
LEARNING LOSS DUE TO SCHOOL AND UNIVERSITY CLOSURES DURING THE COVID-19 PANDEMIC: FROM DISRUPTION TO RECOVERY

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Abstract: The Covid-19 pandemic has created the most severe disruption to global education systems in history, forcing more than 1.6 billion learners in over 190 countries out of school at the peak of the crisis (UNESCO, 2020). Covid-19 led to prolonged school closures to varying degrees across nations. Various distance learning strategies are being used, but they are only partially effective. This study aims to describe the learning situation and the difficulties faced by educators during the covid-19 pandemic. This research is qualitative research with a descriptive approach. Data were obtained through in-depth interviews with some teachers and lecturers. During the covid-19 pandemic, educators have difficulty adapting curriculum and lesson plans. At the primary and secondary school levels, students only study two subjects, while in higher education it is uncertain. Student learning outcomes during the covid-19 pandemic have decreased. Learning losses will reduce the future productivity and lifetime earnings of affected students. Using a nationally stratified sample across two academic years, we found that students showed learning losses due to the school closures.

Keywords: Learning Loss, School and University Closures, Covid-19, Pandemic

Introduction

The Covid-19 pandemic led many countries to close schools, in part or in full to help contain the virus. Most countries closed schools, despite uncertainty if school closures are an effective containment measure. These closures are likely to have a negative impact on student learning and well-being, especially for students from disadvantaged backgrounds. Since April 2020, in response to the Covid-19 pandemic, schools and universities in Indonesia developed a remote learning structure. By August 2021, schools had been closed for about 16 months in Indonesia.

In some instances, schools have combined reduced class time with distance learning (UNESCO, 2021). From the onset of the pandemic, UNESCO started monitoring global school closures and supporting countries in their efforts to mitigate the immediate impact, particularly for more vulnerable and disadvantaged communities, and to facilitate the continuity of education for all through remote learning.

The covid-19 pandemic has caused abrupt and profound changes around the world. This is the worst shock to education systems in decades, with the longest school closures combined with looming recession. It will set back progress made on global development goals, particularly those focused on education. Disruptions to education systems over the past year have already driven substantial losses and inequalities in learning. All the efforts to provide remote instruction are laudable, but this has been a very poor substitute for in-person learning.

Distance learning are largely the responsibility of teachers and parents or caregivers, who do the teaching and monitor progress. The sudden closure of schools because of the covid-19 pandemic left teachers and parents with little time to prepare for home schooling. Teachers in the economies of developing Asia were provided support in the form of special training, instructions on remote learning, and, in some cases, information and communication technology tools and free connectivity (UNESCO, UNICEF, and World Bank 2020a). Parents or caregivers face the challenge of supervising their children's distance learning in addition to other responsibilities, such as housework and work-

from-home. Parents or caregivers were given guidance materials for home - based learning to support their new role (UNESCO, UNICEF, and World Bank 2020a).

UNESCO has been organizing various thematic webinars, producing guidance documents and providing as wealth of resources and recommendations to help students, parents, teachers, schools and governments facilitate learning and provide social care and interaction during school closures. The International Commission on the Futures of Education also published a report on education in a post-covid world presenting ideas for concrete actions that will advance education.

Researchers have attempted to quantify amounts of learning loss using a range of data sources, such as attendance data, number of school closures, the scale of remote learning provision, and the number of hours students have spent studying at home. Differential learning loss between different groups of students has been a particular interest. For example, in October, Halterbeck, Conlon, Patrignani, and Pritchard (2020) estimated an average 21% loss in learning in students from the highest socio-economic groups, and 34% in the lowest socio-economic groups. This was based on a combination of information about the duration of school closures, estimates of the declines in the number of hours per day students spent studying, as well as estimates of the effectiveness of remote learning.

With the ongoing public health emergency continuing to affect students learning, the teachers and parents are dealing with "learning loss" concerns as students fall behind due to interrupted schedules, the inability of families to provide support, unproductive remote learning systems and an inability to connect with teachers and fellow students. As the length of the pandemic remains uncertain, its impact will continue to roil across educational systems during the coming school years.

Covid-19 led to prolonged school closures to varying degrees in Indonesia. These disruptions will affect the skills students acquire and eventually their productivity as future workers. Various distance learning strategies are being used, but they are only partially effective. Learning losses will reduce the future productivity and lifetime earnings of affected students. The impact of school closures on the transmission of the virus in society is best captured by the results for parents.

