

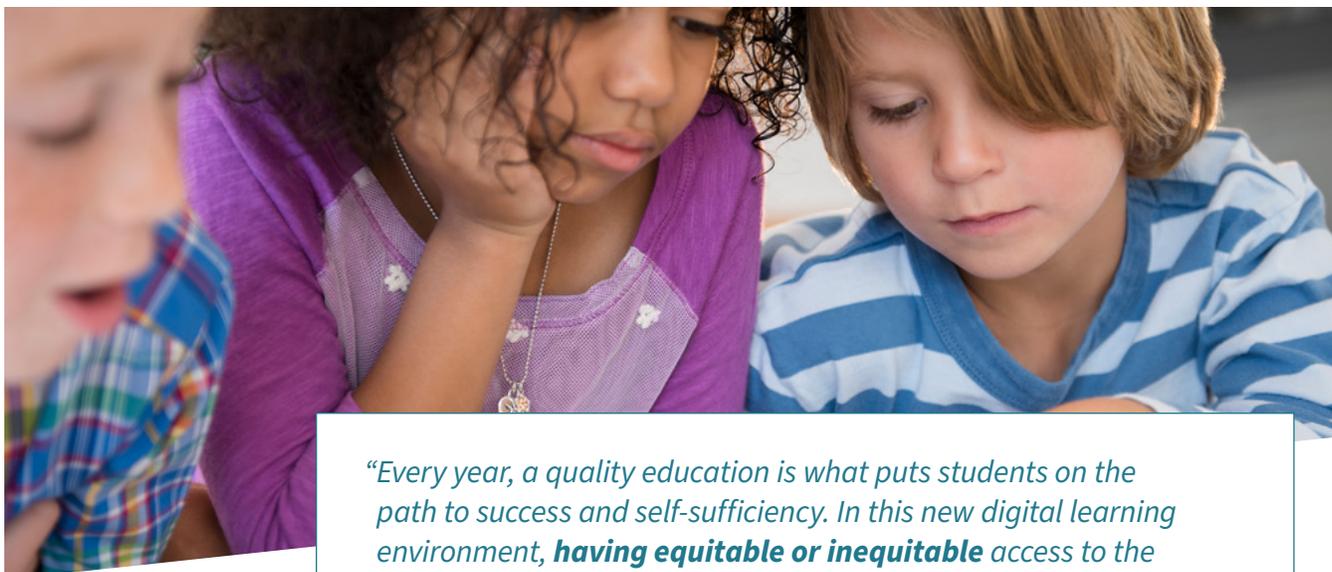


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**90 DAYS  
THAT CHANGED K-12  
TEACHING & LEARNING:**  
SPOTLIGHT ON EQUITY  
IN LEARNING



**Blackboard**



*“Every year, a quality education is what puts students on the path to success and self-sufficiency. In this new digital learning environment, **having equitable or inequitable** access to the Internet and to the tools to use it will be life-defining—for good or bad—in all students’ lives.”*

**Mellissa Braham, APR, Associate Director**  
National School Public Relations Association

## INTRODUCTION

At a recent virtual town hall about the impact of the shift to digital learning this spring, Robin Lake, director of the Center on Reinventing Public Education (CRPE) at the University of Washington, beckoned us to look anew at a reality about equity in learning. While COVID-19 did not create the digital divide for students, explained Ms. Lake, the pandemic did force us to “stare [the problem] right in the eye.”<sup>i</sup> While much has been written and debated about students’ lack of access to technology and the Internet outside of school, the problem staring us right in the eye today is not just about the digital homework gap. Rather, the roughly 90 days of physical school building closures this spring illuminated a new spotlight on what equity within learning really means.

Technology has long held the promise of leveling the educational playing field for all; to enable efficient and effective means for every student to have access to high quality learning experiences that are not limited by the student’s home zip code or the deficit of learning resources in their school or community. And while teachers and administrators regularly identify educational equity as a positive outcome of technology investments in their schools, the promise of high-quality learning experiences continue to remain elusive for too many students, especially students of color and those living in challenged communities. As a result of the pandemic and the sudden shift to digital learning, we can no longer look away from this reality.

