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LEARNING FROM HOME: A PORTRAIT OF TEACHING AND **LEARNING INEQUALITIES IN TIMES** OF THE COVID-19 PANDEMIC

ULFAH ALIFIA, ARJUNI RAHMI BARASA, LUHUR BIMA, REZANTI PUTRI PRAMANA, SHINTIA REVINA, FLORISCHA AYU TRESNATRI

HIGHLIGHTS

- Highly varied learning facilities and support from parents among students, even in a class taught by the same teacher, leads to equally varied practices of learning from home. This widens even further learning inequalities among students. Students with limited support receive the worst impacts of the school closure policy.
- In the remote teaching practice, variations between teachers in terms of their teaching abilities and methods are affected by a number of factors, including their access to the internet. Teachers in urban areas, both on and outside Java Island, are more likely to be more active in teaching.
- A more systematic effort is needed to improve the quality of learning from home implementation which is expected to continue until at least the end of this year. Teachers need to be prepared to conduct teaching which takes into account the varied learning abilities among students in their class. This is important to ensure that low-performing students will not lag further behind their peers.



INTRODUCTION

n an attempt to control the COVID-19 pandemic spread, in mid-March 2020, the government decided to temporarily stop learning activities at schools (Purnamasari, 2020). Schools are considered as a medium that can potentially widen the COVID-19 spread due to direct interactions among students, teachers, and parents in a close distance. Initially, the school closure policy was to be applied for two weeks. However, the increasing number of pandemic infections in many regions forced schools to apply learning from home (LFH) policy until at least October 2020.¹ This extended LFH policy placed some teachers in a difficult situation since they had no adequate preparation.

The implementation of the LFH policy itself greatly varies. According to some studies, (i) variations between teachers in terms of their teaching abilities and methods, (ii) variations between schools in terms of funding support, and (iii) variations between home environments related to parents' socioeconomic conditions and availability of support facilities play roles in supporting or hindering the implementation of LFH (Kementerian Pendidikan dan Kebudayaan², 2020; Arsendy, Sukoco, and Purba, 2020). However, how these varied aspects influence learning inequalities between students with different backgrounds are still unknown. In many countries, learning inequality has been a concern for many parties and a focus in educational research during this pandemic period (Oster, 2020; Sonnemann and Goss, 2020).

To figure out the impact of LFH on learning inequality, we conducted a study to map the practices of LFH in a number of regions in Indonesia for April–June 2020 period. This study aims to look into the emerging inequalities in the LFH implementation, both among teachers and among students. Understanding how LFH is implemented will allow us to identify policies and strategies that the government needs to make to prevent learning outcome inequalities among students from widening further when learning activities turn back to how they normally are.

This study focuses on elementary schools and was conducted using mixed methods. The quantitative data was collected through a telephone survey involving 290 elementary school/madrasa teachers who had participated in the selection process of the 2017 Subsidized Pre-Service Teacher Professional Education (PPG) of Elementary School Teacher Education (PGSD) study program. Most of the respondents are female teachers (71%) and teach in public schools (83%). As many as 59% of the respondents live on Java Island and the rest are spread across different regions in Indonesia, except Papua Island. Based on their educational background, around 54% of the respondents graduated from Pre-service PPG and are around 26 years old on average.

The qualitative data was obtained through in-depth interviews with 31 respondents consisting of teachers, principals, and parents. We selected 16 teachers from the quantitative survey respondents by taking their teaching locations and the types of school they were teaching in into consideration. For the purpose of complementing the information that these teachers gave, we then interviewed 7 principals and 8 parents of students to gain perspectives from other groups of stakeholders.

TEACHERS' TEACHING IN PRACTICE

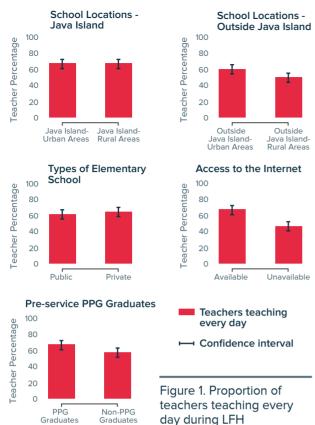
During the LFH implementation, teachers' teaching frequency greatly varies. On Java Island, the proportion of teachers who do not teach every day is 30% (Figure 1). Outside Java Island and in rural areas, the proportion reaches 50%. Pre-service PPG graduate teachers are more likely to teach every

day than those who did not graduate from the Preservice PPG program. Teachers with better access to the internet are more likely to teach every day.