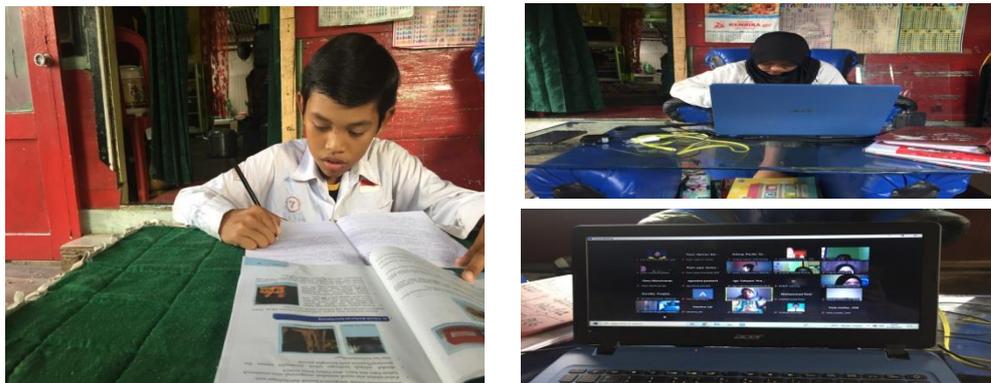


Figure 1. A middle schooler and an undergraduate student learn virtually.

A middle schooler of junior high school 56 Palembang, Muhammad Ridho is doing homeworks given by the teachers during online learning, while an undergraduate student from Sriwijaya University, Putri Qatrun Nada is attending a lecture at home (August 2021)..



Figure 2. Schools and Universities during Pandemic Covid-19 (April 2021).



Figure 3. Teachers make home visits during school closure (January 2021).



Figure 4. A classroom during Pandemic Covid-19 (August 2021).



Figure 5. Students return to school amid rise in Covid-19 cases (August 2021)

Students across South Sumatera are returning to school this week (August 24th, 2021) as many districts reopen. Not all students will return to the classroom though, some like Junior High School of 56 Palembang still have virtual classes.

Nothing beats being in a classroom. After more than a year of school closings and distance learning amid the coronavirus crisis, some teachers said the pandemic resulted in a “significant” learning loss for students, both academically and from a social-emotional standpoint. School closures mean students lose opportunities to learn vital cognitive, social, physical, and emotional skills. Students also tend to forget part of what they have learned when they take a break from school (Cooper et al. 1996). From a life-cycle perspective, the skills that children learn at a younger age set novateurpublication.com

the stage for acquiring more advanced skills as they get older. When young students miss out on opportunities to learn these skills, the total skill level that they acquire in their lifetime is at risk of being lower (Meyers and Thomasson 2017; Gibbs et al. 2019; Andrabi, Daniels, and Das 2020).

This change in the education system occurred suddenly. The education system that had previously been running for years, maybe even hundreds of years had to change significantly. This pandemic demands social-distancing appeals that must be implemented to break the chain of spread of the Covid-19 virus (Shoenfeld, 2020). This appeal ultimately has an impact on the learning process that is carried out face-to-face (directly) and must turn into online (distance) learning (Tantri, 2018). This significant change led to learning difficulties experienced by students, teachers, and also related policy makers (Education Office).

For students, the most difficult is the change in the learning climate which is usually carried out directly, now the students have to listen to their teachers virtually (Ramadhan Witarsa et al., 2018). Students who usually interact directly with teachers and other students, now there is no social interaction that occurs during the learning process (Apsari et al., 2020). According to Liu's research (2019) during the pandemic, there were many learning difficulties experienced by students and teachers. For teachers themselves, the difficulty in carrying out the learning process is in the aspect of educational facilities. The internet network is one of the learning tools that must be owned by teachers during distance learning (PJJ) (Pei & Wu, 2019). The difficulties in this learning process will result in the emergence of learning loss (Zhao, 2021). Learning loss is one of the concepts defined as the absence of the maximum learning process carried out in schools (Huang et al., 2020). Thus, learning loss will be able to have an impact on the quality of human resources that will be born in the years during the covid-19 pandemic (Cook-wallace, 2018).

Method

The type of research in this research is qualitative-descriptive. According to Creswell (2014) Qualitative research is a type of research that can describe phenomena that occur factually. The research instrument used was questionnaire using google form.

Results and Discussion

Close to half the world's students are still affected by partial or full school closures, and over 100 million additional children will fall below the minimum proficiency level in reading as a result of the health crisis. Prioritizing education recovery is crucial to avoid a generational catastrophe (UNESCO, 2021). UNESCO is supporting countries in their efforts to mitigate the impact of school closures, address learning losses and adapt education systems, particularly for vulnerable and disadvantaged communities.

