Navigating the Digital Shift 2019

Equitable Opportunities for All Learners

SETDA

ABOUT THIS WORK

With support from the Bill and Melinda Gates Foundation, this report was launched under the leadership of Christine Fox, SETDA's Deputy Executive Director, with guidance from SETDA's State Action Committee, SETDA's membership, and SETDA's private sector partners to provide a comprehensive update on the shift to digital instructional materials. As part of the research, SETDA interviewed lead educators from a variety of educational and government organizations and state instructional materials leaders. In addition, through a state data collection and independent research SETDA gathered details regarding policies, guidelines, and implementation for all 50 states, the District of Columbia and Guam, regarding for a total of 52 respondents.

Complementary to this work, SETDA's 2019 State K12 Instructional Materials Leadership Trends Snapshot summarizes current state policies and practices in the selection and implementation of digital instructional materials. Additionally, stakeholders can access the Digital Instructional Materials Acquisition Policies for States (DMAPS), an online database providing details related to state and territory policies and practices for K12 instructional materials selection, implementation and procurement. Policymakers, administrators, educators, publishers, technology developers, parents and students can learn about national trends and specific state policies and practices. The interactive map highlights national trends across specific topic areas including allowing users to drill down to specific data elements. State profiles provide narrative details and URLs related to policies and practices. Since its inception in 2015, DMAPS has been updated annually and expanded to include new topic areas. This year SETDA presented a new topic area, Professional Learning. In this section states share professional learning models which provide teachers guidance around the selection, creation and implementation of digital instructional materials.

REPORT AUTHORS

Christine Fox, Deputy Executive Director
Rachel Jones, Educational Consultant

SUGGESTED CITATION

Jones, R., Fox, C. (2018). *Navigating the Digital Shift 2018: Equitable Opportunities for All Learners*. Washington, DC: State Educational Technology Directors Association (SETDA).

Thank you to the Bill and Melinda Gates Foundation for their support of this work.

BILL & MELINDA GATES *foundation*

CONTENTS

EXECUTIVE SUMMARY

Whether you are custom designing your next vehicle, conducting video interviews with job candidates across the globe, managing a new project or reconnecting with old friends, online tools and resources enable us to navigate how we live and work in this digital age. In education, access and opportunities to utilize digital resources for learning provide students with the necessary skills and connections to be successful learners and contribute to their own futures. The thoughtful integration of technology provides students personalized pathways to engage in content and creative ways to demonstrate evidence of their learning. With mobile devices, collaborative digital tools, interactive virtual reality, and access to primary resources, today's students can experience learning that truly meets their individual needs and interests. And with this personalized approach, comes the important responsibility of ensuring that the tools and resources are high-quality, aligned to standards, address educational goals and are accessible for all students.

> *It is not about the technology; it's about sharing knowledge and information, communicating efficiently, building learning communities and creating a culture of professionalism in schools. These are the key responsibilities of all educational leaders.*
>
> –Marion Ginapoli, Superintendent, Lake Orion Community Schools, Michigan

HIGHLIGHTS

INSTRUCTIONAL MATERIALS POLICIES AND PRACTICES

With policies and practices, state leaders can demonstrate to districts and schools a commitment to the utilization of digital instructional materials and resources to support personalized learning where the student is the center of the learning experience. The number of states with definitions, guidance and policies supporting digital instructional materials and resources continues to increase annually, including the number of states with dedicated funding for digital instructional materials and devices.

PROFESSIONAL LEARNING

Teaching in the digital age provides excellent opportunities while posing new challenges for educators around the selection and utilization of high-quality instructional materials. Educators need to understand not only how to use digital tools and resources, but they need professional learning opportunities on how to select and implement high-quality digital instructional materials. Nearly half of all states provide educators with professional learning opportunities for the selection and/or implementation of high-quality digital instructional materials.

PERSONALIZED LEARNING

Digital tools and resources can help educators provide equitable, personalized learning experiences for a variety of students simultaneously. Personalized learning experiences enable students to collaborate with their teachers and take ownership of their learning opportunities through flexibility and choice. Several organizations, state agencies and local education agencies provide personalized learning definitions that focus on the student or learner as the center of the educational experience.

ESSENTIAL CONDITIONS

To effectively utilize digital instructional materials, states need policies and best practices to support the essential conditions necessary for implementation. Access to robust broadband both on and off campus; the provision of accessible materials and technologies; the development of interoperable solutions that support the best future state; and the assurance of privacy and security of student data.

STUDENTS AT THE CENTER

In today's digital world, technology is the key to life and work. From social interactions to banking to communication to job-embedded tools, digital applications and resources drive how we live and work in the digital age. In a recent Pew Research Center poll, The future of work in the automated workplace, more than 80% of adults "look to the education system to play a primary or secondary role in preparing young people for the workforce" and 53% stated that the "education system should be most responsible for providing young people with the necessary tools to succeed in the labor force."

