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Permanent Economic Damage from Learning Losses

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A student takes classes online with his companions using the Zoom app at home during the coronavirus outbreak in El Masnou, Spain, April 2, 2020. (Albert Gea/Reuters)

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OUNTRIES around the world have taken wildly different paths to manage the COVID-19 virus. Some, such as Sweden, have mostly kept their schools open, while others, such as the U.S., have closed many of their schools. While the closing of schools may help slow the spread of the virus, it comes with a cost: reduced access to education. In a new study reported in an OECD paper, we explored those costs.

We found that the economic future of the current cohort of K-12 students has been compromised by the school closures that occurred in spring 2020. If schools miraculously returned immediately to their 2019 performance, these students can on average expect some 3 percent lower income over their entire lifetimes. More distressingly, nobody believes that the reopening policies currently in motion will actually get students back soon to the learning pace of the past.

While the precise learning losses are not yet known, estimates suggest that the students in grades one through twelve affected by the closures might have already lost the equivalent of one-third of a year of schooling. Unless schools actually get better than they were in 2019, existing research indicates this will lead to permanently lower future earnings.

These learning losses will have lasting economic impacts both on the affected students and the nation unless they are effectively remediated. Estimates in our recently released paper indicate that the lower long-term growth for the United States that is related to such learning losses might yield an average of 1.5 percent lower annual GDP for the remainder of the century. Our best estimates are that the already accrued learning losses will amount to \$14.2 trillion in current dollars (present value over the remainder of the century). These economic losses would grow if schools are unable to restart quickly.

Importantly, the losses are not evenly spread. The economic losses will be more deeply felt by disadvantaged students. All indications are that students whose families are less able to support out-of-school learning will face larger learning losses than their more advantaged peers, which in turn will translate into deeper losses of lifetime earnings and widening future income gaps. The regions in the U.S. with the lowest broadband coverage, for example, are the places that have the highest percentage of the population in the African-American and Native American communities. Moreover, just closing the digital divide will not by itself equalize the differential impacts of more technologically based hybrid learning.

Just returning schools to where they were in 2019 will not avoid the huge economic losses. Only making them better can. Think of it this way: If you miss fourth grade, you can't just skip to fifth grade. If fifth grade covers fourth-grade material, then students would have to spend an extra year in school, all else being equal, to make up for the loss.

While a variety of approaches might be attempted, existing research indicates that close attention to the modified reopening of schools offers strategies that could ameliorate the losses. Specifically, with the expected increase in video-based instruction, matching the skills of the teaching force to the new range of tasks and activities could quickly move schools to heightened performance. Additionally, because the prior disruptions are likely to increase the variations in learning levels within individual classrooms, pivoting to more individualized instruction could leave all students better off as schools resume operation.

As schools move to reestablish their programs as the pandemic continues, it is natural to focus considerable attention on the mechanics and logistics of safe reopening. But the long-term economic impacts also require serious attention, because the losses already suffered demand more than the best of currently considered reopening approaches. And not addressing the learning issues head-on at the outset will make it even more difficult to address them later.

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