The end of the 2019-20 school year initiated a process of reflection about what was learned during this shift to digital learning, and how those lessons learned will impact the new school year and beyond. Many have coined this as a new era in education with opportunities to re-invent and re-imagine learning environments for all students. It goes without saying that the 90 days of school closures most likely forever changed our expectations for teaching and learning in K-12 education. In particular, the sudden and unplanned move to remote e-learning certainly resulted in a particular spotlight on the challenges to ensure that every student has appropriate, safe and consistent access to digital tools and resources to support learning outside of school. **But creating equity in learning environments is about more than provisioning a Chromebook and a Wifi hotspot to families. Equity in access to quality teaching and learning matters too.**

To support critical discussions within schools and districts, Project Tomorrow® and Blackboard have collaborated on a new series of four executive briefs under the banner of *90 Days that Changed K-12 Teaching and Learning*. The series addresses four key considerations emerging from the spring 2020 virtual learning experiences:

- The changing views of digital learning because of the increased use of the technology tools during school closures
- The increasingly critical nature of understanding and addressing equity considerations in K-12 learning
- The importance of effective student—teacher communications to the learning process
- The long overdue need to change our thinking about student ownership of learning

Each executive brief in the series leverages new data findings from Project Tomorrow’s Speak Up Research Project. The goal of the series is to not only inform but also to stimulate new local reflections and discussions on the experiences of K-12 stakeholders with remote e-learning and how to most effectively prepare for the uncertainty of the next school year and beyond. Consequently, each brief includes a short list of thought-provoking questions that school and district leaders can use to jumpstart these new conversations within their communities.

This second executive brief in the series turns our focus to those important equity in learning considerations derived from the sudden shift to digital learning. Two key questions are discussed in this brief: (1) do all students have equitable access to digital resources and learning opportunities when they are at school and (2) do all students have equitable access to digital resources and learning opportunities when they are at home or outside of school? With each discussion we also include the important implications of varying access to learning opportunities on the sudden shift to digital learning this spring. Highlights from this brief include:

- Students attending schools with majority minority student populations have less access to digital learning tools when they are in their physical classrooms, and fewer opportunities to develop workplace ready digital skills than white students. This lack of familiarity by students and teachers influenced the efficacy of the remote learning experience.

- While the epicenter for understanding equity in education is focused right now on digital access, evidence of inequity also exists when examining the social and emotional well-being of students. Only one-third of students of color say that their school cares about them as an individual.
- The sudden shift to digital learning at home revealed a much wider digital divide in this country than what was believed before school closures. According to recent research, as many as 16 million K-12 students may lack access to the Internet and technology tools at home to support e-learning during a school closure.
- But simply providing a student with a mobile hotspot is insufficient. Students need access to appropriate devices and resources in a safe environment with high speed, consistent Internet connectivity to enable and empower meaningful learning.

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## **DO ALL STUDENTS HAVE EQUITABLE ACCESS TO DIGITAL RESOURCES AND LEARNING OPPORTUNITIES WHEN THEY ARE AT SCHOOL? AND WHAT DID THAT MEAN FOR THE SHIFT TO DIGITAL LEARNING?**

From kindergarten to 12th grade, students have more access to digital tools and resources in school than ever before. For example, schools nationwide are more likely to report today compared to in 2016 that their students are regularly using online textbooks (67%) and cloud applications (75%) to support learning. One-to-one programs where every student is assigned a tablet, laptop or Chromebook to use in class have increased 37% in just four years. Most elementary school students in grades K-5 (54%) say they use a computing device every day now in their school classroom. And almost two-thirds of teachers reported using an online curriculum with their students before the pandemic. Given this high level of technology access and usage, the assumption in March 2020 was that students and teachers were well-versed in digital learning, and that the shift from the classroom to home, while unplanned and unanticipated, could work.

However, the assumption that universally teachers and students were ready for remote e-learning because of their in-school access and usage was not based in reality. The increased access to digital tools and resources in the classroom, while laudable on a national level, is not the norm for students in schools where the majority of students are Black, Latinx, Asian-American or Native American. **In middle schools where a majority of the students are from minority groups, only 44% of students reported being assigned a Chromebook to use every day in school before the pandemic compared to 65% of students in majority white schools.**

Correspondingly, technology access for one-third of students in majority minority schools was still limited to the media center or a bank of computers in the school library. That is not the case for students in majority white schools where only 19% report that their sole access point for technology is the media center. Nearly 6 of 10 teachers in majority minority schools (59%) say that they need a classroom set of mobile devices for their students to use in class; only 38% of teachers in majority white schools report that same need.