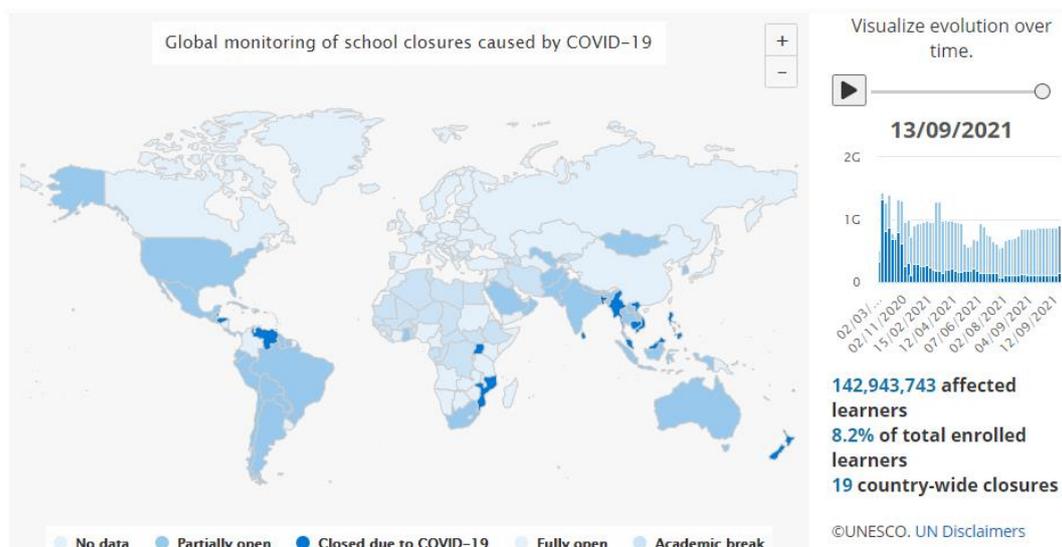


Figure 6. Global monitoring of school closures (UNESCO, 2021)

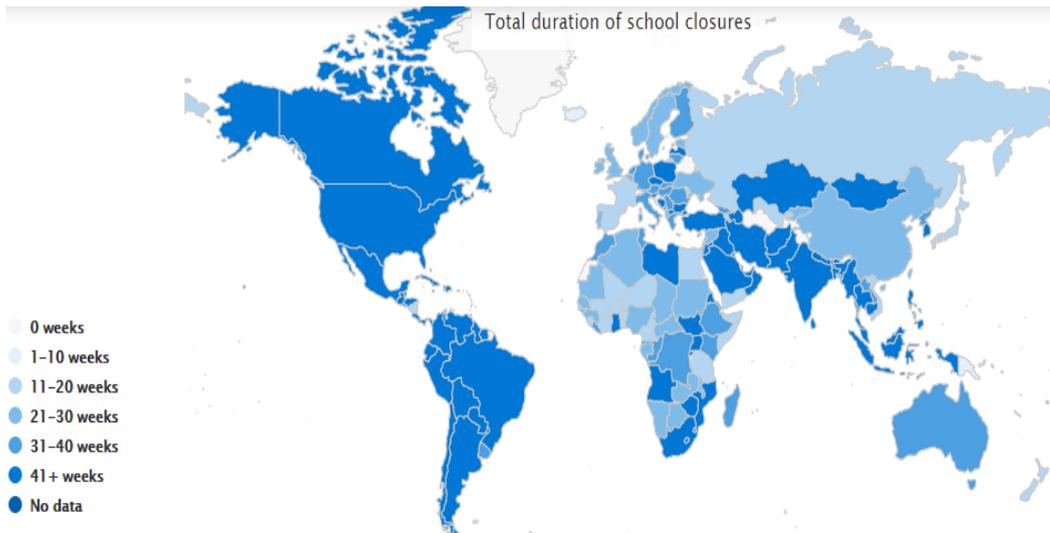


Figure 7. Total duration of school closures (UNESCO, 2021)

Figures correspond to number of learners enrolled at pre-primary, primary, lower-secondary, and upper-secondary levels of education. Enrolment figures based on latest [UNESCO Institute for Statistics data](#).

School closures carry high social and economic costs for people across communities. Their impact however is particularly severe for the most vulnerable and marginalized boys and girls and their families. The resulting disruptions exacerbate already existing disparities within the education system but also in other aspects of their lives. A total of 300 respondents have answered the questionnaire

