Addressing the Long-Term Effects of the COVID-19 Pandemic on Children and Families

**Highlights for Educators**

The National Academies of Sciences, Engineering, and Medicine produced a report addressing the wide-ranging impacts of the COVID-19 pandemic on children, youth, and families and concluded that major disruptions to the education system significantly impacted the learning and social emotional development of children and youth in early childhood programs, elementary and secondary schools, and postsecondary institutions.

Across all measures of school engagement and learning outcomes, students appear to be worse off than they would have been absent the COVID-19 pandemic, and such negative outcomes are generally more acute for the low-income and racially and ethnically minoritized communities that are the focus of this report. Therefore, targeted interventions are needed to support emotional well-being, address missed learning opportunities, and stop the widening of the achievement gap so that students can excel academically and in life.

The report offers recommendations in the following areas:

- Compensating for lost instructional time in order to address missed learning;
- Reengaging families and students who have become disengaged from schools;
- Strengthening the educator workforce needed to accomplish these first two goals;
- Pandemic-proofing schools to minimize future disease-related disruptions to education.

**ADDRESSING MISSED LEARNING OPPORTUNITIES**

The COVID-19 pandemic resulted in substantially reduced instructional time and decreased learning for K–12 students due to school closures, as well as broader health, economic, and social disruptions caused by the pandemic. These effects of the pandemic on learning were not evenly distributed: deeper losses were experienced by students from historically marginalized groups and those attending low-resourced schools. Evidence-based interventions designed to make up for missed learning could accelerate learning recovery and support the development of a wide set of skills—academic, social, emotional, and behavioral—needed to promote students’ further learning.

To address the missed learning opportunities during the pandemic, a comprehensive approach that combines multiple interventions is recommended. Research suggests that targeted evidence-based interventions, such as tutoring, summer learning, extended day education, and mentoring can have positive effects on attendance, academic achievement, and social-emotional outcomes. High dosage tutoring (which occurs at least three times a week) in alignment with curricula and in small group settings, has shown to be particularly effective, especially for students from low socioeconomic backgrounds.

Many of the interventions described above were created for specific groups of students, but the vast educational disruption of the pandemic means that interventions would need to be scaled up significantly. Scaling up these interventions poses challenges in terms of infrastructure, staffing, and logistics. Provision of services that are intermittent or of poor quality might worsen student
outcomes by accelerating disengagement and stress while
damaging trust and relationships between educational
providers and students and families. In this context,

attempts to scale up programs might be more successful
if they rely on incremental expansion and if they are

gum part of a comprehensive effort to integrate the specific
program in established structures of the public school
system. In terms of program implementation, scaling
up highlights the need to ensure that program delivery
actually occurs at sufficiently high doses and with
sufficient consistency over time. This objective is as
important as the specific content of a program.

Since the pandemic began, schools and school districts
have developed and implemented diverse initiatives for
promoting learning and mitigating learning losses. These
initiatives provide valuable information and guidance
about best practices to adopt and mistakes to avoid. A
repository of these experiences could be a useful tool for
helping support states and schools as they implement
their own programs; such a repository could provide
tools, training, evaluation, and quality improvement
tools. Schools would benefit from a systematized,
centralized repository of guidance and toolkits as
they implement and update their own approaches based on their experiences. Such a repository would
provide training and coaching, evaluation, and quality
improvement tools, among other resources.

REENGAGING STUDENTS AND FAMILIES AND RESTORING
ENROLLMENT
Another negative outcome of the COVID–19 pandemic
has been the decline in public school enrollments,
particularly in the early grades. This decline can be
attributed to various factors, including families choosing
to homeschool, students needing to work due to financial
hardships, homelessness, and students falling behind in
credits toward graduation. Reengaging students requires
a comprehensive approach that addresses the multiple
reasons for inconsistent attendance or disenrollment.

To begin the process of reenrollment, it is crucial to
gather accurate data on school enrollments. This data
will help in effective outreach and engagement efforts, as
well as to monitor attendance. The pandemic’s disparate
effects emphasize the importance of collecting and
analyzing data at multiple junctures to identify patterns
that may affect specific groups of students. Expanding
metrics provides school officials with more information
for designing appropriate interventions.

