charter school. Districts have flexibility in what they adopt at the local level and leverage the state board [adopted list](#) as a guide. Formats for textbooks may be print or non-print, including hardbound books, softbound books, activity-oriented programs, classroom kits, and technology-based programs that require the use of electronic equipment in order to be used in the learning process.

Through the [statewide Instructional Improvement System \(IIS\)](#) the state is able to purchase statewide licensing to instructional materials that are delivered through the IIS platform. This [procurement process](#) follows the requirements for NC state agencies. NC Public School Law (115C-89) requires the state Board of Education to make all necessary rules and regulations concerning requests for bids, notification to publishers of calls for adoption, execution and delivery of contracts, requirement of performance bonds, cancellation clauses, and such other material matters as may affect the validity of the contracts.

Funding for digital instructional materials is determined locally by the LEA or charter school based on how they intend to use the various state funds.



Utah

Utah does not procure resources for schools or districts on a statewide level. Each school district has the constitutional authority, from state and/or local resources, to procure and use digital resources and innovative educational technologies as they deem appropriate to meet educational goals and requirements. Districts may use allotted funds for the purchase of technology as determined by local boards of education. The state provides a Recommended Instructional Materials System (RIMS), which is utilized by most districts, and includes contracted prices that are guaranteed for five years. The Favored Nation Status guarantees district and local education agencies the lowest price offered anywhere in the state. Funding for Digital Learning Resources (DLR), including hardware and digital curriculum, is available through state equipment funds and textbook funds (textbook funds can be used to purchase electronic equipment).

Utah does not have legislation that requires adoption of specific DLR by the state or localities, but there is an expectation that DLR align to Utah's standards of learning. Utah has a textbook review/approval

process that is assessed by highly qualified teachers and subject area specialists. All subject areas are reviewed each year, however, districts may choose to use non-state approved textbooks. Reviews of materials are posted on a [website](#) during the five-year contract period. The Utah State Board of Education approves a recommended list of instructional materials twice yearly as a service to districts in the selection of instructional materials. This procedure was initially mandated by law in 1907, however, districts are free to select materials that are not on the list. To encourage the implementation of , Utah has developed OER digital resources and a state driven 1-to-1 initiative that encourages districts to acquire technology.



Virginia

In Virginia, the procurement of devices and instructional materials by state agencies are completed in two ways separate ways. 1) Procurement of Devices: If the procurement is part of a solicitation for a device purchase for students that requires software to be loaded as part of the purchase, then prior to the purchase the contract must be approved by the [Virginia Information Technology Agency \(VITA\)](#). VITA is a state government oversight and monitoring agency. 2) For purchases specific to digital instructional materials at the state or local level, the procurement is conducted through bid or sole source with only departmental or local oversight. If a district solicits bids, and purchases DLR, all other districts in the state can buy off of their contract. Funding for DLR is available through state technology equipment grants (a portion is allocated for DLR), textbook funds (textbook funds can be used to purchase DLR), specific DLR grants from the governor or general assembly, and local funding. There is no legislation that requires adoption of specific DLR by the state or localities, but there is an expectation that DLR align to Virginia's standards of learning. Some larger districts have resource portals with purchased software, OER, and district created resources.

The Digital Textbook Marketplace (approved as a VITA contract) was created to provide a cloud based digital learning platform that has high-quality, standards-aligned content from publishers and other content providers. Selecting DLR content is a district, school, department chair, or teacher initiated process. Virginia's Textbook Marketplace is hosted by the state to encourage the use of digital instructional materials.



