The Impact of Learning from Home (LFH) during Covid-19 Pandemic on Students' Learning Loss

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Abstract

This paper aims to investigate the phenomena of learning loss during Learning from home in the Indonesian education system and offer solutions to prevent more severe learning loss. It begins with analyzing the implementation of LFH in the Indonesian educational system and demonstrates the existence of learning loss among LFH students. It then provides a solution to prevent learning loss. Thus, it concludes with a recommendation to the stakeholders to collaborate in order to implement the solution.

Keywords: learning loss, learning from home, covid-19

1.Introduction

The COVID-19 pandemic is a tragedy that grieves the entire population of the earth. All segments of human life on earth are disrupted, such as education. Many countries have decided to close schools, colleges and universities, including Indonesia. The crisis really came suddenly, the government in any part of the world including Indonesia closed school to reduce people's contact massively and to save lives or still have to open schools in order to survive for workers in maintaining economic sustainability. There are two effects for continuity of education caused by the Covid-19 pandemic. The first is the short-term impact, which many families in Indonesia feel in urban and rural areas. In Indonesia, many families who are not familiar with doing homeschooling. Homeschooling for Indonesian families is a big surprise, especially for the productivity of parents who are usually busy with their work outside the home.

Many community groups in Indonesia will be exposed to long-term impacts from this covid-19. The impact of education from a long-term perspective is the aspect of justice and increasing inequality between community groups and regions in Indonesia. Changing the way of teaching is undoubtedly the only option for teachers. According to Abidah et al., (2020) the national policy of learning from home for students to prevent the spread of the virus should be still reviewed because this changes the habits in learning, especially in Indonesia. Thus, the pandemic of COVID 19 has forced them to spend most of the time at home, to work, to learn, yet at the same time, to stay productive. The uncertainty of when the pandemic will end has forced teachers worldwide to adapt with most use of digital technology to teach and accomplish the learning objectives.(Teräs et al., 2020)

The problems on the remote learning during covid-19 outbreak faced by the students on the earth such as lack of technology supporting to the learning process, low income family does not support the learning device, limited internet connection, which resulting to the learning loss would effect to many aspects such as student's little mastery on the learning instruction.

The change of communication modes in teaching and learning due to the pandemic around a yearlong resulting to the close of the school may potentially devastate the long-term consequences for children's learning and life outcomes. The modes changing from face to face learning into digitization make parents prepare for the good infrastructure, in fact it has so many limited device. The infrastructure mentioned before is gadget, from many talks and discussion in webinar, showing that the limitation of the learning digital infrastructure make the constraint in learning. Finally, the learning and teaching is not running well. Socially, children with the low income or from disadvantaged backgrounds suffered more due to the closure of the school.

Covid-19 has affected not only educational but also financial strain for both educators and the students. This condition also caused the learning loss, which can be understood as the loss of learning standard which may only be achieved by direct teaching such as performance assessment, practical assessment, and attitude character. Many discussions bring the solution such as making a policy to mitigate the long-term impact, particularly for those who are likely not to receive sufficient support after school reopening.

The school closures by the COVID-19 pandemic caused the vast majority of children who have lost access to education or have insufficient alternatives such as community-based classes or poor online education, like mobile phone-based learning(Putra et al., 2020). The policy of providing learning from home (LFH) as a solution issue by stakeholders brought kinds of problems. Students felt hardship during the learning activity due to the internet default, less understanding, and many more.

The government policy in the past will impact future Indonesian generations. The community activities reinforcement and school closure by a regional zone system such as the red and green zone was not the right choice (Abidin et al., 2021). There is no data on a significant relationship between school closure and control of case-by-case transmission in the school environment (Ilyasa et al., 2020). Therefore, various modeling studies in many countries prove results that do not support this government policy.

