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Restarting and Reinventing School: Learning in the Time of COVID and Beyond

Priority 1: Close the Digital Divide

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Across the United States, state education agencies and school districts face daunting challenges and difficult decisions for restarting schools as the COVID-19 pandemic continues. As state and district leaders prepare for what schooling will look like in 2020 and beyond, there is an opportunity to identify evidence-based policies and practices that will enable them to seize this moment to rethink school in ways that can transform learning opportunities for students and teachers alike.

Our current system took shape almost exactly a century ago, when school designs and funding were established to implement mass education on an assembly-line model organized to prepare students for their "places in life"—judgments that were enacted within contexts of deep-seated racial, ethnic, economic, and cultural prejudices. In a historical moment when we have more knowledge about human development and learning, when society and the economy demand a more challenging set of skills, and when—at least in our rhetoric—there is a greater social commitment to equitable education, it is time to use the huge disruptions caused by this pandemic to reinvent our systems of education. The question is: How we can harness these understandings as we necessarily redesign school? How can we transform what has not been working for children and for our society into a future that carries us forward into a more equitable future?

This section is part of a larger report, *Restarting and Reinventing School: Learning in the Time of COVID and Beyond*, that focuses on how policymakers as well as educators can support equitable, effective teaching and learning regardless of the medium through which that takes place. The full report provides an overarching framework to inform the restart of schools while also providing a long-term vision that can guide leaders toward new and enduring ways to address educational quality and inequity. It illustrates how policymakers and educators can:

1. Close the digital divide
2. Strengthen distance and blended learning
3. Assess what students need
4. Ensure supports for social and emotional learning
5. Redesign schools for stronger relationships
6. Emphasize authentic, culturally responsive learning
7. Provide expanded learning time
8. Establish community schools and wraparound supports
9. Prepare educators for reinventing schools
10. Leverage more adequate and equitable school funding

This section provides research, state and local examples, and policy recommendations for how policymakers and educators can close the digital divide. For the full report, go to http://learningpolicyinstitute.org/product/restarting-reinventing-school-covid.

Priority 1: Close the Digital Divide

The COVID-19 crisis has made it clear that technology-supported learning will be part of the future of education and that all children must be provided with access. Schools may reopen only to close again for periods of time over the coming school year; some may reopen with schedules that blend distance learning with social distancing on-site; and, even when schools reopen, students will need to stay home if they have been exposed to the virus, so they may have to plug in to distance learning at any time. Even once the pandemic passes, natural disasters such as hurricanes, floods, and fires will continue to shutter schools for periods of time.

