Disrupted Learning, COVID-19, and Public Education in Minnesota

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What is EPIC?

The Educator Policy Innovation Center, or EPIC, is the practitioner-driven think tank of Education Minnesota. EPIC brings together teams of experienced educators to provide research-proven solutions to the challenges facing Minnesota schools. Each EPIC team performs a comprehensive review of academic literature on a given issue and adds to our understanding by sharing classroom experiences. After discussing the academic literature and its real-world implications for students, the educators recommend policies to meet the challenge. The coupling of sound academic research with actual classroom experience means EPIC's policy recommendations are uniquely valuable because they combine the best from academia and real-world practical experience.

The EPIC research teams are open to all members of Education Minnesota because although practicing educators are the experts when it comes to education policy, the voice of the educator has often been absent in education policy discussions. Academics, politicians, and CEOs proclaim what is best for education, often with no grounding or experience in how their proposals affect real classrooms with actual students. As a result, our schools are hampered by disjointed, inefficient and at times harmful state and federal policies.

Educators see every day how these policies affect Minnesota's children. EPIC ensures policy makers will now have access simultaneously to the best academic research as well as to the thinking of front-line educators on the most pressing issues in education.

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Disrupted Learning EPIC team

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Georgia Miller-Kamara is an educator in Minnesota Intermediate School District 287 which serves students with unique needs. She is multilingual and holds bachelor's degrees in microbiology and social work and a master's degree in social work and policy. Georgia is currently pursuing a doctoral degree as a Title IV-E Child Welfare scholar, and she is committed to pursuing culturally responsive practices serving at-risk children and their families. She is a racial equity advocate and a PD FIRE trainer for Education Minnesota. Governor Walz appointed Georgia to serve as a school related personnel representative on the Minnesota Special Education Advisory Panel (SEAP).

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Teacher of the Month. She has received honors from the Humans of Monticello and is a member of the Monticello Diversity Committee. Kara is co-founder and the current education committee chair for the Wright County Coalition Against Racism.

Marty Scofield is an adult basic education teacher with the Minnesota Department of Corrections at the Minnesota Correctional Facility in Lino Lakes. He holds a B.A. from Concordia College, Moorhead in Spanish education and holds an adult English as a second language (ESL) certificate from Hamline University. Marty has served as a member of the diversity & recruitment committee with the Minnesota Department of Corrections. In addition, he currently serves on the Education Minnesota Governing Board and the Education Minnesota Political Action Committee as well as acting as his building lead for his local union. Marty also represents Education Minnesota as a National Education Association Director. In his free time, he enjoys traveling, spending time with friends and family, and playing outdoor hockey.

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Disrupted Learning, COVID-19, and Public Education in Minnesota

COVID-19 is not the cause of the inequities within the public school system; it is merely the flashlight that is illuminating the problems we always knew existed. The pandemic is certainly intensifying the structural problems that disadvantage too many students, especially students of color, but neither it nor educators are to blame for the academic setbacks students are experiencing.

The global pandemic caused by COVID-19 has sparked a long-overdue national conversation on the systemic inequities within the public education system that disadvantage marginalized students. In the spring of 2020, educators across Minnesota tirelessly worked to shift all students to distance learning in a very short period of time. Richards, Herron, and Slaby (2020) noted that educators met the challenges of the pandemic by rising "above what they were trained to do, throwing themselves not only into online teaching with virtually no preparation but also into other impromptu roles: video editor, device distributor, tech support, meal site worker, car parade driver, sidewalk-chalk writer, window waver." The transition to distance learning was not easy, but it was the safest way to both protect students and educators from contracting COVID-19 while preventing as little disruption to the education of Minnesota's students as possible.

Before COVID-19, most U.S. citizens probably gave only passing attention to the valuable work of public educators. In addition, corporate education reform organizations have successfully attacked public educators for decades, lowering public perceptions of careers in education. However, all of that changed as students and their caregivers transitioned to distance learning. At the start of the pandemic, parents and lawmakers praised educators for their tremendous work, and there were multiple calls to increase educator wages (Richards, Herron, & Slaby, 2020). National publications catalogued the fact that

educators had long asked for more respect, but it took a global pandemic and economic collapse for the public to recognize the multitude of services public schools and public educators provide communities. Public praise for schools and educators was at an all-time high in the spring of 2020.

It took a global pandemic and economic collapse for the public to recognize the multitude of services public schools and public educators provide communities.

Unfortunately, the narrative shifted quickly in the summer of 2020. A new academic year approached, and families were faced with the reality that distance learning could continue through the fall of 2020, or longer. This did not sit well with many, and the rare moment of adulation for public school educators we experienced in the spring of 2020 was soon eclipsed by a barrage of calls from some parents and elected leaders for students to fully return to school buildings in the fall of 2020, no exceptions. Analogies were made to other nations, and individuals claimed public schools were necessary tools for parents and guardians to be able to return to work. In short, America went from praising educators to vilifying anyone who dared to question the safety of in-person learning in the span of a few months.

In the spring of 2020, the federal government allocated approximately $2.8 trillion dollars in public assistance to struggling families, industries, and government services. The Trump administration earmarked only $13 billion of that money, less than 1% of the overall relief package, for education.

The tensions over returning to school buildings were amplified by President Donald Trump, Vice President Mike Pence, and U.S. Secretary of Education Betsy DeVos. The Trump administration demanded all schools fully open for the 2020-2021 school year, and the President and his Secretary of Education spread false information about the health risks associated with a full return to in-person learning. The administration pointed to European and Asian nations that had successfully opened schools while failing to mention that those nations closed other sectors of society, like bars and restaurants, to ensure the safety of students and educators. Trump and DeVos also threatened to withhold federal funds to school districts who did not comply with their demand to open. Administration officials even went as far as to have the Centers for Disease Control and Prevention revise the guidance for school reopening because the recommendations were too complicated and too expensive.[1]

The Trump administration, state leaders, and local decision makers couched their campaign for in-person learning as being in the best interest of students. On July 12, 2020, Secretary DeVos told CNN "They've [students] been missing months of learning, many of them are going to be so far behind...It's difficult to catch up" (Reston, 2020). In some respects, DeVos is absolutely correct. This pandemic has set back a generation of public school students. It is also true that educators and parents know that public schools

1 *A mob of violent insurrectionists stormed the United States capitol on January 6, 2021 to disrupt the Congressional certification of the Electoral College tally. President Donald Trump encouraged these activities and refused to intervene during the mass chaos. This dangerous move by the president led many administration officials, including Secretary Betsy DeVos, to resign. DeVos used her resignation letter on January 7, 2021 to congratulate her department and the President for their dangerous and misinformed actions related to school reopening during the COVID-19 pandemic.*

remain one of the safest and healthiest places for children to learn and grow. However, schools did not have the resources or space to fully protect students and educators from virus transmission, and there was little effort to provide enough funding to help districts prepare.

In addition, the Trump/DeVos worldview about in-person learning during the pandemic is rooted in an ahistorical view of public schooling in the United States. **COVID-19 is not the cause of the inequities within the public school system; it is merely the flashlight that is illuminating the problems we always knew existed. The pandemic is certainly intensifying the structural problems that disadvantage too many students, especially students of color, but neither it nor educators are to blame for students being "so far behind."** Federal and state governments have been slowly divesting from public education for decades, leaving educators and districts with inadequate resources. Problems caused by underfunding have always existed; the pandemic made things worse and lifted the veil to show the problem to the rest of the world.

This is the moment for Minnesota to not simply restore our public schools; this is the time to transform all schools into spaces that equitably meet the needs of all children, regardless of their race, ability, or home address.

