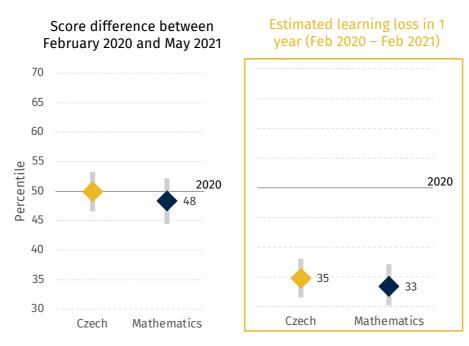


## Czech students lost 3 months of learning after a year of the COVID-19 pandemic

Prague, 5<sup>th</sup> October 2021 – PAQ Research and Kalibro were the first to measure the possible impact of the pandemic on student outcomes. Based on tests in the Czech language and mathematics administered in 2020 and 2021 in the 5<sup>th</sup> grade, we estimate that pupils lost the equivalent of about 3 months of learning during the year of the pandemic. The learning loss was significant following the reopening of schools in the spring of 2021. However, the worrying findings from the Netherlands in the beginning of the pandemic suggesting extremely low effectiveness of distance learning were not reflected in our case. Schools, with the support of the Ministry of Education, Youth and Sports (MEYS), shall focus especially on pupils with the least progress made during the school closures.

Our estimate is based on the administration of identical tests on a panel of 88 schools from all regions in the Czech Republic before and during the pandemic. The results of elementary school 5<sup>th</sup> grade students (~10-11 years old) in the Czech language and mathematics in May 2021 were the same or slightly worse than those of fifth-graders in February 2020. Under normal circumstances, however, there would be a significant improvement in students' results during this period.

Stagnation and worse results indicate that students lost about 3 months of learning. The average student from this year's testing (after adjusting for the effect of a different date) deteriorated by 15-17 percentile points. A more detailed analysis shows that results have dropped in 60% of schools for the Czech language and in 69% of schools for mathematics.

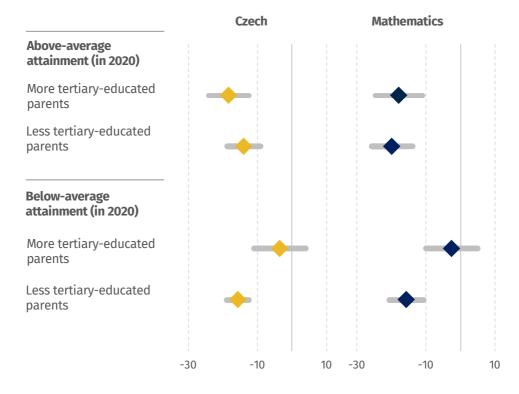


Results and adjusted results if the test was administered in February in both years



The real impact on pupils can be higher or lower due to statistical uncertainty. Further modelling shows that the decline in students' literacy occurred with a 95% certainty. We presume, however, that school might have been able to overcome part of the learning loss during some 2 months of standard teaching.

Schools with below-average results in 2020, attended by more children with universityeducated parents, saw their results fall significantly less than schools with less educated parents. "The results suggest that underachieving students with tertiary-educated parents could have benefitted from the support at home and parental involvement. As a result, they haven't fallen behind so much. On the other hand, we identified significant reductions in attainment in schools serving students with low socio-economic status and worse results. As these schools had poor outcomes already before the pandemic, they are at a high risk of amplified learning loss and educational failure," says PAQ Research researcher Václav Korbel.



## Effect of the pandemic on attainment by parental education and results on the school level

To catch up on this lost learning, the Ministry of Education has appropriately introduced the National Tutoring Plan targeting children with primarily higher absences and lower attainment. According to our study, additional funds should be channelled directly to underperforming schools usually serving students from the lowest socio-economic status.

"The pandemic brought to the fore the need to have a tool to identify the schools and students at need. Those coming from poorer families, who, for example, claim child



benefit<sup>1</sup>, should be additionally supported in education to overcome the differences following remote learning. In addition to tutoring, there is also a need to engage children in accessible leisure activities," explains Daniel Prokop, sociologist and the founder of PAQ Research.

Our estimates of the learning loss are higher than those from the USA measuring the whole 2020/21 school year. The findings, nonetheless, do not reflect the research from the beginning of the pandemic when researchers in the Netherlands reported negligible progress while learning from home. Further, we propose monitoring of educational results in the Czech Republic should take place continuously on a more robust scale and should also enable (micro) regional comparisons. Education policy must be based on quality data collection and interpretation.

Data was collected by the Kalibro company. The exam was taken at the same 88 schools in 2020 and 2021 using the same test in both years. Therefore, we analyse the change in the results of different cohorts of fifth-graders who attend the same school. There was a total of 2234 pupils in 2021 and 2207 in 2020. The least performing schools and those attended by students from the lowest socio-economic status backgrounds are insufficiently represented in Kalibro testing. There are more analyses and limitations available in the full report (in Czech).

## **Press contacts**

Václav Korbel, researcher and leading author vaclav.korbel@paqresearch.cz +420 705 107 450

Daniel Prokop, sociologist, founder of PAQ Research, co-author prokop@paqresearch.cz +420 608 333 902

<sup>&</sup>lt;sup>1</sup> Child benefit is a basic and long-term social benefit granted to families with lower income and dependent children