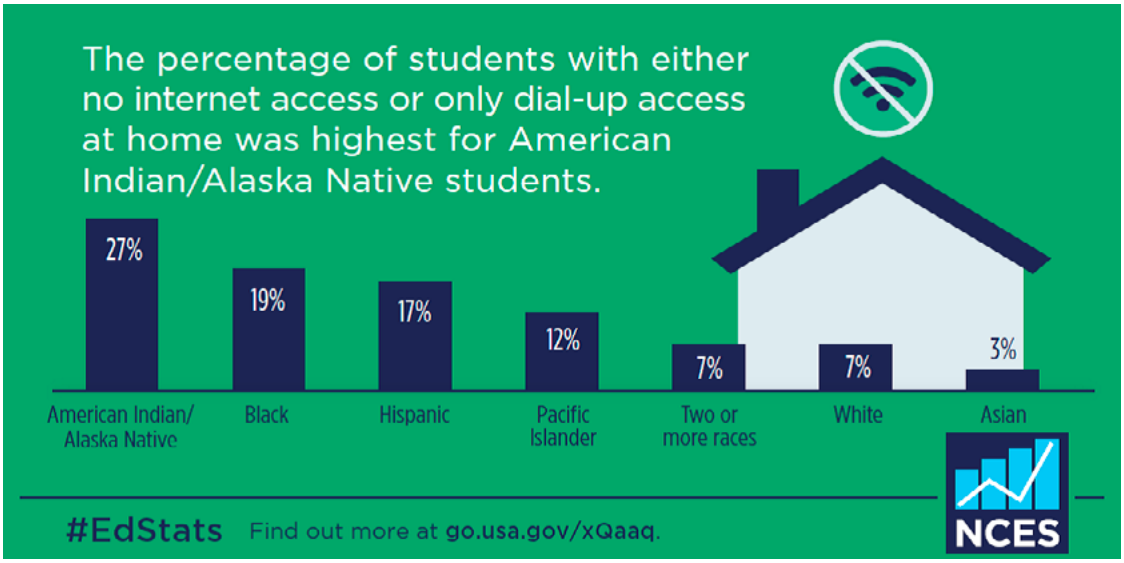
What Students Need

Computers and connectivity are to today's schools what textbooks and chalkboards were to the schools of the past. Cell phone access is not enough. Every student needs access to high-speed connectivity and to computers that are adequate to support not only streaming of videos and access to information, but also the capacity to write and revise text; create spreadsheets and engage in mathematical modeling; engage in simulations; and develop PowerPoint presentations, websites, and web tools in various forms.

The pandemic has highlighted disparities in access to digital devices and the internet. School closures in the wake of the COVID-19 crisis have had a huge impact on families and learning—an impact felt most deeply in low-income communities and communities of color.

Even before the pandemic, there were stark digital divides along racial and ethnic lines. In 2018, the National Center for Education Statistics conducted a study of the percentage of Americans between the ages of 5 and 17 who had access to the internet. The study found wide differences by race and ethnicity (see Figure 1.1).

Figure 1.1
Percentage of Students Without High-Speed Internet by Race and Ethnicity



Source: NCES. (2018). The digital divide: Differences in home internet access.

According to a new report from Common Sense and Boston Consulting Group, based on data from the 2018 census, roughly 30% of the 50 million k–12 students in the United States lacked either high-speed internet or devices with the capacity they need for easy access to digital learning at home. Of these young people, nearly two thirds lacked both high-speed internet and a usable device. Furthermore, at least 300,000 teachers lacked high-speed internet adequate to teach online from home. A report from the Alliance for Excellent Education, National Indian Education Association, National Urban League, and UnidosUS shows that these disparities disproportionately impact students of color, students from low-income families, and students in rural communities.

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While a number of states and school districts reduced this divide with investments in devices and hotspots to enable distance learning during school closings last spring, many of the investments were temporary, as companies offered free internet for short periods of time and devices were often pulled from in-school computer carts to which they will return.

A recent national survey from ParentsTogether in spring 2020 revealed that 13% of parents from low-income homes (earning less than $25,000 annually) reported lacking devices or internet connections, and they were nearly 10 times more likely to say their children were doing little or no remote learning than those from affluent homes (38% vs. 4%). Students from low-income homes were also 3 times more likely to report not having consistent access to a device (32% vs. 10%) and were 5 times more likely to attend a school without distance learning materials or activities (11% vs. 2%).

Another equity concern is access to both basic and assistive technologies needed to support students with individualized education plans. These students may need adaptive equipment and special software. They will also require different kinds of instructional planning and preparation, including ongoing evaluation to determine the appropriateness of particular online and hybrid approaches.

The digital divide parallels the educational divide, and unless it is closed now, it will result in an ever-widening learning gap. The current crisis provides an opportunity to close the educational equity gap and create new and transformative educational strategies based on deeper and authentic learning. The Common Sense Media report estimated that closing the divide will require at least $6 billion in immediate investments for infrastructure and devices at the federal level—of which half would be recurring costs each year. Also needed are changes in policy, so that internet connectivity is treated by federal and state regulators the same way we treat access to telephone services, with rate structures and subsidies that guarantee access and affordability.