The phenomenon of students' forgetting' what they learned in the previous lesson happened. This is a reversal of their academic progress. This involves losing foundational skills such as extensive reading and performing addition and multiplication, which they had previously learned and mastered and which serve as the base for future learning. The absence of these foundational abilities would affect not only the learning of more complex abilities but also conceptual comprehension through subjects.

Learning from home, sometimes, make students feel bored and finally lead them to the Learning loss , as mentioned it is as a condition in which a person or student loses interest in learning, which greatly affects the knowledge and skills of children specifically will decrease. As a result, this total loss of learning loss (forgetting) of what children learned in previous classes as well as what they did not have the opportunity to learn in the current class would result in a cumulative loss over time, affecting not only children's academic success in school but also their adult lives. To avoid this, various methods must be implemented rigorously to compensate for the overall lack of learning when schools reopen.

To achieve objective, further discussion is needed to understand the strategy or policy for giving the solution in understanding beyond the scale of the impact of COVID19 on learning. Learning loss in Indonesia happened long before the pandemic resulting to the loss of spirit in learning or the loss of courage in understanding something new to fulfill life with skill (Engzell et al., 2021). Therefore, using research-based evidence to identify the factors that affected variations in learning outcomes during the pandemic would improve policymaking.

Based on the discussion, there should be step to do first is to determine the extent of learning loss caused by the COVID19 Pandemic's disruption. The second step is to figure out what factors have affected the differences in learning loss scales between different classes, particularly those who have been subjected to different policies.

Discussion

The learning process in schools is the best public policy tool as an effort to increase knowledge and skills to bring reference to international standards and comparison to guide their decisions(Dronkers, 1967). Besides that, many students think that school is a very fun activity, they can interact with each other. Schools can improve students' social skills and social class awareness. The school as a whole is a medium of interaction between students and teachers to improve the ability of intelligence, skills and affection. But now, the activities called schools have stopped suddenly due to the disruption of Covid-19. What is the impact on the learning process at school? Especially for Indonesia, there is a lot of evidence when schools greatly affect productivity and economic growth.(Magnus Carlsson, Gordon B. Dahl, Björn Öckert, 2020)

Magnus Carlsson, Gordon B. Dahl, Björn Öckert, (2020) explains that teenagers in Sweden have different days to prepare for an important test. These differences are conditionally random which the authors try to assume the same conditions in Indonesia. The teenagers in Sweden added ten days of schooling and the result they got was an increase in their score on a knowledge test. Likewise, when we refer to Jonsson, attending school will increase the memory capacity of students(Jonsson et al., 2017). Referring to Carlsson, if on a knowledge use test it is assumed that every 10 days of absence from school is 1 percent of the standard deviation, then students go to school in 12 weeks or 60. They will lose 6% of the standard deviation.

This is also supported by Lavy, (2010), who formulates the impact on learning due to differences in teaching time across countries around the world.He simulates that the total weekly teaching hours in math, language and science is 55% higher in Denmark than Austria. The difference is significant because the test scores varied by approximately 6 % of the standard deviation, as was noted earlier.. So it is clear that any deviation received by Indonesian students due to the loss of time studying at school will result in the student's loss that their knowledge will be eroded. The similarity of Indonesia's situation with other countries must be addressed carefully. Under normal circumstances, there are many disparities between regions. Ministry of Education has the spirit of increasing productivity for students to increase job opportunities when they graduate. However, with the sudden presence of the Covid-19 outbreak, the world of education in Indonesia needs to follow the flow that can help the condition of the school in its current state emergency. Schools need to force themselves to use online media. However, the use of technology is not without problems, many problem variances hinder the effectiveness of online learning.

The condition of teachers in Indonesia is not entirely aware of the use of technology, this can be seen in the teachers who were born before the 1980s. Information technology constraints limit them in using online media. Likewise with students whose conditions are almost the same as the teachers in question with an understanding of the use of technology.