Beyond the access to technology, an examination of how various digital tools and resources are deployed in the classroom to support student learning indicates a lack of equity in those opportunities for some students as well. For example, teachers in schools serving Black, Latinx, Asian-American and Native American students are 27% less likely to provide opportunities for their students to use media creation tools within projects and assignments to show what they have learned than their peers in majority white schools.

Following a similar pattern, students in majority minority schools, urban schools and schools in high poverty communities (Title 1 schools) were also dramatically less likely to be using the Google Education Suite or similar online collaboration and productivity tools on a regular basis before school closures (Table 1). **Only one-third of teachers in urban schools reported daily usage of Google apps with their students compared to 52% of teachers in schools in suburban communities.**

**Table 1: Use of Google Education Suite in the classroom prior to school closures**

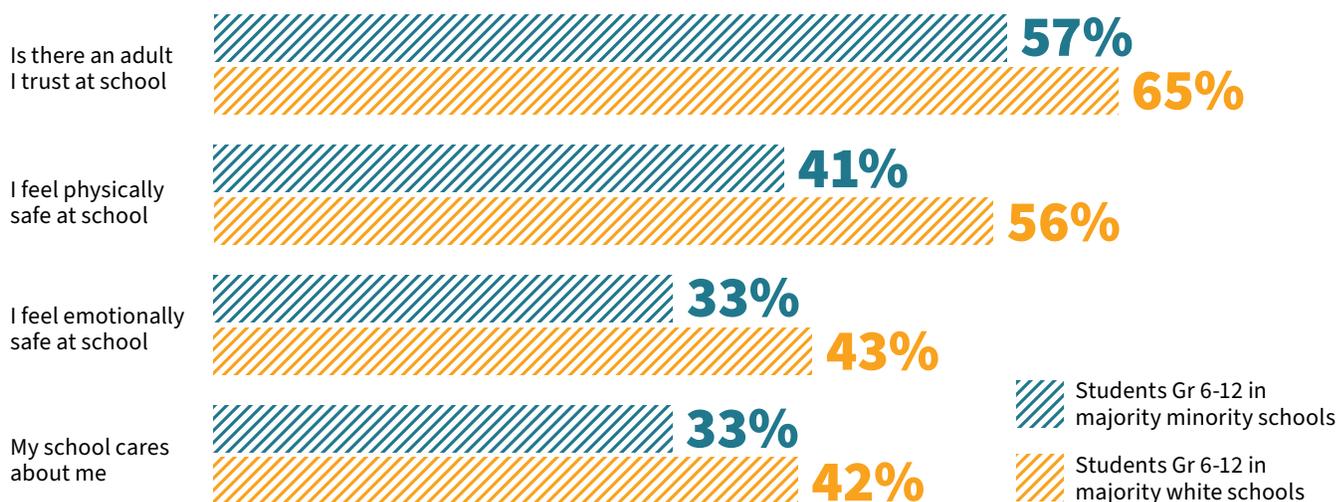
USAGE FREQUENCY	MAJORITY WHITE SCHOOLS	MAJORITY MINORITY SCHOOLS	URBAN SCHOOLS	SUBURBAN SCHOOLS	RURAL SCHOOLS	TITLE 1 SCHOOLS	NON-TITLE 1 SCHOOLS
Daily or almost daily usage	57%	35%	32%	52%	50%	36%	57%
At least weekly usage	77%	57%	55%	71%	70%	57%	75%

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These differences in usage patterns did not just create inequitable learning opportunities for students. It is also significant because in many school districts the vehicle for the delivery of the remote e-learning during the school closures was through Google applications. This lack of day-to-day familiarity with the tools of remote learning, by both students and teachers, most likely resulted in longer onboarding times for virtual learning and quite possibly, less efficacy with the overall learning experience over those 90 days of school closures.

