

LEARNING LOSS AND EDUCATION INEQUALITY IN INDONESIA (MAPPING THE POTENTIAL, CONSEQUENCES, AND THE COVID-19 CRISIS)

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LEARNING LOSS AND EDUCATION INEQUALITY IN INDONESIA (MAPPING THE POTENTIAL, CONSEQUENCES, AND THE COVID-19 CRISIS)

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Abstract

The closure of schools as an effort to reduce the spread of Covid-19 poses a significant risk, namely that little learning is obtained by students during online learning or what is known as learning loss. School closures also result in various social and economic problems. Learning loss is greater experienced by students who come from families with parents who are less educated and have a low economy. There is a positive correlation between learning loss and students' socio-economic background. A mitigation strategy is needed to overcome learning loss so that it does not continue to widen as a result of school closures that continue to occur due to Covid-19 which has not yet disappeared. One strategy that has been tried is to provide individual guidance with high intensity to students. Tutoring given during school hours is more effective when compared to after-school tutoring. In addition, tutoring provided by teachers or professionals is more effective than that provided by volunteers or parents. Indonesia must immediately make efforts to implement face-to-face learning so as not to lag further behind other countries that have previously conducted face-to-face learning.

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INTRODUCTION

The COVID-19 pandemic has affected educational systems around the world, leading to extensive school closures in several countries. This is due to the severe and resilient impacts of the disease on the environment. On March 28, 2020, more than 1.7 billion students started with the LFH (learning from home) system because of the closure of schools, in order to break the chain of the virus distribution (Ghafari et al., 2020). According to (Abidah, Hidaayatullaah, Simamora, Fehabutar, & Mutakinati, 2020), more than 100 countries had implemented national closures, affecting almost 90% of the world's student population. Besides affecting students, teachers, and families, school closures also have major socio-economic consequences for the community. This leads to various problems, including learning difficulties, emergence of digital education, food insecurity and homelessness, childcare access, health care, housing, internet and disability services (Jalali, Shahabi, Bagheri Lankarani, Kamali, & Mojangani, 2020).

The closure of schools in the US reportedly reduced and controlled the impacts of Asian flu and influenza by 90 and 50% during the 1957-1958 and 2004-2008 outbreaks, respectively. Several countries also managed to reduce the infectious spread of the H1N1 Flu pandemic during the 2009 outbreak, through the closure of schools. In the city of Oita, Japan, this procedure managed to reduce the number of affected students at the peak of infection (Kawano & Kakehashi, 2015). Furthermore, school closures and the obligation to implement health protocols reportedly caused a 29-37% reduction rates in influenza transmission, through physical distancing. Early school closures in the United States also delayed the peak of the 2009 H1N1 Flu pandemic (Jhung & Nelson, 2015). During the swine flu outbreak in the UK, a group of epidemiologists supported this process, in order to reduce the present and future spread of infection, as well as increase time for research and vaccine production (Draïssi & ZhanYong, 2020). In reaction, UNESCO suggested that all countries should support and facilitate large-scale distance learning programs (Balfanz, 2016). School closures in response to the COVID-19 pandemic have further caused several problems affecting access to education, such as broader socio-economic issues. Approximately 90% of the world's students are affected by these closures, and are found to experience learning loss. Even when the closure is temporary, it still creates high socio-economic costs and disrupts learning processes. This has a more severe impact on disadvantaged students, impaired nutrition, child care problems, and economic consequences for unemployed families. Based on childcare practices in various homes, working parents are found to have reportedly lost their jobs. In most cases, this leads to wage losses and a negative impact on productivity (Abidah et al., 2020).

Approximately 69 million Indonesian students from all educational levels were also affected by these closures, ordered by the Ministry of Education and Culture (Kemendikbud) to prevent the spread of the COVID-19 pandemic in schools (Papalia, 1970). In addition, educational institutions were also ordered to cancel all exams that required a heavy gathering of students. For the first time in approximately three decades, the national exams for grades 9 and 12 were canceled.