Technology support devices are obviously expensive. The teachers are still in low economic condition. The teachers and students limited in enjoying information technology facilities and infrastructure which are not widely spread especially the internet connection that is very much needed during learning from home because of Covid-19 disaster. The internet network is not distributed in remote parts of the country. Not all educational institutions can enjoy the internet(Matamala & Hinostroza, 2020). Even if there is an internet network, the condition is still not able to cover online learning media. The cost is also something that hinders due to their aspects of the welfare which are far from expectations.

There is a dilemma in the use of online media, when the minister of education encourages advanced productivity during learning from home, but on the other hand, the skills and financial capabilities of teachers and students have not moved in the same direction. When they use internet quota to fulfill their online media needs, it is clear that they cannot afford it. The state has not fully presented in facilitating the cheap internet quota and the easily accessed internet network.

1. Student Losses in the Assessment Process

A school or campus is closed is a total loss for students. Many exams should be taken by students under normal conditions, due to the impact of covid-19, the exam is canceled or postponed. Internal assessments for schools may be considered less urgent, but assessment information is essential for students' families.

While numerous schools have had the option to relieve the most exceedingly awful consequences for learning progression through distance learning, most of educators, particularly those in ruined regions or without web access and gadgets, didn't have such other options. Numerous students missed weeks in learning for weeks, if not months, of school, and those in additional weak circumstances are in danger of not returning to class, even after the emergency closes. Furthermore, school terminations brought about the additional weight of homeschooling duties among families (The ASEAN, 2019).

Some so many people think that the loss of student assessment information is a disaster for students. For example, the target skills and certain skills of students, so that it is the lost for students who have been able to master many skills this year but do not get the proper assessment. According to Joan B.,(1994) Assessment frequently used in a variety of circumstances and has varied meanings for different people. Thus, testing and grading can be used to assess pupils, such as scoring quizzes and examinations and assigning course grades.

The specific purpose of an assessment procedure, incorporating an assessment program in the classes offers ways to reflect about what is being done and learnt to find out what is really happening in classes. It provides a systematic way to gather and evaluate information to improve our knowledge, not only of students in a particular course.

Another case for university students. Many universities abroad have replaced the traditional exams with online tools. This is a new condition for lecturers and students. Assessments for students may have measurement errors, unlike measurements as usual. The good assessment will lead students' to specific competence to make them ready to face the real life or prepare them to have skill for living.

2. Impact on School Graduates

This year, university or secondary education graduates looking for work are experiencing severe disruption due to the Covid-19 pandemic. The students graduating this year experience teaching interruptions in the latter part of their studies. The direct impact experienced by them is a major annoyance in the final assessment they deserve. But under any conditions they are still graduating. The labor market conditions that tend to be difficult are a new obstacle for graduates. Competition in the job market and workers who have also experienced get fired from the company where they work. As for if they as new university graduates, they will inevitably receive lower wages and they will have an effect on career competition (Bobonis & Morrow, 2014). Because covid-19 causes them to have to rethink about education and get the expected wages.

3. **Steps** and Solutions for Indonesian Education

In handling the impact of Covid-19 on the world of education, all *stakeholders* must work together. This condition cannot be separated from government policy and its implementation in the field. As for the things that all stakeholders must do is;

a.   As Government

The role of government is crucial and fundamental. The budget allocation that has been decided by Presidential Instruction Number 4 of 2020 concerning *refocusing* activities, relocating the budget, and procuring goods and services in the context of accelerating the handling of Covid-19 must be implemented immediately. Based on official information, the Ministry of Education and Culture (MOEC) is currently prepared for all situations, including the use of working together to boost online learning (in networks) for students. In order to encourage students to study from home, the MOEC has produced a number of resources to assist them. They create Android-based distant learning applications

such as "portal Rumah Belajar" (Kemdikbud, 2020). Learning.kemdikbud.go.id is the URL for this portal. Learning tools, digital classes, virtual laboratories, and question banks are just a few of the great features available to students and teachers.

