

Parents' Problems in Guiding Children to Learn Mathematics During the Pandemic Situation

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Abstract. This study aims to describe the problems of parents in Tenda to guiding children to learn mathematics during the pandemic situation. Data Collection was carried out using interview. Then the data were analyzed using techniques proposed by Milles and Huberman which include data reduction, data display, and drawing conclusions. The results showed that there were several problems with parents in guiding children's mathematic to learn, that is: 1) they have any difficulty managing the time for guidance because they have another job; 2) they don't understand the proper method to explain the mathematic materials; 3) they more than focus to complete math assignments given by the teacher so that they ignore the core materials that must be mastered by children; 4) the children feel bored because they have not competition if they studying at home; 5) children are more interested in using gadget for entertaining themselves than to learning the mathematic materials.

Keywords: Problems; Parents; Mathematics

1 Introduction

Humans are creatures who have various needs. One of them is in the field of education. For this reason, learning is needed the support of the learning process of students. Learning is an effort that is carried out deliberately, directed and planned, with the objectives that have been set beforehand and its implementation is controlled, so that learning occurs in the person [1]. Therefore, learning that is carried out must be student-centered and create multi-directional interactions, among is the teacher and students, fellow students, and with other learning sources. Likewise in the Learning of mathematics, students are used as learning subjects. This means that students actively discover various concepts in mathematics through observing various learning media provided by the teacher.

Mathematics is an important subject to teach in elementary school because it can be useful in students' daily lives. Other than that, mathematics is also needed as a basis for studying other mathematical sciences. The term mathematic comes from the Greek word "mathein" or "manthenein" which means to study [2]. Mathematic is structured knowledge, where properties and theories are made deductively based on defined or undefined elements, and based on proven axioms, properties, or theories [3]. According to James [4], mathematic is the science of logic, regarding the form, arrangement, quantity, and concepts that are related to one another. Based on this, mathematic needs to be trained from an early age, one of which is to include mathematics as a subject in the school. Mathematic is taught at every level of education, from pre-school, elementary to high school and even college.

In Content Standards [5] explain about the mathematic lessons in schools are aimed at 1) understand mathematical concepts, explain skills between concepts, and apply concepts or algorithms in a flexible, accurate, efficient, and precise way to solve problems; (2) using reasoning on patterns and properties, performing mathematical manipulations in making generalizations, compiling evidence, or explaining mathematical ideas and statements; (3) solving problems which include the ability to understand problems, design mathematic models, solve models and interpret the solutions obtained; (4) communicating ideas with symbols, tables, diagrams, or other media to clarify the situation or problem; (5) having an attitude of appreciating the usefulness of mathematics in life, which is curiosity, attention, and interest in learning mathematics, as well as being resilient and confident in problem-solving. Therefore, learning mathematics is important to pay attention and to be taught to achieve the goals of learning mathematics in schools.

The implementation of mathematics learning in elementary school requires the teachers to always guide and direct students in order to understand various materials. For this reason, teachers can use various techniques, methods, strategies, models, approaches, media, and learning resources. However, since December 2019 the world is being shaken by the Corona Virus (Covid-19) which has caused a change in various sectors. This virus first originated in the city of Wuhan in China and continues to spread in various countries including Indonesia. The World Health Organization or WHO has designated the corona virus as a global pandemic worldwide [6]. Therefore, everyone should be able to make various efforts to avoid the virus.

Based on data as of April 2021, the number of corona cases in Indonesia is 1,668,368 [7]. This shows that the spread of the Corona Virus is growing rapidly. The increasing number of cases occurred in the various region in Indonesia, including in Manggarai Regency, NTT Province. The Covid-19 task force in Manggarai Regency noted that the Covid-19 virus has infected 2,039 people and resulted in 22 deaths [8]. This data proves that there is an increase in the spread of the Corona Virus in various areas in Manggarai. This also has a negative impact on various aspects of life including education. Therefore, the government and society continue to make various efforts to minimize the spread of the virus. One of the efforts made is in the application of online learning.

Online learning is an alternative to learning problems during the pandemic Covid-19 [9]. According to Putra and Irwansyah [10], the development of the industrial revolution strongly supports the implementation of online learning from home, because online learning is learning that eliminates time and distance with the help of an internet-based digital platform that is able to support learning to be carried out without any physical interaction between teachers and students. Thus, the role of the teacher as a guide, guide and in terms of giving motivates replaced by parents. In this case, parents are required to always accompany the child's learning process. In addition, parents are always ready to assist if the child has to get difficult in learning.

