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Analysis of the Basic Abilities of Grade V Students in Working on Volume of Space Building Problems

Fajar Witdanarko[*1], Wiryanto[1], Neni Mariana[1]
[1*]Universitas Negeri Surabaya, Surabaya, Indonesia

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ABSTRACT
Objectives: *The purpose of this simple research is to find out the following: 1) the essential ability of grade V elementary school students in working on problems about the volume of space, especially cubes and beams; 2) the difficulties faced by students in solving volume problems of cubes and beams.* ***Method:*** *The research method used in this simple research is a qualitative description with data collection techniques using written tests. The subjects of this study amounted to 5 students consisting of 2 female students and three male students from grade V elementary school.* ***Results:*** *The results showed that the essential ability of grade V elementary school students in working on problems about the volume of space buildings, especially cubes and beams, obtained an average score of 30. Students in grade V elementary school have difficulty working on volume problems of cubes and beams in the form of story problems; this is evidenced by the answers to the test instrument questions in the form of story problems, which all get the result 0.* ***Novelty:*** *The novelty in this study lies in identifying what mistakes are often made by fifth-grade students in working on volume problems of building space. These errors are grouped into several categories: reading, understanding, processing data, and writing answers. This allows teachers to target more specific interventions based on the types of errors made by students.*

INTRODUCTION

Education in the 21st century demands the development of superior human resource capabilities to previous generations. In the 21st century, machines or computers have replaced all mechanistic abilities. With the changes in this era of globalization, it is essential to prepare learners to have the ability to think critically, creatively, collaboratively, and communicatively, as well as the ability to make decisions that will improve their management, processing, and response to advances in information and technology (Lutfianto & Sari, 2017).

Education is one of the strategies to prepare human resources. Education is a conscious and planned process to create a pleasant educational environment. With a pleasant educational atmosphere, students are encouraged to participate in developing their potential knowledge, personality, morality, and skills (Pristiwanti et al., 2022). Formally, education at school provides a means for students to increase and develop their potential in preparation for the future. Mathematics plays a role in facing globalization and developing critical thinking, creativity, and logical reasoning, which are very important in communicating ideas in the real world (Sa'idah et al., 2019).

Mathematics is one of several subjects taught in the Indonesian curriculum. In the scientific field, mathematics is considered to improve cognitive and deductive skills, solve daily life problems and work-related problems, and support the development of science and technology. In learning activities, mathematics can encourage students to think creatively to improve their thinking skills (Susanto, 2014, p. 185). Mathematics is a

generally applicable science used as the basis for advancing science and technology and plays a vital role in various disciplines. Ignoring mathematics education as a priority will hinder progress in various fields, especially in science and technology (Juanda et al., 2014).

In educating students, mathematics learning is provided at every level, starting from grade one, because mathematics improves logical thinking, analytical reasoning, systematic thinking, critical decision-making, and creative problem-solving skills. All of these abilities are necessary for everyone to obtain information, allocate, and apply it in everyday situations because life is characterized by constant change (Sholehah et al., 2018). Introducing mathematics lessons to students starting from elementary school is very important to provide them with logical, systematic, analytical, creative, critical thinking, and collaboration skills. In addition, students must be able to apply these mathematical skills for problem-solving and effectively communicate concepts and ideas using symbols, diagrams, tables, and other media.

According to Ngilawajan (2013), the essential elements of mathematics, including facts, concepts, operations, and principles, are purely abstract entities. Studying these mathematical objects provides a rich set of problems that are not only intellectually challenging but also help develop critical thinking and practical collaboration skills. A feature of mathematics is partly its deductive nature; this process involves logical and formal reasoning, the first step of which is an inductive process that requires the formulation of hypotheses, mathematical models, analogies, or generalizations based on observed data. In addition, mathematics can be considered an organized and systematic science because its constituent elements are arranged hierarchically and interconnected with functional relationships (Sulaeman & Ismah, 2017).

Mathematics is considered a challenging and intimidating subject by some learners, while other learners have an interest in mathematics. The difficulty arises from mathematics as a logical science, where one must understand basic concepts to understand advanced concepts (Davita & Pujiastuti, 2020). This is the same as Bintoro and Zuliana (2015) said about students considering mathematics challenging to understand. The reason is that mathematics is cognitively demanding and often abstract, making it difficult for students to understand. Basic mathematical principles serve as a foundation and are essential in advancing more advanced learning objectives.

