

Kazakhstan

Estimate of COVID-19 Impact on Learning Loss

Before the outbreak of the global COVID-19 pandemic, the education system in Kazakhstan was struggling to provide high quality education to all students. In PISA 2018, student performance dropped from its 2012 level and was 100 PISA points (roughly equivalent to two and a half years of schooling) below the OECD average. Around two-thirds of students tested by PISA performed below functional literacy. Despite these challenges, COVID-19 has forced Kazakhstan to close schools and transition to emergency remote teaching using online platforms and TV-based broadcasts. However, due to the emergency nature of remote teaching initiatives, effectiveness is likely to be lower than face-to-face instruction.

In Kazakhstan, the COVID-19 pandemic is resulting in substantial learning losses and is pushing many more students into functional illiteracy. Assuming a student gains 40 PISA points of learning in a year, that schools are closed for around four months on average, and that remote teaching in the country is half as effective as face to face teaching, we estimate that learning in Kazakhstan will drop by the equivalent of 8 PISA points (see Figure 1), further aggravating the downward trend in learning outcomes in the country. Additionally, as most students in the country currently perform around the threshold for functional literacy and assuming some will lose more than others, the estimates suggest that the percentage of students performing below functional literacy will increase by 3 percentage points (from 64 to 67 percent).



Figure 1: Estimated impact on PISA scores due to COVID-19*.

*About Learning Loss Estimates

The World Bank has estimated the effects of COVID-19 related school closures on learning outcomes for 157 countries. Simulations use data on learning outcomes, years of schooling and monthly wages to estimate the potential effects of school closures in general and across socioeconomic groups. For global and regional estimates, see: World Bank. 2020. Simulating the Potential Impacts of COVID-19 School Closures on Schooling and Learning Outcomes : A Set of Global Estimates (English). Washington, D.C.: World Bank Group. For more information on World Bank's work on COVID-19: https://www.worldbank.org/en/data/interactive/2020/03/24/world-bank-education-and-covid-19.

The differential access and effectiveness of remote teaching is widening learning gaps across student populations. While remote teaching is likely to be less effective for all students, it is even less effective for students from lower socio-economic quintiles. With parents working from home, parental work needs are prioritized, and it is likely that only students from families with good connectivity and multiple computers, electronic devices and televisions can fully utilize the remote teaching in place. Students with special needs may also face unique challenges accessing remote learning content. Using PISA 2018 data for access to learning modalities and assumptions on differentiated effectiveness (25% effective for the poorest, 50% effective for the average and 75% effective for the richest students), the reading achievement gap is expected to increase by 18 percent (from 45 to 53 PISA points) after only a short term school closure (Figure 2).

Figure 2: Estimated impact of COVID-19 on socio-economic achievement gap



The increased achievement gap and the income shock of the current pandemic can cause an increase in the rate of school dropout in the medium term, particularly for disadvantaged students. Students who fall behind in education will be demotivated and at a higher risk to drop out of school. The loss in household incomes due to COVID-19 will also test households' ability to pay to keep students in school, increasing out-of-school youth and hindering transition to post-secondary education.

The effect of COVID-19 on education will have a decades-long impact on the economy unless authorities act to recover learning losses and protect the human capital of affected cohorts. Learning losses and reduced years of schooling for student cohorts affected by COVID-19 will reduce their expected earnings by an estimated 2.9%, assuming a year of schooling increases earnings by 8 percent on average. This may amount to an overall economic loss of upto US\$1.9 billion (2011 PPP) every year. Kazakhstan needs to increase education spending and equity, ensure remediation to recover learning losses, prevent student dropouts and invest in building a resilient education system for other crises in the future.