According to Fahlana [11], the role of parents during online learning is very important and can be demonstrated in various ways, including (1) helping children to schedule activities and giving children time to remember what to do daily; (2) accompanying and giving attention to children during the online learning process; (3) helping to remind children's activities to reach the target because sometimes children can forget about their learning activities; (4) providing motivation so that children are always enthusiastic and not bored in online learning; (5) As educators at home, parents must also pay attention to their children's health, especially during the Covid-19 pandemic. These various roles must be carried out regularly. In addition, because mathematics learning is not only related to a number of things, but is more focused on relationships, patterns, shapes, structures, facts, concepts, operations, and principles, the role

of parents in guiding children's learning is very important. However, in reality, parents experience various problems in guiding children's mathematics learning. This is evidenced by several previous research before.

A lot of research has been done on parental involvement in children's study guides during this pandemic. The results of Novianti & Garzia's research [12], for example, conclude that most people are directly involved in online learning that their children do. The involvement is marked by the activities of parents supervising students' study time, accompanying children during study, recognizing students' learning difficulties, and providing facilities needed for children to learn. Daniela, Rubene and Rudolfa [13] examined parents' perspectives on distance learning during the pandemic which showed that parents really need support from educators to understand how to support children in learning and expect schools to integrate student learning activities at home and what students need. The results of Apriyanti's research [14] show that most parents, especially mothers, are directly involved in guiding students to learn, parents use textbooks and student worksheets as sources of student learning, and most parents do not use creative media in their children's learning.

Research on the problems and difficulties of parents in guiding their children's learning has also been carried out the results of the research by Mastoah and Zulaela [15] show that in general what parents (respondents) experienced in accompanying children to study at home during the Covid-19 period was not optimal because it drained high anger in a fairly frequent period, limited quota, and not understand the material. In addition, the results of research by Wardani and Ayriza [16] also found that in general, the obstacles for parents in accompanying children to study at home during the Covid-19 pandemic were a lack of understanding of the material by parents, difficulty in fostering children's interest in learning, not having enough time to accompany children, and impatient in accompanying children while learning. Research also show that parents have difficulty with balancing responsibilities, learner motivation, accessibility, and learning outcomes [17].

Research on the difficulties and problems experienced by parents in guiding their children to learn mathematics at home during the pandemic has not been done much. Research on this aspect is important especially because learning mathematics, especially in special competencies such as understanding concepts, and critical thinking, and mathematical creativity requires certain abilities and skills. Meanwhile, the parents of students in the Tenda sub-district generally do not have educational backgrounds who have special experience in guiding students to learn mathematics-specific competencies. For this reason, it is necessary to conduct research to uncover difficulties or problems experienced by special parents in guiding children to learn mathematics at home.

2 Method

This research was conducted on parents of elementary school students in Tenda Village, Langke Rembong District, Manggarai Regency, NTT Province. This type of research is qualitative. Qualitative research is research that intends to understand the phenomena experienced by research subjects, for example behavior, perceptions, actions, etc [18]. Holistically and by means of descriptions in the form of words in a special context. This is natural, this means that researchers interact with data sources. The use of a qualitative approach aims to describe the problems of parents in the Tenda village in guiding children's mathematics learning during the pandemic.

The data collection technique used was interviews. In this case the researcher interviewed the parents of elementary school students. For this reason, the instrument used is in the form of an interview guide. Furthermore, the data were analyzed using the techniques proposed by Milles and Huberman which included data reduction, data presentation, and conclusion drawing. The research flow is as follows:

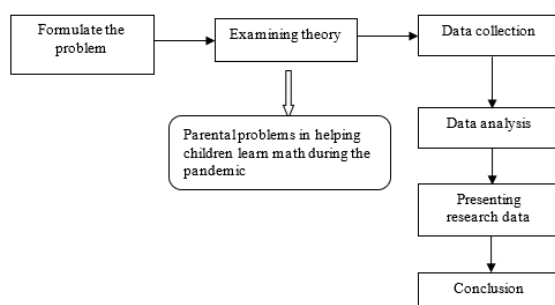


Fig 1. The Study Line

3 Result and Discussion

Family is the first and foremost environment for children to carry out various activities in their life. In the family, parents play an important role in educating and guiding children. In addition, parents are also responsible for meeting children's needs. Since March 2020 the government has issued a Circular of the Ministry of Education and Culture (Kemendikbud) of the Directorate of Higher Education No. 1 of 2020 concerning the prevention of the spread of covid 19 in the world of education, which instructs to organize distance learning and advises students to learn from their homes [19]. This shows that parents play an important role in guiding children's learning at home. guidance is carried out for all subjects, including mathematics.

Learning mathematics is not only related to the number of things, but is more focused on relationships, patterns, forms, structures, facts, concepts, operations, and principles. For that, parents are required to guide their children intensively at home. Based on interviews that have been conducted with elementary school parents in the Tenda village, information is obtained related to the various problem experienced by parents in guiding children's mathematics learning at home. These problems are described specifically in the description below.