The same pattern is also found in students' opportunity to ask their teacher a question and ask

¹ In a press conference from the Ministry of Education and Culture, the 2020/2021 academic year will begin in July 2020, but learning activities at elementary schools/schools of equal level will be resumed no sooner than October 2020.

² Ministry of Education and Culture.



for additional explanation. Teachers outside Java Island generally give their students fewer chances to ask a question compared with their counterparts on Java Island. In addition, the proportion of Preservice PPG graduate teachers who allocate their time to have a question and answer session every day is greater than that of non-Pre-service PPG graduate teachers.

The level of digital application usage by teachers in teaching students and communicating with the parents are fairly high. However, around 30% of teachers in rural areas outside Java Island still do not use any digital applications in their teaching and learning processes (Figure 2). The survey results do not show significant differences between types of elementary school (public/private), between levels of access to the internet, and between teacher statuses (Pre-service PPG graduates/non-Preservice PPG graduates) in digital application usage by teachers.

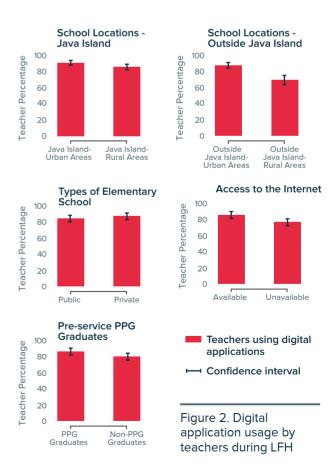
The in-depth interview results indicate that teachers on Java Island utilize various digital applications, such as WhatsApp, YouTube, Google Classroom, and Zoom for teaching. In rural areas outside Java Island, some teachers have to visit their students since they can hardly access the internet. Moreover,

the gadget ownership level among the parents is low. Even when they have gadgets, they generally cannot afford the internet package.

Some teachers also have to go 30 kilometers away to visit a student, with a face-to-face session lasting for one hour for each student. Some other teachers give weekly assignments to the students without delivering them in person. Students are expected to study independently using the assignments given.

Yes, [the school's] totally closed.
But assignments were given;
they'd been given. Until Eid
al-Fitr, the assignments are on
these pages, Boys and Girls, OK.
(Teacher, female, Pariaman,
16 May 2020)

With various existing obstacles, learning visits by teachers did not last long. In addition to the fact that it happened during the same time as the finalterm exams and Eid al-Fitr holiday, some teachers stopped their home visits due to confirmed positive



cases of COVID-19 in their regions. Teachers were also waiting for the instruction from the education agency on whether or not LFH program would be extended. While waiting for the instruction, teachers only gave assignments to students for the next several weeks. Students wishing to ask about their assignments could contact their teachers by telephone.

One principal of a school located in a mountainous region wished that this LFH would end soon. This principal suggested that social distancing be applied at the village level, rather than at district or even national level.

In our region, if possible, learning at schools shall be allowed. In this village, we know each other really well and it's safe. Therefore, lockdown and school closures should not be applied uniformly. Schools in regions like ours, which have no infection cases, ought to be reopened soon.

(Principal, male, Enrekang, 20 May 2020)

During in-depth interviews, some teachers opined that technology mastery would allow teachers to make their online teaching and learning more effective. On the contrary, "technologically challenged" teachers—generally the senior ones—would find it hard to facilitate their students in LFH activities. Some principals also stated that senior teachers have some limitations in terms of information technology and this hinders their efforts to conduct online teaching and learning activities.

Schools' support for teachers in their teaching also varies. Most teachers in urban areas on Java Island receive some funds from their school particularly to buy phone credit/internet quota. On the other hand, the proportion of teachers in rural areas outside Java Island who receive some help from their school is much smaller than that in urban areas outside Java Island as well as in both urban and rural areas on Java Island. Also, the proportion of teachers in private schools receiving aids from their school is relatively greater than that in public schools.

This inequality can be seen not only in funding support from schools. Only a few teachers in rural areas outside Java Island have received training on technology use for teaching compared with those in urban areas on Java Island. Furthermore, teachers in private schools have greater opportunity to receive training than those in public schools. One teacher in a private school in an urban area on Java Island has even attended training on a Google built-in application use to support her teaching way before the implementation of the school closure policy. Such training makes this teacher more prepared in applying online teaching and learning.