Based on the severity and resilience of the disease, schools are unlikely to reopen anytime soon. In late June 2020, the government enacted a set of health-focused regulations for school reopening. These regulations include: (1) The earliest period for schools to reopen is July 2021, (2) Schools are only considered for reopening when they have zero COVID-19 cases. As of July 2020, only 6% of students globally started direct schooling (Khasanah et al., 2020). Moreover, the Ministry of Education and Culture relaxed the requirements in August, by allowing schools in areas with low positive cases of COVID-19 to start class learning, while still implementing health protocols. Although a focus on public safety is sensible, it also has the unintended consequence of student learning loss.

MECHANISMS TO INCREASE LEARNING LOSS AND EDUCATIONAL INEQUALITY DURING DISTANCE LEARNING

Since the early periods of the pandemic, experts had concerns that distance education was likely to cause massive learning loss in the affected student population. Also, it was assumed to be unequal, leading to a significant increase in pre-existing socio-economic educational disparities. In European countries, several studies comparing the knowledge level of students before and after summer vacation further found a significant decline in educational achievement, especially in mathematics (Setiawan, 2020). The real loss of knowledge also occurred when education was stopped, with studies on school closures due to teacher strikes leading to the same conclusion. Besides the reduction of students' knowledge levels, school closures and distance learning also

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caused an increase in social inequality. Several studies in the US consistently showed that learning losses occurred during the summer period, especially in reading skills, which became very heterogeneous due to social background. The effects of this summer vacation in primary schools continued to widen the social gap between high and low socioeconomic background students, as well as affect the achievements in secondary institutions. However, direct learning reduced socio-economic inequalities in academic achievement, due to instructional time in schools becoming more beneficial for children from low-income families (Lavy, 2015).

Based on these conditions, the literature measuring the level of learning loss due to the COVID-19 pandemic was still unavailable, as this study relied on the availability of pre- and post-crisis achievement measures. Furthermore, the study conducted in the Netherlands by Engzell, found that students (aged 7 to 11 years) only made very limited learning progress during the eight weeks of distance teaching in 2020 (Engzell, Frey, & Verhagen, 2021). This educational loss was significantly greater among students with less-educated parents, where they inevitably have to increase the socio-economic achievement gap. According to another study, the test of Grade 4 students in Belgian Flemish schools achieved math and Dutch scores with standard deviations of 0.19 and 0.29, which were below the results of the previous cohort. In addition, inequalities within and between schools are found to be increasing, while a measure of learning loss positively correlated with the low socio-economic background of students (Maldonado & De Witte, 2021). Schools and teachers are still continuously trying to assist the progress of students, by compensating them for the loss of home studies. This is totally in contrast to school closures due to summer vacations or strikes, during the implementation of distance learning in the pandemic. To minimize the impact of learning losses, students should increasingly depend on the physical and cultural assets available at home, in order to pursue distance education. As these resources are unequally distributed across families, only a few students are found to benefit from distance education, leading to heterogeneous learning losses. Consequently, more students without home resources led to greater learning losses in a country. Therefore, this study focuses on the size and heterogeneity of learning losses in Indonesia.

Home resources are widely known as a key factor in promoting social inequality within school achievement and the 'new normal'. A large body of study identified and related additional learning advantages to/beyond the influence of parental education, as well as material conditions and home climate. This includes book availability, parental time investment, learning support and involvement in educational activities, adequate and healthy nutrition, as well as home use of ICT (La Velle, Newman, Montgomery, & Hyatt, 2020).

Meanwhile, an important predictor in the new normal is school achievement. This is considered to be specially important during physical school closures, and their shortage further intensifies the learning losses caused by the COVID-19 pandemic.

The most obvious and widely explained instrument of distance education is the access to learning through the internet and ICT tools. National studies during the pandemic showed that social gradients were clear and important in student access to computers within the Netherlands and the UK (Andrew et al., 2020). The difference between internet access and household income was also observed from pre-COVID data, as explained by Di Pietro. This study further showed that students from more educated families were more likely to have a dedicated and quiet place to study. At the same time, the lack of food access for poor children was also a serious concern within several countries, during the process of distance learning.

