## The Dynamics of Learning Loss for Elementary Students Jakarta in the New Normal

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This study aims to determine the occurrence of learning loss in the new normal era due to sudden changes in the online learning process for elementary school students in Jakarta. This study uses a case study qualitative research method to analyse the causes of learning loss in elementary school students. There are five research stages: test questions, observation, questionnaires, interviews, and documentation. The research subjects were 30 grade IV elementary school students in Jakarta and one grade IV teacher. The results of this study stated that as many as 33.33% of elementary school students did not experience learning loss, and as many as 66.67% of students experienced learning loss.

Keywords: new normal, learning loss, dynamics, students, elementary school

## INTRODUCTION

Covid-19 (Coronavirus 2019) is a disease that is easily transmitted through the air. This disease generally attacks the respiratory tract. Covid-19 was first discovered in Wuhan, China, in 2019. It has been more than two years since the COVID-19 pandemic hit the world, and WHO (World Health Organization) is making efforts to prevent the spread of COVID-19 through periodic vaccinations (Mitra et al., 2021; Pacheco, 2021). This pandemic has created a new normal around the world in various sectors, including the education sector, the economy, and other aspects of life. Then, in this new normal era, human activities are always accompanied by digital technology. During the COVID-19 pandemic, humans could only communicate and interact only through technology. So, during the COVID-19 pandemic, humans learned

to use and make the most of technology. Technology can have both positive and negative impacts, including in the field of education. Education during the COVID-19 pandemic always uses technology (Pedagang, 2021).

The COVID-19 pandemic worldwide, including in Indonesia, has changed teaching and learning activities (Cucinotta & Vanelli, 2020). Face-to-face learning cannot be done during the co-19 pandemic. The Minister of Education and Culture appealed to teaching and learning activities during the COVID-19 pandemic to be carried out at home using online media to prevent the spread of Covid-19. The COVID-19 pandemic has had a massive impact on the development of student learning academically (El Khuluqo et al., 2021). Several accessibility factors that occur in SD Jakarta students are online learning. Obstacles that often occur are parents' finances that are not good enough to buy internet quota, inadequate internet network, and parents' lack of understanding about the use of technology for online learning when accompanying students learning (Hasudungan et al., 2016). Likewise, with online learning, at least there is assistance from teachers while studying. This will be a possibility of learning loss for elementary school students in Jakarta.

The learning process continues online with the help of technology such as WhatsApp, zoom meetings, google meet, google classroom, Kahoot, and others (Rasmitadila et al., 2020; Siwalette & Suyoto, 2021). This is the first time students carry out learning through technology. So, students must adapt to the online learning process, especially elementary school students who still need adult assistance and supervision in using technology. Online learning requires an adequate internet network so that the learning process can run smoothly (Gherheş et al., 2021; Haryati et al., 2021).

This change encourages students to adapt to changes in learning processes and systems. One result of the changes in the learning process that occurred in Jakarta is that students experience learning loss because online learning cannot be maximized (Engzell et al., 2021). Many students do not understand the material from online learning, and the learning time is relatively short compared to offline learning (Engzell et al., 2021; Donnelly & Patrinos, 2021). Thus, learning losses are unavoidable for students. Then, learning loss generally takes the form of a decrease in academic achievement (skills and motivation to learn), loss of memory to remember and understand the material that has been given, in addition to a decrease in student character values. One of the factors for learning losses is that school closures during the prolonged COVID-19 pandemic can harm students and increase the risk of dropping out of elementary school students (Ardington et al., 2021).

In the application of learning that was carried out during the COVID-19 pandemic, there were still obstacles in learning using technology because teachers and students were not used to learning using technological assistance (Stambough et al., 2020). Finally, teachers and students learn on their own to optimally adapt to technology. In addition, the Minister of Education and Culture knows that there are obstacles and challenges for teachers and students in the learning process. For this reason, the Minister of Education and Culture is trying to be able to carry out face-to-face learning with several requirements, including requiring teachers and students to be vaccinated to prevent transmission of COVID-19. Limited face-to-face learning also cannot be carried out by all students. So, learning in the new normal era is divided into several student sessions in the learning process. Then, students only study for about 3 to 4 hours at school (Cahapay, 2020). Elementary school students must always be reminded to comply with health protocols at school.