Educators and researchers recognize that student learning experiences are impacted by many factors. As illustrated in this brief, the lack of equitable access to digital tools and resources impacts the quality of education for many students. Correspondingly, the social-emotional well-being of our students is also an input into the quality of the overall learning experience. Just as was noted in terms of access to technology in school, the lived experience of students of color in our schools is often very different than their white peers. For example, students in majority minority schools are less likely to say that they feel physically or emotionally safe at school than white students. They are also less likely to identify an adult that they trust at their school. **And only one-third of students at majority minority schools believe their school cares about them individually compared to 42% of their peers at majority white schools.** It is certainly more important than ever to frame equity of education discussions in 2020 around the wholistic needs of our children and youth, not just their access to technology.

**Chart 1: Differences in students' social-emotional well-being at school based upon school demographics**



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As we think about how to prepare for the 2020-21 school year and beyond, a greater awareness that not all students have equitable access to high quality learning resources and opportunities in school, or are experiencing school with same outcomes, is important to keep front and center. Differences in access and opportunities for digital learning experiences impact students' preparation for academic success in the short run as well as their college, career, and citizen readiness in the longer term. The same is true when all students do not have equitable access to learning outside of school.



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## DO ALL STUDENTS HAVE EQUITABLE ACCESS TO DIGITAL RESOURCES AND LEARNING OPPORTUNITIES WHEN THEY ARE AT HOME OR OUTSIDE OF SCHOOL? *AND WHAT DID THAT MEAN FOR THE SHIFT TO DIGITAL LEARNING?*

Just as school closures exposed that some teachers and students did not have the skills or readiness for digital learning from home, the sudden shift to remote e-learning also brought into the sunlight a new type of digital divide. Educators have had a long-standing concern about some students' lack of access to high quality Internet and learning-appropriate technology outside of school. **Even prior to the school closures, a majority of school principals (51%) identify digital equity outside of school as a major challenge within their plans to expand technology-based learning experiences for students in school.** Within rural communities, 62% of principals in the pre-COVID19 era called this a significant concern for their school. As the use of digital tools and resources increased in the classroom, there has been new pressure to extend those digitally enhanced learning opportunities beyond the school campus. It was inevitable that as teachers become more familiar with the plethora of apps available to support learning, for example, that they might want to assign school projects facilitated through digital tools or look for homework to be uploaded to class portals.

At first glance, this concern about out-of-school digital equity may seem unwarranted. Researchers have documented for many years the exponential growth in family access and use of technology at home through social media interactions, video and music streaming, and online shopping. As reported by Project Tomorrow and many other education research organizations, students from kindergarten through high school are more likely today to have a personal smartphone including 58% of 3rd graders. Almost universally parents say they have a smartphone also, with little or no differentiation by family income or community type. And when asked if they have Internet access at home, the overwhelming majority of parents and students say yes. However, the nuances of that access are important to understand, especially as it relates to an environment where instruction is supposed to happen fully online. **While it may be satisfactory to look up the occasional grade or the date for a school event on the school portal using one's mobile device, researching and writing an Environmental Science report on global warming on an older generation iPhone through a WiFi connection that is shared with parents and siblings is not an optimum learning environment for any student.**

Per Speak Up data collected prior to the school closures, approximately 12-14% of students in grades 6-12 say they sometimes have trouble doing homework or school assignments due to limitations on their technology access outside of school. This percentage of students which roughly translates into 3.2 million students nationwide only represents the students who were assigned digital homework and consequently had trouble completing that assignments. **Given that only 25% of teachers said before school closures that they were regularly assigning homework and projects that required a digital connection beyond the classroom, it should not be surprising that the number of students who lack appropriate access to technology to support remote e-learning during a school closure may be closer to 15-16 million as recently reported by Common Sense Media and the Boston Consulting Group.**<sup>ii</sup> The sudden shift to digital learning not only exposed the realities around the lack of home access for many students and families, but as a silver lining it has helped us understand what is truly needed to support equitable learning outside of school.

Given their established concerns about digital equity beyond the classroom, school districts have been experimenting for several years with a variety of solutions to ensure students are not “learning compromised” by their lack of appropriate or adequate technology resources at home. As illustrated in Table 2, the most popular solution for addressing the Homework Gap has been to allow students to access the school’s Internet network before or after school (56%). While well-meaning, this solution was far from equitable because it required students and families to have the flexibility and capacity for early arrival or late departure from school campuses. The same conflicts exist with encouraging local libraries to give students priority for using their Internet network and schools providing WiFi connections in their parking lots. The responsibility was on the student (and their family) to get to those locations, rather than providing a way for all students to have more convenient and potentially safer access at home to do homework.

