

## ANALYSIS OF MULTIPLICATION LEARNING DIFFICULTIES IN STUDENTS

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### Abstract

*Mathematics is the foundation of all sciences. Due to this reason, mathematics will never be divorced from any area of life. Thus, we must embrace mathematics, as it is present in all facets of our lives that we meet on a daily basis. However, in elementary school, there are still many students who dislike mathematics, especially in multiplication. The difficulty learning multiplication arise from the beginning of 3<sup>rd</sup> grade to 5<sup>th</sup> grade students, which is influenced by several factors including the teacher's delivery factor with the multiplication material that makes some students cannot digest and students' cognitive abilities. For this reason, the teacher has various ways so that students are able to understand multiplication. The techniques applied by the teacher are memorizing, fast counting with fingers, and so on.*

Keywords: Education, Elementary School, Mathematics, Students Difficulties

### 1. INTRODUCTION

Learning and education are inseparable components of human existence. According to Sartain Aaron Quinn et al. (1958), learning is a modification of behavior resulting from experience. The potentials that humans are born with can be realized through human-developed learning. Every child has a unique personality, as well as academic aptitude, which is frequently referred to as intellectual or intelligence, therefore learning requires effort (Dwiyono, 2021).

As for learning challenges as an issue that rests in terms of "obstacles," namely the implications that may occur both for the individual and for their surrounding environment, this is a problem that lies in its own right (Syafitri et al., 2021). Students will experience learning failure and a sense of inferiority in their growth at school and in society if these challenges are allowed to continue occurring as they have been (Kusumasari et al., 2021).

Therefore, academic failure is a cause of failure in the next life. People believe that learning mathematics is the most challenging subject for children when discussing learning issues in school. A lack of knowledge of symbols, place values, and calculations are frequent errors made by children with learning challenges in mathematics (Chan & Scalise, 2022). Consequently, students already have a paradigm in their subconscious that mathematics is difficult to master. A number of internal and environmental variables contribute to the difficulty of learning multiplication, which is one of the challenges faced by students. This motivates researchers to understand more about the problems that students encounter when learning multiplication and the factors that contribute to these difficulties (Indah et al., 2020).

## **2. THEORETICAL BASIS**

Learning is the process of an individual making an effort to obtain a new change in behavior as a whole as a result of his own experience in his interaction with the environment (Buana et al., 2019). This change in behavior is obtained as a result of his own experience in his interaction with the environment. Learning, as described by Sartain Aaron Quinn, is a change in behavior that occurs as a direct result of experience. Meanwhile, experience and repeated practice are the two most important factors in learning (Syaiful & Aswan, 2006). This entails a shift in behavior, in terms of both knowledge and abilities, as well as attitudes, and it may even cover the entirety of the organism or person (Suartini, 2022).

Some of these viewpoints can be understood to suggest that learning is fundamentally a "process of altering personality or behavior," and that this process is connected to one's perspectives, knowledge, and abilities. To put it another way, learning can be defined as the process of making an effort and making an attempt to gain intelligence or information, engaging in practice, or changing behavior or responses brought on by experience. Humans are born with certain potentials, and the learning that they cultivate can help them realize those possibilities (Mukminah et al., 2021).

Every child has a unique personality, as well as academic aptitude, which is frequently referred to as intellectual or intelligence, therefore learning involves work. Nonetheless, many pupils are unable to solve obstacles in learning, resulting in learning difficulties for learners. In reference to learning difficulties, that the symptoms of learning difficulties have a direct or indirect impact on the education process as a whole, and that the existence of difficulties is indirectly a challenge in the education process (Ambarawati, 2019). Learning difficulties are an issue because of these "barriers," — in other words the potential implications for the individual and the environment if these obstacles are not surmounted. When discussing learning disabilities in school. Others believe that mastering mathematics presents the most challenging challenge for students (Muharram et al., 2019). They have a paradigm in their subconscious that mastering mathematics is difficult or challenging. Children are becoming increasingly disinterested in mathematics as a result of ongoing learning issues. For children, mathematics is a frightening specter. Children are perpetually and easily bored while studying maths.