The Future of Jobs and Jobs Training report asked an array of technologists, scholars, practitioners, strategic thinkers and education leaders their opinions about the likely future of educational and training programs that will provide workers with the skills they need for jobs of the future. In this informal survey, a considerable number of respondents stated that the best education programs will teach people how to be lifelong learners. Developing lifelong learners that are best prepared for college and careers requires seamless, digital learning opportunities for all students in school. Digital learning opportunities empower students to create content, interact with experts, collaborate with peers and participate in virtual reality activities bringing real world front and center.

The implementation of digital instructional materials and resources offers a variety of benefits to support student learning, including personalized learning options. Personalized learning experiences enable students to collaborate with their teachers and take ownership of their learning opportunities through flexibility and choice. Several organizations, state agencies and local education agencies provide personalized learning definitions that focus on the student or learner as the center of the educational experience. The U.S. Department of Education's Office of Educational Technology provides this definition, "Personalized learning refers to instruction in which the pace of learning and the instructional approach are optimized for the needs of each learner. Learning objectives, instructional approaches, and instructional content (and its sequencing) all may vary based on learner needs. In addition, learning activities are meaningful and relevant to learners, driven by their interests, and often self-initiated." At the time of this report, ten states have a definition for personalized learning.

> *Educators have always found new ways of training the next generation of students for the jobs of the future, and this generation will be no different.*
>
> –Justin Reich, Director of the MIT Teaching Systems Lab

Researcher Michael Horn comments that, "In most of society we've come to expect personalization—from the recommendations Amazon offers us to our searches in Google. But schools have been late to these trends—despite the clear evidence that students have different learning needs at different times." A recent 2017 Rand Corporation publication, Informing Progress: Insights on Personalized Learning Implementation and Effects, found that both low-performing and high-performing students benefited from personalized learning experiences. Students in mathematics gained about three percentile points relative to a comparison group of similar students. There was a similar trend in reading, although it was not statistically significant.

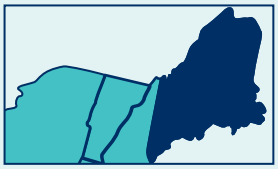
Digital tools and resources can help educators provide personalized learning experiences for a variety of students simultaneously. However, it is not just about the technology. The Leading Personalized and Digital Learning framework purposely does not include technology; instead, the authors contend that "technology needs should be driven by the vision for teaching and learning and not the other way around." Further, the article, How Does Personalized Learning Affect Student Achievement?, contends that "technology can play a role in supporting the complexity of the personalization process. When properly supported by teachers, it can help students learn independently and work at their own pace." When creating personalized learning experiences, teachers should consider digital tools and resources that focus on not only the level and skills of the student, but also their interests. Digital tools should offer engaging interactions with content and choice for students rather than the passive uses of technology. It is not enough to simply substitute analog tools with digital tools. While digital instructional materials and resources can facilitate personalized learning options by offering a variety of choices and instructional methods that can be tailored to the individual needs of the student, it is important to recognize that with these instructional choices comes responsibility. Educators must ensure that digital tools and resources are of high-quality, aligned to standards, address educational goals and are accessible for all students, including those students with disabilities. Further, personalized learning can provide equitable access for students provided that those opportunities are available for all students and not just a select group of students. In the recent blog post from

DISTRICT HIGHLIGHT

At the Community School of Excellence in St. Paul, Minnesota, students are learning the technology knowledge and skills needed for today and the future. With a differentiated curriculum that uses multi-platform tools and manipulatives, students can explore a wide range of topic areas including alternative and renewable energy, computer graphics, digital communications, robotics and software engineering. The Community School of Excellence strives to provide the curriculum and dynamic coaching staff to meet learners where they are and take them as far as they can go.

Education Elements, How Can Personalized Learning Support Educational Equity, Noah Dougherty states that "personalized learning can be a powerful tool for educators seeking to provide equitable outcomes for students" and that "the equity lens can become a driving purpose behind personalized learning." As presented in a recent case study, Access to Opportunities: A Student-Centered Approach, Beaufort County, North Carolina focuses on providing equitable learning opportunities for all students. Some districts view student-centered learning as an intervention or differentiation of instruction. Beaufort views student-centered learning as an equity issue driven by the belief that all students deserve individualized, student-centered learning experiences. The district is creating a culture where students can pursue their own interests and learn in ways that meet their own needs. In Beaufort, equity is not a buzzword or something optional; it is an imperative. With supportive policies and practices, state leaders can demonstrate to districts and schools a commitment to support equitable personalized learning needs of all students.

DISTRICT HIGHLIGHT



Maine: In Maine, students at East Grand School have the opportunity to develop workforce skills every day with the teacher designed project-based/ place-based learning curriculum. In this rural, isolated community educators leverage technology so that students can develop both soft-skills and highly technical skills.