Washington

In Washington, the procurement of devices and instructional materials is primarily conducted at the local district level. Districts may choose to buy off of state master contracts, as well as make use of optional-buy contracts from several buying consortia, including [Digital Edge](#), [Washington Learning Source](#), and [Washington School Information Processing Cooperative](#). Funding for digital learning resources (DLR) is available through state basic education funding or local bonds or levies. The state has a funding formula as part of materials, supplies, and operating costs (MSOC) that drives funding allocations for technology, curriculum and textbooks, and other supplies and library materials, but does not mandate that districts must spend their funds in these categories. The Office of Superintendent of Public Instruction (OSPI) partnered with the Washington State School Directors Association (WSSDA) to update the sample school board instructional materials policy to better reflect digital materials and OER. The WSSDA policy brief and the sample policies are available at <http://wssda.org/Services/PolicyandLegal/SamplePolicies.aspx>.

Selecting supplemental DLR content is usually a school, department chair, or teacher initiated process. There are no state laws restricting local selection and purchase of DLR. The Washington State School Directors Association released an updated model policy and procedure on course design, selection and adoption of 21st century instructional materials that includes digital resources and OER. This model policy states that the superintendent or designee may consider the use of field-testing as part of the adoption process and this can provide a flexible opportunity to investigate the effectiveness of instructional materials through careful experimentation for an identified purpose based on student needs. In addition, the state has a state level OER initiative, which includes digital OER to support the implementation of digital instructional materials.



West Virginia

According to WV Code 18-2E-7, the West Virginia legislature recognizes the need for students to develop proficiency in 21st century content, technology tools, and learning skills to succeed and prosper in life, in school, and on the job.

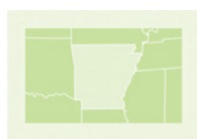
The [21st Century Tools for 21st Century Schools Technology Initiative \(TFS\)](#) provides funding to purchase technology tools, including hardware, software, network cabling, network electronics, and related professional development. In addition to the TFS allocations, districts may use Step 7b funds, local funds, or grants to purchase technology tools and digital instructional resources. According to WV Code 18-9A-10, funds allocated to county boards under Step 7a of the Public School Support Program (PSSP) are to be used to improve instructional programs according to the county and school improvement plans required by WV Code 18-2E-5 and approved by the state board.

Appendix D: School/District Exemplars



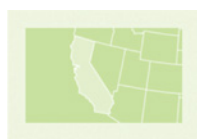
Alabama **Talladega County**

In 2009, Talladega County schools started the move towards a 21st century learning environment to prepare students for college and a career. Classrooms are equipped with computers, interactive whiteboards, and digital resources to provide students with access to instructional tools. Teachers use the project based learning (PBL) approach and guide students as they solve real-world problems, using appropriate digital tools and software to teach core content standards. Students are developing 21st century skills—communication, collaboration, creativity, and critical thinking. Currently, all Talladega schools utilize this approach and the county placed digital learning specialists in half of its schools to assist with implementation. Since Talladega implemented the PBL approach, student performance and engagement have improved significantly. Talladega’s districtwide graduation rate is now 90%, a 10% increase since 2011. <http://center.all4ed.org/Page/205>



Arkansas **J.O. Kelly Middle School**

Leveraging the robust offering of technology in the Environmental and Spatial Technology (EAST) classroom, students are empowered to direct their own learning. Promoting student choice and voice in the selection and direction of their chosen community service projects, project teams work collaboratively to solve real-world problems. Using online collaboration tools and digital content, students are connected in a way that removes the traditional barriers of walls, location, and time restraints. Teachers embrace the role of facilitator and encourage students to own the learning process; yet teachers provide support and resources along the way to help students bring their projects to successful fruition. <http://knightsofeast.weebly.com/>



California **El Capitan High School**

Located in central California’s Merced Union High School District (MUHSD), El Capitan High School opened in 2013 as the first MUHSD school to implement a “one-to-web” environment. The district allows students to bring their own mobile devices or provides them with school-issued Chromebooks so they can access all the educational resources they need over the web—anytime, anywhere. Student discipline referrals have decreased and students are more engaged in school by having a device to support their learning. <http://echs.muhsd.edlioschool.com>



Connecticut **Kaynor Technical High School**

Kaynor Technical High School is the first technical school in Connecticut to fully incorporate a 1-to-1 device structure. All teachers use an online system to post, receive and grade assignments in a paperless environment. The vast majority of the textbooks have transitioned to online digital instructional materials, to create a “backpack-less” system for students. This school-wide coherent approach provides students with equity of access, as well as enhancing student organization and collaboration. For staff, this initiative was accompanied by whole group, small group, and individual professional learning, and has enhanced staff technological capacity and professional culture as a shared learning community. Indicators of success include student and staff surveys regarding ease of use, capacity to access the technology, and effectiveness of training. School walkthroughs with district administrative teams have provided observational evidence of improved student engagement.



