

# Education Equity, the Digital Divide and COVID-19

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A D2L Discussion Paper



## Executive summary

D2L has a personal stake in educational equity. For over twenty years, D2L has worked to transform the way the world learns, with the belief that all learners should have access to the best possible learning opportunities and experiences. The COVID-19 pandemic demanded rapid innovation in how we do school and education, making transformation more than an aspiration for some but a necessity for all.

Throughout the COVID-19 pandemic, we have and will continue to do everything in our power to support learners across the world despite the unique challenges we currently face. To do that, to truly reach every learner, we must call out and address inequities where we see them.

We know access is a foundational piece of educational equity and for many years, access to institutionalized education was inherently tied to access to physical school buildings. No matter the background and individual challenges of students, once inside the walls of a school, students had the opportunity to learn. However, a student's ability to learn has always been determined in part by their access to learning opportunities once they leave the school, including digital access.

COVID-19 has brought critical attention to the chasm between the learning opportunities of students who can access learning digitally in their homes and those who cannot. While these inequities existed and impacted students before COVID-19, the shutdown of physical school buildings has exacerbated them and brought necessary attention to this issue.

We know that learning will look fundamentally different in the 2020–21 school year and, perhaps, for years to come. We have the opportunity—and moral responsibility—to address the digital inequities that will not only improve the education of all students, but build resilience into our educational systems, today and well into the future.

This discussion paper examines some of the equity concerns correlated with COVID-19 and K–12 education—it provides foundational knowledge in the hopes of facilitating meaningful action towards alleviating inequity and creating resilient systems of learning. It includes recommendations for how education leaders can use this crisis as an opportunity to propel us into a future where all students have more robust and equitable learning opportunities.



## **Background: School building closures and the risk of growing inequity**

COVID-19 was referred to early in the pandemic as often been called “the great equalizer,”<sup>i</sup> but those who work in education know that is untrue. Digital inequities have long existed in education.<sup>ii</sup> These inequities exist across districts and schools, and in individual students’ homes.

They are rooted in where a student calls home — or if a student has a home — and correlate with race, class, native language, and the specificity of an individual child’s needs.

### **SHUTDOWNS AND INCREASED RELIANCE ON HYBRID LEARNING**

The immediacy of initial shutdowns left no room for remediation of long-standing technological inequity, or careful analysis of where those inequities lie. As schools across the world were forced to close their doors indefinitely due to stay-at-home orders, districts, schools, parents, and students without the digital infrastructure necessary to move to online learning were left in the wake of the pandemic. Educators were left to struggle with providing continuity of learning to their students in the uncertainty.

As stated in our policy brief, “A new door to the classroom,” the COVID-19 pandemic has made digital learning infrastructure no longer a “nice to have” or luxury for wealthier schools.<sup>iii</sup> It is a critical necessity for school systems to deliver on their core mission of learning under any circumstances.

### **DANGERS OF GROWING INEQUITY**

COVID-19 and the dramatic shifts it forced upon our education systems poses a higher risk to students if we do not affirmatively acknowledge and seek equity.

High-quality educational technology can enhance the learning experience of every learner, on an individual and systemic scale. However, without systemic actions to ensure all students have access to the digital infrastructure and skills needed to perform, the increased use of technology in everyday schooling will continue to grow the digital divide.

Often referred to as the Homework Gap, the **digital divide** is a consequence of some students not being able to access or complete schoolwork via the internet, and who continue to fall further and further behind.<sup>iv</sup>

This pandemic has increased the urgency to address these inequities, or risk this gap growing beyond repair.

## Defining the digital divide in the era of COVID-19

COVID-19 forced school buildings to close their doors and immediately engage in some form of remote learning. The educational models used looked different for students depending on district, school, and individual needs. Schools that had funding and infrastructure in place for hybrid learning had a crucial tool to aid in the continuity of learning.

