

LAPORAN AKHIR
Penelitian Publikasi Internasional Bereputasi Madya
(PPIBM)



JUDUL

Metode pembelajaran Barbasis teknologi dengan model
Konstruktivisme: kebermanfaatan membangun motivasi
belajar siswa

Oleh;

Prof. Dr. Abd Rahman A Ghani, M.Pd (0310036104/Ketua)

Dr. Arum Fatayan, M.Pd (0303069001/Anggota)

Zulherman, M.Pd (0329078602/Anggota)

Anggota Mahasiswa

Sartika Ayu (1901025010)

Aska Amalia Bachrudin (1901025230)

Mardita Putri Fauziah (1901025108)

Nomor Kontrak Penelitian: 831

Dana Penelitian: 6.400.000

FAKULTAS KEGURUAN DAN ILMU PENDIDIKAN
PROGRAM STUDI PENDIDIKAN GURU SEKOLAH DASAR
UNIVERSITAS MUHAMMADIYAH PROF DR HAMKA JAKARTA
TAHUN
2023

**SPK PENELITIAN YANG SUDAH DI TANDA TANGANI OLEH
PENELITI, KETUA LEMLITBANG, DAN WAKIL REKTOR II**

**LAPORAN PENELITIAN****UNIVERSITAS MUHAMMADIYAH PROF DR. HAMKA Tahun 2023**

Judul : Metode pembelajaran Barbasis tekhnologi dengan model Konruktivisme: kebermanfaatan membangun motivasi belajar siswa

Ketua Peneliti : Prof. Dr. Abd Rahman A Ghani, M.Pd

Skema Hibah : Penelitian Publikasi Internasional Bereputasi Madya (PPIBM)

Fakultas : SECOLAH PASCASARJANA

Program Studi : PEP

Luaran Wajib

No	Judul	Nama Jurnal/ Penerbit/Prosiding	Level SCIMA GO/SIN TA	Progress Luaran
1	The Dynamics of Learning Loss for Elementary Students Jakarta in the New Normal	Journal of Higher Education Theory and Practice	SCOPUS Q4	Publish

Luaran Tambahan

No	Judul	Nama Jurnal/ Penerbit/Prosiding	Level SINTA/S CIMAG O	Progress Luaran
1	The Implementation of the Inquiry Method in Improving Student Learning Outcomes in the Social Science Subject in Elementary Schools: Classroom Action Research	Journal of Education Action Research	Sinta 3	Publish

Mengetahui,
Ketua Program Studi PEP

Dr. Hj. Ernawati, M.Pd
NIDN. 019076501

Ketua Peneliti

Prof. Dr. Abdul Rahman A Ghani
NIDN. 0303069001

Menyetujui,
Direktur Pascasarjana



Prof. Dr. H. Ade Hikmat, M. Pd
NIDN. 0019066301

Ketua Lemlitbang UHAMKA

Dr. apt. Supandi, M.Si
NIDN. 0319067801

LAPORAN AKHIR

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

Latar Belakang (Background)

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).

Tujuan Riset (Objective)

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.

Metodologi (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).

Hasil dan pembahasan

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.

Daftar Pustaka (Voncoover)

- Almonacid-Fierro, A., Vargas-Vitoria, R., De Carvalho, R.S., & Fierro, M.A. (2021). Impact on teaching in times of COVID-19 pandemic: A qualitative study. *International Journal of Evaluation and Research in Education*, 10(2), 432–440. <https://doi.org/10.11591/ijere.v10i2.21129>
- Ardington, C., Wills, G., & Kotze, J. (2021). COVID-19 learning losses: Early grade reading in South Africa. *International Journal of Educational Development*, 86, 102480. <https://doi.org/10.1016/j.ijedudev.2021.102480>
- Bae, C.L., DeBusk-Lane, M. Les, & Lester, A.M. (2020). Engagement profiles of elementary students in urban schools. *Contemporary Educational Psychology*, 62(5). <https://doi.org/10.1016/j.cedpsych.2020.101880>
- Cahapay, M.B. (2020). Rethinking Education in the New Normal Post-COVID-19 Era: A Curriculum Studies Perspective. *Aquademia*, 4(2). <https://doi.org/10.29333/aquademia/8315>
- Cucinotta, D., & Vanelli, M. (2020). WHO declares COVID-19 a pandemic. *Acta Biomedica*, 91(1). <https://doi.org/10.23750/abm.v91i1.9397>
- Donnelly, R., & Patrinos, H.A. (2021). Learning loss during Covid-19: An early systematic review. *Prospects*. <https://doi.org/10.1007/s11125-021-09582-6>