When viewed from students' enthusiasm towards the subject, mathematics is considered to have a low level of student interest in learning. One of the causes of students' low interest in learning mathematics is their attitude towards the subject. This is because mathematics tends to be seen as a systematic field of theory, with symbols and formulas that are difficult to understand and not fun to learn (Madhuri, 2020).

In the primary education curriculum, mathematics is one of the subjects that significantly impacts the development of students' cognitive abilities. One of the essential mathematical concepts is understanding spatial shapes, such as cubes and blocks, which involves an understanding of volume.

Tiyani (2013) describes a spatial structure as a building with a specific area separating the interior and exterior, plus the space inside. This description implies that a spatial structure has a perimeter that includes the interior and exterior. On the other hand, Diwarta in Mu'adz (2016) describes "spatial structure" as "a mathematical structure that has content or volume ."In this case, geometric shapes have volume and are three-dimensional objects. Some common spatial shapes in everyday life are balls, cartons, milk cans, etc. Arina et al. (2020) define a spatial shape as a three-dimensional shape with a volume bounded by sides that delimit the interior and exterior.

There are several types of spatial figures; Priatna (2019) states that spatial figures are organized into two categories: flat-sided structures and curved-sided structures. The flat-sided structures mainly consist of beams, cubes, prisms, and pyramids. In contrast, curved-sided structures are tubes, cones, and spheres. The volume of a spatial construct is a measure that describes the amount of space occupied by the object. According to Priatna (2019), at the elementary level, the first geometry volume concept to be studied is the volume of a beam. This is because conveying the initial idea of volume is easy and is helped by the similarity of students in encountering block-shaped objects around them. This opinion states that the most effective way to teach the volume of space is to start with the volume of blocks. This is done to create an initial picture of the total volume of space.

Building volume is a relevant topic for research, especially at the elementary level, because the formation of basic mathematical knowledge starts early. Based on the results of interviews with fifth-grade teachers, many students still have difficulty working on problems about the volume of cubes and beams. The scores obtained by students in this material have not reached the KKTP. Students' enthusiasm for participating in math learning also decreased compared to other subjects.

In this context, this research aims to analyze the basic abilities of grade V elementary school students in working on problems about the volume of built space, especially cubes and beams. In addition, it is also essential to know the difficulties students face in solving volume problems of cubes and beams. This simple research can provide valuable input for teachers at the elementary level to improve teaching methods and provide a more practical approach to learning mathematics, especially on the volume of spaces. Therefore, this simple research is expected to positively impact the development of mathematics education at the primary level.

One of the studies discussing the Analysis of students' ability to work on volume problems in space is research conducted by Indasari, M., & Ratna, M. (2019), titled Analysis of Students' Learning Obstacles in Solving Geometry Problems of Cube and Beam volume material geometry problems. The difference between Indasari and Ratna's research and this simple research is that Indasari and Ratna discuss children's skills in solving HOTS-based problems, with the research subjects being grade VI elementary school students. This simple research analyzes the essential ability of students to solve volume problems of cube and beam spaces, with the research subject being grade V elementary school students.

The novelty of this research lies in identifying the mistakes often made by fifth-grade students when working on volume problems. These errors are grouped into several categories, such as errors in reading, understanding, processing data, and writing answers. This allows teachers to target more specific interventions based on students' errors.

RESEARCH METHOD

This simple research uses a qualitative description method. According to Ramdhan (2021), qualitative description is research using methods that describe the results of research, and the aim is to provide a description, explanation, and validation of the phenomenon under study. In this study, to find out how the ability of grade V elementary school students to work on test questions about the volume of cube and beam building materials was carried out using written test techniques to grade V elementary school students at one of the elementary schools in Magetan Regency. The number of subjects in this simple research is 5, consisting of 2 female and 3 male students. This research uses the test method to obtain data. The test method uses a test tool in the form of questions or math test questions with valuable Cube and beam space material. The ability of students to work on test questions is determined by comparing the average value of the written test results of all fifth-grade elementary school students. The problems faced by students in doing the test were identified by analyzing the items and the test results in documents and interviews with fifth-grade elementary school students.