The quantity and quality of parental support are more difficult to assess and compare across social groups and countries, during a pandemic. A previous literature showed that lower income parents in decreased social strata provided less activity and support for their children, as well as generally spend inadequate time with them. However, families should overcome certain difficulties and work-life conflicts during the period of COVID-19, when educational support to students is needed. Furthermore, the surveys conducted in the UK and Ireland during the pandemic showed that parents spent less time in financially or educationally supporting the learning of children (Draissi & ZhanYong, 2020). However, a study in the Netherlands reported a gap in the active roles of more educated parents (Bol, 2020). This was in line with a survey on parental use of time, during distance learning in Italy and Hungary (Fodor, Gregor, Koltai, & Kováts, 2021). In addition, both Dutch and British surveys show that educated parents were more capable and confident to help their children with school assignments (Bunawan, Rangkuti, & Yanti).

The differences in family circumstances and conditions are the main promoters of social inequality

1 in learning experiences. In distance teaching, there were also differences in the quality of learning, with the effectiveness of this process continuously playing a major role. A present study confirmed that schools were not uniformly and quickly tackling the huge challenges of distance teaching. Moreover, their adaptability was found to correlate with the social composition of the students. In the UK, teachers from higher-status schools (especially private institutions) were more confident and active in broadcasting lessons and reaching out to their students during the pandemic (Klein, Sosu, & Dare, 2020).

THE PATH OF LEARNING LOSS AND EDUCATION INEQUALITY IN INDONESIA

Several studies conducted by various institutions investigated the impact of school closures on student learning in Indonesia. These showed that children from less privileged backgrounds spent fewer hours studying and having more limited access to learning facilities. When school reopenings are not supported by effective remediation programs, they are likely to catch up. This leads to students learning less, with the condition accumulating into a larger and permanent educational deficit.

The quality of education in Indonesia was also characterized as low and stagnant before the closure of schools, with the OECD showing that the performance of 15-year-old students did not highly progress between 2003 and 2018 in the PISA (Program for International Student Assessment) (Bunawan et al.). Therefore, school closures posed a significant risk based on the little learning obtained by students during online education (learning loss). Furthermore, Indonesian teachers have difficulties in monitoring learning processes from home. The World Bank also estimated that only 5% of primary school teachers had sufficient educational skills to enhance students' learning in Indonesia. This was because approximately 10% of these teaching personnels were absent from classrooms, with rates found to be much higher in remote areas. It is also because the teacher-based approach is very dominant compared to the student method, with little meaningful interactions carried out. In addition, the qualities of teacher development programs were generally low, leading to unimproved educational practices.

Learning from home also requires a fairly good internet connection during the pandemic. Based on data from the Association of Indonesian Internet Service Providers (APJII) in 2020, web availability was relatively high in Java (58.08%), accompanied by Sumatra (19.09%), Kalimantan (7.97%), Sulawesi (6.73%), Bali-Nusa (5.63%), and Maluku-Papua (2.49%). However, this availability widely varied outside Java, from 30-79% in Papua and East Kalimantan, respectively. These results are shown in the following diagram.

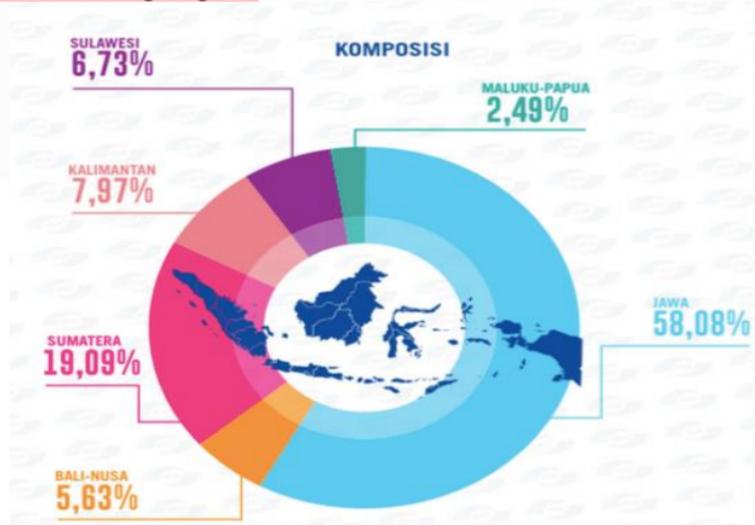


Diagram of the Survey Results of the Indonesian Internet Service Providers Association in 2020. Based on internet connection, only 40% of Indonesians had access, ranging from 66-20% in Jakarta and Papua, respectively (Arsendy, Gunawan, Rarasati, & Suryadarma, 2020). This indicated that rural children without internet connection encountered severe limitations in receiving educational services while schools were closed. The bigger implication is that learning from home is unlikely to

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be effective in Indonesia. Additionally, a UNICEF survey showed that 70% of students were frustrated, anxious, and stressed, as a result of the lockdown (Unicef, 2020).