In the new normal era, teachers must be able to innovate by utilizing technology in the learning process to attract interest and make it easier for students to understand the learning material provided. One of the mathematics lessons is always considered tiring and difficult (Almonacid-Fierro et al., 2021). Teachers need a long time to explain mathematics to elementary school students. Therefore, this study uses LCM and GFC materials as benchmarks for student academic achievement. Based on the statement of the Minister of Education and Culture No. 21 and 58 that mathematics is an important subject in measuring the ability to think, reason, solve problems, and communicate. In addition, the State of Indonesia occupies the lowest-ranking position in the field of mathematics. LCM and GFC materials are basic materials in mathematics, including multiplication and division (Rusdi et al., 2020).

In overcoming learning loss that occurs in the new normal era, it is necessary to collaborate with teachers and students in the learning process. Student-centered learning is in the new normal era, so teachers must actively involve students (Bae et al., 2020). This can make the atmosphere more interactive.

This research is different from previous research because this research was conducted under new normal conditions with Jakarta elementary school students as research subjects. The research variable is learning loss. There has been previous research related to learning loss. The reason is the learning situation and difficulties faced by elementary school teachers in Senurus, Central Lombok, during the pandemic. The process of adapting learning during a pandemic, which must use the help of media platforms or technology, is still a challenge during a pandemic. Learning activities can only be carried out for 30 minutes from the 120 minutes of learning hours that should be. Resulting in students experiencing learning loss (Maulyda et al., 2021). The learning process became less than optimal, student participation in the learning process became passive, and teachers stated that students experienced a decrease in learning outcomes by up to 50% during the co-19 pandemic. In addition, we need to be aware of the results of RISE's research that elementary school students have the potential to be left behind for approximately two years due to school closures during the COVID-19 pandemic (Pratiwi, 2021).

Therefore, researchers are interested in researching learning loss in the new normal due to high learning loss during the Covid-19 pandemic. In the new normal era, students have started to return to their activities after a long time during the COVID-19 pandemic. Learning is done by blended learning, combining 50% online learning and 50% face-to-face learning.

Adapting to changes in the technology-based learning process for elementary school teachers and students so that learning becomes easy to understand, fun, and always has the latest innovations in learning. This can be useful in preparing quality human resources through education, given high motivation and interest of students. Face-to-face learning can be a solution. The interaction between teachers and students using technology, such as PowerPoint and YouTube, can improve student learning outcomes academically (Hasudungan et al., 2016). In addition, learning loss that occurs for a long time can endanger the golden generation in Indonesia. The importance of knowing changes in student learning outcomes. The goal is for teachers to overcome and find out the causes of learning loss during the COVID-19 pandemic until the new normal era.

Teachers can move and innovate using technology platforms in the learning process in class. The goal is to improve the performance of teachers. The progress of the learning system in these schools can improve the quality of teachers and student learning outcomes at SD Jakarta.

#### **METHOD**

This research uses a qualitative case study type of research because it aims to find out the reality related to learning loss material in the new normal era in elementary schools in Jakarta. This study is described in a structured manner starting from an overview of special cases related to the learning loss case of LCM and GFC materials in the new normal era for elementary school students. According to Miles and Huberman, qualitative data is processed through three stages, data reduction, data presentation, and conclusion (Kurnia et al., 2022).

#### **Data Collection**

The aspect of assessing learning losses for elementary school students in Jakarta is from the 10 test questions used as a learning assessment to determine students' understanding and abilities of the material that has been given in the online learning process. This assessment uses LCM and GFC materials as benchmarks for students' understanding and abilities (Maarif et al., 2022). Then the researcher determines whether students experience learning loss on the test through the results obtained by students achieving the passing grade or not. Students who do not reach passing grades will be analyzed for the causes. Furthermore, researchers will conduct interviews with students who have not achieved completeness. This interview was conducted not only once but repeatedly until students answered consistently. In addition, students must fill out a questionnaire regarding the online learning process.