In the spring and summer of 2020, the federal and state governments failed educators and students in this critical moment for public health. In the spring of 2020, the federal government allocated approximately $2.8 trillion dollars in public assistance to struggling families, industries, and government services. The Trump administration earmarked only $13 billion of that money, less than 1% of the overall relief package, for education. This was happening at the same time the President and his advisors were demanding schools reopen (Darling-Hammond & Melnick, 2020). Darling-Hammond and colleagues have argued that "the United States' reliance on local revenues has produced one of the most unequal school funding systems in the industrialized world. Despite strong evidence that money matters for student achievement and other important life outcomes" (Darling-Hammond et al., 2020, p. 98). Unfortunately, even a global pandemic could not get federal leaders to accept this truth. Instead, the Trump administration forced an already overburdened school system "to do more with less" even as a deadly virus decimated communities across the nation.

In what follows, we review the academic literature on what many researchers have labeled "the COVID slide." We hope to provide a better understanding of how Minnesota's students and educators have fared during this frightening pandemic. **The COVID slide is typically defined as the academic learning loss experienced by students as schools have shifted education from school buildings to computer screens.** The concept has been compared to the "summer slide," a topic education researchers have long tracked and analyzed. It is most certainly true that students are currently experiencing academic setbacks, but we find the common meaning of "COVID slide" to be too limited. Before COVID-19, Minnesota reported some of the worst racial discipline gaps and opportunity gaps in the nation (see our EPIC report: *Building an Equitable School System for All Students and Educators*, May 2019), and we know schools were drastically underfunded. Thus, we present findings about the COVID slide with two important caveats.

First, policymakers must acknowledge that public schools in Minnesota were facing an equity crisis long before COVID-19; the pandemic only exacerbated inequities that have existed for decades. **Second, "the COVID slide" is not simply an academic problem.** Any examination of what is happening in Minnesota schools must also include the social-emotional well-being and physical health of students and educators.

Ultimately, we argue that the needs are acute and the recovery will take substantial resources from both the state and federal governments. There are interventions we can provide now to stop some of the harm that will come from this pandemic, but legislators will need to find the political will to provide funding for these measures. **This is the moment for Minnesota to not simply restore our public schools; this is the time to transform all schools into spaces that equitably meet the needs of all children, regardless of their race, ability, or home address.** We will address "what we know" and "what we can do" in the following sections:

I. The Context of 2020: It Is Not All About COVID-19

II. What Do We Know So Far About COVID-19 and Disrupted Learning?

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   B. *Concerning Trend #1: COVID-19, Trauma, Mental Health, and Increased Suicide Rates*

   C. *Concerning Trend #2: COVID-19 and Chronic Absenteeism*

   D. *Concerning Trend #3: COVID-19 and the Digital Divide*

   E. *Concerning Trend #4: COVID-19, the Racial Wealth Gap, and Financial Insecurity*

   F. *Concerning Trend #5: COVID-19 and Increased Racism Directed at Asian-Americans*

III. Learning Loss and Disrupted Learning: What Do We Know? What Can We Predict?

   A. *Insights From Research on Summer Learning Loss*

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      1. Spotlight on Learning Loss After Hurricanes Katrina and Rita

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IV. Policy Recommendations

I. The Context of 2020: It Is Not All About COVID-19

"In these unprecedented times, only one thing has remained consistent—disruption." – Linda Darling-Hammond & Hanna Melnick

Darling-Hammond and Melnick (2020) have rightly noted, "In these unprecedented times, only one thing has remained consistent—disruption." The pandemic has escalated unemployment, housing insecurity, hunger, and death, but it is not the only disruption students and educators have had to face this year (Kuhfield et al., May 2020, p. 28; NAACP, 2020). DePaoli, Hernández, and Darling-Hammond (2020) have argued:

> The events of 2020 have deeply shaken U.S. society. The murders of Breonna Taylor, George Floyd, Ahmaud Arbery, and Rayshard Brooks, among others, have elicited rightful displays of pain and anger, spawning unprecedented uprisings across the nation as justice seekers call for an end to punitive policing and for the acknowledgement of the humanity of Black lives. These killings and the ongoing use of excessive force have put systemic racism on clear display and reignited the collective, individual, and intergenerational trauma that U.S. citizens, particularly Black Americans, bear as a result of our nation's embedded systems of power and oppression. (DePaoli, Hernández, & Darling-Hammond, 2020)

Any examination of learning loss and student well-being must both account for the past inequities that have been well documented while also acknowledging the new scope of the problems caused by the pandemic.

In 2020, U.S. citizens have (1) witnessed a presidential impeachment trial, (2) participated in a historic presidential election that challenged the very foundation of the nation's democratic institutions, (3) experienced horrific displacement and destruction at the hands of fires and storms caused by climate change, (4) saw the balance of the U.S. Supreme Court tilt farther right, (5) learned the President and First Lady had contracted the deadly coronavirus, and (6) watch natural disasters caused by climate change ravage both domestic and international communities.[2] It has, by any measure, been a year of many disruptions that will have lasting impacts on all students and educators.

2 *Unfortunately, President Trump added a "violent insurrection" and "attempted coup" to this list by encouraging and supporting the efforts of a violent mob to storm the United States Capitol Building on January 6, 2021 as the U.S. Congress met to certify the Electoral College tally.*

Any examination of learning loss and student well-being must both account for the past inequities that have been well documented while also acknowledging the new scope of the problems caused by the pandemic. COVID-19 has forever changed the lives of students in Minnesota, but it is only one piece of the story. DePaoli, Hernández, and Darling-Hammond (2020) have noted:

> The events of the day are contributing to a collective and individual trauma that has deep implications for youth learning and wellness. They are also causing many to reflect on our traditional way of "doing school"—holding a mirror to how educational systems have contributed to the inequities and problems facing our society. While the current moment is wrought with crises and difficult reflection, it also presents significant opportunities for schools to redesign their structures and practices so as to pave a more equitable path forward. (DePaoli, Hernández, & Darling-Hammond, 2020)

Thus, we move forward with the understanding that an invisible virus is not the only actor that caused "disrupted learning" in 2020. Systemic racism, overt violence, and natural disasters also played a role in the process, and any attempt to recover from this current moment must also account for these lived experiences.

II. What Do We Know So Far About COVID-19 and Disrupted Learning?

State agencies and researchers are frantically collecting as much data as possible about the state of public school students and public school educators during the pandemic. Recently, researchers at the Education Trust (2020) conducted a poll of households in New York and Chicago and found "that elevated stress levels for families (parents and children) continue due to economic uncertainty and job loss, fears about catching a life-threatening virus, and the psychological impact of social isolation and disruptions to everyday life. The (almost certainly adverse) effect of these economic and psychological factors on the learning occurring in homes is difficult to anticipate" (Kuhfield et al., May 2020, pp. 11-12). Researchers are having to both collect and analyze data at a rapid pace, and we do not have a complete picture of the "education needs" caused by the COVID-19 pandemic. However, we do have some insights. In this section, we will cover what we know to date as well as some troubling trends with public education.

A. National and State Statistics About COVID-19 and Education

Researchers and analysts have collected mountains of data during the COVID-19 pandemic, but unfortunately, it is not the type of data typically used in education policy work. The focus has obviously been on general health data and infection rates. In addition, data researchers with organizations like the National Center for Education Statistics, the U.S. Department of Education, and the Economic Policy Institute have focused their education surveys on "delivery methods" and "feelings of safety among students and educators." At this point, we have very little large-scale, achievement-oriented data about the impact of COVID-19 on academic progress.