Idaho

Kuna Middle School

Launching via the Idaho state Pilot Grant in 2013, Kuna School District was one of the first school districts in Idaho to implement a 1-to-1 learning project at the middle school level. Kuna Middle School (KMS) successfully deployed and implemented over 800 Chromebooks to its students and staff members. By using the Substitution, Augmentation, Modification, and Redefinition (SAMR) educational technology implementation model, most KMS teachers launched the program with substitution focusing on the ultimate goal of redefinition. Teachers use online tools to deliver assignments and to encourage group collaboration. The learning management system helps to ensure that all students are connected to each other and that devices provide safe access to the digital resources. Online quizzes and tests, essays and papers, and other final exams are completed and collected digitally. Teachers often use the automatic scoring systems, which produce immediate results and the opportunity to re-teach as needed, helping to personalize instruction.



Maryland

Baltimore County Public Schools

Baltimore County Public Schools (BCPS) received grant funding from Maryland's Digital Innovation Grant during the 2013-14 and 2014-15 school years. BCPS installed broadband and Wi-Fi technology for all schools and is working to move from a 3-to-1 learning platform to a 1-to-1 platform by 2017, equipping each student and teacher with a digital learning device. To support teachers through the transition, the school system is providing each school with an instructional technology leader to guide best practices in the classroom, co-teach classes, help evaluate digital materials, and troubleshoot technical problems. BCPS spent nearly two years planning before devices were selected, with the district ultimately choosing a hybrid tablet-laptop that was favored by students, who tested prospective devices. BCPS is also developing "BCPS One," a website only available to students, staff, and parents as a central location to share instructional information. Full Summary: digitalpromise.org/districts/baltimore-county-public-schools.



Massachusetts

Burlington Public Schools

Burlington Public Schools launched the 1-to-1 Learning Program for students in grades 1-12 in 2011. The goal of the program is to provide students with real-world learning environments that mirror working environments in the digital age. Student engagement has increased across all grades and in all content areas. Students report that having access to a 1-to-1 mobile learning device is not only a dynamic catalyst for learning, but also an extraordinary tool for organizing their academic and extracurricular lives. Class structures have shifted from focusing on traditional methods of lecture and assessment, to project based, flipped classroom, and blended learning models. The schools are in the process of shifting to digital with some fully digital classes at the high school level. bpsedtech.org.

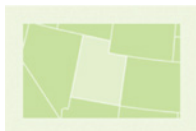


New York

Yonkers Public Schools

Yonkers Public Schools is located in Yonkers, New York, on the south end of the Hudson Valley, only minutes away from Manhattan. Yonkers is the fourth largest school district in New York, serving a diverse population across 39 schools, grades pre-kindergarten through grade 12 with 26,000 students from 100 different nationalities. In Yonkers, the district provides instructional resources through Yonkers Online Quick Links, the district's open and recommended digital resource area. It is designed to support easy access for students, staff and families. Individual schools select instructional materials based on instructional needs. At Palisades Preparatory School, many educators

teach in a blended learning environment. Science teacher, Alex Romero, utilizes digital content to engage students. Ms. Romero uses Moodle (a free platform) as the delivery platform for her science class and estimates that 75% of her instructional materials are digital. Students can access teacher created and student created content through the Moodle platform. Ms. Romero combines virtual lab experiences with face-to-face hands-on inquiry. Ms. Romero utilizes virtual labs from PhET, which offers interactive science and math simulations. Ms. Romero encourages students to “experience the interactive simulations and not memorize,” thus fostering 21st century skills. Ms. Romero promotes student involvement in creating OER content as part of their learning experience. Students created their own tutorials via a free screen-casting app and developed their own rubrics to evaluate projects and case studies. oerstudies.setda.org/case-studies/new-york/#!/summary.