## **Participants**

The research participants were 30 grade IV elementary school students in Jakarta and one fourth-grade elementary school teacher. Get accurate and valid information about learning losses during the COVID-19 pandemic with LCM and GFC materials. The implementation of this research was carried out directly.

# TABLE 1 PARTICIPANTS

No	Gender	Total
1	Female	14
2	Male	16

#### RESULTS AND DISCUSSION

The results of the online learning process that has been carried out for more than two years have had a negative impact on students in the process and student learning outcomes, especially for elementary school students. The duration of learning is relatively short, and educators do not know during the online learning process whether students are ready or not in the learning process that is being carried out (Masa'deh et al., 2022). The purpose of the online learning process is to avoid and prevent the spread of COVID-19 and continue the learning process during school closures during the COVID-19 pandemic. Learning loss is a decrease in the academic learning outcomes of elementary school students. This is interpreted as a loss in the learning process because it can fulfill learning achievement indicators (Kurnia et al., 2022). Therefore, educators must create learning schemes in the new normal era to overcome learning loss during the COVID-19 pandemic.

#### **New Normal Learning Scheme**

Online learning is suddenly carried out in the world of education in Indonesia. There is no preparation and planning that in 2020 there will be a lockdown, and everyone is not allowed to leave the house, such as work or school. This made everyone have to change and adapt to the environment during the Covid-19 period, which became a new habit after Covid-19. (Walker et al., 2020). New normal learning is carried out in several stages, starting from limited face-to-face learning. Only 50% of students can carry out learning in schools and classes. During the lesson, there are no discussion activities. Only essential material is provided. While participating in activities, students must implement strict health protocols. The rest of the students who are not limited to face-to-face learning are only given assignments according to the limitations of face-to-face students. Assignments are given by the teacher via WhatsApp.

In this new normal learning, teachers must work hard in teaching and learning activities. This face-to-face learning can only be applied in areas where the spread of COVID-19 has decreased. So, the many new normal learning schemes make elementary school students in Jakarta make mistakes.

There is a difference between studying during the COVID-19 pandemic and the new normal. During the Covid-19 pandemic, learning was carried out with the help of technological media (online), where students studied accompanied by their parents at home. Students complete assignments from educators easily through the help of Google, parents tend to learn compared to students, and students cannot ask specifically about difficult learning material. Usually, educators tend to give many assignments rather than explain learning material. Whereas in the new normal era, learning is carried out face-to-face with time limited to 3 to 4 hours per day, students study accompanied by teachers. Students work on assignments independently without the help of Google (Sparrow et al., 2020).

#### **Learning Loss Results in the New Normal**

The aspect of the learning loss assessment for elementary school students in Jakarta is 10 test questions, which are used as an assessment to determine students' understanding and abilities of the material that has been given in the online learning process. This assessment uses LCM and GFC materials as benchmarks

for students' understanding and abilities (Maarif et al., 2022). Then the researcher determines whether students experience learning loss on the test through the results obtained by students reaching the passing grade or not. Students who did not reach passing grades will be analyzed for causes. Furthermore, researchers will conduct interviews with students who have not achieved completeness. This interview was conducted not only once but repeatedly until students answered consistently. In addition, students must fill out a questionnaire regarding the online learning process.

Based on the results of a survey regarding learning loss in mathematics in elementary schools during the Covid-19 pandemic. 67% of students in grade 2, 76% of students in grade 3, 85% of students in grade 4, 89% of students in grade 5, and 89% of students in grade 6 experienced learning loss. The higher the level of education, the higher the risk of learning loss.