In addition, Minnesota suspended the use of the Minnesota Comprehensive Assessments at the end of the 2019-2020 school year, a move that we supported. At this point, we are at a "wait and see" stage in assessing how impactful COVID-19 has been on learning loss. Charts 1 and 2 present data from one of the few nationally representative surveys that included questions about the social-emotional well-being of students during the pandemic. The survey was conducted by researchers at the Center for Promise at

America's Promise Alliance. Chart 1 shows the responses of high school students about key elements of distance learning. Chart 2 provides a quick snapshot of how different racial demographics of students are experiencing disruptions to their emotional health.

Chart 1: National Survey of High School Students

Participating in digital learning	92%
Spend fewer than 4 hours a day on school	78%
Have increased feelings of depression	30%
Feel disconnected from educators/school	29%
Have increased concern about physical health	52%
Have increased concern about family's finances	40%
Have increased concern about their education	39%
Have increased concern about basic needs	30%

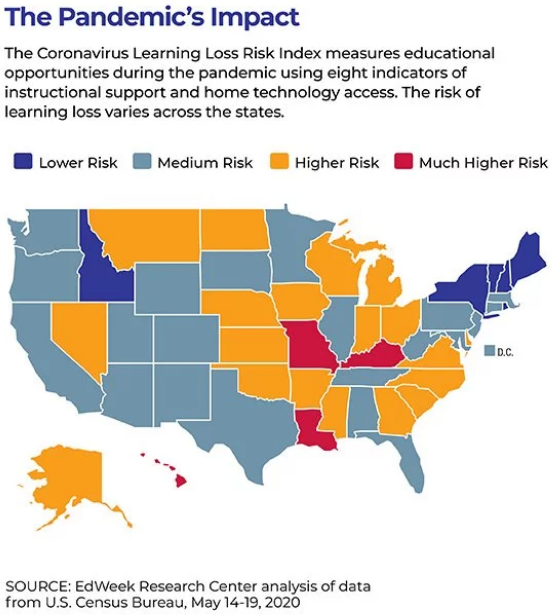
Chart 2: Youth Reporting a Decline in Emotional Health by Race

Asian youth	44%
Black youth	31%
Latinx youth	40%
White youth	30%

The figures in Charts 1 and 2 represent data from the Center for Promise at America's Promise Alliance's national representative survey conducted in May/June of 2020 (Margolius, Doyle Lynch, Pufall Jones, & Hynes, 2020).

Finally, researchers at Education Week recently scored the risk of learning loss students are experiencing in each state. Researchers based their rankings on eight indicators, four based on equity and four based on socioeconomic disparities, to determine academic risks for each state. Figure 1 displays a map of each student's score. Minnesota ranks in the middle and received a score of "medium risk."

Figure 1: Risk of Learning Loss During COVID-19 by State



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B. Concerning Trend #1: COVID-19, Trauma, Mental Health, and Increased Suicide Rates

In previous reports, we have noted that Minnesotans, especially Minnesotans of color, report high numbers of traumatic life experiences (Educator Policy Innovation Center, May 2019). Unfortunately, the events of 2020 have only heightened trauma levels for educators and students and the experience of the pandemic, as well as the additional experiences caused by the pandemic, will only exacerbate the childhood trauma crisis plaguing Minnesota's schools.

Minnesota educators are especially concerned about the rise in suicide rates and hospitalizations for mental health crises among students.

As mentioned in the previous section, data researchers have yet to provide a complete picture of the state of students and educators during the pandemic. Education Minnesota has conducted internal polling and most members have reported being very concerned about the pandemic and are experiencing tremendous levels of stress and anxiety. Margolius and colleagues (2020), in one of the few national surveys with a statistically significant representative sample, found that "1 in 4 young people reported an increase in losing sleep because of worry, feeling unhappy or depressed, feeling constantly under strain, or experiencing a loss of confidence in themselves" (Margolius, Doyle Lynch, Pufall Jones, & Hynes, 2020). In addition, researchers with Education Week conducted a national survey in the spring of 2020 and found "76% of students and 66% of teachers reported having a low morale" (Kurtz, 2020). It is safe to predict that the mental well-being of educators and students is in a state of crisis.

Minnesota educators are especially concerned about the rise in suicide rates and hospitalizations for mental health crises among students. Sparks (2020) recently reported that nationally "the mental health-related hospital emergency department visits rose 24 percent for children ages 5 to 11 and 31 percent among adolescents ages 12 to 17, when compared to the same period in 2019." Health agencies do not report if the mental health emergencies are directly tied to pandemic concerns but we do know that "the share of mental health visits for every 100,000 pediatric hospital emergency visits each week rose steadily beginning about three months into the pandemic." We know that suicide rates and mental health emergencies are escalating during this period of disrupted learning, but we need more data collection to gain a better grasp of how the stress of this current situation increased the likelihood that a student might attempt to take his or her own life (Sparks, 2020).

We are only starting to understand the full scope of how the COVID-19 pandemic will impact a generation of students as well as educators working in our public schools.

It is important to consider the psychological health of students and educators as we consider prior research on learning loss in times of "disrupted learning" due to events like summer vacation. There is a huge difference between quarantining during a global pandemic and a traditional summer vacation from school. Students and educators are being exposed to increased levels of trauma. Godsey (2020) has argued that this moment of "disrupted learning" was caused by "genuine trauma" in which "almost all students were jolted by the sudden separation from their friends and cessation of their everyday habits. Some students knew someone who was sick with the disease. Many students had parents who suddenly lost their jobs" (p. 3). In short, we are only starting to understand the full scope of how the COVID-19 pandemic will impact a generation of students as well as educators working in our public schools.

Some researchers and respected policy organizations have conducted studies that provide an alarming amount of preliminary data on the mental health of educators and students. These include:

- Researchers at the Learning Policy Institute have reported that, "Recent data indicates that young people are experiencing chronic stress and trauma as they navigate basic needs and health concerns, a lack of connectivity to their school communities, and exhaustion from constant anxiety about the future. The pandemic has been disruptive for nearly everyone but has also exposed and exacerbated existing inequities, including those in health and safety, mental health, and learning opportunities and experiences" (Darling-Hammond, et al., 2020, p. 33).
- Margolius and colleagues have argued that "students are experiencing a collective trauma, and that they and their families would benefit from immediate and ongoing support for basic needs, physical and mental health, and learning opportunities (Margolius, Doyle Lynch, Pufall Jones, & Hynes, 2020).
- Researchers have also gathered early warning signs that there are differences in the emotional well-being of students when we account for racial identity. Researchers at America's Promise Alliance have reported that, "Asian students are more likely to feel disconnected from their school communities than White, Black, and Latinx students." In addition, they have indicated that "Latinx students report feeling less connected to both school adults and peers than either White or Black students" (Margolius, Doyle Lynch, Pufall Jones, & Hynes, 2020).

- Margolius and colleagues have found early evidence that "students in rural communities report feeling less connected to their school communities than students in cities, towns, or suburbs" during distance learning (Margolius, Doyle Lynch, Pufall Jones, & Hynes, 2020).

Finally, we know from the survey conducted by America's Promise Alliance that "young people living in cities were 15% more likely to report poorer [physical and mental] health indicators than those in rural areas" and "Asian and Latinx youth were significantly more likely to report poorer health than Black or White youth." We also know that students of immigrant parents are also "likely to experience poorer health than youth whose parents were born in the United States." In short, these findings align with public health data that have shown "the greater risks that COVID-19 presents for some racial groups and in more densely populated places" (Margolius, Doyle Lynch, Pufall Jones, & Hynes, 2020).

C. Concerning Trend #2: COVID-19 and Chronic Absenteeism

Attendance is a key indicator of academic success, graduation rates, and social-emotional development.