New York: At Mineola Middle School, New York, it is a fundamental belief that students learn in different ways and it is the school's responsibility to craft lessons and activities that allow each student an opportunity to demonstrate their learning in engaging ways. Curriculum is delivered via multimedia-based text sets, resources that appeal to different learning styles and technological platforms that allow for deliberate skills-based practice. In this way, differentiation affords all students an opportunity to access content.

STATE LEADERSHIP

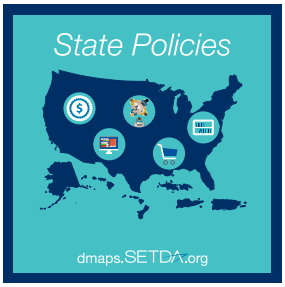
One of the fundamental elements for a successful shift to the utilization of digital instructional materials and tools is state leadership. With policies and practices, state leaders can demonstrate to districts and schools a commitment to digital learning. The number of states with definitions, guidance and policies supporting digital instructional materials and resources continues to increase annually, including the number of states with dedicated funding for digital instructional materials and devices. More than half of states currently have policies supporting digital learning, including 31 states with a definition for instructional materials that includes digital and 32 states that allow the implementation of digital instructional materials. As states and districts are often challenged financially, there are federal funding options for the acquisition of digital instructional materials and tools. The ESEA Title IV-A: Student Support and Academic Enrichment program includes the option to use funds for supporting the effective use of technology (e.g., professional development, blended and personalized learning, and devices) and the ESEA Title II-A: Supporting Effective Educators provides the opportunity to implement support for effective instructional materials and innovative technologies. As of 2018, 21 states have dedicated state funding for digital options.

38 STATES

have a definition for instructional materials

21 STATES

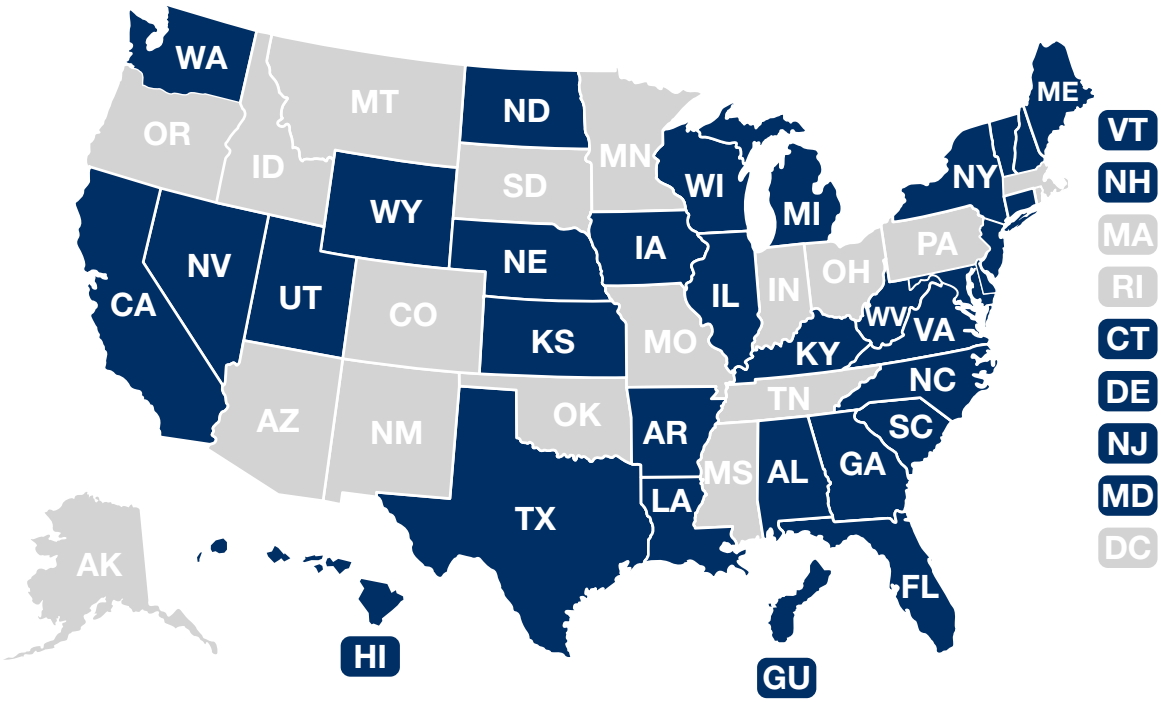
states have a process for the review of instructional materials



Policymakers, administrators, educators, publishers, technology developers, parents and students can learn about national trends and specific state policies and practices at the online database, DMAPS. The interactive map enables users to drill down to specific data elements to uncover and compare national trends. Individual state profiles include narrative details and URLs related to policies and practices for each state.