PARENTS' PARTICIPATION, HOME ENVIRONMENT, AND OPPORTUNITY FOR LEARNING DURING THE PANDEMIC

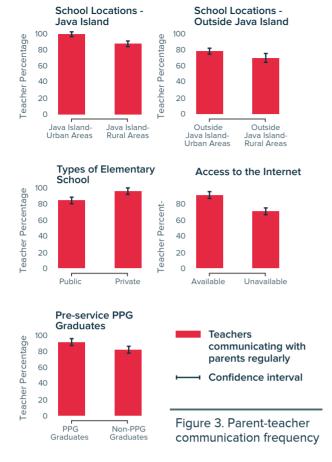
LFH makes parents' role more crucial since they have to take over teachers' role as an educator. This in itself becomes an issue considering that parents have varied capacities in providing guidance for their children during LFH.

How come this teaching and learning is given back to us. What are we going to teach? We are farmers. Suddenly, we are expected to be teachers.

(Parent of a student, female, Enrekang, 8 June 2020)

Family background becomes a factor that affects children's daily activities, particularly learning. Children living in urban areas and having highly educated parents generally have a more balanced time division between learning and playing. On the contrary, children with poorly educated parents and living in rural areas are more likely to spend their time to play and to have unclear learning schedules.

Communication between parents and teachers is the key to helping students learn. Parents serve as an intermediary for teachers and students, particularly students of lower elementary levels. In terms of parent-teacher communication frequency, the data shows a statistically significant difference between regions. Only around 2% of teachers in urban areas



on Java Island do not communicate regularly with parents. Meanwhile, 31% of teachers in rural areas outside Java Island do not communicate regularly (Figure 3). One factor which leads to this inequality in communication between teachers and parents is the access to the internet.

A number of teachers complained that some parents were not responsive during LFH activities. The driving factors include, among other things, (i) parents' own activities, (ii) parents' low concern for their children's education, and (iii) parents' lack of communication devices or internet package. The survey results also indicate variations between students in one class in terms of parents' activeness and access to communication devices. Children with above average performance generally have access to gadgets which can support their LFH activities. Parents of this student group also communicate actively with teachers. Despite no significant difference in the access to gadgets, the data obtained from teachers' reports shows a smaller number of responsive parents in the group of students with average performance (Figure 4).

In the group of students with below average performance, the survey results indicate a small portion of students capable of accessing gadgets to support their LFH activities. Additionally, less than 50% of teachers who communicate regularly with parents report active communication between teachers and parents of the low performing student

During their communication, teachers and parents usually discuss the lesson materials, assignments, and children's learning development. Parents with higher education, living in urban areas, and sending their children to private schools generally communicate with teachers regarding

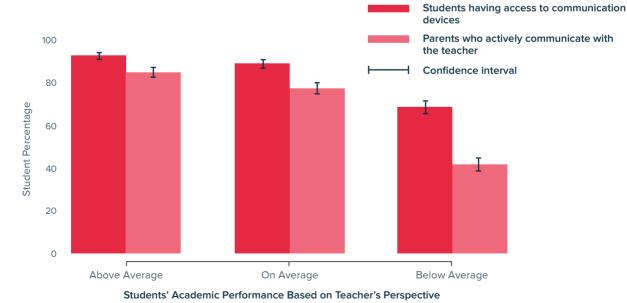


Figure 4. Access to communication devices and parents' activeness in communication based on students' academic performance

their children's development during LFH. Parents with these characteristics regularly inform their children's conditions to the teachers. Thanks to this information, teachers can periodically motivate students and give them flexibility in their learning and in finishing their assignments.

This communication pattern is not found in parents with lower education and living in rural areas. Parents with these characteristics are more likely to have a one-way communication, i.e., receiving the lesson materials and assignments to be given later to their children. They are also reluctant to ask or discuss with teachers regarding their children's development since they are not familiar with the lesson materials.

The in-depth interview results reveal three types of parents' guidance during LFH, namely (i) active guidance, (ii) passive guidance, and (iii) no guidance. Parents who actively give guidance not only ensure their children's learning schedule, but also help explain the lessons and check their assignments before they are submitted to the teachers.