To the extent that returning to school includes hybrid
approaches, monitoring attendance in remote settings
will also assist with effective student engagement.
Virtual learning worked well for some students but not
for others, and better data on engagement in remote
settings can help school officials make decisions about
which students should have priority for in-person
learning opportunities.

The pandemic has introduced additional stressors beyond
schoolwork for students, such as grief, social anxiety,
and financial hardship. Addressing these issues requires
strong personal connections between students, teachers,
and staff. Initiatives where school staff regularly meet
with students to understand their needs, from academics
and enrichment activities to basic needs, such as food
and housing, help schools provide support that can build
connection and reengage students.

STRENGTHENING THE EDUCATOR WORKFORCE
Recruiting and retaining qualified staff has been a
consistent challenge in both early childhood and K–12
education. COVID–19 has exacerbated the staffing
shortages, leading to increased turnover and a decreased
pipeline of new teachers. Strategies to strengthen the
educator workforce include targeting paraprofessionals
and teachers’ aides for recruitment and providing them
with the necessary support to become teachers or other
licensed personnel. Other strategies focus on the practical
barriers to entering teaching, by offering, for example,
student loan forgiveness for time on the job, rent or
mortgage assistance for high-cost markets, supports for
credentialing and advanced degrees, and the articulation
of clear and compelling pathways for advancement and
professional growth.

Supporting the economic, psychological, and professional
well-being of educators is crucial in both hiring and
retention. Investments in wages, benefits, professional
recognition, mental health support, and improved
working conditions are essential.

Expanding the pipeline of future educators is also critical.
Increasing enrollment in teacher preparation programs
and fostering greater diversity in the pool of candidates
can help stabilize staffing in schools, particularly those
serving historically marginalized students. Preparing and
certifying paraprofessionals as future teachers is a viable
approach to increasing diversity in the candidate pool as
paraprofessionals may already know the students and
families and often live in the communities where they
work, reflecting the diversity of the student population—
racially, culturally, and linguistically.
Strengthening the educator workforce will have financial implications. However, it is clear that mitigating the effects of the pandemic will not be possible without a stable, quality education workforce.

PREPARING FOR FUTURE PANDEMICS

Underlying many of the challenges of the COVID-19 pandemic was the fear of contracting COVID-19 in school buildings. This fear led to extended school closures, disenrollment from formal schooling, and difficulties in retaining and recruiting teachers. Concern about the health risks of in-person schooling was higher among low-income and racially and minoritized communities than others. Many Black and Latino parents expressed uncertainty about sending their children back to school and preferred the continuation of COVID-19 safety precautions, such as mask mandates. However, these families have faced challenges in accessing high-quality masks and rapid testing due to funding limitations in their school districts. Allocating funding for mitigation measures such as ventilation upgrades and mask provisions would enhance the safety of school buildings and address the concerns of these communities.

The benefits of both ventilation and detection and mitigation investments will be threefold. First, they will allow schools to remain open and functioning even during potential future surges of COVID-19 or other infectious diseases. Second, they will reengage at least some families who disenrolled their children from schools because of health fears. Third, by making the educator workplace safer, they will help schools better retain and recruit the educators needed in the nation’s schools.

Given that COVID-19 will likely be circulating in the population for the near future and that other infectious diseases may arise, addressing school engagement and learning challenges requires minimizing future disease-driven disruptions to education. To that end, pandemic proofing schools is needed to prepare schools to remain open and safe even during future surges of COVID-19 or other infectious diseases. The goal of pandemic proofing is to make future closures exceedingly rare and to ensure that students, families, and educators believe that school-based risks to their physical health are minimal.

Assessing the short-, medium-, and long-term consequences of educational disruptions is an ongoing process, and the full impact will likely not be known for many years. But together, the report’s recommendations for programs, supports, and interventions to counteract the negative effects of the pandemic on child and family well-being offer a path forward to recover from the harms of the pandemic, address inequities, and prepare for the future.