

SIDEBAR

Impact of COVID-19 on K–12 Students

Many researchers have attempted to quantify the detrimental and differential impact of COVID-19 on the academic lives of K–12 students (Bauld 2022; Mineo 2022). Researchers' statistical models suggest that the impact of COVID-19 may be long lasting, with a domino effect of weeks to months of disrupted learning followed by months of learning recovery difficulties and, potentially, lifelong effects on students' academic and financial well-being (Fahle et al. 2022; Goldhaber, Kane, and McEachin 2021).

Analyses of MAP Growth assessment data from 5.4 million students from third grade through eighth grade before and during the pandemic-affected years (i.e., 2019–22) support the National Assessment of Educational Progress finding that students have missed significant amounts of learning as a result of the pandemic (Kuhfeld, Soland, and Lewis 2022). Specifically, NWEA found that mathematics test scores dropped by 0.20–0.27 standard deviations (SDs) from fall 2019 to fall 2021. In comparison, other major school disruptions, such as the 2005 Hurricane Katrina in New Orleans, resulted in a drop of 0.17 SDs. Even as students' scores returned to normal rates of growth in 2022, that would not be enough to make up for disrupted learning during the pandemic years (Kuhfeld, Soland, and Lewis 2022; Mervosh 2022; Sawchuk and Sparks 2020). NWEA suggests that above-average growth will be needed. NWEA estimates that if learning interventions are implemented to address learning declines, elementary school students may, on average, fully recover from pandemic learning disruptions in 3 years or more. NWEA projects that middle school students would need 5 years or more to recover, meaning that those students may not have enough time to recover before graduating high school.

The challenge of academically recovering from COVID-19 is further complicated by the exacerbation of existing structural inequities in the education system. Evidence indicates that COVID-19 disproportionately affected disadvantaged, systematically excluded students, including those students in high-poverty school districts, students with disabilities, Black students, and Hispanic students (Center on Reinventing Public Education [CRPE] 2022; Fahle et al. 2022; Goldhaber et al. 2022; Jones 2021; Kuhfeld, Soland, and Lewis 2022). Researchers are particularly concerned about high-poverty schools, where students have experienced considerably more disrupted learning than students in more resourced school environments. Additionally, these students are more likely to have experienced negative health, emotional, and financial impacts from the pandemic (Thorn and Vincent-Lancrin 2021; West and Lake 2021) and will need more significant funding and interventions to reach pre-pandemic learning levels.

Research suggests that the greater impact of COVID-19 on students in high-poverty schools is attributable to a variety of factors, including the complexity of remote learning's role in student performance during the pandemic. Most, if not all, students experienced a learning mode transition from in-person instruction to online learning during the onset of the pandemic (Berger et al. 2022; De Leon 2022). However, in an analysis of 2.1 million students across 10,000 schools in 49 states, students in high-poverty schools spent almost twice as much time (22 weeks) in fully remote learning environments than did those in high-income schools (13 weeks) (CRPE 2022). Goldhaber et al. (2022) suggest that these differences in remote learning experiences led to more disrupted learning and larger academic declines (as much as 50% more achievement declines in mathematics) for students in high-poverty schools.

The experiences of high school students impacted by COVID-19 who graduated in 2020 and 2021 also differed, with more substantial impacts noted for students graduating from high school in 2021 (Kurtz et al. 2021). Specifically, an EdWeek Research Center nationally representative survey of high-achieving high school graduates in 2020 and 2021 revealed that the 2021 graduates were more likely than their 2020 counterparts to delay or cancel their postsecondary plans to pursue more education and reported using earnings from afterschool jobs to support their family rather than

using them for college-related costs. The 2021 high school graduates impacted by COVID-19 were also more concerned about their financial future than the 2020 graduates were. This concern aligns with the Organisation for Economic Co-operation and Development's and others' projections of the impact of COVID-19 disruptions on students' lifetime earnings.

Economists have estimated the effects of disrupted learning on students' lifetime earnings. One model suggests that the average K–12 student in the United States who experienced disrupted learning in 2020 will have approximately 6% lower lifetime earnings, which will have a substantial effect on income for the students themselves and on the U.S. economy as a whole (Hanushek 2023). Another statistical model suggests that each student affected by the pandemic may expect an average lifetime earning loss from approximately \$20,000 to \$45,000, resulting in an aggregate loss of from \$900 billion to \$1 trillion dollars for the U.S. economy (Kane et al. 2022). Given the unprecedented nature of the pandemic, it is important to note that these models suggest potential outcomes that could change if learning declines are reversed. If the mathematics achievement declines become permanent, then income inequality between pandemic-affected cohorts and pre-pandemic cohorts is likely (Goldhaber et al. 2022). These economic forecasts have sparked conversations among policymakers, educators, and state legislators about the importance of learning recovery and how to fund these efforts. Researchers suggest that the funds should be used for learning recovery initiatives that are data informed and evidence based, including high-dose tutoring, summer enrichment, and extended school time (Bauld 2022; Jordan, DiMarco, and Toch 2022). Others suggest that funds should be used to reduce the technology disparities across student groups illuminated by the pandemic (Rodriguez and Ishmael 2022).