What Policymakers and Educators Can Do

With connectivity now clearly essential to ongoing learning as well as families' access to telehealth, employment, and needed benefits, some states and districts, as well as corporations and philanthropies, have made major investments in technology for students. At the federal level,

opportunities already exist through the E-Rate program housed in the Federal Communications Commission (FCC), which schools had already been using for internet connectivity.[1] Funds could be expanded and allocated through the FCC's E-Rate program to provide broadband as well as hotspot access to rural areas of the country.

At the state level, there are some outstanding examples of progress being made to close the digital divide. Promising practices include stakeholder outreach and engagement, robust policy frameworks, planning and capacity building, and improved funding and operations, as we describe below.

Prioritize federal efforts to close the digital divide

Every student, no matter her or his living situation, deserves access to an adequate computing device and internet connectivity. An allocation of $500 per student would cover the costs for equipping a household with an inexpensive device, connecting to a high-speed internet provider, and funding training. Given the major economic downturn and state revenue declines accompanying pandemic-related shutdowns, federal recovery funds to education will be needed to supplement state budgets for this purpose, among others.

As outlined in the recent Common Sense Media report, federal policymakers should take swift policy action in the short term by passing the next stimulus bill with funding to ensure internet service and devices at home for students who lack them through expanded funding for federal E-Rate supports and through direct funds to states and districts. They should also take long-term action and invest funding to upgrade and close gaps in the nation's broadband infrastructure. Furthermore, future regulation of broadband should be modeled more closely on the regulation of the telephone industry, which provides incentives to providers and rate structures for households designed to ensure access in every home.

Closing the divide is critical not only to ensuring educational equity but also to sustaining economic security. The work of economist Brian Whitacre at Oklahoma State University demonstrates that there are major economic returns on rural broadband investment in both jobs and income.[2] Despite past failures, policymakers in the United States now have an opportunity to bridge this divide with smart, sustainable, and well-funded policies that support those in need.

Expand broadband access through state and city initiatives

In February 2020, The Pew Charitable Trusts published a comprehensive state-by-state overview, *How States Are Expanding Broadband Access*. Kathryn de Wit, manager of the broadband research initiative at The Pew Charitable Trusts, noted in an interview that "for the better part of a decade, states have been rolling up their sleeves and making meaningful progress on bridging the digital divide. As leaders at all levels of government look for solutions to address broadband challenges, they can learn from states."

At least nine states have made substantial gains in broadband access in recent years. Minnesota has placed most of its broadband program in statute and included clear goals for broadband expansion, a state Office of Broadband Development, and a fund to support broadband infrastructure, and launched the Minnesota K-12 Connect Forward Initiative in 2016. In West Virginia, the legislature established the West Virginia Broadband Enhancement Council to provide policy guidance and technical assistance to communities.

The Colorado Department of Local Affairs centralizes the state's financial and technical assistance to local governments and offers regional broadband planning grants. In Tennessee, the legislature passed a 2017 measure creating the Tennessee Broadband Accessibility Grant Program to support broadband deployment in unserved areas in the state. In Wisconsin, the Wisconsin Broadband Office makes grants to support the deployment of broadband infrastructure in unserved and underserved areas of the state.

Wyoming has also established itself as a leader in expanding access. In 2016, the state of Wyoming was ranked No. 1 in the nation in broadband connectivity, having addressed the needs of 100% of its school districts in a sparsely populated, rural state. This outcome was in large part because of a statewide education technology plan, which has as its goal to "better provide equal access to education through technology." Each of these states has developed strong solutions for ensuring that every child has internet access.

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Cleveland, OH, is a city-level example of access success. The Cleveland Metropolitan School District and the nonprofit DigitalC have worked together since the pandemic struck to hand out over 17,000 devices and provide 4,700 temporary hotspots. In partnership with, and with additional funding from, the city of Cleveland and MetroHealth, the district is paying DigitalC a discounted rate of $16 per household to install antennas and other equipment throughout the city.