Parents with higher education but living in rural areas are more likely to give passive guidance. Parents, particularly mothers, only remind their children about their learning schedule and sit next to them while they study. However, since they have limited knowledge, they cannot explain the lessons nor help their children with their assignments when they encounter difficulties.

The absence of guidance for children is found in parents with low education attainment, sending their children to public schools, and living in rural areas. Parents with these characteristics generally do not give any guidance and thus their children have to study independently. One of the causes is their limited knowledge.

CHANGES IN TEACHERS' WORKLOAD DURING LFH

LFH leads to changes in teachers' routines. During this pandemic, they are demanded to adjust their working time to allow them to regularly communicate with students and parents. Most survey respondents think that they are busier during the LFH period. The teachers' perception of being busier is affected by a number of factors, such as the great amount of time needed to prepare their lesson materials and

to make some assessments, the after-school time required to visit students or communicate with parents, and the requirement to do teaching works and domestic chores at the same time.

In private schools and in urban areas on Java Island, most teachers think that they are busier since it takes more time for them to prepare their lessons and to make assessments. Meanwhile, most teachers in public schools and in rural areas on Java Island think that they are busier since they have to visit their students' house or communicate with the parents after school. In-depth interviews with teachers reveal that teachers outside Java Island generally use theme-based textbooks as the main sources when giving assignments; therefore, it does not take them long to prepare the lessons.

Most teachers teaching outside Java Island and teachers in rural areas on Java Island stated that their leisure time is generally used for taking care of their family, farming, and breeding livestock. Meanwhile, teachers in urban areas make use of their free time for self-development activities, such as attending webinars or watching videos on innovative teaching and learning on YouTube channels.

Teachers in urban areas, particularly in private schools, spend more time to prepare their lessons and teach both through pre-recorded lesson videos or face-to-face meetings using a video conference application. Also, they frequently have to provide some consultation to students and parents all day long. This is because both parents of some students have to work and thus they can only communicate in the late afternoon or evening. Parents of students in private schools generally often ask for feedback on their children's assignments, requiring the teachers to be more responsive.

CONCLUSION AND IMPLICATIONS OF TEACHING AND LEARNING INEQUALITY

Inequality in access to quality education in Indonesia had existed even long before the pandemic occurred (Lundine et al., 2013; Azzizah, 2015; Muttaqin, 2018). Inequalities in education infrastructure, access to information technology, and student parents' educational backgrounds are visible between urban and rural areas, and between Java Island and outside Java Island. The massive

infrastructure development outside Java Island still cannot tackle such inequalities.

During this pandemic, LFH makes the long existing inequality even wider. Students who have no access to gadgets with adequate features for online learning, access to the internet, adaptive teachers, parents who can be around when they are studying or who can provide facilities for online learning, and schools which provide adequate support miss the opportunities they should have got under normal circumstances. These less fortunate students are generally enrolled in public schools located in rural areas, particularly outside Java Island. "The school is closed" is the concept students under this condition understand

Meanwhile, students in quality schools, particularly private schools in urban areas, generally have teachers with high competence, better economic condition, and parents with high awareness of their children's education. They receive various LFH-supporting facilities, such as gadgets, internet connection, and learning guidance from parents, which help them learn optimally during the pandemic.

If the problems found in this study persist until at least schools are reopened (October 2020 if no change is made to the plan), it is highly likely that students under less fortunate circumstances will experience learning loss. Learning inequality between students with different socioeconomic backgrounds will also get even wider.

Learning inequality between students in the same class are predicted to get wider as well. Students with better academic performance are more likely to have better facilities and parents with greater concern of their learning processes. On the other hand, students with lower academic performance encounter greater learning challenges due to their lack of facilities and parents' support. If teachers are not prepared to conduct teaching which takes into account their students' varied learning abilities, low-performing students will continue to fall behind their high-performing peers.

The emergency in the education sector has not received adequate attention from the community in general compared with the economic issues caused by the pandemic. Many stakeholders in this sector have not realized yet that school closures

result in limited learning opportunities for students under less fortunate circumstances. Some studies show that students' current learning loss will affect their knowledge development later and it has the potential of creating income inequality when they work (Andrabi et al., 2020; Kaffenberger, 2020; Azevedo et al., 2020). Without acceptance of the fact that an education emergency has occured during this pandemic, no systematic efforts will be made to deal with it.

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