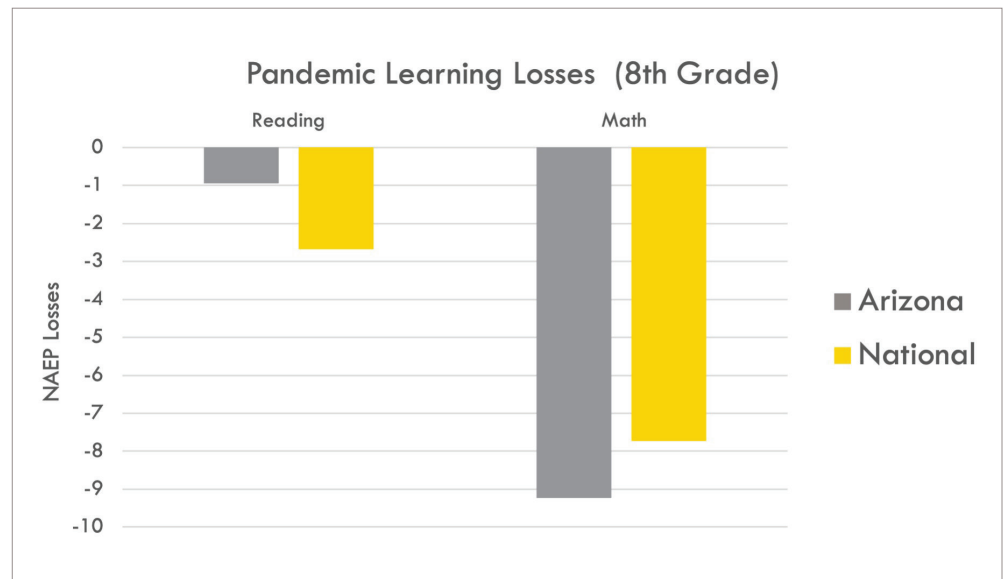


ARIZONA

by Eric A. Hanushek

Arizona had greater learning losses than the nation as a whole, and the economic impacts on affected youth and on the state become very large.



ASSESSING THE ECONOMIC IMPACT OF COVID-19

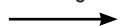
Much of the discussion of the educational impact of the pandemic has been phrased in terms such as test score points or standard deviations that have little meaning to most people. But the abstract nature of the discussion belies both the seriousness of the problems and the certainty of economic harm that lies ahead.

This analysis discusses the potential economic impact of the learning losses suffered during the pandemic. To assess the impact of the pandemic, we compare how the cohort of students in 2022 performed relative to the cohort of students in 2019. We call this comparison the “learning loss” from the pandemic. This learning drop, it turns out, has large significance for individuals and for states, because history suggests the very significant economic loss that is likely to be associated with this achievement drop.

The assessment of economic impact begins with a few simple facts: Those with higher achievement and greater cognitive skills earn more, and the value of higher achievement persists across a student’s entire work life. Moreover, the economic growth of states is highly dependent on the quality of the state’s labor force. The pandemic implies that the future workforce will be less prepared to contribute to economic growth.