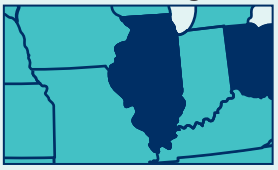
The State K12 Instructional Materials Leadership Trends Snapshot summarizes current state policies and practices in the selection and implementation of digital instructional materials based on the 2019 updates and expansion of DMAPS.

States with Digital Learning Plans



DISTRICT HIGHLIGHTS

Massachusetts: Natick's Office of Digital Learning works to promote and strengthen the district's implementation of digital technologies in the Natick Public Schools. Based on an understanding of the foundations and mechanics of current research-based methods on digital learning, Natick educators allow their educational goals for student learning to drive the digital technology used. Natick educators maintain high academic standards for all students, while at the same time understanding that each learner has unique strengths, interests and passions that can be, and should be, part of the learning environment. Using digital methods enables teachers to spend more time with students to build the knowledge and skills to become lifelong learners.



Illinois: North Palos School District 117 created a blended learning environment where students use collaborative digital applications and work with peers to engage in authentic and real-world learning experiences. Students in grades K-2 have 2:1 device access and students in grades 3-8 have 1:1 device access. The availability of devices allows students to showcase their creativity, demonstrate mastery in a variety of ways, gain independence and model responsibility. With these digital tools, students manage their own learning and provide real-time data to teachers.

PROFESSIONAL LEARNING

Sustainable professional learning models geared specifically to support the implementation of student centered, personalized digital learning environments can positively impact teaching and learning experiences. One key focus area of professional learning must focus around the selection and utilization of high-quality instructional materials. Educators need to understand not only how to use digital tools and resources, but they need professional learning opportunities on how to select and implement high-quality digital instructional materials. It is imperative that states and districts provide professional learning opportunities for teachers to prepare them as they shift towards digital learning.

SETDA's Quality Content Guide recommends that districts and schools develop professional learning strategies to ensure successful implementation of instructional materials that includes:

- initial resource training for educators
- peer coaching
- sustained professional learning

Whether teachers are selecting materials from state reviewed content, district provided content, via a resource repository or vendor's website, they need strategies to select and implement instructional materials that are aligned to standards, accessible for all learners, free from bias and that include pedagogical designs that support learning goals. Districts, schools and teachers should consider digital tools and resources that focus on the active use of technology that enable learning through creation, production and problem solving. Passive uses of technology such as apps that mimic worksheets or flashcards that simply substitute analog tools do not necessarily enhance learning opportunities just because they are digital.

When accessing digital tools, teachers also need to internalize laws and best practices related to digital citizenship, accessibility, and student data privacy. There is an increasing need to foster conversations between teachers, students and parents about the responsibility and impact of utilizing digital tools and resources. Common Sense Media offers free lesson plans for teachers on topics such as media literacy,

> *Access to high-quality digital materials is important but knowing how to use them effectively is just as important. Like owning a Ferrari but not knowing how to drive a five speed, simple access is not enough to impact learning.*
>
> –Christine Fox, Deputy Executive Director, SETDA

JOIN THE PROFESSIONAL LEARNING FOR EFFECTIVE PRACTICE: LEVERAGING TITLE IIA COMMUNITY

Launched in May 2019, this online community provides an online forum where district and state Title IIA leaders can learn about the effective implementation of the federal Title IIA program. The community highlights program implementation, best practices and shares examples of evidence-based professional learning opportunities and exemplary professional learning programs at the state and district levels. www.edweb.net/titleiia

online privacy and cyberbullying. The 2016 ISTE Standards for Students asserts that "students recognize the rights, responsibilities and opportunities of living, learning and working in an interconnected digital world, and they act and model in ways that are safe, legal and ethical."

For the first time, SETDA gathered data about professional learning opportunities for educators provided at the state level either by the state education agency or statewide through partnering organizations. As shown in the infographic, 22 states reported that they provide educators with professional learning opportunities for the selection of high-quality digital instructional materials and 20 states provide educators with professional learning opportunities for the implementation of digital instructional materials. Sixteen states provide professional learning programs to support the development of digital OER and 14 states provide professional learning opportunities for teachers to share digital OER. Twenty-five states provide technical assistance to support the implementation of accessible educational materials and 20 states provide technical assistance to support the use of accessible technologies.

STATE HIGHLIGHTS

Louisiana: The state is committed to supporting teachers, principals and school system leaders, by providing high-quality, standards-aligned curriculum, assessments and professional development. Professional learning opportunities are provided through annual face to face collaboration meetings and the statewide summit. Louisiana also offers teacher leaders a blend of high-quality tools and resources. Information is available to all teachers on the collaboration and teacher leadership website.