Students who are absent for 10% of an academic year, for any reason, are officially placed in a category of students experiencing what scholars term chronic absenteeism (Lieberman, 2020). Attendance is a key indicator of academic success, graduation rates, and social-emotional development. It is also the primary metric state governments use to calculate per-pupil funding. Unfortunately, the COVID-19 pandemic has presented new challenges for districts and educators trying to provide an accurate census of students. Some students may not "be present" for a synchronous educational activity because they did not have access to a computer or because they were assisting a younger sibling with distance learning. However, that same student might complete assignments at times considered non-traditional school hours. This raises the question on how to classify a student as "present" or "absent."

Researchers have consistently shown a relationship between high truancy rates and several negative life outcomes, including incarceration. Furthermore, locating students becomes even more of a challenge when the majority of the state is operating under stay-at-home orders. Researchers with *Education Week* conducted a nationally representative sample in the fall of 2020 and found three trends all policymakers should review:

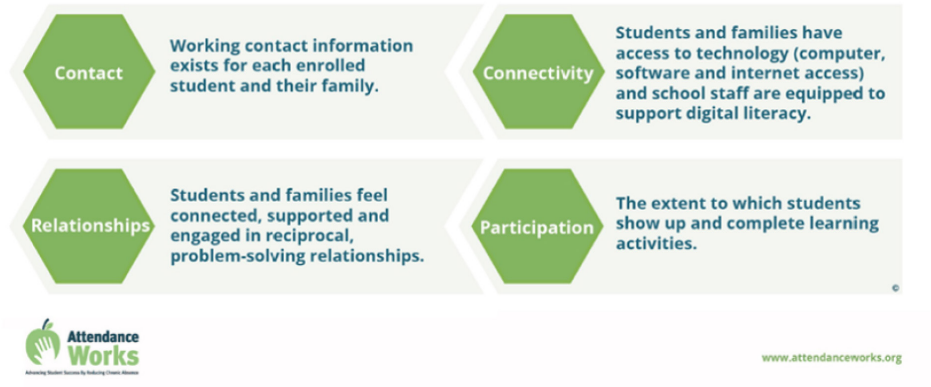
1. Student absences are doubling during the pandemic. Lieberman (2020) reported that "Educators... reported an average of 5 percent of their students were absent on a typical day before the pandemic... that average has increased to 10 percent. That means double the number of students are absent on a typical day compared with normal circumstances." In addition, absenteeism is more of an issue for secondary students than elementary students.
2. Absenteeism is not only a problem in distance and hybrid models. Districts operating with in-person learning models are reporting record-high absentee rates (Lieberman, 2020).
3. Educators believe districts need to rethink how students are "held accountable" for missing school to prevent further harm to their academic and emotional growth (Lieberman, 2020).

In addition, educators reported vast differences in the way urban, suburban, and rural districts are responding to absenteeism, and researchers found that schools with primarily lower-income students are more likely to assign punitive corrections for student absenteeism.

Lawmakers should reflect on how distance learning has sparked a conversation on how we might shift "an understanding of attendance from time spent in class to engagement, participation, and student outcomes" (Darling-Hammond, et al., 2020, p. 18).

It is too early to know how COVID-19 has altered attendance rates for Minnesota students. However, lawmakers should reflect on how distance learning has sparked a conversation on how we might shift "an understanding of attendance from time spent in class to engagement, participation, and student outcomes" (Darling-Hammond et al., 2020, p. 18). Figure 2 offers new ways educators and districts can conceptualize "attendance," especially during distance learning.

Figure 2: Alternative Terms for Attendance During Distance Learning



This image was reproduced from (Darling-Hammond et al., 2020, p. 19). It is based on recommendations from Attendance Works (Attendance Works, 2020).

D. Concerning Trend #3: COVID 19 and The Digital Divide

COVID-19 has also provided stark examples of the reaches of Minnesota's digital divide. Policymakers have long pushed for universal broadband access across the state, and Minnesota is often held up as a national example of progress on this topic. Unfortunately, universal access did not arrive before students and educators moved the majority of all education activities online. Researchers with Common Sense Media recently reported that "in Minnesota, 249,845 students and 6,379 teachers lack adequate internet access" and "about 22% of the students who lack access are Black, Latinx, or Native American" (Common Sense Media, 2020). Like other inequities, lack of access to digital tools and internet often fall hardest on communities of color.

The digital divide results from (1) poor infrastructure, (2) access challenges, and (3) cost. In terms of education, researchers argue that students can experience a device gap, a connectivity gap, or both. Chandra and colleagues (2020) have argued that a student needs "a desktop computer, laptop, or tablet in their household" to meet the minimum device threshold (Chandra et al., 2020, p. 8). Ideally,

students will have access to their own device and not be required to share it with siblings or guardians, which interferes with synchronous learning experiences. Researchers have also deemed smart phones and mobile phones as inadequate tools for distance learning (Chandra et al., 2020, p. 8). Unfortunately, many Minnesota students only have access to the internet through a mobile device.

The connectivity gap is a bit more complicated to define. In terms of distance learning, broadband experts define an adequate internet connection as "25/3 Mbps (download/upload speeds), at a minimum" (Chandra et al., 2020, p. 8). In addition, broadband experts would deem dial-up internet inadequate because it typically has "connection speeds that are too slow (40 Kbps–60 Kbps) for distance learning" (Chandra et al., 2020, p. 8).

Researchers with Common Sense Media recently reported that "in Minnesota, 249,845 students and 6,379 teachers lack adequate internet access" and "about 22% of the students who lack access are Black, Latinx, or Native American" (Common Sense Media, 2020).

The digital divide is wide for many families in the United States. Researchers with Common Sense Media estimate that there are roughly 9 million students in the United States without any access to the internet or any device to access the internet. They also found that Black, Latinx, and Native American households are "the three racial demographics with the highest proportion of individuals without connection" (Chandra et al., 2020). An additional 5-6 million students are "internet insufficient" meaning they have an appropriate device but no access to broadband. Finally, about 1 million students have access to the correct internet speeds but are "device deficient," meaning they do not have a digital tool through which to conduct distance learning. Darling-Hammond and her colleagues have also indicated that "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" (Darling-Hammond et al., 2020, p. 6). In sum, researchers have estimated "that 1 in 4 students do not have an adequate internet connection or device" (Chandra et al., 2020, p. 13).

Minnesota lawmakers have set an aggressive goal of achieving border-to-border broadband access by the year 2026 (Minnesota Department of Employment and Economic Development, 2020). However, the global pandemic, which led to distance learning for most students in Minnesota, has exposed how much work is left to accomplish. Chart 3 provides statistics on the reaches of the digital divide in Minnesota. In the year 2020, over 249,000 students and over 6,000 teachers are without adequate access to high-speed internet.

The COVID-19 pandemic has exposed that the digital divide is a critical equity issue touching all corners of the United States. Yes, internet connectivity issues are more common in rural areas, but we also know "access is also an issue in urban areas. For example, internet access is a significant challenge for unhoused and highly mobile families" (Chandra et al., 2020, p. 9). Furthermore, Chart 4 shows that students of color are more likely to fall victim to this phenomenon.

Francis and Weller (2020) have argued, "unreliable internet access and a lack of consistent access to electronic devices reduces families' time teaching children by two to three hours among Black families but only by one to two hours among White families. While the short- and long-term impacts of COVID-related

school closures and job losses on children's educational outcomes cannot be measured yet, it is already clear that there are differential effects by race on access to educational resources as a result of the pandemic" (Francis & Weller, August 2020). We agree with Darling-Hammond and other researchers who have emphatically stated that "closing the divide is critical not only to ensuring educational equity but also to sustaining economic security" (Darling-Hammond et al., 2020, p. 7).