While some schools distributed home paper packets, others were immediately able to move to a fully online learning model that enabled students to log in daily for learning instruction.<sup>v</sup> The model districts chose depended on the digital learning infrastructure available and the ability of their students to access and use that infrastructure at home. The options for many districts and students were limited as, even before COVID-19, approximately 15 percent of students had difficulty completing assignments because of a lack of high-speed internet at home.<sup>vi</sup>

The ability of districts and learners to benefit from hybrid learning was and is hinged on the digital divide.<sup>vii</sup> For the purposes of this paper, we consider foundational factors contributing to the Digital Divide in K–12 education to include:

1. Broadband internet access;
2. Access to internet-enabled devices;
3. Quality digital learning platforms; and
4. Functional technological skills of both parents/guardians and students.

The inequities inherent to this divide existed before COVID-19 but were made more glaring because of the crisis. As of 2018, almost one in five students between grades K–12 in the US did not have access to high-speed internet or computers.<sup>viii</sup> Without these tools, students will miss out on the opportunities for robust learning in a world where at least some learning must occur in the home.

This section details how the challenges of the digital divide manifest across different demographics.

### BROADBAND INTERNET AND DEVICE ACCESS

Access to broadband is a factor of both infrastructure (whether the physical technology is in place to support broadband) and income (the capacity of individuals to afford the cost of an internet subscription). A student's likelihood to have access to broadband internet is directly correlated to their household's income, location, and race.

More than 21.3 million Americans and 12 million American children do not have access to broadband internet.<sup>ix</sup> Unsurprisingly then, learners in rural and low-income neighborhoods, even in wealthy technological centers such as Boston and San Francisco, have been disproportionately affected by school shutdowns.<sup>x</sup>

### LOCATION

Where a student calls home, and if a student has a home, can hinder their ability to access the broadband necessary for online learning. Homeless and transient students' access to broadband is perpetually uncertain or unstable, leaving them especially vulnerable to lapses in communication and learning when schools are closed.

Many places, especially in rural areas, do not have the digital infrastructure necessary for internet. While rural broadband access varies largely depending on state, as of 2017 only 61 percent of rural Americans had access to broadband internet.<sup>xi</sup> These numbers become even more dire amongst Native Americans who live in rural areas, with 7 in 10 rural tribal residents lacking broadband access.<sup>xii</sup>

Distance creates challenges receiving services, meals, and educational materials. Some rural educators resorted to driving over 30 miles to deliver paper packets to students who lack broadband access.<sup>xiii</sup> There are fears that because of the economic devastation of COVID-19 on rural areas and the lack of connectivity, that many first-generation college prospects may not enroll next year or for years to come.<sup>xiv</sup>

State and rural districts across the country have employed creative solutions to increase broadband access during this crisis. Districts have set up mobile hotspots on school buses,<sup>xv</sup> and others have turned football stadium parking lots into WIFI zones.<sup>xvi</sup> Many districts have left their school buildings' broadband active so students can access it from outside,<sup>xvii</sup> and some have distributed mobile routers to students to support broadband expansion.<sup>xviii</sup> These creative solutions speak to the dramatic efforts districts have needed to take to address their students' need for stable internet to continue their education during this pandemic.

## **SOCIOECONOMIC STATUS**

Socioeconomic status also plays a role for both broadband and device access. Approximately 35 percent of students who live in low-income households, where the annual income is below \$30,000 a year, do not have access to high-speed internet—compared to only 6 percent of children who live in households with an annual income of \$75,000 or more.<sup>xix</sup> A quarter of low-income households, report not having a computer at home.<sup>1xx</sup>

Many people who do not have broadband internet live in areas where it is technically available.<sup>xxi</sup> Of the 23 percent of Americans reporting not having internet in their homes, only half that amount live in areas not wired for broadband.<sup>xxii</sup> The high cost of internet being another bill for families on a tight budget.