Montana: In addition to the various in-person professional development opportunities that are offered by the Montana Office of Public Instruction, the Teacher Learning Hub (HUB) provides the foundation for statewide professional development. The Hub offers quality online learning that is engaging, relevant, accessible and free. The Hub offers diverse course offerings and an expanded catalog of more than 100 courses. With users increasing to nearly 9,000 in 2017, the Hub added a second full-time specialist in January 2018 with support from the Montana Comprehensive Literacy Program Grant.

> *Simply searching online for a video or podcast may not result in a quality instructional material that is aligned to standards and supports differentiated learning. Idaho provides professional learning opportunities focused on the selection of high-quality instructional materials through face-to-face training and practice as well as webinars and online courses.*
>
> –Elizabeth James, Curricular Materials Coordinator, Idaho Department of Education

Nebraska: The Nebraska Instructional Materials Collaborative (NIMC), the Nebraska Department of Education (NDE) and key partners are committed to providing statewide leadership that informs and supports the decisions made locally related to curriculum and instructional materials. The NIMC has developed a website highlighting high-quality, standards-aligned instructional materials and offers Nebraska-specific guidance documents to ensure materials meet the expectations of Nebraska's Content Area Standards. Along with the CCSSO Network Project and the guidance it provides, Nebraska is also providing training and development around OER.

Ohio: Ohio's shared plan, Each Child, Our Future Each Child, ensures that each student is challenged, prepared and empowered for his or her future through an excellent pre-kindergarten through grade 12 education. The plan's purpose includes promoting high-quality educational practices across the state and include providing leadership and support for professional learning opportunities for educators related to the creation, selection and/or implementation of quality digital instructional materials.

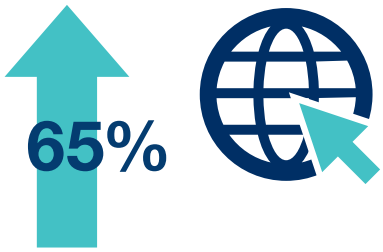
Pennsylvania: Pennsylvania Intermediate Unit (PAIU) Hub on OER Commons includes high-quality, standards-aligned, open educational instructional materials either created or curated by commonwealth educators. As part of this effort, the Pennsylvania Department of Education and PAIU are gathering teacher cadres for professional development to ensure the collections will be implemented with fidelity.

ESSENTIAL CONDITIONS

In the 2015 Navigating the Shift publication, SETDA identified the essential conditions necessary to support digital learning: state leadership; equity of access to both high-speed broadband and devices; accessibility for all students; the interoperability of digital tools and platforms; and data privacy policies to protect the rights of students. Those essential conditions remain relevant and this publication provides additional insight about recent initiatives and trends in each of these areas.

Broadband Access

With the use of digital tools and resources to personalize learning, consideration needs to be given to bandwidth capacity. Education Networks of America (ENA), based on its experience delivering connectivity to over 7,000 schools and libraries, continues to observe and projects into the future a bandwidth growth rate of 65% per year. Additionally, CoSN's 2018-19 Annual Infrastructure Report stated that student devices and digital content continue to rank as the top drivers for increased bandwidth in schools. It is important that states, districts and schools assess current bandwidth needs and adequately plan for the future so that educators and students can effectively leverage digital instructional materials and applications for learning on campus. Additionally, off campus access for educators and students is essential for ensuring equitable access to digital tools and resources for all students. As instructional materials continue to shift to digital, and typically some of that content is exclusively available online, students must have access to broadband and devices outside of school, particularly at home, to be successful. Unfortunately, many students still do not have adequate access to the internet at home—often referred to as the "homework gap," the gap between students whose internet connections at home are slow or non-existent—and those who have home connections with adequate speed. According to the Pew Research Center Fact Tank, 17% of teens can't always finish their homework because they do not have reliable access to a computer or the internet.



Future Internet Growth Rate

The National Collaborative for Digital Equity (NCDE) works to eliminate the digital divide as a barrier to economic and educational opportunity. NCDE strategic priorities are mobilize states and communities to undertake sustained efforts to eliminate the digital divide; provide guidance for partnership development; and generate and disseminate research and evaluation on effective digital equity and economic inclusion practices through GIS mapping.

23

STATES

provide policies and/or guidelines for districts for the implementation of internal wireless connections.

Accessibility

With the imminent shift from print to digital, education leaders must proactively consider the accessibility of digital resources for all students, including students with disabilities. To both comply with legislation and optimize teaching and learning opportunities for every student, states and districts should develop policies and best practices that ensure the provision of accessible materials and technologies.

Digital materials and technologies are accessible when students with and without disabilities can use them in an equally integrated and equally effective manner, and with substantially equivalent ease of use. Accessible materials are designed or enhanced in a way that makes them usable by the widest possible range of learner variability, regardless of format (print, digital, graphical, audio, video). Accessible technologies are usable by students with a wide range of abilities and disabilities and are directly usable without assistive technology (AT) or usable with it (accessibletech.org). Students with disabilities use a range of AT for communicating, perceiving information, and physically interacting with materials and technologies.

