

Chairman Martin, Chairwoman Brooks, Chairwoman Williams, Chairman Haywood and members of the Senate Education and Senate Health and Human Services Committees, thank you for the opportunity to provide written testimony regarding the impact of COVID-19 changes to schooling on children and adolescents in Pennsylvania. My name is George DuPaul and I am a professor of school psychology and associate dean for research in the College of Education at Lehigh University. I have a PhD in School Psychology from the University of Rhode Island and I am a licensed psychologist in the Commonwealth of Pennsylvania. Over the course of my 35year career, my students, colleagues, and I have conducted research on school-based intervention and services for students with attention-deficit/hyperactivity disorder (ADHD) and related emotional and behavioral disorders that have directly informed education and mental health practice.

In this testimony, I summarize research indicating that pandemic-related school closures and activity restrictions have led to twin challenges of student learning loss and compromised student mental health. The significant losses in learning, particularly in mathematics and reading, will likely extend across multiple school years and may ultimately reduce the earnings and lifespan of an entire generation of students. In addition, due to pandemic-related stress and social isolation, children and adolescents are experiencing more frequent and severe symptoms of mental health disorders, chiefly anxiety and depression, relative to pre-pandemic functioning. The risks for learning loss and social-emotional difficulties are directly related to decreased access to in-school instruction and mental health supports, respectively, provided by schools. These negative effects are particularly acute for Black and Latinx youth, students with disabilities, English learners, and children living in poverty. Ameliorating the short- and longterm impacts of student learning loss and social-emotional disturbances will require long-term investment in and implementation of evidence-based screening, assessment, and interventions in our public schools.

Multiple large national studies have documented significant losses in mathematics and reading achievement of K-12 students since March 2020 (i.e., beginning of pandemic restriction on in-person schooling). Using national assessment data, McKinsey & Company¹ estimated that as of Fall 2020, on average, students have lost the equivalent of 1.5 months of reading learning and 3 months of mathematics learning. The greatest losses were evident for poor and racially diverse students who were twice as likely as White students to not have access to live instruction. If in-classroom instruction is delayed until fall 2021, it is estimated that the average student will lose over 12 months of learning². A separate report from Amplify³ indicates that losses in reading achievement are particularly acute for younger students in Kindergarten and first grade with nearly half of the 12 million children assessed earning scores that indicated they were "far behind" in early reading skills. Again, these learning losses were especially prominent for Black and Latinx students. Learning losses are primarily attributable to the cumulative impact of reduced academic engaged time for students. According to national survey data from December 2020⁴, 45% of students report spending significantly less time on schoolwork relative to before the pandemic. As an extreme example of reduced academic engagement, it has been estimated that since March 2020, approximately 3 million children nationwide have gone "missing in

action", i.e., are no longer connecting to school, remotely or otherwise⁵. An estimated 1.1 million students will drop out of school as a direct result of the pandemic (i.e., a 9% increase in dropout rate compared to pre-pandemic schooling)². Achievement losses will not only impact student school success in the short-term (i.e., as they return to "normal" schooling), but will reverberate across their educational experience and lifespan. Research from the Federal Reserve Bank of San Francisco predicts that the current cohort of children will attain lower levels of education relative to prior generations leading to significantly lower lifetime earnings and a diminished national economic output of 1/4% per year for the next 70 years⁶. The cumulative loss of educational attainment is also estimated to significantly shorten the average lifespan for this generational cohort⁷. As with other effects of COVID-19, pandemic-related learning loss has and will exacerbate existing educational disparities for students on the margins, including youth from Black, Latinx, and economically disadvantaged backgrounds^{1,2,3}. Students who are English learners and/or who have disabilities are especially at-risk for exhibiting learning loss as they have reduced options to receive educational accommodations and services to which they are legally entitled, thus making learning essentially inaccessible for these vulnerable populations⁵. Learning loss for students with disabilities also is exacerbated by the very nature of their disability. For example, our research team at Lehigh has found that youth with ADHD may be less engaged with remote learning largely because these students are not able to sustain attention to instruction or assigned work due to less structure and greater distraction in the home environment.

Pandemic-related changes to schooling are also associated with increased prevalence of social, emotional, and mental health difficulties for children and adolescents. Multiple national surveys indicate that since the pandemic began, students are reporting increased symptoms of depression and anxiety disorder⁸. In a spring 2020 national survey⁹, 1 in 4 adolescents reported an increase in feeling unhappy or depressed, feeling constantly under strain, or experiencing a total loss of confidence in themselves. This is not surprising given extended home confinement, social isolation, and potential overuse of the internet and social media associated with reductions in in-school instruction. Notably, students report that feeling depressed, stress, or anxious is the number one obstacle to learning, especially for Latinx, Black, and multiracial youth⁴. As a function of social isolation, children who were already experiencing abuse, neglect, and acute mental health challenges are at even greater risk, especially because teachers and school personnel often are the individuals who first recognize signs of abuse and neglect⁵. Data from the Centers of Disease Control and other research groups^{10,11} indicate a precipitous increase in the proportion of pediatric emergency department visits due to mental health concerns for 2020 vs. 2019. Most alarmingly, pediatric emergency department visits due to youth suicidal thoughts and attempts have increased markedly during the pandemic. As is the case for learning loss, the negative mental health impacts of reduced in-school learning are most acute for Black and Latinx children and students from economically disadvantaged backgrounds^{4,8,9}. It is important to note that prior to the pandemic, most students needing mental health services received support and intervention in school, rather than in other community settings. Thus, the pandemic has not only led to reduced engagement with academic instruction, but also has severely limited access to mental health support for those students in greatest need of those services. Yet, fewer than 15% of state school re-opening plans include policies and practice requirements related to student social and emotional well-being¹².

