How COVID-19 school closures could affect inequalities in the decades to come

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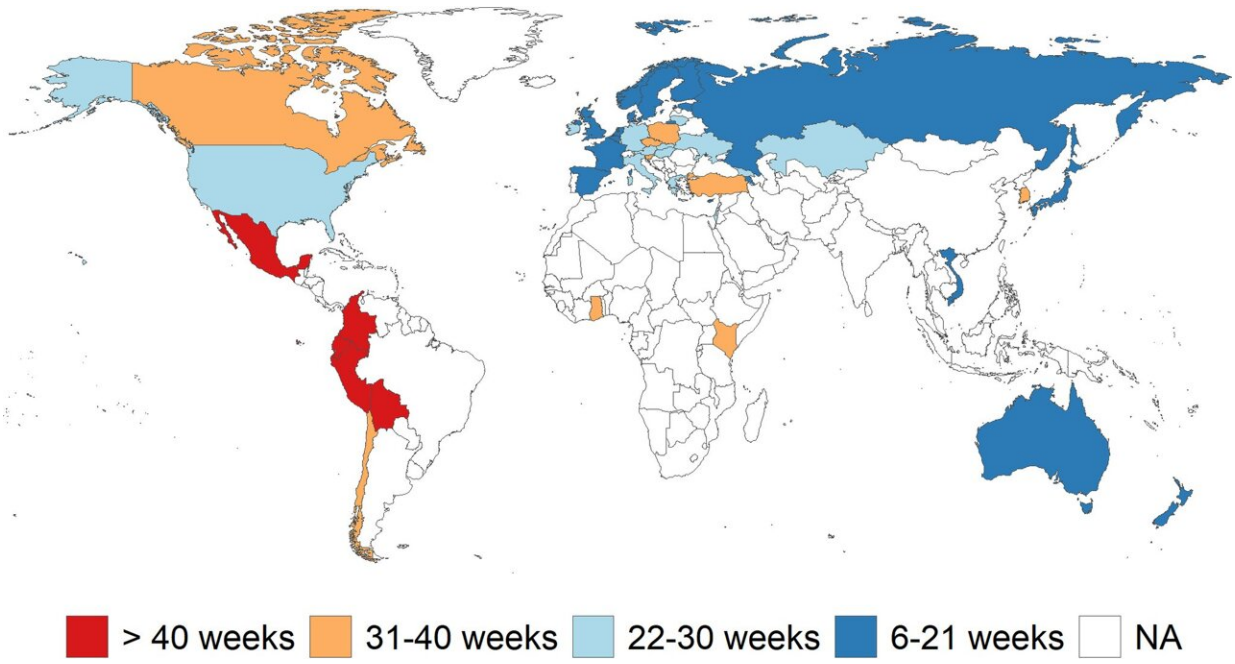

Length of school closures. Credit: *PLOS ONE* (2022). DOI: 10.1371/journal.pone.0277113

School closures due to the COVID-19 pandemic affected learning to varying degrees in different countries. A new study sheds light on what this learning loss will mean for countries' human capital in the decades to come.

Education is a human right and ensuring access to quality education for

all is the fourth Sustainable Development Goal (SDG4) set by the United Nations General Assembly. While there is evidence that more children and youth worldwide have access to education, according to some indicators, the quality is in decline when looking at acquired skills such as literacy or numeracy.

Deeper research into the level of education and acquired skills is crucial to see how recent trends, such as school closures in the COVID-19 pandemic affect the workforce. A new study published in *PLOS ONE* projected adult skills until 2050 while measuring the effect of pandemic school closures on these skills.

"Projecting human capital—in other words the economic value of a person's experience and skills—gives us insight into the future status of societies, particularly the workforce, whose skills are essential for jobs contributing to economic growth and development outlooks," explains Claudia Reiter, a researcher in the IIASA Social Cohesion, Health, and Wellbeing Research Group and a coauthor of the study. "It also influences people's capacity to innovate in view of the many challenges to be faced in the future, such as climate change."

The study uses the Skills in Literacy Adjusted Mean Years of Schooling (SLAMYS) indicator, which combines the lengths of schooling with a factor based on adult literacy test scores. The researchers applied the measure for the working age population in 45 countries and looked at five-year intervals until 2050 under various population scenarios, integrating COVID-19 school closures in the models.

"Our study for the first time provides projections of future human capital that captures both quantitative and qualitative dimensions, with clear relevance for progress towards development goals," says coauthor Dilek Yildiz, a researcher in the IIASA Migration and Sustainable Development Research Group.

The study showed that the adult skills gap between countries in the Global North and countries in the Global South would likely continue to exist by 2050, even under very optimistic assumptions. However, the gap may widen or narrow depending on specific development trajectories.

The researchers also found that the loss of learning due to school closures during the pandemic would likely further exacerbate inequalities between countries. The acquired skills of students have particularly been affected in countries where schools have been closed for a prolonged period of time and the infrastructure for effective online schooling is lacking.

"The impact of the COVID-19 pandemic is projected to erase decades-long gains in adult skills for affected cohorts unless policies to mitigate learning loss are implemented immediately," notes IIASA Population and Just Societies Program Director Anne Goujon, who was also a study coauthor. "This could seriously compromise the achievement of SDG4 in many countries and therefore requires further efforts than those already needed to progress successfully toward the goal."

More information: Caner Özdemir et al, Projections of adult skills and the effect of COVID-19, *PLOS ONE* (2022). DOI: 10.1371/journal.pone.0277113

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