Chart 3: The Digital Divide In Minnesota and The United States

	Total number	Overall percentage
U.S. teachers* without a digital device**	100,000	3%
MN teachers without a digital device	1,046	2%
MN students without a digital device	162,607	18%

	Total number	Overall percentage
U.S. teachers* without high speed internet***	~300-400k	8%
MN teachers without high speed internet	6,379	11%
MN students without high speed internet	249,845	28%

These figures were obtained from researchers at Common Sense Media who used a variety of government and industry reports to produce the best estimates on the digital divide. See: Chandra et al., 2020. Closing the K-12 digital divide in the age of distance learning. San Francisco; Boston: Common Sense Media; Boston Consulting Group.

**These figures only represent the licensed teachers without digital devices. Unfortunately, state and federal agencies do not track the availability of digital devices and high-speed internet for education support professionals. However, we can hypothesize with some certainty that the divide is even more acute for these educators.*

***A digital device is defined as a tablet or personal computer that allows a student to access all elements of digital learning. Many students have smart phones and other handheld devices, but these do not provide adequate platforms for distance learning.*

****High speed internet/Adequate internet connection is defined as "internet with sufficient speeds for distance learning, of 25/3 Mbps (download/upload speeds), at a minimum. These connection speeds can be provided through a fixed broadband network, including digital subscriber line (DSL), cable, or fiber. Adequate internet connection excludes dial-up, which has connection speeds that are too slow (40 Kbps–60 Kbps) for distance learning" (Chandra, et al., 2020, p. 8).*

Chart 4: Race and the Digital Divide, U.S. Students Without High Speed Internet

American Indian/Alaska Native	27%
Black	19%
Hispanic	17%
Pacific Islander	12%
Two or more races	7%
White	7%
Asian	3%

E. Concerning Trend #4: COVID-19, the Racial Wealth Gap, and Financial Insecurity

Minnesota consistently reports one of the worst racial wealth gaps in the United States. As a collective, Black Minnesotans have less financial security and lower rates of home ownership than White Minnesotans.

Minnesota consistently reports one of the worst racial wealth gaps in the United States. As a collective, Black Minnesotans have less financial security and lower rates of home ownership than White Minnesotans. As the pandemic raged, many Minnesotans experienced job loss or a reduction in household wages. Francis and Weller (2020) estimated that nationally, "54.8 percent of Black workers said that they had lost incomes due to a job loss or cut in hours from late April to early June, compared with 45.8 percent of white workers." Minnesota has benefited from budget surpluses and progressive statutes, as compared to other states, to offset some of this loss, but Minnesotans of color have born the vast majority of the economic pain caused by COVID-19. This in turn complicates the educational opportunities of children of color in Minnesota.

The vision of our country's education system includes a belief that it is equally accessible and of equally high quality for all students, which would, in turn, help individuals escape poverty. However, an education alone cannot manifest financial gains. Citizens need jobs and opportunities to provide an income for their families. Francis and Weller (2020) have said:

> In the United States, wealth and education already feed into each other in an intergenerational cycle. Families with more wealth are able to provide more educational opportunities for their children, who are in turn able to capitalize on those opportunities in ways that create more wealth. This reinforcement of wealth through education and of education through wealth—when combined with the racially disparate economic and health impacts of the COVID-19 pandemic—will only further widen existing

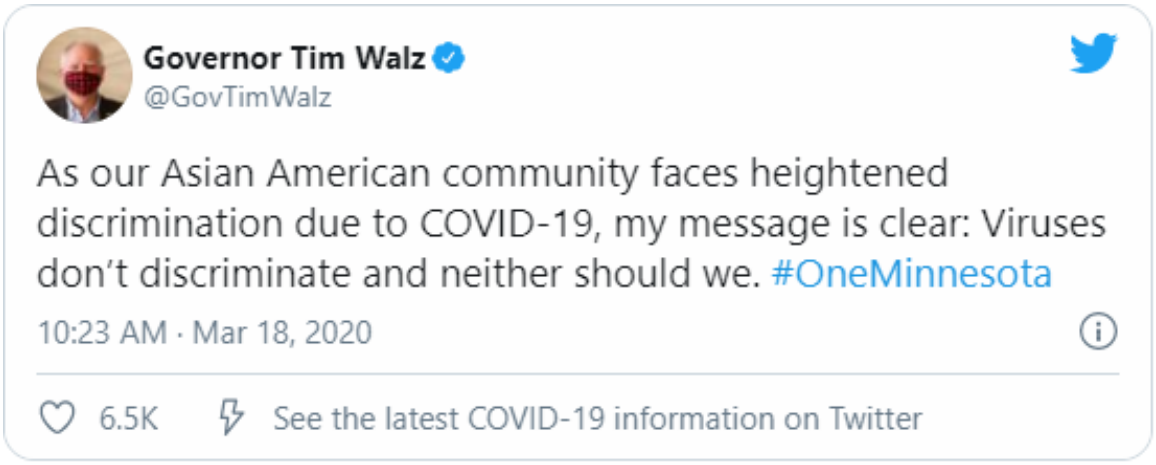
racial wealth and education gaps. The intergenerational transmission of racial wealth inequality is playing out at rapid speed during the pandemic. (Francis & Weller, August 2020)

We do not have complete figures on the extent of economic damage caused by COVID-19, and state agencies need to "accurately assess the financial condition of families who are suffering a loss of income and employment." However, some scholars have predicted that "under the current circumstances, it is very likely that poverty rates in the United States will reach their highest levels in 50 years" (Cookson, May 2020, p. v).

F. Concerning Trend #5: COVID-19 and Increased Racism Directed at Asian-Americans

Finally, we want to draw attention to the racism directed at Asian-Americans as a result of COVID-19. President Trump and his allies consistently used the term "China Virus" to refer to the pathogen that causes COVID-19. Reporters, activists, and political leaders asked the President to refrain from this racist language on several occasions. Unfortunately, as Yang (2020) reported, Trump "rejected questions about the effect of his words on Asian Americans." We know there has been increased hostility directed at Minnesota's Asian population based on false beliefs that COVID-19 is somehow intrinsically tied to all people of Asian descent. This specific moment of racism has been so profound that even Governor Tim Walz had to address it in a tweet on March 18, 2020 (see Figure 3). Policymakers must account for this specific moment of hate speech as they address the totality of the trauma caused by the COVID-19 pandemic (Feshir & Yang, 2020).

Figure 3: Walz Denounces Racist Speech Directed at Minnesotans of Asian Descent



III. Learning Loss and Disrupted Learning: What Do We Know? What Can We Predict?

A. Insights From Research on Summer Learning Loss

Education researchers have been studying "summer learning loss" or the "summer slide" for years. Barbara Heyns's (1978) "comparison of school-year and summer achievement gains for a sample of Atlanta, Georgia, middle schoolers...first connected summer learning loss to the achievement gap" (Alexander, Entwisle, & Olson, 2007, pp. 12-13). Since her study, most scholars have concluded that summer vacation in the United States typically sets students back about one month in terms of academic progress. In addition, the researchers have shown that students typically regress more in math skills than other areas, including reading.

We must acknowledge that distance learning brought on by the COVID-19 pandemic is neither vacation nor a break, and we can say without question that 2020 has not been a "typical year."

Researchers have also confirmed that "under typical schooling conditions, the students who lose the most during the summer tend to gain the most when back in school" (Kuhfield et al., May 2020, p. 27). But, we must acknowledge that distance learning brought on by the COVID-19 pandemic is neither vacation nor a break, and we can say without question that 2020 has not been a "typical year." Thus, scholars argue that "the ground that students have to make up during the 2020-21 academic year will probably be greater due to COVID-19" (Kuhfield et al., May 2020, p. 27).