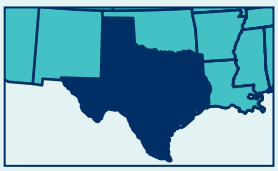
The National Center on Accessible Educational Materials (AEM Center), a SETDA partner, offers technical assistance to state and local policymakers and other stakeholders

States and districts also have the responsibility of communicating accessibility requirements to publishers and technology developers. The National AEM Center provides best practices for communicating digital accessibility requirements in procurement policies and guidelines. Currently, 30 states have a definition for accessible educational materials either based in state statute or the federal definition and 29 states have a definition for accessible technologies.

STATE HIGHLIGHTS

Indiana: Indiana's PATINS project (Promoting Achievement through Technology and INstruction for all Students) is a state-wide technical assistance network. Funded by the Indiana Department of Education and Administration, PATINS has a team of specialists that provides training on accessible materials and technologies through in-person trainings and webinars that are available year-round to Indiana educators. Self-paced courses on access-related topics are on PATINS iTunes U and educators can learn anytime on PATINS YouTube channel.

Florida: Florida's Department of Education has developed a series of guidance documents for use at the state and district levels. These include a Technical Assistance Paper on Accessible Instructional Materials and a Technical Assistance Paper on Assistive Technology (AT). These documents provide definitions of key terms, guidance for the selection and procurement of both materials and technologies, their consideration in IEPs and more. To ensure accessibility in procurement processes, Florida developed a UDL Questionnaire for bidders to report the specific learner supports in their products, including flexible presentation and navigation options, study tools, and compatibility with AT.



Texas: Texas Education Agency (TEA) has a robust and comprehensive accessibility policy for publishers and technology developers. TEA, a state adoption state, calls for bids for new instructional materials by issuing annual proclamations. Proclamation 2020 requires publishers and other vendors of digital materials to contract with an independent third party to provide a report that verifies product compliance with federal accessibility standards.

Interoperability

State leadership is essential for developing interoperable solutions that support the best future state where student data will be seamlessly incorporated by all stakeholders to support the ultimate goal of student success. In the Navigating the Digital Shift 2018 publication, SETDA identified interoperability considerations and requirements for digital instructional materials as a critical step in ensuring the seamless transition to a digital learning environment. Interoperability begins with the procurement process, providing an opportunity for states and districts to include data standards requirements in requests for proposals. Ideally, data from multiple products such as a learning management system, a student information system and learning object repositories will be aligned to the same common data standards. Without interoperability, districts may incur significant costs and staff time trying to integrate systems that are not interoperable.

More recently, in SETDA's 2018 State Education Leadership Interoperability: Leveraging Data for Academic Excellence publication, state academic and interoperability goals focus on improving student success; personalizing instruction; improving data collection and reporting; safeguarding data security and privacy; ensuring portability of student data; and improving states' ability to assess efficacy of education technology products.

STATE LEADERSHIP INTEROPERABILITY

SETDA is partnering with the Council of Chief State School Officers (CCSSO) to strategically align efforts on improving State Education Agency (SEA) data and system interoperability by expanding the adoption of standards, solutions, and practices necessary to impact the education community broadly. CCSSO and SETDA both share a belief that improving data interoperability is an important element to improving student outcomes. With funds made available by the Michael and Susan Dell Foundation, CCSSO and SETDA are collaborating on an interoperability themed project titled Project Nessie (Nurturing Engagement & Support for State Education Interoperability Efforts). The project goals include a multi-state Interoperability Taskforce, State Commitment to Interoperability and a Roadmap to Interoperability Implementation.

STATE HIGHLIGHTS

Wisconsin: In Wisconsin, the state's digital learning plan recommends the use of a common format for the learning management system that allows courses from any vendor or content developed in-house to be mixed and matched. Additionally, Wisconsin is adopting technical interoperability standards to ensure the seamless sharing of digital content and services among systems and applications.

PROJECT UNICORN

Project Unicorn

This initiative strives to improve data interoperability within K-12 education, encourages districts to only procure vendor tools which meet a quality threshold of fidelity for data exchange.

Student Data Privacy

When acquiring digital applications and resources, considerations related to student data privacy are essential. As the collection and shared access to data increases, states recognize the need to have a clear understanding of data privacy, confidentiality and security practices related to uses of student data, and to provide guidance to districts when needed. States and districts should be certain that policies are in place regarding who has access to student data and review third party agreements for compliance around use, protection and destruction of student personally identifiable data. The Data Quality Campaign (DQC) recommends that state policymakers implement laws and policies to ensure the availability of quality data. Additionally, DQC encourages states to engage with the community to build trust around the value of education data to improve learning. Many states have passed student data privacy legislation in the past few years. Resources related to state level student data privacy are available via National Conference of State Legislatures.