## **3. RESEARCH METHOD**

This research utilizes a qualitative descriptive methodology. The researcher employs the descriptive technique because, in accordance with the nature and objectives of the study, he or she is not interested in verifying the hypothesis, but rather in obtaining an accurate depiction of the learning challenges of 30 fifth-grade students in multiplication materials (Ambarawati, 2019).

The data validity test was carried out, namely the data credibility test by triangulation. Data collection techniques in this study were observation, documentation and interviews. The interview aims to obtain information about the difficulties experienced by students and the material being taught. Documentation is used to obtain the data needed in research. Observation aims to observe and record teacher activities in delivering material and students' perceptions in solving multiplication problems.

#### **4. RESULT AND DISCUSSION**

Mathematics is the study of numbers and calculations, the relationship between form and structure, ways of thinking, and a collection of structural systems and tools (Dubinsky, 2002). Why should we explore mathematics as maths is the foundation of all science? Therefore, mathematics will never be divorced from any facet of life. Therefore, we must embrace mathematics, as it permeates every area of our lives that we face on a regular basis. In this observation, we interviewed one of the instructors at SDN Pegadungan 011 about the fifth-grade pupils' difficulty with learning multiplication. We inquire as to why so many pupils dislike mathematics. She added that in this instance, it was influenced by a number of circumstances, including the inability of some students to absorb the mathematics curriculum presented by the teacher. Therefore, mathematics will be remembered as a particularly unpleasant topic, as its study necessitates intense analysis and accurate computations. Why does maths a challenging and inactive subject for students? If a student understands and masters the fundamentals of mathematics, mathematics is actually a delightful and pleasurable subject to study.

Is primary school multiplication difficult for pupils to learn? Generally speaking, multiplication has its own obstacles for kids, particularly third graders who are just beginning the curriculum, and teachers employ a variety of methods to make it easier for pupils to understand multiplication information (Sufa & Setiawan, 2018). The objective is to make it less difficult for students to memorize and demonstrate their ability to count on their fingers when attempting to join class.

Is it necessary for children to memorize multiplication? Multiplication is also the underpinning for all developments in the mathematical sciences, as addition, multiplication, division, and so on, is the foundation for instilling mathematical knowledge in the students themselves, so some argue that multiplication must be memorized by students, while others argue that multiplication does not need to be memorized by students (Chan & Scalise, 2022). However, teaching the concept of multiplication itself so that pupils may master it begins in grade 3rd elementary school instruction. So, what is the cause of pupils not memorizing multiplication, which is that students do not comprehend what the next multiplication concept is? How can I memorize multiplication quickly? A teacher must first introduce the concept of multiplication, which is defined as the division of the next repeated addition. How to make children memorize rapidly so that children memorize multiplication quickly, then a teacher must implant the concept that multiplication is repeated addition, then what actions elementary school instructors can take so that students understand mathematics learning. An elementary school teacher must provide children with a tangible understanding of learning, which means that students are introduced to learn mathematics in a real or real environment that all students may experience, making it easier for students to understand mathematics learning itself. Thus, is division the same as multiplication, and do division and multiplication have a relationship? Indeed, where 6 divided by 2 yields 3 times 2 is equal to 6, this is the concept of the link between division and multiplication. This is indeed the outcome of an interview we conducted with one of the teachers at SDN Pegadungan 011 about learning multiplication in 5<sup>th</sup> grade elementary school.

## 5. CONCLUSION

Mathematics is a field of study that deals with numbers and calculations, as well as examining the relationship between patterns of form and structure, modes of thought, and a collection of structural systems and instruments. Mathematics can be found in all sectors of life, including elementary school. However, mathematics can be a difficult topic for some children. They have an underlying perception that learning math is difficult or challenging. Children are becoming less and less engaged in learning mathematics as a result of ongoing learning challenges. Multiplication is one of the most complicated math concepts to comprehend. From the beginning of third grade to the end of fifth grade, students have difficulty learning mathematics. This difficulty is influenced by several factors, including the teacher's delivery factor, the Mathematics material itself, which some students cannot digest, and the students' cognitive abilities. As a consequence, the teacher employs a variety of methods to ensure that students comprehend multiplication content, such as memorizing, fast counting with fingers, and so on.

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