According to current information, the MOEC has partnered with seven online learning platforms, including Smart Classes, Quipper, Google Indonesia, Sekolahmu, Zenius, and Microsoft. Each platform will include facilities that are both free and open to the public. Google Indonesia, Sekolahmu, Smart Classes, Zenius, Quipper, and Microsoft are some of the online learning platforms that students and teachers can use to expand their learning resources. Online-based learning using digital technology virtually holds teaching and learning process, delivering knowledge and tranfrom understanding of skills. (Putrawangsa & Hasanah, 2018)

Several regions have decided to close schools to prevent the spread of coronavirus. For students to continue studying at home, the Ministry of Education and Culture (MOEC) has prepared several supports to facilitate the process. MOEC itself develops distance learning applications based on portal and android "Rumah Belajar". This portal can be accessed at learning.kemdikbud.go.id.

The covid-19 has been really hard for all nations, putting their ability to use knowledge by continuing to seek and endeavor to solve any challenge that arises to the test. As a large country, Indonesia must be capable of resolving all issues. This is demonstrated by Indonesia's readiness to take advantage of all opportunities, as evidenced by the creation of technologies developed by the country's youth to deliver online education services.

b. Parents

Parents as the main educators in the household must carry out their functions. Even so, teachers' help in schools must be *door to door for* all students. This should open up the horizons and responsibilities of parents that the education of their children must be returned to the *efforts* of parents in educating their children's mental, attitude and knowledge. Some schools make routine distance learning schedules from morning to noon, like studying at school through e-learning either via Zoom or Google Meet. However, we cannot deny that more schools do not have access to such a routine schedule and only give assignments via chat.

Parents' role when students have distant learning or learn from home is to ensure that their children have a regular daily learning schedule. This schedule can be adjusted to each family's household conditions. However, it is more advisable for children to wake up in the morning, have breakfast and then start "school" every day at the same time. For example, start studying at 08.00 to 10.00 for 1 lesson. Then continue again at 11.00 – 12.00 for other lessons. With a daily routine like this, children will maintain their learning activities at home and have a definite time when to study and when to play.

Parents must also monitor children's learning at home during learning from home. Monitoring can be done by making light quizzes for our children at home (Ratnasari et al., 2019). If the child cannot, this is a concern for parents to provide further deepening of the material. Monitoring results are also used as a material for discussion during school meetings with teachers.

To avoid learning loss, parents must also understand the learning targets and indicators because by having a target that a student will achieve in one semester per lesson. Parents can use these targets to measure to what extent our children have understood the lesson (Hiraoka & Tomoda, 2020). Parents ensure that our children's learning activity remains on target according to the existing curriculum.

c. Teacher

Steps of online learning should be as effective as possible. The teacher does not burden students with the tasks that are delivered in learning at home. If necessary, the teacher comes with ideas in *door to door* students. The teacher is not only a transfer of knowledge but also a motivator, innovator because teacher is the first and foremost person in a state education considering that education is a place for printing the nation's generation.

Teachers often forget that, a teacher is a motivator. Which must continue to provide material or assignments to students, accompanied by motivation for students to stay enthusiastic in learning. On the same occasion the teacher must also provide advice or things that are positive. Thus, students don't just think about science and get bored.

Teachers should teach online while still providing explanations to students. Not just by giving assignments continuously, because students also need explanations to understand the material discussed. On the other hand, the teacher must also pay attention to the students' learning mood so that they are not too stressed due to assignments, with various approaches.

On the other hand, the teacher's job is not only to deliver material. However, teachers as innovators need to be shown to students in the online learning process. Teachers must be innovative towards the media and methods used in learning. Teachers should master several ways to learn online.

Teachers must be smart in choosing the method that will be used in this online learning process. Not to forget the teacher must master the method applied as well. This will be different from usual, because learning does not occur directly. Changing the method is hoped that students will not get bored.