A Human Rights Watch report similarly showed several students were more anxious on school closures (Gupta & Jawanda, 2020). They shared feelings of stress, anxiety, isolation, and depression, due to a lack of contact with the school community. Furthermore, there was a concern based on the welfare of teachers, with an acknowledgment showing that they also experienced higher stress levels as a result of school closures. For example, 62% of teachers in a Vietnamese survey stated that the shift to online learning significantly increased their workload, with more than a quarter of them reporting that they were stressed as a result of changing their methods of teaching. The data from the UK also showed a decline in the welfare of teachers, due to the COVID-19 pandemic (La Velle et al., 2020). According to a survey conducted by YouGov on behalf of Education Support, 52% of teachers in the UK stated that their mental health and well-being had declined during the pandemic (Murphy, 2020). In addition, approximately 58% of teachers reported that the most challenging aspect of COVID-19 was working from home, while ensuring that students were performing their educational activities.

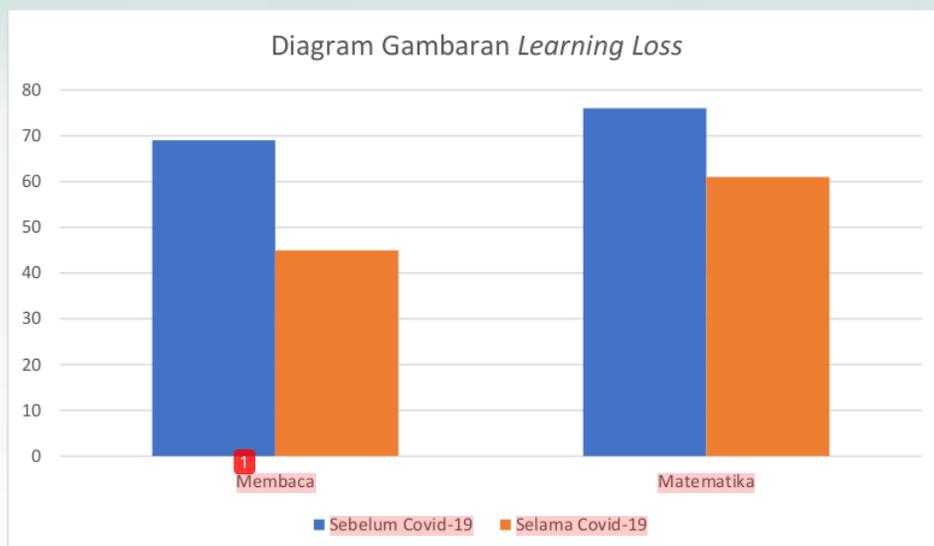
Educational automation has received a major focus over the past year, with studies showing global variations on technological access, based on the provision of distance learning. In Bangladesh, the World Bank found that only 39% of students had access to educational television channels (Biswas, Roy, & Roy, 2020). The LSMS survey (World Bank) in Ethiopia also found differences in internet permission, between rural and urban students. Approximately 4.6 and 17.9% of these rural and urban students accessed the internet and used learning applications through mobile phones, respectively (Gyimah, 2020). Furthermore, another study showed that only 10% of students used radio or television for learning purposes, during the closure of schools (Adnan & Anwar, 2020). Although students have access to technology or learning resources, close interactions with these materials are still often unguaranteed. A study showed that less than 1% of the students accessed online content during school closures, although more of them had permission opportunities (Unicef, 2020). Moreover, similar results were found in Bangladesh, where only 1.5% of students used online learning materials in a week (Biswas et al., 2020). In Ecuador, a World Bank survey showed that 74% of them had internet access at home, with only 59% having a computer or tablet. However, only 8% of the students used the Ministry of Education's learning platform (McAleavy, Joynes, Gibbs, & Sims, 2020).