Utah
Nebo School District

Nebo School District, located in Utah County, is the seventh largest school district in Utah, serving nearly 30,000 students. The district’s leadership supports a digital learning environment and is moving towards a 1-to-1 learning environment for all students in all schools over the next several years. Nebo is currently working to remodel the wireless networks to increase broadband capacity and meet demand for online instructional materials. In 2010, in a partnership with BYU and the Utah Office of Education, Nebo piloted an Open Educational Resources(OER) project for high school science. Teachers worked together over the summer to develop OER flexbooks primarily using content available on the CK-12 platform. The flexbooks are available in both print and digital version and the school is moving to full implementation of the digital versions. The flexbooks offer the opportunity for annual changes to the content, including adding additional resources and images, as well as student feedback. During this process, reviewers target areas where students are struggling or where they have misconceptions and teachers have responded positively because they can immediately make changes instead of waiting for the textbook adoption process cycle and/or new funding streams to improve the content. Teachers and students have provided positive qualitative feedback regarding increased engagement and the ability to personalize learning for students. oerstudies.setda.org/case-studies/utah/#!/summary-2.



Virginia
Henry County, Rich Acres Elementary School

Rich Acres Elementary School is a Total Title 1 Project school based on a high percentage of students qualifying for free and reduced lunch. Each teacher has a wireless laptop and the entire curriculum is digital and available via the staff’s webpage. Teachers at this school have become facilitators, rather than lecturers and students have an active part in their learning process. Students in grades three to five are provided tablets that include digital instructional materials, a variety of educational games, support content, and numerous educational apps. Digital learning has increased parental involvement and Rich Acres continues to have the highest achievement scores of any elementary schools in the district. web.henry.k12.va.us/domain/1051



Washington
Spokane Public Schools

Spokane Public Schools, located in Spokane County, is the largest school district in eastern Washington with approximately 30,000 students. Spokane includes both urban and rural schools. With a grant from the state, Spokane chose the Engage NY math curriculum for all its K-8 students. Engage NY includes free open resources aligned to the Common Core State Standards (CCSS), which was a critical requirement in the instructional materials selection process. Spokane completed extensive field testing of the OER before a two-year rollout. Field tests included one or two units per grade with professional development sessions to support teachers. All of the content is available digitally and

teachers can access online teacher guides and student books through their learning management system (LMS). The LMS is only accessible by administrators and teachers, and allows the teachers to access the course materials from work, as well as home. Spokane also provides logistical support for teachers including printing, purchasing, and organizing of course manipulatives. Teachers and students can use either the printed or digital version of the OER materials. oerstudies.setda.org/case-studies/washington/#!/summary.



Wisconsin
Washington Elementary

Providing students with access to technology is important, but giving them access to the right technology to meet their individual needs is critical. In Janesville, teachers personalize technology tools and resources especially for those students with disabilities. As part of the Universal Design for Learning strategies, the schools assess students for their strengths and seek to discover how they learn best. For example, students that need support to increase reading skills may be provided audio books or apps that provide print materials with audio support. Students at Washington Elementary have increased their reading scores; some even doubled their scores. washington.janesville.k12.wi.us

Appendix E: Glossary

Accessible Educational Materials (AEM): AEM are print- and technology-based educational materials, including printed and electronic textbooks and related core materials that are designed or converted in a way that makes them usable across the widest range of student variability, regardless of format (print, digital, graphic, audio, video).

Buying Consortium: Local, regional, state, or national groups that join together to purchase commodities with the best quality and pricing.

Digital Curriculum: The planned interaction of students with digital instructional content, materials, resources, and processes intended to assist them in achieving identified educational goals.

