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State Strategies to Advance Digital Equity

By Joseph Hedger

By accelerating schools' adoption of technology for virtual learning, the pandemic spotlighted longstanding inequities in digital access, especially for Black, Hispanic, and low-income K-12 students. By spearheading efforts to collect data, collaborate with partners, buy digital devices and infrastructure, and reimagine effective technology use, several states made strides toward digital equity in schools.

In 2019, 95 percent of 3- to 18-year-olds had home internet access, 6 percent of whom relied on a smartphone for access.[1] However, in April 2021, 46 percent of parents with lower incomes said their children had at least one issue related to use of technology for schoolwork during school closures.[2] Even though most schools have returned to in-person learning, these households' lack of connectivity or devices continue to limit students' opportunities to access content and instruction in increasingly connected learning environments.

Early this month, the Biden administration emphasized its support for ensuring digital access and opportunity for digital learning beyond the pandemic with its announcement of a plan to work with service providers to make high-speed internet more affordable for low-income families.[3]

GATHERING DATA

In early 2021, the **New York Board of Regents** and the New York State Education Department (NYSED) convened three summits to explore digital inequity in New York that culminated in a set of strategic goals for addressing it. During these summits, experts reviewed data from the U.S. Census Bureau's annual American Community Survey, which showed that nearly 27 percent of New York households did not subscribe to wireless broadband service at home in 2019, and about 22 percent did not have a desktop or laptop computer at home.[4] Similarly, poor New Yorkers, older adults, and communities of color had a low adoption rate of digital tools, and rural households were less likely to have wireless service than nonrural households.

At the beginning of school closures in spring and fall 2020, NYSED also surveyed public schools for information on students' and teachers' home access to devices and the internet. These surveys clarified where students lacked sufficient, reliable, high-speed internet access and whether they had devices, either provided by the school or family.[5]

In partnership with technology and library groups and universities, NYSED in December 2021 made data on digital and broadband access among children and in disadvantaged communities publicly available through an online, interactive mapping tool. The New York State Digital Equity Portal includes the percentage of households with broadband at home by income level, the number of households with no broadband internet connection, the percentage of households by connection type, and the total number of children under 18 years old without connectivity. The tool also breaks down digital access at home by race and ethnicity and thus checks off one of the first short-term goals of the strategic framework developed out of the digital equity summits.[6]

In December 2020, the **West Virginia State Board of Education** approved four new data elements relating to students' equitable access to technology within the West Virginia Education Information System.[7] The state education agency proposed collecting information about student access to devices suitable for virtual or remote learning, whether students have sole use of devices for learning, the type of internet services or connectivity available in a household, and the quality of internet access and connectivity to support virtual or remote learning in the home. The state's Data Governance Committee and other stakeholders reviewed these new elements to ensure they were useful in gauging progress toward state goals.

ENGAGING PARTNERS

Idaho Governor Brad Little formed the Digital Divide Committee in June 2020 to work with the governor's office and the state board of education to improve student access to devices and connectivity. "When the pandemic forced the soft closure of schools and a transition to distance learning options, it became painfully clear just how wide the digital divide is," said committee chair and board member Kurt Liebich at the time.[8]

The **Idaho State Board of Education** convened a special session in July 2020, where they approved a committee recommendation to use part of the state set-aside from federal Elementary and Secondary School Emergency Relief (ESSER) funding, as well as a $30 million grant from the Governor's Coronavirus Financial Advisory Committee, for digital equity. Idaho's plans call for education agencies to partner with other local organizations, businesses, and parents to identify a framework around devices, connectivity, and learning management systems that can help districts maximize the impact of funds devoted to closing gaps in students' access to digital technology.[9]

Libraries and librarians also play a large role in advancing digital equity. Because their job is to think holistically about information and technology, they are well placed to engage students outside of school hours, according to Alan S. Inouye, senior director of public policy and government relations at the American Library Association.

"How do both types of libraries—school and public—promote student learning, exploration, and socialization in your state?" he said. "If you don't know the answer, I urge you to reach out to the library community in your state. You could start with the state librarian and president of the state library association."

BUYING DEVICES AND SOFTWARE

In 2020, the **Mississippi** legislature allocated $200 million for equity in distance learning and broadband availability during the pandemic through the Mississippi Connects initiative. Using ESSER funds, the state education agency bought and distributed more than 325,000 devices to school districts across the state.[10]

In addition to laptops or tablets for students and teachers to use at home or school, Mississippi Connects provided preloaded high-quality instructional materials and online learning tools, enhanced internet connectivity in areas lacking broadband service, professional development and technology support for teachers and students, and student access to telehealth and teletherapy services during distance learning. Title I school districts started one-to-one Chromebook programs and purchased hotspots and other solutions for disconnected families.[11] The state board also contracted with vendors in December 2021 for subscriptions to digital trainings and online resources and learning materials for school districts.

In its plan for the use of American Rescue Plan ESSER funds in 2021, the **Utah State Board of Education** highlighted the lack of broadband infrastructure in San Juan School District, specifically with Navajo Nation students, and outlined the need to allocate resources to extending broadband connectivity and schools' local area networks there.[12]

FOCUSING ON KEY LEARNING STANDARDS

In May 2021, the **California State Board of Education** released the California Digital Learning Integration and Standards Guidance, a framework to help teachers shift standards-aligned instruction seamlessly between in-person and virtual settings. The guidance was developed following passage of Senate Bill 98, which directed its development and authorized funds for it. Developed by the Sacramento County Office of Education in collaboration with the state education agency and education technology organizations EdSurge, the International Society for Technology in Education (ISTE), Solutions Studio, and Computer-Using Educators, the guidance identifies critical standards in English language arts and mathematics for instructional focus, resources for formative and diagnostic assessment, and embedded social-emotional learning (SEL) supports for pupils through instruction on SEL skills, intentional teaching practices and activities to create inclusive and nurturing environments, and integration of SEL with academic content.[13]

"The legislature wanted us to take the English language arts and math standards and identify what some people might call the power standards—the main things that you've got to teach," said Dr. Linda Darling-Hammond, chair of the California board. "A lot of states had already said, 'How do you organize the standards in a way that really goes deep on the things that are most important?' This gave us an opportunity to do that and to link it to the digital tools and software and opportunities that were available."

Although they began developing the framework during school closures, its developers understood that most schools would be open and in person by the time it was released, so they wanted to meet existing needs in a way that would endure and be helpful to teachers on an ongoing basis, Darling-Hammond said. "It's also written in a way that's very accessible and organized so teachers can really take it for their grade level and content area and use it effectively."

At the beginning of school closures in 2020, the California education agency surveyed districts to determine the need for laptops and wi-fi hotspots. Through the Bridging the Digital Divide fund, they sought to address gaps they identified. While many inequities persist, the state did see substantial improvements. The percentage of households reporting reliable device access shot up from 67.5 percent in spring 2020 to 81.6 percent and 81.8 percent in fall 2020 and spring 2021.[14]

Boards should support a high-quality, effective broadband internet infrastructure sufficient to close the connectivity gap in areas with limited access. Armed with heightened knowledge of the gaps that came out of the pandemic, states can now better advance efforts to connect all students to digital learning opportunities moving forward.

Joseph Hedger is NASBE's associate editor.

NOTES

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