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# ANALYSIS OF PROBLEMS IN MATHEMATICS LEARNING IN ELEMENTARY SCHOOL POST ONLINE LEARNING

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## ABSTRACT

*Mathematics is one of the learning content that is often considered difficult by students. After online learning, the problems in learning mathematics are increasingly diverse. This study aims to describe the problems in learning mathematics in elementary schools after online learning. This research uses qualitative research method with descriptive research type. This research was conducted at SDN Kenongo 1, Tulangan District, Sidoarjo Regency, East Java. The subject of this study was the fourth grade teacher at SDN Kenongo 1. The data collection technique used was interview. The data analysis technique used is data reduction, data presentation, and drawing conclusions. Based on the results of research that has been done, it was found several problems in learning mathematics in elementary schools after online learning, namely students experiencing difficulties in learning mathematics, students complaining when learning mathematics, students losing knowledge and skills (learning loss) due to online learning, learning models are less varied, and the achievement of student learning outcomes is low.*

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## A. Introduction

Education is an indispensable need for every human being (Yusuf, 2018). This has a meaning that education is the right of every human being. Education is carried out with the aim of preparing quality human resources to build the nation and state. Based on the Law of the Republic of Indonesia No. 20 of 2003 concerning the National Education System that education aims to develop the potential of students to become human beings who believe and fear God Almighty, have noble character, are healthy, knowledgeable, capable, creative, independent, and become democratic and responsible citizens.

Education in Indonesia has levels of education ranging from elementary school to university level. At all levels of education there is always a field of mathematics study. Mathematics is one of the most important subjects to be given to students. Mathematics has a role in helping solve problems in human daily life. This is because mathematics is very close to everyday life. In addition, mathematics is also very much needed in the present and in the future. Therefore, students need to learn mathematics.

The word mathematics comes from the Latin mathema which means to study or the thing being studied. Mathematics is a science that is abstract and deductive. However, in general, many students complain that mathematics is a difficult and boring subject (Oktaviani et al., 2020). This is because in mathematics subjects have to deal with formulas that are difficult to remember in solving mathematical problems.

In learning mathematics, problems are often found. Problems in learning mathematics do not only occur in Indonesia. According to (Mundia, 2012), many students at all levels of education in developing countries have problems in learning mathematics. Problems in learning mathematics are increasingly complex when learning activities inevitably have to be carried out online from their respective homes due to the covid-19 pandemic.

During online learning, many problems were found, especially in learning mathematics. Some of the problems in learning mathematics that are often experienced online are that students are less interested in learning mathematics, resulting in decreased learning outcomes (Aprisal et al., 2021). According to (Harahap & Hidayat, 2022), the problem of learning mathematics through online is that students' interest and motivation in learning are very low towards learning mathematics online. Another opinion according to (Fadilla et al., 2021), the

problems that occur in online mathematics learning are that students find it difficult to understand the subject matter presented by the teacher, students are not able to master learning well, and students are not motivated to learn.

Currently conditions have improved and learning activities have been carried out offline in schools. However, it is undeniable that after learning has been carried out online for approximately two years and now it has been carried out offline, it will have a significant impact, causing problems in learning mathematics in elementary schools. Based on the background described above, the formulation of the problem in this study is how the problems in learning mathematics in elementary schools post online learning. The purpose of this study is to describe problems in learning mathematics in elementary schools after online learning.

## B. Method

In this study using qualitative research methods with descriptive research type. Qualitative research is research that is descriptive and analytical. The data obtained in qualitative research are in the form of words or sentences and not numbers. While descriptive is a type of research by utilizing existing data to solve a problem. Qualitative descriptive is used to reveal events or facts in the field. The qualitative descriptive research used in this study aims to obtain information related to problems in learning mathematics in elementary schools after online learning. This research was conducted at SDN Kenongo 1, Tulangan District, Sidoarjo Regency, East Java. The subject of this research is the fourth grade teacher of SDN Kenongo 1. The data collection technique used is interview. Interview is a form of question and answer activity conducted with the aim of obtaining information. The instrument used is an interview guide. The data obtained from the interviews were analyzed. The data analysis techniques used in this study are data reduction, data display, and conclusion drawing.

## C. Result and Discussion

Based on the results of interviews with fourth grade teachers at SDN Kenongo 1, it is known that there are several problems that occur in learning mathematics in elementary schools after online learning. The first problem is that students have difficulty learning mathematics. Students are less able to understand the material and cannot catch the lesson well. This is supported by (Raharjo et al., 2021) most students find it difficult to participate in mathematics learning activities. Learning difficulties or learning disability itself is a condition where students have

difficulty being able to carry out learning activities effectively (Kholil & Sulfiani, 2020). Learning difficulties will cause various obstacles that will cause students to fail in achieving learning objectives.

Second, students complain when learning mathematics. Students who complain when studying will have a bad impact on the learning process. In general, many students complain that mathematics is a difficult and boring subject (Oktaviani et al., 2020). This is because in mathematics subjects have to deal with formulas that are difficult to remember in solving mathematical problems. According to (Permatasari, 2021), many elementary students consider mathematics as a difficult, scary, uninteresting, and boring subject.

