



Addressing the Technology Divide in Education: A Survey of State Laws Nationwide

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Background

As cases of COVID-19 surged in 2020 and schools shut their doors to in-person learning, virtual and electronic-learning (e-learning) became the primary method to conduct education for K-12 school systems. Schools have been using technology and virtual learning to enhance activities in the classroom where the school or other public entities are able to offer the necessary equipment and online services. Although schools and public entities are able to provide some of the necessary technology for learning, it is estimated that over 21 million people in the United States do not have access to the internet. Roughly 40% of schools lack broadband internet service.¹ Rural residents, those of racial/ethnic minorities and those of lower socioeconomic status are at a greater disadvantage digitally than their counterparts. Rural residents are less likely than urban or suburban residents to have broadband internet service at home. They also are less likely to have a smartphone, computer or tablet.² Half of all American Indian/Native Alaska children and more than one-third of Black and Latinx children lack either a computer, high speed internet or both compared to one fifth non-Hispanic white children.³ Technology, home internet access and equipment is even less available for those children whose families receive Supplemental Nutrition Assistance Program (SNAP) benefits and live in poverty.³ Thirty-three percent of lower-income families with children in school report not having internet access at home.¹ The digital disparity has led to researcher's identifying the "homework gap," a term used to describe the phenomenon of children without an in-home internet connection lagging behind those who do have in-home internet.¹

The unprecedented and rapid closure of schools left administrators, parents, and students, especially those in rural areas, of racial/ethnic minorities and of lower socioeconomic status scrambling to participate in the provided virtual education. At the start of the 2020-2021 school year, 74 percent of the 100 largest school districts nationwide were providing remote-only instruction models, impacting more than 9 million students.⁴ As of June 7, 2021 45% of school districts nationwide were providing a hybrid learning environment where in-person learning was provided for part of the week and/or for some grades.⁵ Interestingly, while majority white school districts almost always had an option for in-person instruction, 6% and 4% of majority black and majority Hispanic school districts, respectively,⁶ completely lacked the ability to return to school thereby exaggerating an already present equity issue. While many school districts have attempted to return to a more

permanent in-person learning environment for the 2021-2022 school year, students who are sick, exposed to COVID-19, or quarantining while awaiting negative test results are often forced to revert back to virtual learning.

As COVID-19 variants continue to emerge, schools will, for the foreseeable future, continue to occasionally utilize virtual/e-learning. Moreover, some states have discussed integrating virtual school days on a more permanent basis instead of forced weather or other emergency cancellations, making it unnecessary to make up days at the end of the school year. At the same time, some schools have established valuable connections by way of telehealth that could prove beneficial with the right tools and resources in the hands of students⁷ and, therefore, do not want to abandon the progress made on technology infrastructure to date.

The purpose of this fact sheet is to identify state laws related to technology plans, internet and equipment accessibility, professional development for school staff, and the introduction of virtual school days at the start of the 2021-2022 school year. This fact sheet will also highlight some key pieces of legislation aimed at addressing existing shortcomings in some states' laws.

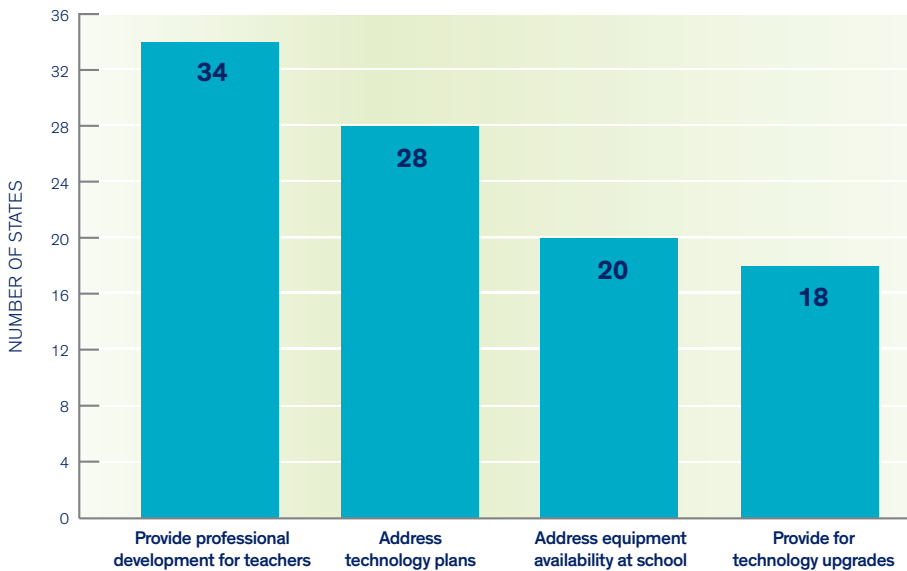
Methods

Codified statutes and administrative regulations available as of September 1, 2021 on LexisNexis⁸ and Westlaw⁹ were collected using primary legal research methods by trained legal researchers at the University of Illinois Chicago. Pending legislation was included if available from either commercial database as of September 1, 2021. State laws were analyzed by an attorney and trained analysts.