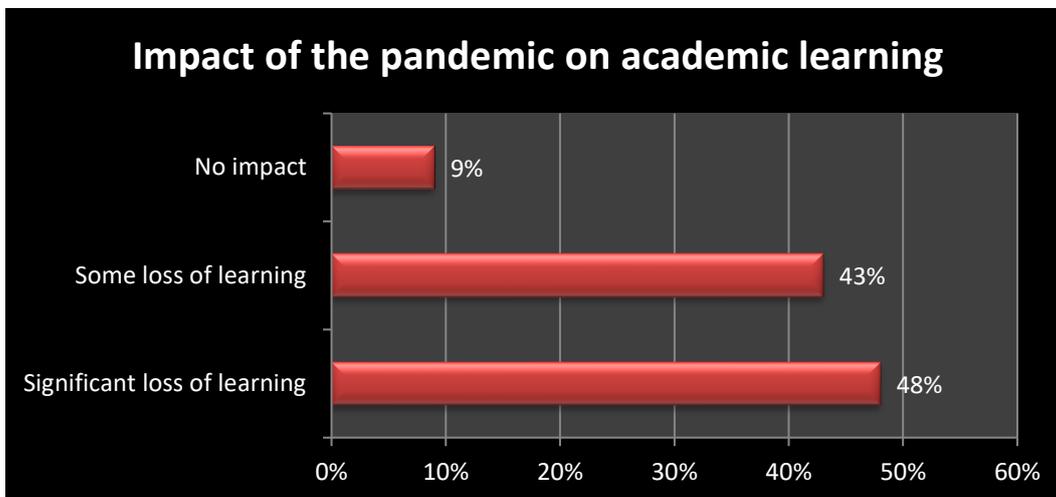


Figure 8. Impact of the pandemic on academic learning

Three hundred educators were polled, including teachers and lecturers in August 2021. The majority of teachers and lecturers from different provinces in Indonesia said that remote learning is a poor substitute for being back in the classroom. Educators in schools and universities in areas with higher poverty found virtual classes to be especially ineffective, heightening concerns that Covid-19 exacerbated educational inequalities. 144 of 300 Teachers and Lecturers said the pandemic resulted in a “significant” learning loss for students, both academically and in their social-emotional progress.

It was found that almost every teacher and lecturer did not make lesson plans during online learning. Before the covid-19 pandemic, teachers only made lesson plans for administrative needs, while some lecturers used existing learning plans, according to the curriculum that had been made by the department. During the covid-19 pandemic, it was hard for teachers to design a lesson plan that match with online learning conditions. Many students submit assignments not on time and some students submitted assignments in the evening or the next day. According to Ariesca et al. (2021) simplification of material during a pandemic can indeed have an impact on the ease of teachers in delivering material but also has an impact on receiving material to students aren't optimal.

On a day, elementary and middle school students only study two subjects. Some teachers only give assignments to students via whatsapp without teaching the learning material first. Only one or two teachers in a school teach using a video and audios.

In some areas, students who do not have internet access, smartphones, or laptops can come to school to ask for learning materials to the teachers. Teachers in Junior High School 9 of Muara Teladan, Musi Banyuasin even visited students who always absent during the covid-19 pandemic.

Some students just fill out the attendance list, then disappear or go back to sleep. Some students do not do the assignments given by the teachers and some students procrastinate doing the assignments given by the teacher so that they are always late to submit it. Student activity also decreases during online learning, students tend to be passive, some teachers complain that interactions with students are not like learning in a classroom.

Student learning outcomes during the covid-19 pandemic are very diverse, kindergarten and elementary students decreased dramatically, while middle schoolers and undergraduate students got an increase in learning outcomes, this is due to the time the students took the exam can freely search for answers in books or the internet. Likewise with undergraduate students, almost no students get a C.

It's not enough for schools to simply reopen after Covid-19. Students will need tailored and sustained support to help them readjust and catch-up after the pandemic. We must help schools prepare to provide that support and meet the enormous challenges of the months ahead.

Conclusion

When schools closed and learning switched to being predominantly remote at the outset of the pandemic, differences between groups of students based on a variety of factors were introduced, and existing disparities deepened. Probably the most prominent of these factors was socio-economic status, with the poorest students' learning time being reduced to a greater extent than the richest. However, even when schools reopened, disparities remained as attendance varied between the most and least deprived areas. There was extensive variation behind the averages reported in the literature about lost time though, at regional, local authority, school and student level.

With concerns growing over a potential "Covid Generation" of students demonstrating stunted academic development, policymakers are exploring options to ensure that equitable and adaptive policies are in place to allow every student to have a chance at success in this new, unprecedented environment.

Policy makers may consider several policy and budgetary solutions to address the risk areas in which students most need assistance and outline a strategy to prevent academic loss on a generational scale. This Policy Analysis compares learning loss risk factors, specifically focusing on four issues:

1. Family instructional support: the weekly hours household members spent on all teaching activities with children;*
2. Phone or video teacher contact: the weekly hours students spent in contact with teachers;
3. Internet availability: uninterrupted home internet available for educational purposes; and
4. Device availability: consistent availability of devices at home for educational purposes.

Regardless of the toll the pandemic has taken on the entire educational system, the broader policy issues for policymakers are how to achieve structural changes in the educational system and, more specifically, the delivery of high quality education to every student in the nation.

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