In order to address the short- and long-term impact of learning loss and mental health challenges associated with pandemic-related school closures, intensive and sustained policy and

practice strategies will be needed. It will be critically important for schools to engage in ongoing universal assessment of reading and mathematics skills to identify, monitor, and address student academic difficulties³. In similar fashion, schools will need to engage in periodic, systematic, and universal screening of student mental health concerns in order to connect youth with appropriate services as quickly as possible¹³. Most importantly, schools must have the resources to address the massive loss in instructional time. For example, Robert Slavin at Johns Hopkins University¹⁴ recommends a "Tutoring Marshall Plan" that involves widespread implementation of individual or small-group intensive tutoring delivered by trained paraprofessionals before, during, and after the school day for at least 50-minutes per day across one or more school years. Others¹ have suggested supplementing typical school hours with "acceleration academies" that involve 25 hours per week across two weeks of targeted reading and math instruction delivered to small groups of students. In similar fashion, schools must have the resources to provide research-based interventions to meet the social and emotional needs of students. School mental health action plans should be developed to leverage and extend existing supports (e.g., positive behavior support strategies implemented by school psychologists and counselors)¹⁵. Given that the pandemic has exacerbated existing educational disparities for students from minoritized and economically disadvantaged backgrounds, resources will be needed to ensure equitable access to remote learning (e.g., internet and broadband) and telehealth mental health services. Finally, because educational professionals will be facing a substantially different school environment, resources are needed to facilitate rapid research that can quickly evaluate and identify instructional and mental health strategies that are effective vs. those that are not helpful¹⁶.

Our public schools are facing unprecedented twin challenges to student success in the face of school closures due to the pandemic, including substantial learning loss and compromised social and emotional health. These twin challenges (a) are inextricably linked such that learning loss leads to compromised student mental health and vice versa, (b) are directly related to loss of in-school learning and mental health support, (c) are likely to negatively impact student achievement and mental health for years to come, and (c) have exacerbated existing educational and health disparities for children of color, students with disabilities, English learners, and those from economically disadvantaged backgrounds. Schools will require considerable resources from local, state, and federal agencies to mount the massive multi-year effort it will take to mitigate the short- and long-term effects of these twin challenges.

My Lehigh colleagues and I are available to assist state policymakers and agencies to provide research-based consultation regarding the supports and resources schools, families, and students will need to succeed in post-pandemic education. In particular, we have expertise to guide efforts related to addressing the academic and mental health needs of our most vulnerable students, namely those with disabilities, English learners, and from economically disadvantaged backgrounds. Thank you again for your leadership in arranging this joint hearing and for the opportunity to provide written testimony. Please let me know if I can provide additional information and support to your committees.

Resources

¹https://www.strumpfassociates.com/demo/wp-content/uploads/2021/01/COVID-19-and-learning-loss-disparities-grow-and-students-need-help-V2-1.pdf

²https://www.mckinsey.com/~/media/McKinsey/Industries/Public%20and%20Social%20Sector/ Our%20Insights/COVID- 19%20and%20student%20learning%20in%20the%20United%20States%20The%20hurt%20coul d%20last%20a%20lifetime/COVID-19-and-student-learning-in-the-United-States-FINAL.pdf

³https://amplify.com/wp-content/uploads/2020/12/mCLASS_Flyer_CovidBrief-LearningLoss_v8.pdf

⁴https://youthtruthsurvey.org/students-weigh-in-part2/

⁵https://bellwethereducation.org/publication/missing-margins-estimating-scale-covid-19-attendance-crisis

⁶https://www.frbsf.org/economic-research/publications/economic-letter/2021/february/futureoutput-loss-from-covid-induced-school-closures/

⁷https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2772834

⁸https://pediatrics.aappublications.org/content/146/4/e2020016824

⁹https://www.americaspromise.org/resource/state-young-people-during-covid-19

¹⁰https://www.cdc.gov/mmwr/volumes/69/wr/mm6945a3.htm

¹¹https://pediatrics.aappublications.org/content/early/2021/02/04/peds.2020-029280

 $^{12} https://www.childtrends.org/publications/more-comprehensive-state-guidance-support-whole-child-covid-19$

¹³https://www.apa.org/topics/covid-19/student-mental-health

¹⁴https://www.the74million.org/article/slavin-an-open-letter-to-president-elect-biden-a-tutoring-marshall-plan-to-heal-our-students/

¹⁵https://ps.psychiatryonline.org/doi/full/10.1176/appi.ps.202000258

¹⁶https://ies.ed.gov/director/remarks/10-26-2020.asp