**Table 2: K-12 district solutions for the “Homework Gap” employed prior to school closures**

SOLUTION	% OF DISTRICTS IMPLEMENTING THIS SOLUTION
Allowing students on campus early or after school to access school network	56%
Providing information to families about low cost Internet providers and programs	50%
Encouraging libraries or other public Internet locations to give students priority access	46%
Discouraging homework assignments that are 100% Internet dependent	38%
Providing WiFi access in the school parking lots for staff and student access	37%
Loaning families mobile WiFi hotspots	33%
Instructing students to download web-based assignments and resources to USB sticks while still at school	26%
Equipping school buses with WiFi hotspots	18%

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The inadequacy of these solutions is evident by the reporting of students themselves as to where they were accessing the Internet for homework if their home connectivity is insufficient or unavailable to them. **While 29% of high school students say they occasionally do digitally based homework in a fast-food restaurant or coffee shop, 42% of the Homework Gap impacted students say they regularly do Internet based homework in those locations.** And 31% of those students also report habitually using WiFi on public transportation to do their homework. It is important to note that even before the pandemic and school closures, a significant portion of our students were impacted by a pre-existing digital equity crisis.

The closures of physical school buildings brought this digital equity crisis to the forefront. School districts approached the shift from face-to-face instruction to remote learning from two primary directions: a non-digital, paper-based approach to instruction or the facilitation of virtual or e-learning from home. However, neither approach adequately addressed the inequities in learning opportunities for all students. For some districts, the desire to provide equity resulted in providing all families with printed instructional materials to support ongoing learning at home. Realistically, that approach was never totally equitable as some families who had high quality access to technology at home could certainly supplement the printed worksheets with online resources.

Many school districts sought a different path toward educational equity by provisioning laptops, tablets and Chromebooks to students who lacked those educational tools at home. This included loaning more families WiFi mobile hotspots than what had been experimented with previously. Additionally, many companies and philanthropic organizations stepped in to fill the gaps where districts did not have the technology or the funds to support students' access at home to technology. As an example, Google provided 4,000 Chromebooks and 100,000 mobile hotspots to families in rural communities in California in April.<sup>iii</sup> Despite such herculean efforts, students were still left unconnected to their school, teachers, and classmates during the school closures. In New York City, it was estimated in early April that only 50% of students were regularly signing into their virtual classes with their teachers.<sup>iv</sup> While the reasons for students not connecting with their teachers may be numerous, the lack of connectivity or contention for that connectivity at home with siblings and parents sharing devices and the WiFi signal may have been a contributing factor.

The sudden necessity to shift to remote e-learning has changed the way many educators are now thinking about the digital equity conundrum. Prior to the school closures, 49% of teachers said that they needed to have confidence that their students had appropriate out of school Internet access before they would advance their use of technology in the classroom, including assigning digital homework. **After their remote e-learning experience this spring, 68% of teachers now say it is imperative for their students to have safe and consistent Internet connectivity at home even when instruction is happening face-to-face.** Equitable access outside of school to support learning must be about more than having a smartphone and a data plan. For equity of learning opportunity, no matter if the school format is 100% online, 100% on premises, or a hybrid learning plan, students need access to technology outside of school that meets these four criteria:

- Access to technology that is in a safe location that supports an effective learning process
- Consistent access to learning tools that are not shared with siblings or have limited availability for student use
- High quality Internet connectivity with adequate bandwidth to support interactive learning
- Appropriate devices for all kinds of learning experiences