Digital Learning: “Any instructional practice that effectively uses technology to strengthen a student’s learning experience. It emphasizes high-quality instruction and provides access to challenging content, feedback through formative assessment, opportunities for learning anytime and anywhere, and individualized instruction to ensure all students reach their full potential to succeed in college and a career.” all4ed.org/issues/digital-learning/

Digital Devices: Electronic devices that use and process discrete, numerable data for operations. Examples used in education include: tower computers, digital cameras, digital microphones, digital camcorders, tablets, laptops, flash drives, scanners, printers, smartphones, monitors, etc.

Digital Content: This term can have broad application and include everything from snippets of video to full-year textbooks in a digital format along with all the video, audio, text, animation, simulations, and assessments in between. Thus, digital content can consist of smaller “chunks,” such as individual chapters or lessons, allowing for flexibility in creation, purchasing, distribution, and usage. It is blurring the traditional division between “adopted” or “core” content and supplemental content. setda.org/priorities/digital-content/out-of-print/

Digital Instructional Materials (DIM): Instructional materials that are created, viewed, distributed, modified, stored on and accessible with computers or other electronic devices. Examples include: computer programs, computer software, digital images, digital audio, digital video, websites, databases, electronic books, electronic textbooks, etc.

Digital Learning Resources (DLR): Digital instructional materials that are created to assist students and teachers in the teaching and learning process. Often these materials reside in an electronic repository or digital library for access by educators.

e-textbooks or e-books: The notion of digital content as core information for teaching and learning indicated as a single textbook, novel, or non-fiction book

Flexbooks: Digital publications that educators and students can update because they are published with open licenses

Individuals with Disabilities Education Act (IDEA): Specifically focuses on accessible formats of print instructional materials.

Instructional Materials: Items that are designed to serve as a major tool for assisting in the instruction of a subject or course. These items may consist of such things as textbooks, consumables, learning laboratories, slides, films, filmstrips, recordings, manipulatives, instructional computer programs, online services, compact disks (CD), digital video disk (DVD), etc.

K-12 OER Collaborative: An initiative led by a group of 12 states with the goal of creating comprehensive, high-quality, open educational resources (OER) supporting K-12 mathematics and English language arts that are aligned with state learning standards k12oercollaborative.org

Local Education Agency (LEA): District or charter based on the state definition of LEA.

Open Educational Resources (OER): Print materials, e-textbooks, videos, animation, rubrics, simulations, assessments, and any other tools that support teaching and learning and are in the public domain, open, free, and may be used and modified based on open licensing. Specific definitions from the State Educational Technology Directors Association (SETDA), the William and Flora Hewlett Foundation, and United Nations Educational, Scientific and Cultural Organization.

RFP: Request for Proposals

Procurement: Acquisition of appropriate goods, services, or works from an outside source with the best possible cost to meet the needs of the acquirer in terms of quality, quantity, time, and location.

SEA: State Education Agency

Universal Design for Learning (UDL): A framework to improve and optimize teaching and learning for all people based on scientific insights into how humans learn.

Appendix F: Licensing for Digital Resources Chart

Type	Cost	Licensing	Flexibility
Individually Purchased Digital Instructional Materials	Varies	Copyright	Copyright: Owner has the right to control the copying and dissemination of an original work.
Subscription Digital Instructional Materials	Varies	Copyright and Open Licensing	The service provider may include materials from a variety of companies and different content providers may have different types of licensing. Flexibility depends upon the type of resource.
Free Digital Learning Resources	Free	Copyright	Copyright: Owner has the right to control the copying and dissemination of an original work.
Open Educational Resources	Free or minimal cost (non-electronic print costs)	Open Licensing (Creative Commons or other)	License that permits the free use and re-purposing of the content by others. (some restrictions may apply). Digital or print format.
State Digital Learning Repository	Free (some states require state credentials for access)	Open Licensing or Copyright	Many state repositories include both open and copyrighted materials. Flexibility depends upon the type of resource.