Third, students lose knowledge and skills (learning loss) due to online learning. The Education and Development Forum (2020) defines learning loss as a situation where students lose knowledge and skills, either in general or in particular, or there is an academic setback due to certain conditions such as a prolonged gap or the discontinuity of the educational process (Pratiwi, 2021). Students lack insight in mathematics because in limited face-to-face learning activities (PTMT) there are very few learning hours. Learning hours are only limited to 1 hour and a half and a maximum of 2 hours. So, in the implementation of learning activities can not run optimally. According to (Cerelia et al., 2021), based on the results of research conducted by Michelle Kaffenberger, it is known that global learning loss in students is very large in elementary school students.

Fourth, the learning model is less varied. The learning model is a framework that provides a comprehensive picture of the learning activities that will be carried out from beginning to end. During post-covid-19 learning activities, teachers do not use learning models in the process of learning activities in class. The learning model has a very important role in the implementation of learning activities. According to Joyce in 1992 each learning model will assist teachers in designing learning activities so that students can achieve predetermined learning goals (Djalal, 2017).

Fifth, student learning outcomes are low. According to (Purwanto, 2016), learning outcomes are changes in behavior that occur after following the teaching and learning process in accordance with educational goals. Learning outcomes only occur in individuals who carry out learning activities. Learning outcomes can be used as an illustration of the level of success of the learning activities that have been carried out. According to (Azmi, 2021), in learning mathematics, there are

many students who complain that it is difficult to master mathematical formulas, procedures, and principles so that this causes low mathematics learning outcomes. According to (Karso, 2014), in general, learning achievement in elementary schools is relatively low. However, there are also many elementary school students who excel in learning mathematics.

## D. Conclusion

Based on the results of the research that has been done, it was found several problems in learning mathematics in elementary schools after online learning. The problems are that students have difficulty in learning mathematics, students complain when learning mathematics, students lose knowledge and skills (learning loss) due to online learning, learning models are less varied, and the achievement of student learning outcomes is low.

## References

Aprisal, Arifin, S., & Tobondo, Y. V. (2021). Strategi Guru SD Melaksanakan Pembelajaran Matematika Selama Pandemi COVID-19. *Jurnal Pembelajaran Matematika Inovatif*, *4*(6), 1551–1560.

Azmi, N. (2021). Analisis Kesulitan Belajar Matematika pada Siswa SD Negeri 11 Banda Sakti Lhokseumawe, Ar-Riyadhiyyat. *Ar-Riyadhiyyat: Jurnal Pendidikan Matematika*, *1*(2), 81–88.

Cerelia, J. J., Sitepu, A. A. F. A. L. N., Pratiwi, I. R., Almadevi, M., Farras, M. N., Azzahra, T. S., & Toharudin, T. (2021). Learning Loss Akibat Pembelajaran Jarak Jauh Selama Pandemi Covid-19 di Indonesia. *Seminar Nasional Statistika X*, *10*(2).

Djalal, F. (2017). Optimalisasi Pembelajaran Melalui Pendekatan, Strategi, dan Model Pembelajaran. *Sabilarrasyad: Jurnal Pendidikan Dan Ilmu Kependidikan*, *2*(1), 31–52.

Fadilla, A. N., Relawati, A. S., & Ratnaningsih, N. (2021). Problematika Pembelajaran Daring pada Pembelajaran Matematika di Masa Pandemi COVID 19. *Jurnal Jendela Pendidikan*, *1*(2), 48–60.

Harahap, D. S., & Hidayat. (2022). Problematika Pembelajaran Matematika Melalui Daring. *Jurnal Penelitian Pendidikan MIPA*, *6*(2), 8–12.

Karso, H. (2014). *Pendidikan Matematika 1. In: Pembelajaran Matematika di SD*. Universitas Terbuka.

Kholil, M., & Sulfiani, S. (2020). Faktor-Faktor Kesulitan Belajar Matematika Siswa Madrasah Ibtidaiyah Da'watul Falah Kecamatan Tegaldlimo Kabupaten Banyuwangi. *Educare: Journal of Primary Education*, *1*(2), 151–168.

Mundia, L. (2012). The Assessment of Math Learning Difficulties in a Primary Grade-4 Child with High Support Needs: Mixed Methods Approach. *Nternational Electronic Journal of Elementary Education*, *4*(2), 347–366.

Oktaviani, U., Kumawati, S., Apriliyani, M. N., Nugroho, H., & Susanti, E. (2020). Identifikasi Faktor Penyebab Rendahnya Hasil Belajar Matematika Peserta Didik di SMK Negeri 1 Tonjong. *Math Locus: Jurnal Riset Dan Inovasi Pendidikan Matematika*, *1*(1), 1–6.

Permatasari, K. G. (2021). Problematika Pembelajaran Matematika Di Sekolah Dasar / Madrasah Ibtidaiyah. *Jurnal Ilmiah Pedagogy*, *14*(2), 68–84.

Pratiwi, W. D. (2021). Dinamika Learning Loss: Guru dan Orang Tua. *Jurnal Edukasi Nonformal*, *2*(1), 147–153.

Purwanto. (2016). *Evaluasi Hasil Belajar*. Pustaka Belajar.

Raharjo, I., Rasiman, & Untari, M. F. A. (2021). Faktor Kesulitan Belajar Matematika Ditinjau dari Peserta Didik. *Journal for Lesson and Learning Studies*, *4*(1), 96–101.

Yusuf, M. (2018). *Pengantar Ilmu Pendidikan*. Lembaga Penerbit Kampus IAIN Palopo.

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