The research on summer learning loss is not a perfect comparison to understand what is happening as a result of COVID-19. Kuhfield and colleagues (2020) have noted that "the biggest difference between school closures examined by previous studies and those of COVID-19 is that most school districts are now providing online instruction. Many districts have offered remote learning plans, which may include formal curriculum, assignments, and/or progress-monitoring as well as access to general educational resources" (Kuhfield et al., May 2020, p. 10). However, it is a fair starting place and thankfully we have decades of findings to help us predict what might happen as a result of lost instructional time during the 2019-2020 and 2020-2021 academic years. Here is a quick summary of previous research on summer learning loss:

- **There are some variations on the extent of summer learning loss, but most researchers argue that students lose "about one month of skill in reading and math during summer recess"** (Cooper et al., 1996). Others have found "mean summer learning losses" (e.g., Allinder et al., 1992; Borman et al., 2005), "summer learning stagnation" (e.g., Benson & Borman, 2010; Downey et al., 2008), "summer learning slowdown" (e.g., Alexander et al., 2001; Burkam et al., 2004; Quinn et al., 2016), "or a mix of the three" (e.g., Downey et al., 2004; Heyns, 1978; von Hippel et al., 2018; Atteberry & McEachin, April 2020, p. 27).

- **Researchers have found that students regress the most in "domains involving memorization (math computation, spelling)"** and less in areas of "conceptual understanding" (Alexander, Entwisle, & Olson, 2007, p. 14).
- **Some predict that a lack of supplemental resources during summer vacations can exacerbate summer learning loss.** Entwisle, Alexander, and Olson (2000) analogize the reasons for summer learning loss to a kitchen faucet. In a typical academic year, the school provides needed resources and learning opportunities but "during the summer, poor families cannot make up for the resources the school had been providing and their children's achievement is stable or declines. In contrast, middle-class families can make up for the school's resources to a considerable extent and their children's growth continues, though at a slower pace than during the school year" (Borman, Benson, & Overman, 2005, p. 133).
- Alexander, Entwisle, and Olson (2007) reported that many scholars, such as Burkam, have found that **"children from higher-SES families learn more over the summer than do their less advantaged counterparts"** and experience less "learning loss" (Alexander, Entwisle, & Olson, 2007, p. 15; Godsey, 2020, p. 3).
- **Students identified for special education services are most likely to experience academic regression** (Jones, Vaughn, & Fuchs, June 2020, p. 2).
- **Some researchers caution about extrapolating too much from summer learning loss studies because researchers cannot always account for "differential resources in terms of families' economic capital"** (see for example, Borman et al., 2005). This is an especially important caveat because "resource differences are likely exacerbated by summer break when, for some families, work schedules come in greater conflict with reduced child care" (Atteberry & McEachin, April 2020, p. 33).
- **Most researchers have confirmed that unaddressed learning gaps may grow bigger for students from "high-poverty" contexts during summer recess.** There is some learning loss caused by summer recess, but quality interventions can reverse these trends (Borman, Benson, & Overman, 2005, p. 146). Students show the most growth in summer school programs with high amounts of collaboration between home and school (Borman, Benson, & Overman, 2005, p. 149), and summer reading programs can help slow learning loss in students from low-income families (Kim & Quinn, 2013, p. 34; Soland et al., May 2020; Cookson, May 2020, p. vii; Alexander, Entwisle, & Olson, 2007, p. 26-27).
- **Temple, Reynolds, and Miedel (1998) produced one of the first studies that connected "extended intervention is strongly associated with a lower rate of early high school dropout."** This led the researchers to support "the call in Zigler and Styfco (1993) for extending Head Start-like interventions into the primary grades" (Temple, Reynolds, & Miedel, 1998, p. 24).

Although minor disagreements exist, most researchers have confirmed, (1) students lose about a month of learning over summer vacation, (2) this loss is greater for students from low-income households, and (3) quality interventions and extended-time programs in the summer can help slow or reverse lost learning.

B. Insights From Research on Learning Loss in Times of Collective Trauma

As mentioned in the previous section, we caution policymakers from basing too many predictions solely on studies about summer learning loss. In 2020 and 2021, most students are participating in virtual learning experiences, and are collectively moving through a worldwide traumatic experience. Studies about summer vacation give us some window on the potential learning loss that will result from the COVID-19 pandemic, but policymakers will likely find information from the few studies on learning loss as a result of natural disasters and other disruptions additionally helpful.

Any attempts to correct "learning loss" or the "COVID slide" will likely be secondary to social-emotional interventions that target the collective trauma students have experienced during the 2019-2020 and 2020-2021 school years.

A few researchers have studied the educational setbacks of students displaced by Hurricanes Katrina and Rita. Picou and Marshall (2007) found that "students displaced by Hurricane Katrina...had difficulty concentrating and often manifested symptoms of depression in the months following the hurricane." Thus, we can assume that educators will need to understand the emotional toll caused by the global pandemic, and then strategize the best way to provide supports to struggling students. The supports will need to be tailored to individual students and communities, and there will not be a one-size-fits-all approach (Kuhfield et al., May 2020, p. 27). Additionally, other scholars who examined the impacts of Hurricane Katrina and the Christchurch, New Zealand earthquakes found that disruptions following natural disasters on student development was long lasting, with some students continuing to show psychological distress and trouble concentrating for several years afterwards" (Kuhfield et al., May 2020, pp. 11-12).

The impact of natural disasters on learning provides another set of warning signs for what COVID may mean for our students. However, we can predict, based on the few studies we have, that the emotional and psychological impact of COVID-19 will be drastic for many students. Any attempts to correct "learning loss" or the "COVID slide" will likely be secondary to social-emotional interventions that target the collective trauma students have experienced during the 2019-2020 and 2020-2021 school years.

C. Predictions About Learning Loss During the COVID-19 Pandemic

We can use the findings from the research analyzed in the previous two sections to make predictions about what is likely to happen as a result of the pandemic. We note that it is problematic to speculate too much at this point because we are still immersed in this disruptive moment. Researchers will be analyzing the cumulative impact on student learning caused by the events of 2020 for several years, if not decades, but to ignore the warning signs we have now would only serve to worsen the damage already being caused.

However, education scholars have been able to make a few predictions/projections:

- In the spring of 2020, researchers predicted that **"students are likely to return in fall 2020 with approximately 63-68% of the learning gains in reading relative to a typical school year and with 37-50% of the learning gains in math"** (Kuhfield et al., May 2020, p. 2).

- Other researchers predicted similar losses with slight variations. Kuhfield and Tarasawa (April 2020) hypothesized "students will return in fall 2020 with roughly 70% of the learning gains in reading relative to a typical school year. However, **in mathematics, students are likely to show much smaller learning gains, returning with less than 50% of the learning gains and in some grades, nearly a full year behind what we would observe in normal conditions"** (p. 2).
- Kuhfield and colleagues (May 2020) have also predicted that **learning loss will most likely not be a universal experience, and some students will fall behind at higher rates than others.** They wrote, "We estimate that losing ground during the COVID-19 school closures would not be universal, with the top third of students potentially making gains in reading...educators will likely need to consider ways to support students who are academically behind and further differentiate instruction" (p. 2).
- Soland and colleagues (May 2020) argued that researchers have shown that "students who lose the most during the summer tend to gain the most when back in school." However, the researchers warned educators that "this may not hold for COVID-19...**the ground that students have to make up during the 2020-21 academic year will probably be greater due to COVID-19"** (Soland et al., May 2020).