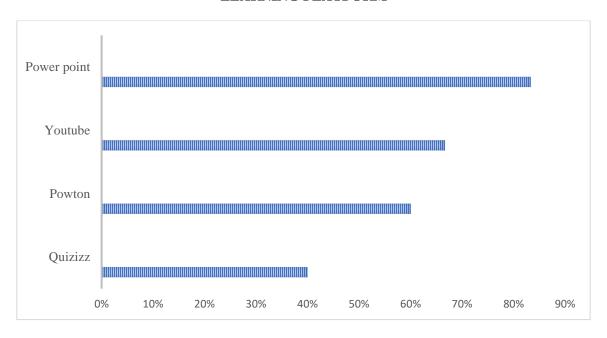
The minimum score for students' completeness in mathematics is 75. The percentage of students who experience learning loss in the new normal is marked by students who do not reach the passing grade with a score of 20 students, which is around 66.67%. Students who achieved passing grades were ten students at 33.33%. On average, students had difficulty calculating multiplication and division in solving word problems related to LCM and GFC. In the new normal, students must calculate manually without the aid of a calculator. Thus, students must remember how to calculate and complete the LCM and GFC materials provided during online learning at home.

Then from the results of the comparison of the two, in the new normal era, Jakarta elementary school students experienced a decrease in learning loss. This is because students have started doing limited face-to-face activities, and learning is starting to be effective. There is a stimulus and response carried out by educators and students directly. Unlike the learning that was carried out during the COVID-19 pandemic, the learning loss that occurred among students was very high. This is because the learning process is carried out only in one direction, and there is a lack of interaction between educators and students when the learning process is carried out (Elser, 2021).

## Utilization of Technology as an Online Learning Media

The implementation of the online learning process indicates that many teachers, students, and parents suddenly have to learn to use technology in the learning process. Teachers have to go the extra mile (Zulherman et al., 2021; Mamolo, 2022). The need for school support in helping teachers to make the most of technology. The process of designing and producing instructional media using technology for senior teachers tends to experience difficulties. The use of technology in the online learning process is only a temporary intermediary. Direct learning of Jakarta elementary school students is better able to understand material compared to using technological media (Dziuban et al., 2018). If direct learning uses technology as a medium, students and teachers carry out interaction activities through question and answer. Thus, the teacher can measure student understanding after teaching and learning activities. Meanwhile, online learning educators only provide material in video form. The teacher cannot know for sure whether students have been able to understand the material provided properly or not. Applications are used as learning media by utilizing technology (Jasiah et al., 2021). Some learning technology media that are still applied in the offline learning process can again attract students' attention and make it easier for students.

## FIGURE 1 LEARNING PLATFORM

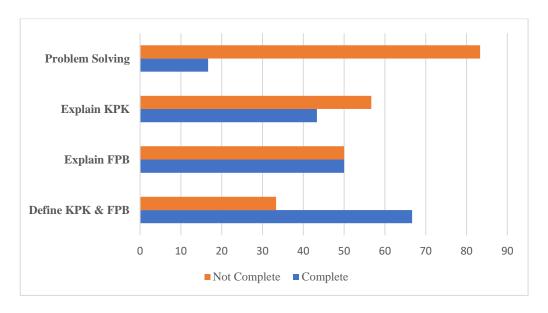


In this new normal era, it is hoped that teachers and students can utilize the internet and technology to improve the quality of learning in the classroom after nearly two years of online learning with the help of technology (Sukirman et al., 2022). Therefore, at least teachers and students can make maximum use of PowerPoint media because students tend to be interested in this media. After the COVID-19 pandemic, teachers were required to use technological media in the learning process. Students state that learning with technology and media is fun. Compared to learning, educators only explain and lecture.

As many as 83.33% of students like learning with PowerPoint media. PowerPoint media provides various explanatory materials such as interactive videos, games, and so on. Youtube is an online video streaming website where teachers choose videos according to the material and character of students in class. As much as 66.67% understand learning with media. Powtoons are animations designed according to learning materials, usually in the form of cartoon videos. 60% of students like Powtoon. Quizzes are used for assignments to determine students' understanding and abilities after carrying out teaching and learning activities. As many as 40% of students who like assignments use quizzes (Sedov & Kashfrazyeva, 2022).