Under-resourced schools, with large low-income populations, exist in both urban and rural communities. The challenges of broadband and device access amongst low-income families means that there are less opportunities for hybrid learning and virtual engagement amongst educators, support workers, and students. This makes the threat of COVID-19 especially dire for low-income students, who are more likely to be identified as having special education needs<sup>xxiii</sup> and have lower standardized test scores.<sup>xxiv</sup>

Further, the support these students receive at home may not be as robust. Parents and guardians who are low wage workers are far less likely to be able to work from home—limiting the adult support available to learners.<sup>xxv</sup>

1 Low-income defined as households making a combined income of less than \$30,000 a year.

## RACE/ETHNICITY

The digital divide, like many aspects of inequity in the US, can also be traced along racial/ethnic lines. Even before COVID-19, the digital divide disproportionately affected Black and Latinx students.<sup>xxvi</sup> According to analysis by the Pew Research Center, almost 34 percent of Black and 39 percent of Latinx families did not have broadband internet in their homes.<sup>xxvii</sup> In 2019, the Center found that 25 percent of Black teens report not being able to complete their homework because of lack of a reliable computer or internet connection, compared to 17 percent and 13 percent of their Latinx and White peers, respectively.<sup>xxviii</sup>

The digital divide limits communities' abilities to provide the hybrid learning solutions necessitated by the COVID-19 pandemic.

Critical private and public action has been taken to try to alleviate some of the access challenges defined by the digital divide. Districts in major cities have distributed tens of thousands of laptops and devices.<sup>xxix</sup> Many internet providers and private companies have waived fees and provided internet for families experiencing financial hardship—but most of these private relief measures are only temporary and are not guaranteed to last into or beyond the pandemic.<sup>xxx</sup>

Small, rural, and under-resourced districts are facing struggles for critical digital infrastructure that are beyond their ability to alleviate alone. Broadband internet costs money, devices cost money, quality digital learning platforms cost money—funds that many districts simply do not have.

It requires financial resources, time, and support to provide skills training to students and parents. Those resources are difficult to come by for districts whose student populations are burdened by the

digital divide. These districts and these students did not create the digital divide, but they are the ones suffering the consequences as the pandemic response increasingly requires districts to shift away from reliance on physical infrastructure to deliver on their core mission of learning.

## Special populations—equity considerations beyond broadband and devices

Equity can only be achieved by drawing special attention to, and addressing, the needs of populations whose challenges are the greatest. COVID-19 poses a special risk to certain students and communities—based on the digital infrastructure available and their individual needs. The Digital Divide's impact on student learning opportunities is correlated to socioeconomic status, location, and their race or ethnicity largely because of broadband and device access limitations.

We know that every student having broadband, a device and proper skills training is foundational to closing the digital divide. But it is important to note, that alleviating these pressures alone will not fully address the access challenges and equity concerns some students face. Individual student needs are complex—and must be supported by highly trained teachers, quality program design, and programming that is accessible.

Students with special needs and English Language Learners are particularly vulnerable to the educational consequences of the pandemic. These students are underdiscussed in conversations about educational inequities arising during COVID-19. Here, we look at these two populations whose educational future is most at risk due to the educational shifts after COVID-19.

## **SPECIAL EDUCATION**

With school buildings closed, physical distancing measures in place and hybrid learning models growing in importance—COVID-19 has placed much of the burden of educating all students on parents and caregivers. This leap is of special concern for students with disabilities, who may require expert evaluation and services as part of their learning needs.

COVID-19 interrupted the special education services many students require to fully participate in learning. Schools that can provide educational opportunities to general population students, are required to ensure that children with special needs have access to the same opportunities to the greatest extent possible.<sup>xxxii</sup> The foundation of these services is accessibility, meeting of student individual educational needs, and the principle that students should be able to participate and learn alongside their peers to the greatest extent possible. Special education covers not only students' cognitive needs, but also mental and physical concerns that influence their ability to learn and grow, such as vision or hearing challenges.

Schools, educators, and leadership have scrambled to fulfill the students' individual needs noted in Individualized Education Plans (IEPs) without the infrastructure, specialized services, and experts typically available to students in school buildings. Ensuring that resiliency plans, including the technology for student learning, are accessible and allow for the necessary evaluation of students is critical.