These limited predictions may not comfort policymakers looking for immediate interventions. We understand the need for quick, acute, and targeted programs to stop some of the damage caused by the pandemic. Unfortunately, we do not have enough real-time data to provide a thorough analysis of what can be done in the early months of 2021. **The best option is to use the previous studies as guides and turn to practices we know work in most all situations: (1) social-emotional learning programs, (2) quality extended-time activities, (3) targeted programs for at-risk populations, and (4) individualized interventions that meet the unique needs of specific communities of students.** In time, we will have data to make more targeted programmatic decisions. For now, it is best to use past guidance to stop as much of the learning disruption as possible in these unprecedented times.

The best option is to use the previous studies as guides and turn to practices we know work in most all situations: (1) social-emotional learning programs, (2) quality extended-time activities, (3) targeted programs for at-risk populations, and (4) individualized interventions that meet the unique needs of specific communities of students.

IV. Policy Recommendations

Policymakers and education researchers have started compiling a list of potential interventions that could stall, or reverse, learning loss for the nation's students. Many of these recommendations are from a national perspective, but state policymakers could scale the ideas to fit the unique needs of students in Minnesota. Darling-Hammond and her colleagues have noted that

> Now, more than ever, policymakers will determine the extent to which out-of-school time exacerbates or mitigates inequitable educational outcomes for students. COVID-19 has further illuminated what we have long known: Our current school schedule cannot meet the needs of many students. Innovations made now will have lasting benefits, as school closures are likely to become more common, not only due to public health emergencies, but also due to increasingly common climate crises. (Darling-Hammond et al., 2020, p. 71)

This is the moment for Minnesota's leaders and educators to build truly equitable schools for all students. What follows is a list of potential starting points:

Proposal #1: Fund extra time education programs

Extended learning time programs, whether as add-ons to the school day or as summer programs, are a mandatory part of any attempt to mitigate learning loss during the pandemic. Researchers have long documented the successes of these programs. Here are some key findings:

- **Researchers have shown that "increased learning time had a positive effect on students performing below standards"** (Kidron & Lindsay, 2014, p. 10; Patall, Cooper, & Allen, 2010, p. 428). Their findings are consistent with other researchers that looked at the connection between "at-risk" students and supplemental learning opportunities. Policymakers and educators must prioritize underperforming students in any extended school time programming.
- **Extended learning time programs deliver the best results when they are delivered by certified, licensed teachers.** Kidron and Lindsay (2014) reported that "increased learning time programs that employed certified teachers had a statistically significant but small positive effect on students' literacy achievement and math achievement. In contrast, programs that employed instructors who were not certified (such as graduate students and volunteers) had no effect on students' academic achievement" (Kidron & Lindsay, 2014, pp. 6, 16-17).
- **Researchers have recognized that there is not a one-size-fits-all approach to extended-time programs.** Patall, Cooper, and Allen (2010) have argued that "other support services, such as after-school programs, summer school programs, and other out-of-school services, may provide similar levels of academic support when extended school time is not an option for struggling students" (p. 432).
- **In addition, researchers have stressed the need to assess and develop extended-time programs that are tailored to the unique needs of individual students.** Darling-Hammond and her collaborators have reminded policymakers that educators will need the time to "prioritize understanding student experiences." This means policymakers will need to trust educators with the work of "forging caring connections, surfacing considerations of what students have had the opportunity to learn, and connecting students to the appropriate supports within school and community systems" (Darling-Hammond et al., 2020, p. 21).

- **Scholars have shown that extended-school time opportunities are most important for single-parent households and low-income families** (Patall, Cooper, & Allen, 2010, p. 432).
- **Researchers have concluded that extended-time programming must go beyond summer learning opportunities.** Alexander, Entwisle, and Olson (2007) have argued, "Disadvantaged children need year-round supplemental programming to counter the continuing press of family and community conditions that hold them back, which leads us to support summer school or extended-year programs targeted specifically for poor children, as well as supplemental school year services for these children during the early grades (Alexander, Entwisle, & Olson, 2007, p. 25).

Home and community for BIPOC families, single-parent families, and low socioeconomic families are rich environments in which much is learned. Unfortunately, our metrics and benchmarks rarely measure the knowledge, cultural capital and community traditions that are passed down in families that are too often marginalized by our traditional systems.

Extended-time programs are essential if lawmakers want to see educators close the learning gaps caused by the pandemic. Given our goal is to slow losses and increase gains, these are the evidence based approaches we have at this time. However, extended-time programming is not meant to be a substitute for the important learning that occurs in the homes of Minnesota families. Policymakers and educators must acknowledge that home and community for BIPOC families, single-parent families, and low socioeconomic families are rich environments in which much is learned. Unfortunately, our metrics and benchmarks rarely measure the knowledge, cultural capital and community traditions that are passed down in families that are too often marginalized by our traditional systems.

This would not be a hard policy shift because Minnesota already allows districts to receive money for extended school year programming (https://www.revisor.mn.gov/statutes/cite/126C.05 see subd.15). Policymakers could make adjustments to this funding stream, making sure to keep it separate from all other aspects of the school finance formula. Currently, a school district can have a student enroll in learning year programming and receive up to 1.2 student units multiplied by $5,117. That 1.2 student unit is based on the ratio of hours exceeding 1,020 hours of instruction for secondary, 950 hours for elementary and 850 for kindergarten.

Ideally, the Legislature would allow districts to fully count the appropriate ratio of hours to the whole formula, as was past practice and law prior to 2004. Districts were allowed to count the per-pupil unit of real ratio of hours served and apply that pupil unit to the formula. In short, districts would be able to multiply the per-pupil number throughout the whole formula (except extended-time revenue, Q Comp, and gifted and talented). Other options could include:

- raise the dollar amount from $5,117 to a higher number
- target funding only for students who have been distance learning
- target ESSA-identified schools

- earmark funds for BIPOC students, students qualifying for special education, and students qualifying for the free/reduced-price lunch program
- increase the dollar amount and tie it to inflation

Proposal #2: Support equitable, restorative, and transformative returns to school. This will require granting educators the agency and resources needed to determine individually-appropriate interventions that meet the unique needs of their population of students.

Minnesota students will return to in-person learning with academic deficits. However, researchers have shown that it makes little sense to target learning gaps until the basic needs and social-emotional needs of students have been met. This will require resources, so educators can "prioritize social and emotional well-being, including mental health" of all students. Educators and researchers have long argued that "all young people need to feel safe and have their basic needs met in order to engage in learning... this includes stabilizing, where possible, families' insecurity about basic needs" (Margolius et al., 2020).

Darling-Hammond and her colleagues have encouraged schools to approach post-COVID learning with "experiences that promote inclusion and reduce segregation. Students also need opportunities to form relationships across lines of socioeconomic, racial, and ethnic difference. As part of reopening and learning continuity plans, schools can promote equity and inclusion in learning experiences by creating cohorts that are socioeconomically, racially, and ethnically diverse" (Darling-Hammond et al., 2020, p. 53).

Experts have recommended that communities "explore trauma-informed care and healing-centered practices as a framework of support for young people" (Margolius et al., 2020). In addition, Darling-Hammond and her colleagues have encouraged schools to approach post-COVID learning with "experiences that promote inclusion and reduce segregation. Students also need opportunities to form relationships across lines of socioeconomic, racial, and ethnic difference. As part of reopening and learning continuity plans, schools can promote equity and inclusion in learning experiences by creating cohorts that are socioeconomically, racially, and ethnically diverse" (Darling-Hammond et al., 2020, p. 53).