- El Khuluqo, I., Ghani, A.R.A., & Fatayan, A. (2021). Postgraduate students' perspective on supporting "learning from home" to solve the covid-19 pandemic. *International Journal of Evaluation and Research in Education*, 10(2), 615–623. <https://doi.org/10.11591/ijere.v10i2.21240>
- Engzell, P., Frey, A., & Verhagen, M.D. (2021). Learning loss due to school closures during the COVID- 19 pandemic. *Proceedings of the National Academy of Sciences of the United States of America*, 118(17). <https://doi.org/10.1073/PNAS.2022376118>
- Gherheș, V., Stoian, C.E., Fărcașiu, M.A., & Stanici, M. (2021). E-learning vs. Face-to-face learning: Analyzing students' preferences and behaviors. *Sustainability* (Switzerland), 13(8). <https://doi.org/10.3390/su13084381>
- Haryati, S., Sukarno, S., & Purwanto, S. (2021). Implementation of Online Education During the Global Covid-19 Pandemic: Prospects and Challenges. *Cakrawala Pendidikan*, 40(3), 604–612. <https://doi.org/10.21831/cp.v40i3.42646>
- Hasudungan, N.A., Ofianto, & Tri, N.Z. (2016). *International Journal of Distance Education and E- Learning (IJDEEL)*. *International Journal of Distance Education and E-Learning*, VII(I), 15–30.
- Masa'deh, R., Almajali, D.A., Majali, T., Hanandeh, A., & Al-Radaideh, A. (2022). Evaluating e-learning systems success in the new normal. *International Journal of Data and Network Science*, 6(4), 1033–1042. <https://doi.org/10.5267/j.ijdns.2022.8.006>
- Maullyda, M.A., Erfan, M., & Hidayati, V.R. (2021). Analisis Situasi Pembelajaran Selama Pandemi Covid-19 di SDN Senurus: Kemungkinan Terjadinya Learning Loss. *Collase: Creative of Learning Students Elementary Education*, 4(3).

- Merchant, G. (2021). Reading with technology: The new normal. *International Journal of Primary, Elementary and Early Years Education*, 49(1), 96–106. <https://doi.org/10.1080/03004279.2020.1824705>
- Mitra, P., Misra, S., & Sharma, P. (2021). One Year of COVID-19: The “New Normal”. *Indian Journal of Clinical Biochemistry*, 36(1), 1–2. <https://doi.org/10.1007/s12291-020-00954-x>
- Nasution, A.K.P., Nasution, M.E., Batubara, M.H., & Munandar, I. (2022). Learning during COVID-19 pandemic: A systematic literature review. *International Journal of Evaluation and Research in Education*, 11(2), 18–20. <https://doi.org/10.11591/ijere.v11i2.21917>
- Pacheco, J.A. (2021). The “new normal” in education. *Prospects*, 51(1–3), 3–14. <https://doi.org/10.1007/s11125-020-09521-x>
- Pratiwi, D.W. (2021). *Dinamika Learning Loss: Guru dan Orang Tua*. *Jurnal Edukasi Nonformal*, 1(1), 147–153.
- Rasmitadila, Aliyyah, R.R., Rachmadtullah, R., Samsudin, A., Syaodih, E., Nurtanto, M., & Tambunan, A.R.S. (2020). The Perceptions of Primary School Teachers of Online Learning during the COVID-19 Pandemic Period: A Case Study in Indonesia. *Journal of Ethnic and Cultural Studies*, 7(2).
- Rusdi, Fauzan, A., Arnawa, I.M., & Lufri. (2020). Designing Mathematics Learning Models Based on Realistic Mathematics Education and Literacy. *Journal of Physics: Conference Series*, 1471(1). <https://doi.org/10.1088/1742-6596/1471/1/012055>
- Siwalette, R., & Suyoto. (2021). Implementation of Kahoot as a Creative Learning Media. *Journal of Physics: Conference Series*, 1933(1). <https://doi.org/10.1088/1742-6596/1933/1/012023>
- Stambough, J.B., Curtin, B.M., Gililand, J.M., Guild, G.N., Kain, M.S., Karas, V., . . . Moskal, J.T. (2020). The Past, Present, and Future of Orthopedic Education: Lessons Learned From the COVID-19 Pandemic.

Journal of Arthroplasty, 35(7), S60–S64. https://doi.org/10.1016/j.arth.2020.04.032
Target Jurnal Internasional (Output) Journal of Higher Education Theory and Practice Vol. 23(6) 2023

Lampiran Log Book

No	Tanggal	Kegiatan
1	12 – 20 Desember 2023	Pengambilan Data Penelitian
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3	26 Januari 2023	Submit Artikel
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5	11 April 2023	Publish Artikel