## **ENGLISH LEARNERS**

English Language Learners make up almost 10 percent of students in the US.<sup>xxxii</sup> Under normal conditions, students who are non-native English speakers have a difficult school experience learning a new language while also receiving instruction in that second language for other subjects. Experiencing these conditions in a remote learning environment, with limited peer-to-peer language engagement, is a serious hindrance to their academic growth.<sup>xxxiii</sup>

Further, many non-English speaking parents may have limited capabilities understanding and guiding their children using technology or coursework because of language barriers.<sup>xxxiv</sup>

### **How Leadership is addressing the digital divide?**

Across the country and the world, leadership at the federal, state, and local levels are trying to address the digital divide head on.<sup>xxxv</sup> These initiatives range in scale and scope, but all are aimed at expanding access to devices and digital learning platforms, broadband internet, and the skills necessary to navigate this digital world.

States, Districts and Departments of Education have given away hotspots and devices and set up WIFI zones.<sup>xxxvi</sup> Some government agencies are partnering with public and private sector groups to get devices, sometimes refurbished, into the hands of residents who need them most, and to expand free and low-cost internet for residents.<sup>xxxvii</sup> The New York City of Education, for example, gave away over 300,000 iPads to their most in need students.<sup>xxxviii</sup>



More than anything, COVID-19 has forced leadership at all levels to begin to address the Digital Divide. Some are finding the need to be larger than initially understood. In California, the Department of Education originally estimated that 150,000 laptops were needed to support students across the state; by May that number grew to 400,000; and as of June stands at a minimum of 708, 400 laptops and 322,100 WIFI hotspots for all students to have digital access.<sup>xxxix</sup>

## Conclusion and recommendations

Educational equity can only be achieved through recognizing and addressing inequality and inequity.

What we risk now by not affirmatively addressing the needs of populations who have been traditionally underserved regarding technology is not just perpetuating these inequities, but significantly growing the learning gaps between these students and their non-impacted peers as they remain disconnected from learning.

The goal should not be to keep all children at a minimum standard during this pandemic, but to enable communities, districts, educators, parents, and students with all that they need to enhance and support education.

The resilient education systems demanded by COVID-19 offer us the opportunity and obligation to address the many inequities present in our existing learning infrastructure. To support the development of equitable learning opportunities for students during COVID-19, we recommend:

### 1. Prioritize equity in the development of all resilient learning initiatives:

Populations who are known to be especially impacted by the Digital Divide should be prioritized in financial and resource planning—including specialized services for children with special needs, and programing in non-English speakers' home language.

School leaders should evaluate their actions and guidance under equity frameworks, such as the Minnesota Department of Education's "[Equity Lens Reflection and Exploration Tool for Learning](#)" to ensure that equity matters are top of mind.<sup>xi</sup> Further, leaders should track the impact of actions on especially vulnerable populations to monitor how their actions are contributing to or alleviating inequity.<sup>xli</sup>

### 2. State and Federal action must be taken to close the Digital Divide:

The Digital Divide is a systemic problem—reflecting legacies of discrimination and oppression across race, language, location, and socioeconomic status. It is beyond the capacity of districts and communities to remove these barriers on their own. Only through state and federal action aimed at increasing broadband and device access in those communities who most need it, can the Digital Divide be closed.



### **3. Singular systemwide platform — one “Digital Door” through which all students can access learning and services outside of school:**

By supporting a singular access point, with a fully responsive design, districts will drive equity through standardizing the quality of learning and broadening access to as many students as possible. Districts should be providing devices, but where that’s not possible, a web-based platform providing a single point of access to learning will enable students to use any device that maybe available to them.

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## **About D2L**

D2L develops software that makes the learning experience better. Our cloud-based platform — Brightspace — is the leading learning management system (LMS) for blended and fully virtual learning. It’s easy to use, flexible, and smart. With Brightspace, schools can personalize the learning experience for every learner to deliver real results. Brightspace is used by learners in K-12, higher education, and the corporate sector, including the Fortune 1000.

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