Based on the cognitive and non-cognitive abilities produced during the pandemic, the increasing disparity had important consequences in the short and long terms. Several studies showed that the cognitive and socio-emotional skill levels of students were good predictors of future outcomes. This indicated that students with less skills had lower educational attainment than expected outcomes. When there are no appropriate policy measures to solve these issues, the short-term impact caused by the pandemic is likely to persist, leading to more futuristic economic disparities.

THE HIGH IMPACT OF LEARNING LOSS DUE TO COVID-19

The response of the school system is understandably overwhelmed and unprepared when the rapid spread of COVID-19 began in early 2020. This was because schools were used as support centers in several communities, such as mental health counseling and child care. At home, students lacked internet access, technological tools, and a quiet place to study, especially low-income families.

The basic conditional gap for learning is reflected in the formative assessment results obtained at the end of the even semester this year. These showed that students in the study sample only learned 67 and 76% of mathematics and reading from their usual daily school activities, respectively (Dorn, Hancock, Sarakatsannis, & Viruleg, 2020). The average result indicated that they experienced *learning losses*, equivalent to 3 and 1.5 months of learning mathematics and reading, respectively. The average score of student learning loss is further illustrated in the following diagram.



These results are only an illustration of a small number of students, however, this sample described the condition of their learning outcomes during the pandemic. These assessments were further obtained at school, based on those that had made it back to class. When extrapolated to student level, this result indicated that they had lost three to five months of learning mathematics. Moreover, the disrupted learning during the closure of schools in March 2020 showed that several students did not learn any new material after the emergence of the pandemic, while also losing previous knowledges.

MITIGATION OF LEARNING LOSS AND EDUCATION INEQUALITY IN INDONESIA

Longer school closures and durations of students in distance education leads to the experience of higher *learning losses* (Engzell *et al.*, 2021). Furthermore, the local governments are expected to invest more in digital education, towards being equipped with ICT tools and internet connections to effectively respond to the crisis. The relevant government should also invest more in the digital skill trainings for teachers, in order to provide higher quality distance education, with the aim of minimizing *learning loss* during the pandemic.

The examinations and explanations of pre-Covid data from various affected countries were the approaches adopted to develop the mitigation measures for *learning loss* and education inequality in Indonesia. This was because timely information was needed to confront the true educational consequences of the persistent COVID-19 crisis. Therefore, the utilization pre-Covid data is important in effectively understanding the serious educational risks involved in the present crisis, as well as to also identify vulnerable groups and areas.

This study is more focused on younger and vulnerable children in need of parental support during distance learning. The analytical results of various source ideas are very important for distance education, based on their availability in shaping and assessing student learning outcomes during the pandemic. These outcomes include access to the internet and books, having a room, adequate nutrition, and obtaining parental support. The use of digital resources and school management are also expected, based on their functions as proxies for the technical readiness of distance learning.

Based on these descriptions, the mitigation of *learning loss* is implemented as follows. *Firstly*, mapping the possibility of increasing educational inequality between Indonesian region. This is due to the needs to highlight the most vulnerable areas. *Secondly*, overcoming learning losses and limited future opportunities, while also needing effective policy support from the government. This process should consist of short and long term interventions. Short-term programs should help the most disadvantaged students and prepare teachers to make more efficient distance learning plans. It should also assist these educational personnels towards quick adaptation to daily activities, after returning to school. Meanwhile, long-term interventions should prepare schools and teachers for possible physical closures in the future. Furthermore, the adaptation of foreign

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educational systems to help students deal with *learning loss* is also an important long-term strategy. *Thirdly*, offering several considerations in targeting programs to solve the problem of significant urban-rural educational disparities, with rural students more likely to be affected by the negative consequences of the crisis. Therefore, government support programs in these areas should concentrate more on rural areas, in order to reduce educational inequality.