Results

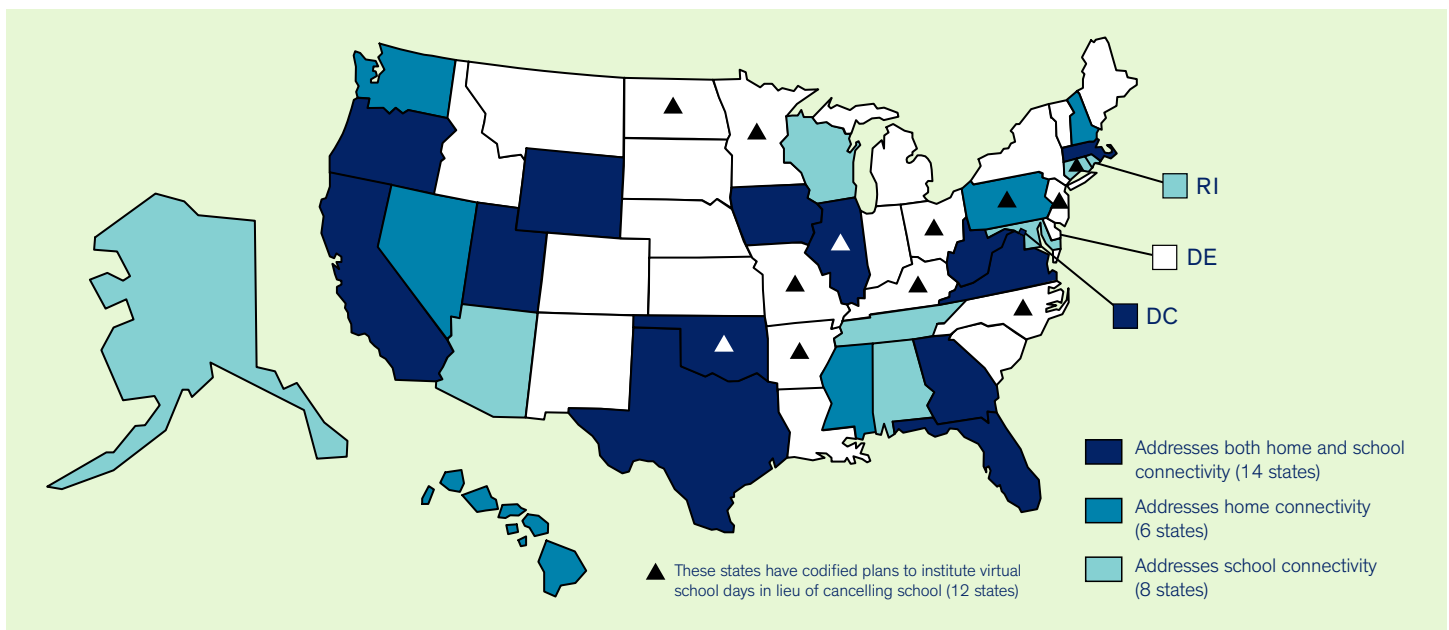
As of September 1, 2021, 28 states' laws addressed a technology plan or otherwise referenced the creation of one as part of a state-wide grant program. Twenty states' laws discussed access to equipment in schools while 18 states' laws discussed technology upgrades to keep systems current and/or functioning efficiently. Thirty-four states' laws addressed providing professional development to teachers related to using technology and/or digital learning (Figure 1).

FIGURE 1 Number of states with laws related to technology and equipment availability in schools, as of September 1, 2021



Although access to the internet continues to be an issue in many communities, only 22 states' laws addressed school connectivity while 20 states' laws addressed efforts to expand service to homes for the express purpose of improving student access/education opportunities (Figure 2). Twelve states' laws discussed discounts or otherwise making computers, laptops, tablets, or other equipment available to students learning in a virtual environment. Meanwhile, 12 states have codified laws that could replace days that would historically have been made up (i.e., snow days, cold weather days) with virtual school days. The aforementioned laws complement existing laws in states, such as Indiana, that have historically granted waivers for similar virtual instructional time during cases of inclement weather based on State Board of Education discretion.^{10, 11}

FIGURE 2 State laws related to school and home internet connectivity, as of September 1, 2021



Pending Action

After identifying disparities in school and student access to internet service, many states have included efforts to fund improved broadband service for schools and communities through recent appropriations bills. At the same time, some states, such as California, have proposed programs that would authorize funding to supply each school-aged child with a computing device to allow for distance learning if passed.¹² Still other states are working to revise accountability reporting to take into consideration greater equity concerns such as unintended barriers that may impact different racial, ethnic, socioeconomic, or disability communities.¹³

Conclusion

While virtual education and e-learning are becoming more permanent, it is vital that the technology divide between students of varying geographical locations, race/ethnicities and socioeconomic status is not. Policymakers in those states which have, to date, not addressed the issue should consider taking action, while those who have not updated policies since the start of the pandemic should also revisit what policies are in place and how they might be improved.

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