Protecting Student Privacy
Established by the U.S. Department of Education, this website provides technical assistance to help districts and schools use best practices in their use and management of student information. The website provides official guidance on FERPA , technical best practices and answers to Frequently Asked Questions.

NEXT STEPS

Developing lifelong learners that are best prepared for college and careers requires seamless, digital learning opportunities for all students with digital instructional materials at the core. As districts and schools shift to digital instructional materials and resources to support student learning, policies and practices are critical to ensure effective implementation. SETDA highlights several next steps for consideration as education leaders continue to advance living and learning in the digital age.

- **Instructional Materials Policies and Practices:** With policies and practices, state leaders can demonstrate to districts and schools a commitment to the utilization of digital instructional materials and resources to support the personalized learning needs of all students. We encourage states to provide a service to districts in the review and approval of instructional materials. Most often districts are not required to acquire instructional materials from the list, but it is a valuable resource ensuring that materials are high-quality, aligned to standards and accessible for all students.
- **Professional Learning:** Sustainable professional learning models geared specifically to support teachers for the implementation of digital materials can positively impact the teaching and learning experiences. Educators need to understand not only how to use digital tools and resources, but they need professional learning opportunities on how to select and implement high-quality digital instructional materials securely and safely.
- **Personalized Learning:** Digital tools and resources can help educators provide personalized learning experiences for a variety of students simultaneously. Personalized learning can provide equitable access for students provided that those opportunities are available for all students regardless of location, income, race, or disability.
- **Essential Conditions:** To effectively utilize digital instructional materials, states need policies and best practices to support the essential conditions necessary for implementation. Access to robust broadband both on and off campus; the provision of accessible materials and technologies; the development of interoperable solutions that support the best future state; and the assurance of privacy and security of student data.

APPENDIX A: WORKING GROUP PARTICIPANTS

CREDITS & ACKNOWLEDGMENTS

SETDA would like to the State Instructional Materials Review Association (SIMRA) and the National Center on Accessible Educational Materials for their support of this work. The following leaders provided helpful comments and insights, including:

Doug Casey, Connecticut Commission for Educational Technology
John Chadwick, New Mexico Department of Education
Cynthia Curry, National Center on Accessible Educational Materials for Learning
Andre DeLeon, Nevada Department of Education
Peter Drescher, Vermont Agency of Education
Alison Fairbrother, Florida Department of Education
Rick Gaisford, Utah State Board of Education
Erich Grauke, Illinois State Board of Education
Alan Griffin, Utah State Board of Education
Elizabeth James, Idaho State Department of Education and SIMRA
Todd Lawrence, Idaho State Department of Education
Ann-Marie Mapes, Michigan Department of Education
Sean McDonough, National Education Technology Consultant
Janice Mertes, Wisconsin Department of Public Instruction
Dennis Small, Washington Department of Public Instruction
Carla Wade, Oregon Department of Education
Jean Wheeler, Virginia Department of Education

APPENDIX B: PERSONALIZED LEARNING DEFINITIONS

Bill & Melinda Gates Foundation: Personalized learning has four key attributes: learner profiles, personal learning paths, competency-based progression, and flexible learning environments. (Bill & Melinda Gates Foundation, Continued Progress: Promising Evidence on Personalized Learning)

Digital Promise: Personalized learning, learning that is connected to each individual's development, background, interests, and experiences, provides an approach that broadly and equitably supports educators' efforts to empower learners as individuals.

ISTE: [Personalized] learning that is tailored to the preferences and interests of various learners, as well as instruction that is paced to a student's unique needs. (ISTE, Personalized vs. Differentiated vs. Individualized Learning)

iNACOL: Personalized learning is tailoring learning for each student's strengths, needs and interests—including enabling student voice and choice in what, how, when, and where they learn—to provide flexibility and supports to ensure mastery at the highest standards possible. (Mean What You Say: Integrating Personalized, Blended and Competency Education Patrick, Kennedy, Powell, iNACOL 2013)

National Center for Learning Disabilities: Personalized learning allows all children to receive a customized learning experience. Students learn at their own pace with structure and support in challenging areas. Learning aligns with interests, needs and skills, and takes place in an engaging environment where students gain a better understanding of their strengths. (National Center for Students with Learning Disabilities, Personalized Learning: Meeting the Needs of Students with Disabilities)

Personalized learning offers a path to effectively support the growing diversity of the population of students by understanding how individual learners learn best and actively engage, motivate, and inspire them with the right resources at the right time, in the right medium, and at the right pace. (Digital Promise: Making Learning Personal for All The Growing Diversity in Today's Classroom)

U.S. Department of Education: Personalized learning refers to instruction in which the pace of learning and the instructional approach are optimized for the needs of each learner. Learning objectives, instructional approaches, and instructional content (and its sequencing) may all vary based on learner needs. In addition, learning activities are made available that are meaningful and relevant to learners, driven by their interests, and often self-initiated.