The steps in this simple qualitative description research are preceded by making a test tool as a research instrument. The research instrument in this study is in the form of test questions on the volume of cubes and beams with a total of 10 questions. The next step is to validate the research instrument. This research instrument was validated by expert validators, namely the Head of the UNESA Postgraduate Program and the fifth-grade teacher. In validating this research instrument, revisions, suggestions, and input from expert validators are obtained.

After the research instrument is validated, the step is to test the instrument that has been revised and corrected as a result of validation from expert validators to the research subject. The subjects of this study were fifth-grade elementary school students in the Magetan Regency area. This instrument test was carried out on March 21, 2024, and the instrument test processing time was 60 minutes.

RESULTS AND DISCUSSION

Results

The instrument test was carried out on Saturday, March 21, 2024, to grade V students as research subjects consisting of 2 female students and five male students at one of the State Elementary Schools in Magetan Regency. Before carrying out the instrument test, the researcher first explained the confidentiality of the identity of the fifth-grade students who were the subjects in this simple research. In addition, the researcher explained the purpose of this instrumented test: to analyze the essential ability of grade V elementary school students to work on volume problems, especially cubes and beams. In addition, it

is also to find out the difficulties students face in solving volume problems of cubes and beams. After testing the instrument on 5 grade V elementary school students and then analyzed by the researcher, the results of the instrument test obtained student score data in Table 1 below.

Table 1. Instrument Test Results

NO	ID	Value	Overall Average
1.	A	40	
2.	B	20	
3.	C	30	30
4.	D	30	
5.	E	30	

Source: Secondary data processed, 2024

From the data in Table 1 above, we know that none of the students who were used as research subjects received a score of 100 or all of them were correct. The lowest score obtained by the research subject is 20, while the highest score is 40. There is one learner who gets a score of 20, and there are three learners who get a score of 30. The overall average value of students who work on the instrument test in this study gets an average score of 30. From these average results, not all fifth-grade students have been able to work on questions about the volume of Cube and beam-building materials.

The results of the Analysis of students' answers in working on mathematics instrument test questions with the material of the volume of cubes and beams can be seen in Table 2 below.

Table 2. Analysis of Answer Items

NO	TEST NO.	LEARNER ID					%	%
		A	B	C	D	E	CORRECT	FALSE
1.	1	1	1	1	1	1	100	0
2.	2	1	1	0	1	1	80	20
3.	3	1	0	1	1	0	60	40
4.	4	1	0	1	0	1	60	40
5.	5	0	0	0	0	0	0	100
6.	6	0	0	0	0	0	0	100
7.	7	0	0	0	0	0	0	100
8.	8	0	0	0	0	0	0	100
9.	9	0	0	0	0	0	0	100
10.	10	0	0	0	0	0	0	100
	VALUE	40	20	30	30	30		

Source: Secondary data processed, 2024

In problem number 1, a picture of a cube is presented with a rib length of 12 cm. Problem number 1 is to calculate the figure's volume. Based on the item analysis results in Table 2 above for question number 1, all students answered correctly, with the percentage of correct answer accuracy being 100%.

Problem number 2 is presented with a block picture, and the length, width, and height are 10 cm, 6 cm, and 7 cm, respectively. The problem is calculating the volume of the beam drawing. From the Analysis of Table 2 above, the accuracy percentage of students answering correctly is 80%. While the percentage of learners answering incorrectly is 20% because there is one wrong learner answer. The error in answering this is because the learners are less careful in multiplying the numbers, as shown below.

Discussion

Question number 2 is presented with a beam picture, and the length, width, and height are 10 cm, 6 cm, and 7 cm, respectively. The problem is calculating the volume of the beam drawing. From the analysis of Table 2 above, the accuracy percentage of students answering correctly is 80%. While the percentage of learners answering incorrectly is 20% because there is one wrong learner answer. The error in answering this is because the learners are less careful in multiplying the numbers, as shown below.