ADAPTING TO THE REALITY OF DISTANCE LEARNING

Learning conditions had improved significantly since the pandemic emerged, although several students remained isolated. Even those spending their days battling with digital technology have a better learning experience this year, as schools had adapted curriculum and distance education. Several schools within the Covid-19 green zone have also returned to school, in order to increase expectations for teachers and students. Based on these conditions, approximately 60% of students had been estimated to remotely start school in the 2021/2022 session. Moreover, another 20% started with a hybrid model (distance and direct learning), while the remaining 20% returned to the classroom to carry out direct learning.

Besides forcing the continuous physical closure of institutions, the pandemic also prompted several students from underprivileged families to drop out of school. However, some affordable parents transferred their children to private schools or *homeschooling*. Despite having no national enrollment data yet, a study of more than 60 schools in 20 regions found that kindergarten registration decreased by an average of 16% this year (Engzell et al., 2021; Klein et al., 2020; Kolandaisamy & Subaramaniam, 2020). Although several parents kept their children in quality preschool programs that promoted socio-emotional and academic growth, others still did not have that option. The decision to skip kindergarten is understandable, especially when parents conduct home learning for their children. Meanwhile, kindergarten have a major impact on children's skill development, which affects future academic performance and long-term life outcomes. The invitation of students to stay involved in distance learning is also a challenge, as the data from instructional software provider, Zearn, showed that their participation in online math courses decreased by 11% in 2020, compared to the involvement before the pandemic (Engzell et al., 2021; Klein et al., 2020; Kolandaisamy & Subaramaniam, 2020; Lavy, 2015; Lehman, 2006).

Beyond access and quality of teaching, students should be in physical and emotional learning states, due to the pandemic wreaking havoc on families and leaving many children in precarious situations. This was in line with the study of Feeding America, which noted that one in four children was at risk of starvation during a pandemic (Huizar, Arena, & Laddu, 2021). The number of homeless children is also increasing, as families are continuously struggling to pay rent. In addition, parental supervision and support are found to be more difficult in families where both parents are unable to directly promote their child's learning processes, due to the need of working outside the home.

LOOKING AHEAD: HIGH HURDLES TO REDUCE LEARNING LOSS

Schools in various countries have made progress in the field of education, with the 2021/2022 session realistically remaining a challenge for every student. This is because the pandemic has turned Indonesia's educational system upside down, forcing schools to adopt strategies with no certainty in the outcome. Moreover, existing distance learning studies were based on virtual institutions, which are non-representatives of the entire general school population (Woodworth et al., 2015). There were also no deep studies on the impact of online learning models, students' emotional and mental health, as well as limiting the spread of disease. This ensured educational difficulties based on the creation of effective learning strategies, for experts to predict the impact of ongoing disturbances. Guided by the pre-COVID-19 study of the virtual learning effectiveness and assessment data collected at the start of this school year, four considerable scenarios were created as follows:

1. No progress: As a base scenario, this is the loss incurred by students when direct education is shifted to distance learning.
2. Status quo: This assumes that students remain in their present educational modality (distance, blended learning, or face-to-face) until the end of the school year, with a slightly better quality of learning.
3. Much better: In this scenario, students remain in their present learning modality until the end of the school year, with the occurrence of significant improvement.

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4. Back to school: This is identical to the status quo scenario until the end of 2021, with students continuing the direct schedule from January 2022 till the cessation of the session (Woodworth et al., 2015).

All of these scenarios had a significant impact on the existing attainment gap. Meanwhile, shortening the duration of interruptions or improving the quality of distance learning significantly reduced these impacts. When the status quo continued, students lost 11 to 12 months of study by the end of the year, however, targeted action helped reduce this to 6-8 months.

Based on the studies of natural disasters, such as the 2005 earthquake in Pakistan, learning losses are likely to increase over time (Abidah et al., 2020; Andrabi, Daniels, & Das, 2021; Woodworth et al., 2015). However, schools should carry out actions to minimize further damages.

THE WAY FORWARD: CURBING LOSSES AND ACCELERATING LEARNING

The school system should act more to make online experiences very conducive to learning, with distance classes likely to remain a future reality. With access to technology and direct teaching, students need a daily schedule that establishes formal opportunities for engagement, collaboration, and feedback. System leaders should also empower teachers with new methods, in order to share, practice, and receive professional development in an online format (Lemov, 2020). However, some bright spots have already been observed. Furthermore, a previous Curriculum Associates analysis identified a subset of model schools that were successful in minimizing learning loss, based on serving students from low-income families. These schools were responsible for eliminating the digital gap, reaching every family, providing feedback on instruction, learning and assessment, as well as promoting success (Dorn et al., 2020).