### Students need access to appropriate technology and the Internet outside of school for continued learning



Prior to school closures

**49%**

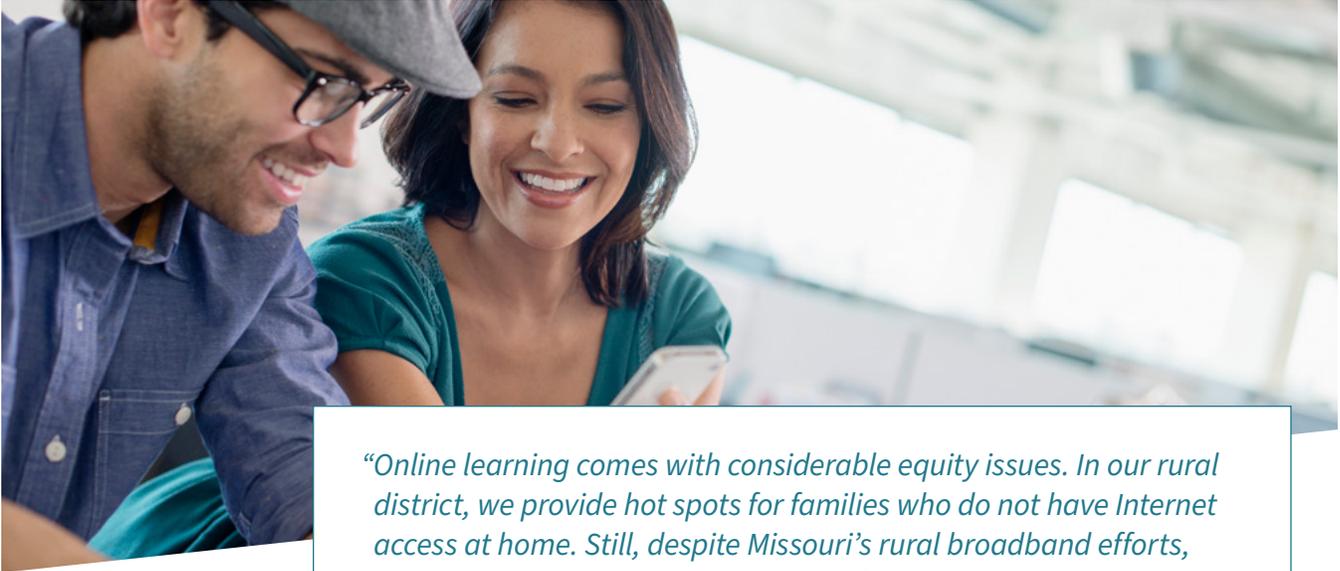
of teachers agree



As a result of remote learning

**68%**

of teachers agree



*“Online learning comes with considerable equity issues. In our rural district, we provide hot spots for families who do not have Internet access at home. Still, despite Missouri’s rural broadband efforts, there are many areas where Internet signals are not available. We must be mindful of these access issues as we plan for expanded distance learning.”*

**Bob Satnan, Communications Director**  
Sedalia School District #200

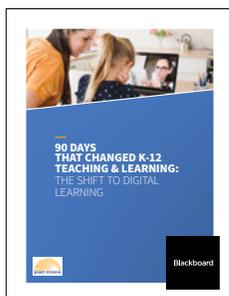
## ENDING THOUGHTS

Though it may be hard to find silver linings to the pandemic and resulting school closures this spring, a greater appreciation of the importance for all students to have access to equitable learning materials, tools and experiences might qualify as a hopeful prospect. Unfortunately, it took the closing of physical school buildings on a Friday and the advent of remote e-learning on a Monday for many educators, community leaders and national policymakers to recognize the urgency to address deep inequities in our education ecosystem. Those inequities include differences in technology access and digital learning experiences both at school as well as at home. Certainly, many factors contribute to those differences including teacher competencies and confidence using technology within instruction, school district decisions, local funding formulas for schools, community support for equity and the home environments of the students themselves. Regardless of the contributing factor, the bottom line is the same: we need to do more to address inequity in education.

As education leaders, parents and communities continue to reflect on the experiences from the spring, this series of executive briefs explores key takeaways from this shift to digital learning that we believe should be part of an ongoing reflection process in every school and district. It is our hope that the data-informed insights shared through these briefs will enlighten local discussions on these issues. In addition to this brief, Spotlight on Equity in Education, the other three briefs in the series include:

1. **90 Days That Changed K-12 Teaching and Learning: The Shift to Digital Learning**

The cavalcade of school closures caused by the COVID-19 pandemic resulted in the sudden and unplanned shift in the delivery mechanism for instruction, from primarily face-to-face, in-classroom instruction to digital learning facilitated over the Internet from home. Almost overnight, technology tools became the principal instrument for enabling the continuity of learning for students across the country. It also goes without saying that the roughly 90 days of school closures most likely forever changed our expectations for teaching and learning in K-12 education, and most certainly has shone a new spotlight on the role of digital tools, content and resources within the learning experience.