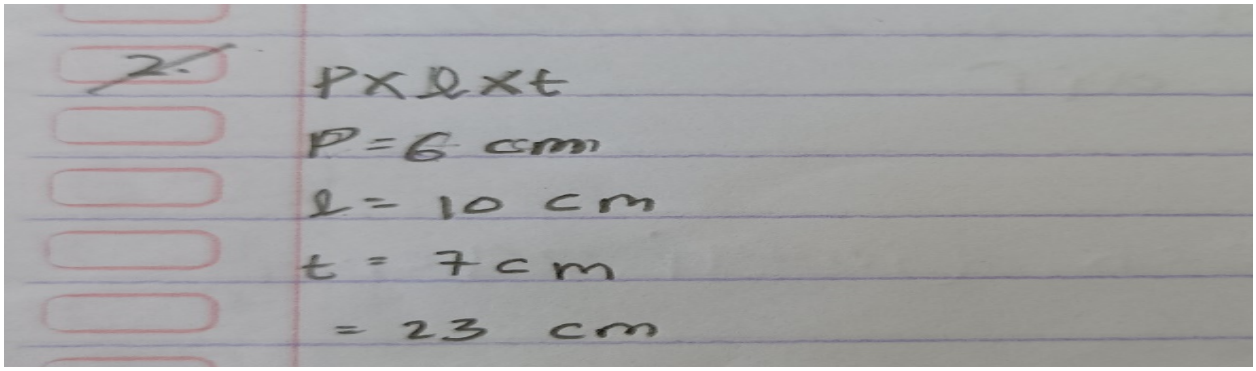

Figure 1. Question Number 2

From the picture above, students have actually been able to write the formula for the volume of the beam and identify the length, width, and height of the image. But when multiplying, the answer is not correct. When examined, the answers of these students are the result of addition, not multiplication.

Problem number 3 presented a story problem related to the cube space. From the problem, it is known that the length of all the ribs of the Cube is 420 cm. The problem is calculating the volume of a cube whose length of all the ribs is known. From the Analysis of Table 2 above, the accuracy percentage of students answering correctly is 60%, with the number of students answering correctly being three. The percentage of students answering incorrectly is 40% because there are two wrong answers from students.

Problem number 4, the percentage of correct answers of learners is 60%. Three learners answered correctly. Meanwhile, the percentage of wrong answers is 40% because two learners answered wrong.

For problems 5 to 10, the percentage of correct answers is 0%. This is because none of the learners answered correctly. The percentage of students' errors in answering reached 100%.

Based on Table 1 and Table 2 above, it is found that the essential ability of grade V elementary school students in working on problems about the volume of space, especially cubes and beams, the results show that the average score of students reaches 30. This shows that students have an essential ability that needs to be improved in understanding the concept of the volume of space cubes and beams. Thus, the results of this study can

be used as a consideration in curriculum development and as a more effective learning strategy to improve student's ability in mathematics, especially the volume of cubes and beams.

From the results of the item analysis in Table 2 above, researchers find 6 questions interesting to discuss. These questions are interesting to discuss because the percentage of accuracy in answering students is 0%. The questions are 5, 6, 7, 8, 9, and 10. Researchers analyzed the answers and interviewed research subjects. The research subject on this interesting question is low ability (SKR).

Problem number 5 is as follows: "The length of a cardboard box is equal to twice its width and three times its height. If the length of the cardboard is 90 cm, how many liters is the volume?". Here is the answer from SKR.