Schools also importantly perform a more holistic view of their role in students' lives, reorganizing curriculum elements, teaching, technology, and supporting infrastructure. This step began with a focus on early childhood, based on integrating health care, social services, and educational programs to cognitively and socio-emotionally support children in readiness for school. It also continued by ensuring high-quality teaching materials in each classroom, as well as integrating personalized best practices and blended learning to help students in content mastery. By recognizing the teacher as an important part of the educational system, the approach involved a more practice-based professional development and innovation, in outlining the teaching role. For example, *Opportunity Culture* worked with several schools to adopt a multigrade leadership model in distance learning, which embedded virtual mentoring in each classroom (Dorn et al., 2020). Schools were also found to provide more than just academics. In addition, the pandemic underscored the importance of investing in mental health support, motivational mentoring, skills training, and new promotional structures, leading to a better educational experience.

This study showed that a structured evidence-based approach suffered months of learning losses, even when schools carefully followed it to obtain optimal distance education and improve their teachings. As a result, the school system should create a step-change in learning, to quickly adapt to lost knowledges through this pandemic. The system should also create accelerated plans, using evidence-based strategies that support students with more time and dedicated attention. These strategies should be projected towards the needy, by leveraging the best formative assessment and early warning systems, in order to identify vulnerable students (Khasanah, Pramudibyanto, & Widuroyekti, 2020). Some of these solutions are only possible after it is safe to return to direct learning, however other elements are likely initiated during distance education.

PROVIDING HIGH-INTENSITY GUIDANCE TO STUDENTS

A confirmed catalyst for accelerated learning is the provision for direct support, in the form of "high-dose" mentoring and training. This program was pioneered and enhanced by Match and Saga Educations in Boston and Chicago, respectively, to provide 50 minutes of daily math lessons for underprivileged students. In this case, tutors were found to work with two students at once in each session, while also including the revision of lessons learned in regular math classes. This type of student-teacher ratio is unattainable, however, the costs are relatively low in providing guidance through professionals (e.g., fresh graduate college graduates). Although certified educational skills are required to teach a class of 25, a trained college graduate is still required to effectively tutor two students in a group.

This high-dose program is more effective than weekly low-dose voluntary guidance, which does not have a significant effect on academic progress. A more extensive study on tutoring found that it had high and greater impacts on reading ability and mathematical performances in early

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(kindergarten and first grade) and future grades, respectively. In addition, the teachings conducted and paraprofessionals used during learning hours are more effective than after-school periods and volunteers/parents, respectively (Maldonado & De Witte, 2021).

ACCELERATION NOT REMEDIAL: LEARNING CONTENT EXPOSURE

The main factor triggering achievement differences is teaching, as teachers following the best evidence-based practices in curriculum and pedagogy are more likely to promote academic progress. When helping students adapt to learning, teachers should keep them focused on the educational content being taught, although this method is counter-intuitive. However, a recent study showed that the teacher's approach to "re-teach" previously provided material produced low expectations and academic achievements (Dorn et al., 2020). Furthermore, a better approach used in providing exposure to learning is the production of "timely" context, for the unhindered accessibility of students (Desjardins & Rubenson, 2013). This is a natural method used to prioritize educational contents over previous grades necessary for progress.

The pandemic has widened the persistent gap between various races and income groups in Indonesia. In the educational sector, attention has largely focused on the attainment gap, which is widening due to the pandemic. However, schools should focus on the underlying opportunity gap, in order to solve the problem. This gap has also forced vulnerable students into the most undesirable learning situations, where the tools and support systems are inadequate for navigation. With several OECD countries continuously conducting direct learning, Indonesia is at risk of being left farther behind. The necessity to provide every child with successful opportunities is also more important than national competitiveness. Based on these conditions, the pandemic has forced the students in this generation to encounter career and life-threatening challenges. However, this is likely to inspire breakthroughs towards the excellence and equity of an underprivileged educational system.

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