**DOWNLOAD BRIEF 1**

2. **90 Days That Changed K-12 Teaching and Learning: Strengthening the Bonds of Communications**

While schools have long championed the importance of school-to-home communications and encouraged family engagement with local schools, the remote e-learning environment has promoted effective communications from important to absolutely imperative. But what does effective communications mean in this new era, especially relative to the dialogue between teacher and student?

3. **90 Days That Changed K-12 Teaching and Learning: Sponsoring Student Ownership of Learning**

School closures and remote e-learning has presented an unprecedented opportunity for education leaders to think constructively about the purpose of school and the role of the student in the learning process. These critical discussions have the potential to lead to new discoveries around student engagement, how to create contextually relevant learning experiences, and empowering greater student ownership of the learning process.



To support ongoing discussion around these critical issues, each executive brief in the series aims to provide research-based findings as a catalyst for new local discussions on the experiences of students, families and educators with remote e-learning and how to most effectively prepare for the uncertainty of the next school year and beyond. To assist education leaders with realizing that goal, here is a short list of thoughtful questions that can be used to jumpstart new conversations within your communities about equity in education considerations. Share your thoughts on these questions or how you have used them to support your planning efforts with your stakeholders on Twitter using this hashtag: [#90DaysofK12Change](#)

1. The shift to digital learning has opened our collective eyes to some persistent and potentially institutional inequities within K-12 education, particularly in terms of the quality of learning experiences. What can our school and district teams do to first, better understand where learning experiences and opportunities are not equitable for all students, and second, what can we do to directly address those issues in our schools?
2. The shift to digital learning has also revealed that safe and consistent home access to digital resources is a no longer a nice-to-have, but it is an essential component for student learning today, whether school takes place online or in a physical classroom. What are some innovative ideas for how schools and communities can collaborate and share resources to address the homework gap so that all students have access to digitally enhanced learning experiences?
3. We also were reminded during the virtual learning experiment in spring 2020 that school provides social and emotional sustenance for our children and youth as well as academic support. What can we do to ensure that our plans for supporting the social, emotional and mental health of our students is equitable for all and addresses each student's individual needs with trauma-informed instruction and supports while we still navigate the uncertain waters of this pandemic?

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## ABOUT PROJECT TOMORROW

Project Tomorrow's nonprofit mission is to support the effective implementation of research-based learning experiences for students in K-12 schools. Project Tomorrow is particularly interested in the role of digital tools, content and resources in supporting students' development of college and career ready skills. The organization's landmark research is the Speak Up Research Project which annually polls K-12 students, parents, educators and community members about the impact of technology resources on learning experiences both in school and out of school, and represents the largest collection of authentic, unfiltered stakeholder voice on digital learning. Since 2003, almost 6 million K-12 students, parents, teachers, librarians, principals, technology leaders, district administrators and members of the community have shared their views and ideas through the Speak Up Project.

Learn more at [www.tomorrow.org](http://www.tomorrow.org)

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## ABOUT BLACKBOARD

Blackboard's unique approach to K-12 education focuses on creating a seamless and engaging experience for each learner. Our platform provides a way for students to learn in a safe, connected, and technologically savvy environment by focusing in advancing personalized learning and engaging and informing the entire community. For more information visit:

<https://www.blackboard.com/industries/k-12>

<https://twitter.com/BlackboardK12>

<https://www.facebook.com/BlackboardK12>

## ENDNOTES

- i. <https://www.edsurge.com/news/2020-06-16-covid-19-has-widened-the-homework-gap-into-a-full-fledged-learning-gap>
- ii. <https://www.common sense media.org/about-us/news/press-releases/k-12-student-digital-divide-much-larger-than-previously-estimated-and>
- iii. <https://www.theverge.com/2020/4/2/21204057/google-free-chromebooks-wi-fi-hotspots-california-schools-students-remote-learning-coronavirus>
- iv. <https://www.nytimes.com/2020/04/06/us/coronavirus-schools-attendance-absent.html>