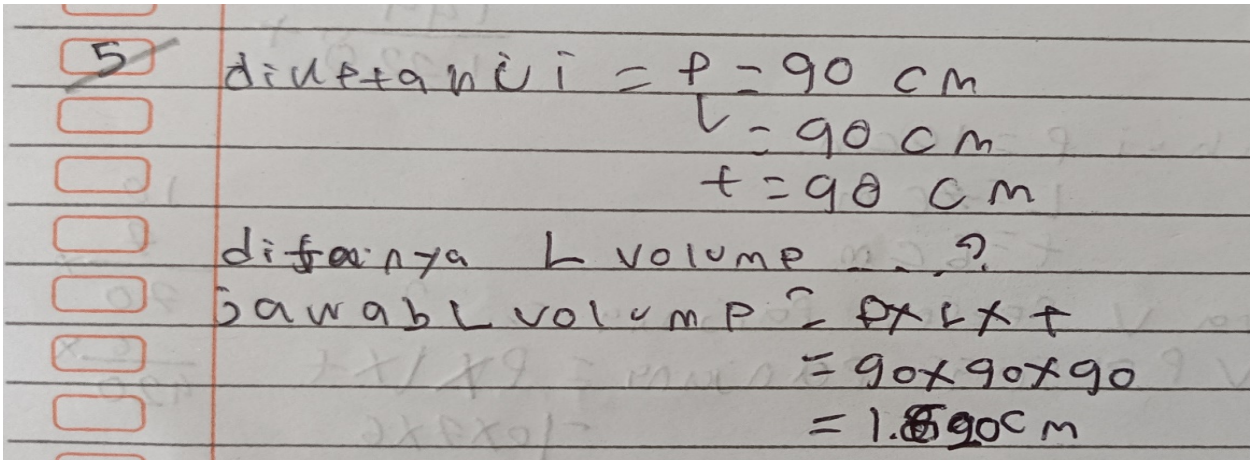

Figure 2. Question Number 5

Understanding the Problem

Based on the results of SKR's work above, SKR understands what is asked in question 5. In addition, SKR is also able to write what is known from question number 5:

P : For this question number 5, what is it asking Ananda?
SKR : Problem number five is looking for the total volume in liters, sir.

The work and interview excerpts show that SKR understood the meaning of problem number 5 but had difficulty answering the question.

Problem-Solving

Based on the results of SKR's work above, it can be seen that SKR has been able to write the formula for the volume of cube spaces, but it still needs to be corrected when entering numbers based on information from the problem. The following is an excerpt from the interview with SKR:

P : Did you need any help solving the problem?
SKR : yes there is, sir.
P : Where was the difficulty?
SKR : Determining the width and height in the question is not there, and changing it to liters, sir.
P : How did you solve the problem?
SKR : Because there is no measurement for width and height, I assume it is the same as your length, so I wrote length = 90 cm, width = 90 cm, and height = 90 cm and

then put it into your formula.

From the interview above, SKR considers that the width and height are the same as the length because it is not known in question number 5. cm^3 into liter so that the student's answers are in the form *cm*3. Determine the final answer to the problem

P : So, what is the final result for question number 5?

SKR : My answer is 1.620 cm^3

The results of the interview excerpts have allowed SKR to determine the final answer to question number 5, but the answer still needs to be corrected. The error is because SKR needed to understand the problem in detail.

Problem number 6 is as follows: "A block measuring 18 cm in length has the same volume as a cube whose ribs are 12 cm long. If the height of the beam is 6 cm, then what is the width of the beam?". Here is the answer from SKR.

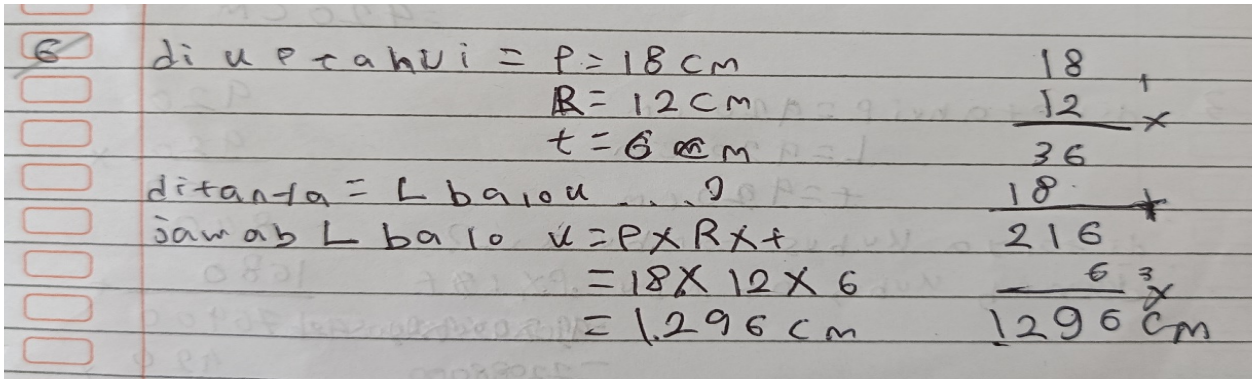

Figure 3. Question Number 6

Understanding the Problem

Based on the results of SKR's work above, it can be seen that SKR has been able to understand what is asked in question number 6:

P : For question number 6, what is the question?