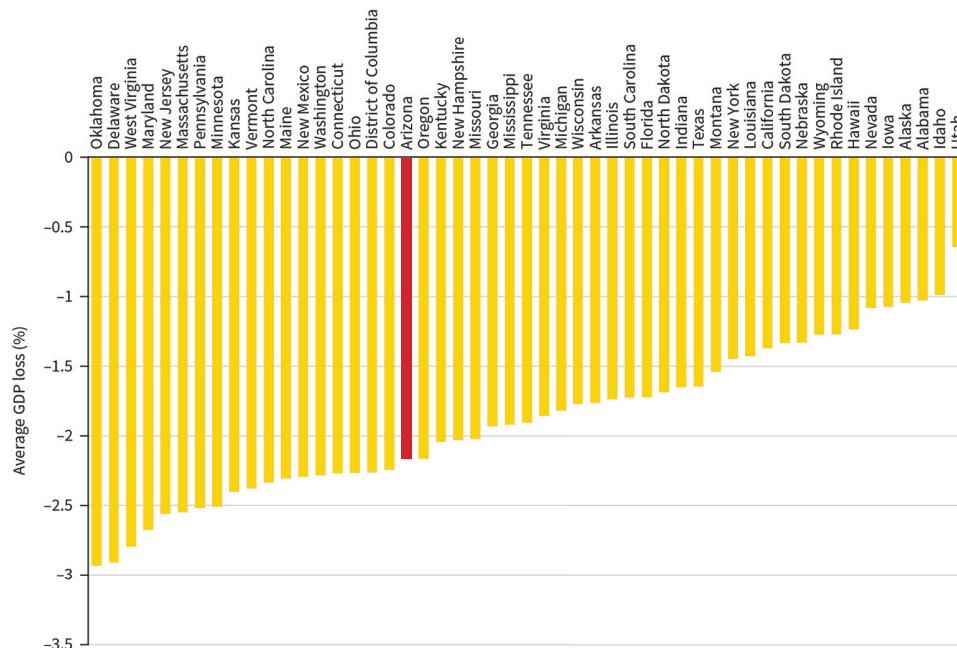
Even if education returns to its pre-pandemic quality, there is a cohort of students that will move through the future labor force with lower skills and achievement than those both before and after them. As detailed on the following page, this cohort will have lower lifetime earnings, and their reduced skills will, by historical observations, lead to a slowdown in growth (relative to what would have occurred without the pandemic).

See Page 2



For the state of Arizona, our assessment is that COVID-19 learning losses will result in a total economic loss of 2.2 percent of GDP over the twenty-first century, a loss, in present value terms, of \$253.2 billion. Arizona students in the COVID cohort can expect on average 6.5 percent lower lifetime earnings.

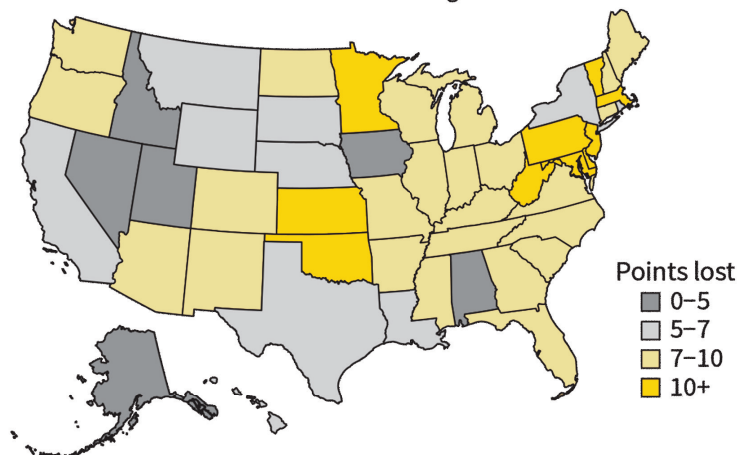
Expected Average Percent GDP Loss Over the Twenty-First Century



THE CHALLENGE

History indicates that the economic losses will be permanent unless the schools get better. Just returning schools to their pre-pandemic performance levels will not erase the lost learning. Recovering from the pandemic requires swift and decisive improvements to the schools.

NAEP score losses 2019–22: grade 8 math



Background

This analysis relies upon estimates for the declines in student math achievement identified by the National Assessment of Educational Progress (NAEP) for 2019 and 2022; see <https://www.nationsreportcard.gov/>. The economic costs to individuals uses the analysis of how achievement affects lifetime earnings in Eric A. Hanushek, Guido Schwerdt, Simon Wiederhold, and Ludger Woessmann. 2015. “Returns to skills around the world: Evidence from PIAAC.” *European Economic Review* 73: 103-130. The projections of state losses from lower growth follow the projections in Eric A. Hanushek, Jens Ruhose, and Ludger Woessmann. 2017. “Economic gains from educational reform by US States.” *Journal of Human Capital* 11, no. 4 (Winter): 447-486. **The complete national analysis can be found at [hoover.org/research/economic-cost-pandemic](https://www.hoover.org/research/economic-cost-pandemic).**