In Figure 2, the teacher gives assessments with different difficulty levels using HOTS questions C2 to C5. Based on this figure, it can be concluded that the C2 related to the determination of SD LCM and GFC Jakarta students tend to have no difficulty in completing the assessment. Furthermore, the difficulty level of C3 students was compared between the LCM and GFC material. At level C4, students had more difficulty with assessments because students were less able to explain how to get the answers they got. Then at solving level C5 problems regarding LCM and GFC in everyday life, very few students can understand these assessments (Handayani et al., 2019).

FIGURE 2 ASSESSMENT OF LEARNING THE NEW NORMAL



#### **Challenges of Elementary School Students in Online Learning**

Learning loss for elementary school students during the COVID-19 pandemic, including changing the face-to-face learning process to distance learning (online) (Skar et al., 2021). Lack of understanding and support from parents and family members of students at home during the online learning process. Student motivation is low (Sabates et al., 2021). Less time for studying due to limited internet access (Kuhfeld et al., 2020). Thus, educators tend to give assignments to students to understand the learning material. Then, students feel stress and difficulties in the online learning process. Online learning has advantages and disadvantages, but online learning and learning using technology really support current learning, especially for elementary school students in Jakarta. Schools must pay a sizable amount to be able to complete technological facilities and require an adequate internet network (Simamora, 2020). Studying online at home also means parents have to buy an internet quota package.

## **Efforts to Overcome Learning Loss**

There needs to be a policy to overcome learning loss by considering the program and involving teachers and parents. Loss of learning can give students a cumulative loss over the long term. This is because the learning process has not been fulfilled due to the lack of optimal learning during the COVID-19 pandemic. Then, reopening schools can restore and repair student learning losses that take a long time. In addition, educators must repeat material that students have not understood during online learning (Dorn et al., 2020).

Oldekop, in the Center for Global Development, explained several activities that can be used to carry out recovery and improvement for students who experience learning loss, namely making the curriculum simpler. The aim is to facilitate quality teaching through a simple curriculum that includes core curriculum components. Provide training and guidance to educators and parents regarding the use or utilization of digital media in the learning process and continue to encourage them to improve digital literacy. The importance of establishing communication with parents of students to improve student learning outcomes. There need to be achievement targets in learning, including literacy and numeracy-intensive programs (Oldekop et al., 2020).

#### **CONCLUSION**

There was a negative impact on elementary school students in Jakarta in the new normal era. Students experience learning loss in LCM and GFC material. The factor that causes learning loss in the new normal era is the learning process that is not optimal because online learning time is limited by time. During the learning process, students did not focus on the material provided, especially mathematics, and students tended to be passive. So, students should be able to study on their own at home, but students tend to be too lazy to study. In addition, because there is no supervision from the teacher. So many students search for answers using Google without knowing how to solve problems related to LCM and GFC.

Based on the presentation of learning loss, 33.33% of elementary school students did not experience learning loss, and 66.67% of students experienced learning loss. It was stated that students who experienced learning loss were higher than students who did not experience learning loss in the new normal era. The presentation of students' understanding of the LCM questions was 60%, while the GFC questions were 40% of the 30 elementary students who studied.

Students are said to have lost learning LCM and GFC material if they do not achieve KKM scores during the COVID-19 pandemic on LCM and GFC material. Researchers use mathematics because mathematics is a subject that can be used as a benchmark in the student learning process. In general, students experience learning loss in LCM and GFC material because they have not mastered multiplication and division. Meanwhile, the arithmetic operations of multiplication and division are the most important and always present in mathematics.

Overcoming or reducing learning loss takes a long time. The teacher must repeat the material that has been given to students online. Teachers must strive to create a pleasant learning atmosphere in the online learning process and look for methods so that students can easily understand the subject matter, especially LCM and GFC materials. Then, it is necessary to do direct learning in turns with elementary school students. Online learning that is carried out for a long enough duration for elementary school students will have a negative impact on students. Therefore, there is a need for direct learning efforts while still implementing health protocols.

#### ACKNOWLEDGEMENTS

Thank you to several parties who have supported and assisted in completing this research promptly, especially the Elementary School Teacher Education Study Program, Faculty of Teacher Training and Education, University of Muhammadiyah Prof. Dr. HAMKA, and the Uhamka Research Institute.

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