According to Zhao (2021), there is a hazardous trap to avoid: learning loss. It presents a pessimistic view of education that encourages educators and policymakers to avoid making poor choices and invest in the wrong things.

Learning from home (LFH) may be bored and potentially bring the learning loss. Therefore, the role of teacher is crucial in making students more comfortable and adapting to the condition which can change every time. Adjusting to the teaching method changes will help students understand materials and prevent them from learning stress.

d.   School

Schools as educational institutions must be ready to facilitate any changes regarding the education of their students. Behavioral education must be a strong foothold amid technological developments and the accelerated flow of information. Educational programs carried out by schools must really be conveyed to students, especially with online media, but the school must really pay attention to ethics as an educational institution. The emphasis on studying at home for students must really get control so that teachers who teach through crisp media remain *smooth* and intelligent in delivering lessons that students must understand. Some policies can be made by school through headmaster such as below;

1.   Utilizing all components of education in order to ensure the implementation of learning in a different atmosphere

Curriculum and learning are designed based on the emergency conditions of the COVID-19 disaster through optimizing the use of technology. This step is significant considering that teaching and learning activities will be carried out by teachers and students even though using internet network or online method.

The teachers made a detailed and accurate teaching map about the material implemented during the Covid-19 pandemic. As well as asking teachers between subjects to be able to collaborate and arrange schedules so that the student's task load is not too high and piled up.

2.   Works with teachers, students and parents and give them appreciation

Teachers teaching online means that they need extra energy to prepare materials. This is only teacher themselves to do but also school community. Thus, the appreciation and an expression of gratitude to all students, parents, and teachers provide a good athmosphere in doing the distant learning. The Messages of encouragement and motivation will certainly be able to revive the spirit that is starting to loosen according to the advice of Ki Hajar Dewantara: "Ing Madya Mangun Karsa" or in the midst of encouraging, of course this step is very effective.

3.   Conduct online training briefly about the distance learning platform

Not all teachers can operate online platforms and have facilities such as the availability of quotas around the learning schedule. As the school's headmaster, the limitations of the available capabilities and facilities become constraints among students and teachers. This is where the role of IT literate teachers and those who have received national and international training in the IT field is here.

IT literate teachers accompany other teachers who cannot so that the achievement of using and operating the platform can be carried out. Now, the quota for teachers has also been included in the boss's fund according to the Minister of Education and Culture circular, such as: Edmodo, Google Classroom, Google Form, Quizizz, Quipper, Facebook, Instagram, Youtube, etc.

4.   Transforming task reports into online form for the Education Office

All school stakeholders who have the duty and position to prepare emergency work plans must be reported daily. The report is in detail such as a description of activities and physical evidence such as photos and others. Reports are sent via google form to make it easier for all school stakeholders to report and be responsible for their respective tasks and performance.

Conclusion

Being exposed to a pandemic is influenced by many factors that can be made in the form of location or venue, depending on the situation. Those have risk of viral transmission; meaning that government protocol is vital, and we must all follow it. Learning from home in educational institutions clearly cause major disruptions, such as student learning, interference in assessment, cancellation of assessments, opportunities to get a job after graduation, cancellation of public assessments for qualifications in job selection. Schools need resources to rebuild lost in learning as well as the stakeholders train teachers how to make learning material is enjoyable for the students, when they reopen learning activities. Recovery for this recovery must be done quickly and precisely with the allocation of the government's budget for education. Cutting the education bureaucracy must be carried out immediately to deal with the impact of Covid-19 on the world of education. An important policy that must be carried out by the minister of education is to recover assessments for learning, not eliminate, due to the importance of assessment factors for students, so a better policy is to postpone assessments instead of skipping school internal assessments. For new graduates, policies should support the

entry of fresh graduates into the labor market to avoid a longer period of unemployment. The ministry of education must coordinate with the relevant ministers so that labor-intensive work fields are reopened and refreshed

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