Organize access to devices and connectivity

Once every home has the potential for internet access, many students will still need Wi-Fi and an internet-capable device at home in order to participate in distance and hybrid learning. When cellular service is the only viable option, students will need LTE-enabled devices or mobile hotspots. Many state and local reopening plans include a requirement that each district undertake a survey of device needs across families to determine how best to narrow the digital divide.

This work can be centralized in order to ensure quick delivery of laptops and other devices during a time when there are already disruptions in the supply chain. California has already surveyed all of its districts, and in April 2020 established a task force overseeing the California Bridging the Digital Divide Fund, a joint effort of the Governor's Office, the State Board of Education, and the California Department of Education (CDE). The funds raised go directly to equip school districts with resources they need to enable distance learning. With contributions from corporations and foundations, the state has purchased hundreds of thousands of Wi-Fi hotspots and Chromebooks for students to support district efforts. Many county offices and large districts, including Los Angeles, did the same to purchase devices and hotspots in bulk.

In May 2020, California Assemblywoman Rebecca Bauer-Kahan introduced a bill to close the digital divide by providing school districts financial relief through the elimination of the sales tax on device purchases. This new legislation, which is currently being amended in the state senate, builds upon prior efforts, including a 2017 measure sponsored by the California Emerging Technology Fund that created the California Advanced Services Fund Broadband Adoption Account, which provided $20 million for

digital literacy programs. A cross-sector partnership between the California Public Utilities Commission and CDE was formed as part of a broadband in schools initiative to distribute $25 million from the California Teleconnect Fund for Wi-Fi hotspots and internet service for student households.

Nebraska has also quickly responded to both the immediate crisis and the longer-term challenge with the Launch Nebraska initiative, which contains a thorough set of digital learning guidelines. The state has established a hierarchy of digital learning needs, beginning with infrastructure (equity of broadband internet access to every home); proceeding to devices (a computing device for every student), software systems (learning management, content management, collaborative learning technologies, and the integration of these systems), and digital content (online digital resources); and finally to professional development and training (effective methods for teaching and learning in a digital world, whether virtual or face-to-face).

Policymakers can learn from these examples and others that inform efforts to bridge the digital divide. Every family will need both broadband and device access in order to have an uninterrupted education. With COVID-19 surging across broad swaths of the country, learning cannot occur without these foundational investments. Left unaddressed, the digital divide will continue to widen gaps in achievement and attainment. Even with uncertain federal funding and local tax revenues, it will be imperative for states, cities, and districts to move swiftly to make blended and distance learning possible for every child.

Resources

- How States Are Expanding Broadband Access (The Pew Charitable Trusts). This report identifies and explores promising practices for connecting unserved communities through examples in nine states.
- Closing the K-12 Digital Divide in the Age of Distance Learning (Common Sense Media). This report, done in partnership with Boston Consulting Group, analyzes the digital divide for America's k–12 public school students and teachers and provides strategies for moving forward to close the digital divide.
- Digital Learning Plan (Wyoming). This 2017-2018 framework helped the state achieve 100% broadband connectivity and become the national leader in high-speed access.
- empowerCLE+ (DigitalC). This nonprofit organization provides a growing number of communities in the greater Cleveland area with $18/month internet access—a potential model for philanthropic partnerships in other states.
- Return to School Roadmap (Opportunity Labs). This roadmap neatly describes what to do first, what to do before school opens, and what to do when schools are open and operating, including districtwide procedures for devices.

Endnotes

1. Puma, M. J., Chaplin, D. D., & Pape, A. D. (2000). *E-Rate and the digital divide: A preliminary analysis from the integrated studies of educational technology*. Chicago, IL: Urban Institute. https://www.urban.org/research/publication/e-rate-and-digital-divide.
2. Whitacre, B., Gallardo, R., & Strover, S. (2014). Broadband's contribution to economic growth in rural areas: Moving towards a causal relationship. *Telecommunications Policy*, *38*(11), 1011–1023.