Difficulty guiding children because they are tired after a long day of work

In everyday life, parents are responsible for meeting children's needs. According to Maslow, there are five basic human needs, namely physiological needs, safety, belonging and love, self-esteem, and self-actualization needs [20]. Physiological needs are basic needs that must be met, such as food and drink. To meet the needs of food and drink, parents have to work. The work is done by parents in general, starting from the morning until the afternoon. Then when returning home, parents, especially mothers, also have to cook for the family. This causes parents to have difficulty in guiding children's mathematics learning because they only have free time after dinner. However, in general, after dinner, the parents immediately rested.

Does not understand the proper method of explaining mathematical material

In learning mathematics, every concept is always related to other concepts. To learn a concept based on other concepts, one needs to first understand the prerequisite concept because without understanding the prerequisite concept it is impossible for that person to understand the new concept well [21]. This means that students are required to master every concept in mathematics. Mastery of these concepts is marked by the achievement of various indicators of understanding mathematical concepts.

Zuliana [22] said there are seven indicators of understanding mathematical concepts, including (1) restating a concept, (2) classifying objects according to certain properties (according to the concept), (3) providing examples and non-examples of concepts, (4) presenting concepts in various forms of mathematical representations, (5) developing necessary or sufficient conditions for a concept, (6) using, utilizing, and selecting certain procedures or operations, (7) applying concepts or algorithms solution to the problem. Based on these indicators, in learning mathematics, various activities must be pursued to concretize abstract things into concrete forms so that students can understand the concepts they are learning. For this reason, appropriate learning methods are needed and in accordance with student characteristics. However, in general, the parents of students in Tenda Kelurahan are not teachers, so they do not know various methods that are appropriate for their children's abilities. This causes children to have difficulty understanding math material.

Parents are more focused on completing math assignments given by the teacher so that they ignore the core material that must be mastered by children

One of the components that need to be considered in learning mathematics is the mastery of the material by students. Therefore, planting the concept in each material must be done effectively. Mathematics learning for elementary school students in grades I, II, and III is integrated into the themes being studied, but for high classes, namely grades IV, V, and VI mathematics material is separated thematically so that students can understand the material in-depth [23]. This means that if students understand the material, students will also master mathematical concepts. Students who master the concept will get satisfying learning outcomes and can solve various problems in mathematics.

During a pandemic, teachers cannot deeply embed concepts in every math material because learning is done online. In general, teachers only give students assignments to do at home. For this reason, parents must assist children in understanding mathematics material. However, in reality, parents tend to ignore the planting of mathematical concepts. Based on the research that has been done, it was found that parents only guide students in completing assignments. In addition, some parents do the tasks that the teacher gives to their children without involving the child in the process of completing the task. This is done so that children get high scores and parents do not need to take the time to guide children in doing assignments. Thus, the material that should be mastered by students is neglected.

Children feel bored because they have no competition in learning at home

In essence, elementary school students are at the concrete operational stage. At this stage the child develops logical thinking, is still very attached to perceptual facts, is still limited to concrete objects, and is able to carry out conservation [24]. In this case, the child will understand something if it is presented abstractly. In addition, children prefer to learn while playing with their friends. Children also tend to stand out, so that they always want to compete with their friends. During a pandemic, the government sets rules to always keep your distance and not gather. This causes children to study at home on their own. This situation makes

children bored so they are lazy to learn. Studying alone at home causes children to feel that nothing can compete with themselves so that their enthusiasm for learning mathematics decreases.

Children are more interested in using gadgets as entertainment than in learning math material

Online learning requires children to use gadgets. The use of gadgets can help children in their daily lives, especially in finding data and information to do school work and as a means of entertainment from the features provided in gadgets [25]. In addition, the use of gadgets can have a negative impact on children, such as impaired vision, hearing, and laziness to read books. This negative impact occurs when children use gadgets excessively without parental supervision. Based on the results of interviews conducted with parents in the Tenda village, information was obtained that in general children are more interested in using gadgets as entertainment. This makes online learning ineffective because children use gadgets for other things than learning math material. Sometimes children also forget to do assignments because they are shy playing online games. This situation makes it difficult for parents to guide children's learning at home.

5 Conclusion

Based on the research that has been done, it is concluded that the problems of parents in guiding children's mathematics learning during the pandemic are; 1) they have any difficulty managing the time for guidance because they have another job; 2) they don't understand the proper method to explain the mathematic materials; 3) they more than focus to complete math assignments given by the teacher so that they ignore the core materials that must be mastered by children; 4) the children feel bored because they have not competition if they studying at home; 5) children are more interested in using the gadget for entertaining their self than to learning the mathematic materials.

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