Policymakers will need to provide educators and administrators with resources, primarily time, staff, and training, to provide culturally-responsive approaches to reopening schools (Darling-Hammond et al., 2020, p. 29). Educators will need to be given the authority and flexibility to "respond to their young people's unique needs." The COVID-19 pandemic caused different degrees of trauma and suffering for students, and educators will need to tailor and scaffold their supports accordingly." Margolius and colleagues have shown that "timely, personalized support is an essential component of mitigating the learning losses that young people are experiencing as a result of their extended time away from formal schooling and other opportunities to learn" (Margolius et al., 2020).

Proposal #3: Minnesota policymakers must endorse a "do no harm approach" to student assessment. This will require rethinking the purpose and means of measuring student successes as well as revisiting the utility of standardized assessments.

In the spring of 2020, the Minnesota Department of Education convened a panel of education stakeholders to issue assessment guidance for distance learning. MDE also updated that guidance in the fall of 2020 (Minnesota Department of Education, 2020, August 18). The department's guidance is an excellent starting point to begin rethinking the way student progress is assessed in distance learning as well as for future in-person learning.

Our prior approaches to assessment were not built with an equity frame, nor do they account for all aspects of student performance. In addition, multiple researchers have confirmed that certain assessments increase fear of "being held back" in many students. This fear "contributes to greater academic failure, higher levels of dropping out and greater behavioral difficulties" (Darling-Hammond, 1998). We also know that some elementary students live in fear of being "held back" or "judged" for failing on certain assessments (one study found that children fear grade retention so much that they cite it No. 3 on their list of anxieties following only the fear of blindness and death of a parent). COVID-19 has presented educators and policymakers with an opportunity to correct this inequity (Darling-Hammond, 1998).

Policymakers should remember:

- No student should be held back because of "lost learning" during COVID-19." Researchers such as Lorrie Shepard have shown that "repeating a grade does not help students gain ground academically and has a negative impact on social adjustment and self-esteem" (Darling-Hammond, 1998).
- This is an ideal time to shift from a "measurement culture" to what researchers call "a learning culture." Darling-Hammond and her colleagues have noted that this will require building (Feshir & Yang, 2020) "assessment systems that are designed to transform learning and close opportunity and achievement gaps, rather than just surface them, as many current assessment systems do" (Darling-Hammond et al., 2020, p. 22).
- As educators have long argued, statewide assessments, like the Minnesota Comprehensive Assessments, provide one snapshot of summative data. Instead, policymakers could support educators in their efforts to build "locally relevant assessments...that diagnose where students are in more fine grained ways and inform decisions about teaching" (Darling-Hammond et al., 2020, p. 26).

Proposal #4: Minnesota must encourage districts to start preparing for future disruptions.

We all hope this is the last global pandemic in our lifetime, but we cannot be certain. Our society is becoming more globalized, and the risk of disease transmission increases as more humans come into contact with each other. In addition, displacement and disruption due to climate change will most certainly disrupt future learning endeavors. Many districts, such as the Miami-Dade County Public Schools, were better prepared to meet the demands of distance learning because of the "Instructional Continuity Plan" the district created for disruptions due to hurricanes. Minnesota can follow this example and have all districts regularly update a preparedness plan for future disruptions (Miami-Dade County Public Schools, 2020, April 4).

Proposal #5: Close the digital divide.

In previous sections, we highlighted the digital divide that disrupts the learning experiences of too many students in Minnesota. Policymakers should realize that any effort to close the digital divide in response to COVID-19 "will also position communities that have long struggled with the digital divide with equitable technology resources to better succeed in the future" (Chandra et al., 2020, p. 7). We fundamentally believe that "high-speed internet connection at home is not a luxury. It is as essential as electricity and running water to be fully engaged in American society and to ensure equal opportunity at desired educational, economic, health, public safety, and social outcomes (Chandra et al., 2020, p. 7). Minnesota will need to continue its quest for border-to-border broadband access, but lawmakers also need to close the "digital device" divide. Researchers have argued that "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" (Darling-Hammond et al., 2020, p. 7). This is a small investment that will pay dividends in terms of student success.

Proposal # 6: Completely reimagine public education.

Policymakers and educators should also look for the glimmers of hope and silver linings that have emerged as we all found new ways to teach and learn during the pandemic. This a moment to reinvent public education and learn from what happened as we tried new models of learning.

Policymakers and educators should also look for the glimmers of hope and silver linings that have emerged as we all found new ways to teach and learn during the pandemic. This a moment to reinvent public education and learn from what happened as we tried new models of learning. We recommend the following as starting points:

- Many districts in Minnesota used hybrid learning models for elementary students. In most of these districts, educators would have only half of their students each day. This allowed for more personal attention and individualized instruction. Early data indicators suggest that students are making greater learning gains. The state should direct the Minnesota Department of Education to study how decreased class sizes improved academic achievement for elementary students.
- In addition, elementary schools using hybrid models are also reporting lower rates of exclusionary disciplinary interventions such as suspensions and expulsions. State agencies should track how smaller class sizes correlate with improved school climate and student behavior.
- The traditional school calendar is dated and does not fit the day-to-day realities facing students. During the pandemic, high school students were able to work during the day and complete school at night. Students and educators were given more flexibility with what a "school day" looks like. We know that students will still need to work once the pandemic ends. Perhaps this is a good moment to revisit the length of the school year and the timing of the school day.
- Some students thrived during distance learning. Special education teachers have reported that many students with autism and behavioral disorders are performing better because they are removed from

the triggers they experience in traditional classrooms. The state should direct resources to studying how distance learning might be a better model for some students even after the pandemic.

- In addition, some marginalized students, such as LGBTQ+ students, who often fall victim to bullying and harassment have found a moment of repose in distance learning. The state should also direct researchers to investigate how distance learning might be a safer alternative for students who prefer this model.
- Educators transformed public education in a matter of weeks in the spring of 2020. The state should (1) study what innovations worked and can be replicated and (2) realize that educators can transform education if afforded the proper resources and agency.
- COVID-19 has shown that public schools provide more than academic skills for students. They are community hubs. This pandemic has shown that the state needs to invest in more full-service community schools.
- Researchers have long predicted that certain stages of adolescent development can be more critical than others. For example, researchers have confirmed that academic setbacks "during the elementary school years likely casts a long shadow" (Alexander, Entwisle, & Olson, 2007, p. 20) and "the beginning of high school is a critical time in the schooling process" (Alexander, Entwisle, & Olson, 2007, p. 21). Unfortunately, some students hit these critical stages during this pandemic. Lawmakers should give educators and districts the authority and resources to provide intensive interventions for students that hit these critical stages of development during the pandemic.
- Finally, this is the ideal moment to reevaluate how we measure "success" and which version of "cultural capital" we are using to judge students. Yosso (2005) reminded us that "white middle class communities as the standard by which all others are judged" in public education in the United States. It is time for the state to direct resources to reexamining the benchmarks and standards we set for students. It is time to acknowledge the "cultural wealth within communities of color" that have too long been ignored and build learning and growth standards that account for the linguistic, social, and cultural capital students of color bring to classrooms across Minnesota (Yosso, 2005, p. 82).

Concluding Thoughts

Public educators and students are living through a frightening global pandemic. Minnesota's public school system was already plagued by systemic racism and underfunding before the introduction of COVID-19 to the state. Unfortunately, the pandemic will most definitely exacerbate inequities that have long existed. But, all is not lost. Minnesota's students and educators are strong and resilient. Lawmakers should equip them with the resources they need to "reinvent our systems of education." It is time to provide an answer to the foundational question of this moment, "How can we transform what has not been working for children and for our society into a more equitable and empowering future?" (Darling-Hammond et al., 2020, p. v).

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Notes

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