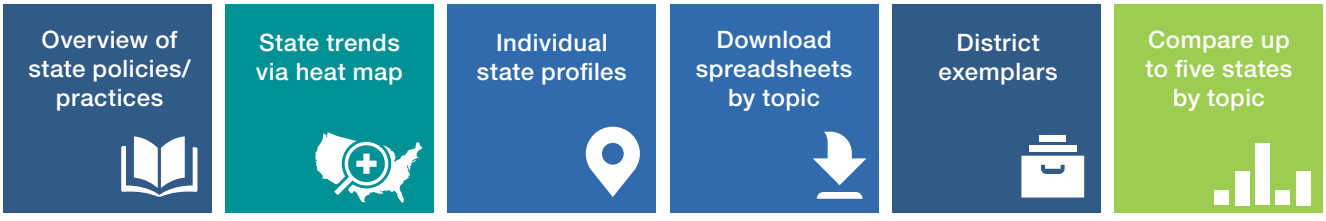
ESSA, EdTech and the Future of Education, a SETDA publication, discusses how the authorization of new funding streams can potentially help states and districts invest in technology to support everything from personalized learning and enhanced digital content to advanced assessment and data analytics — as well as the staff development needed to put these tools to use.

APPENDIX C: 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 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



APPENDIX D: STATE INSTRUCTIONAL MATERIALS POLICIES OVERVIEW

32 STATES

have a digital learning plan

31 STATES

have a definition for instructional materials that includes digital instructional materials

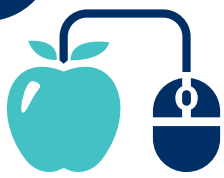
3 STATES

require the implementation of digital instructional materials

19 STATES

require districts to develop a digital learning plan

21 STATES



have a definition for OER

9 STATES

require students to take an online class prior to graduation

29 STATES

have digital learning standards for students

32 STATES

allow the implementation of digital instructional materials

10 STATES

have a definition for personalized learning

38 STATES

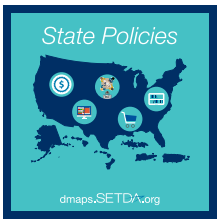
have a definition for instructional materials

From the State K12 Instructional Materials Leadership Trends Snapshot report

https://www.setda.org/priorities/digital-content/snapshots2019/

APPENDIX E: RESOURCES

State K12 Instructional Materials Leadership Trends Snapshot. summarizes current state policies and practices in the selection and implementation of digital instructional materials. This report is based on the 2019 updates to the Digital Instructional Materials Acquisition Policies for States (DMAPS) online portal. http://www.setda.org/master/wp-content/uploads/2019/03/DMAPS_snapshot_3.26.19.pdf.

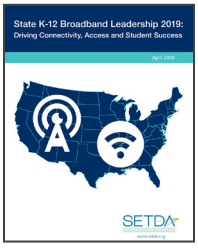


DMAPS Digital Instructional Materials Acquisition Policies for States (DMAPS). Updated and expanded in March 2019, the DMAPs website is an online database providing state and territory policies and practices related to the acquisition of digital instructional materials in K-12 education. This unique tool offers the opportunity to view details regarding individual states and national trends via an interactive map. The goal of this portal is to provide a clear picture of each state's instructional materials policies and practices to help encourage increased implementation of digital instructional materials. dmaps.setda.org.

Guide to Quality Instructional Materials. State, district and school level leaders can use this guide to launch and maintain vetting processes for the selection of quality instructional materials aligned to standards. Key considerations, questions and helpful hints are included throughout the guide. Additionally, the guide includes best practice examples from states and districts and national, state and local resources to consider when selecting quality instructional materials. http://qualitycontent.setda.org/

Transformative Digital Learning
A Guide to Implementation

TDL is a free web-based resource designed to support school and district leaders as they work to ensure that investments in digital learning spark positive results. Updated as of April of 2018, the guide now includes a set of professional learning resources, known as facilitator guides, for states and districts to use to host statewide and/or regional convenings to provide customized support and training. This project also includes a set of stakeholder communication toolkits designed to help stakeholders disseminate information about teaching and learning in the digital age. Topics include: Planning, Professional learning, Operations, Instructional Materials, Equity & Access. http://digitallearning.setda.org/



State K-12 Broadband Leadership: Driving Connectivity, Access and Student Success. The resource highlights the importance of state leadership and the various ways states strive to support districts and schools to achieve equitable digital learning opportunities for all students both on campus and outside of school. States demonstrate leadership through legislation, initiatives, partnerships, statewide broadband networks, regional networks, and/or statewide purchasing consortia to facilitate reliable, cost-effective internet access for districts. In addition to this report, SETDA published an Online Broadband Map tool to highlight individual state policies and practices and to provide a chance to share additional state examples. https://www.setda.org/priorities/equity-of-access/statek12broadbandleadership2019/