SKR : Problem number six is finding the width of your beam.

From the work results and the interview excerpts, it can be seen that SKR understood what was asked in problem number 6 but needed to correct the formula.

Problem-Solving

Based on the results of SKR's work above, it can be seen that SKR has been able to write the formula for the volume of the beam but is still incorrect in answering question number 6; it can be seen that to find the width of the beam SKR multiplies the length of the beam, cube ribs, and beam height. The volume of the cube should be sought first, and from the volume of the cube, the width of the beam should be sought using the volume of the cube divided by the product of the length and height of the beam. The following is an excerpt from the interview with SKR:

P : Did you need any help solving the problem?

SKR : Any difficulties, sir

P : Where was the difficulty?

SKR : Multiplying the numbers in the problem

P : How did you solve the problem?

SKR : I multiply all the fathers

From the interview excerpt, it can be seen that SKR had difficulty multiplying the numbers in question 6. Despite this difficulty, the multiplication results of SKR's answers were correct.

Determine the Final Answer to the Problem

P : So, what is the final result for question number 6 ?

SKR : The result is 1,296 cm father

From the interview excerpts, SKR has been able to determine the final answer to question number 6, but the answer is still wrong. The error is because SKR needed to understand the problem in detail.

Problem number 7 is as follows: "Bagus has a cube-shaped bathtub with an inner rib size of 80 cm. If the tub has been filled with 120 liters of water, determine the water needed to fill Bagus's tub!". Here is the answer from SKR.

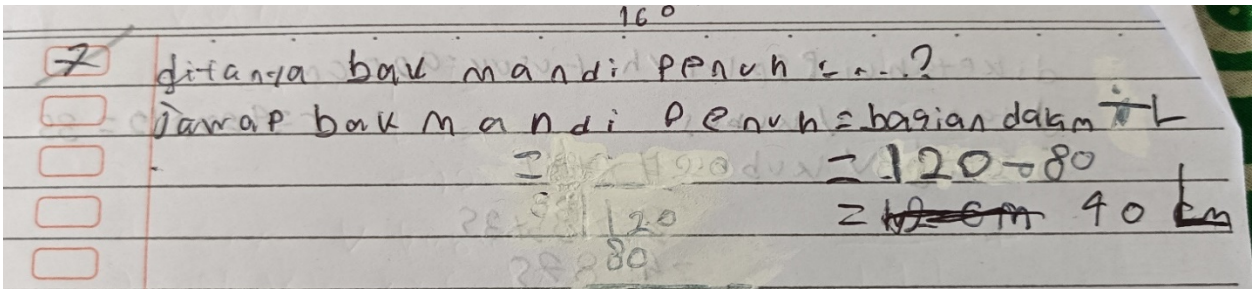

Figure 4. Question Number 7

Understanding the Problem

Based on the results of SKR's work above, it can be seen that SKR can write what is asked from question number 7:

P : What is the question for question number 7?

SKR : Question number 7, how much should Bagus's bathtub be filled to fill it up?

The work and interview excerpts show that SKR understood the meaning of question 7 but needed to correct it.

Problem-Solving

P : Did you need any help solving the problem?

SKR : Yes there is, sir

P : Where was the difficulty?

SKR : Not sure how to add more to your bathtub

P : How did you solve the problem?

SKR : I subtracted 120 - 80 to get 40 liters, sir.

Based on SKR's work and the interview snippet above, it can be seen that SKR subtracted the tub's contents from the length of Bagus's bathtub's ribs. The correct answer should be to calculate the cube-shaped volume of Bagus's bathtub first. Then, find the water needed to fill the bathtub fully by subtracting the total volume of the tub from the volume of the water content in the problem.

Determining the final answer to the problem

P : So, what is the final result for question number five?

SKR : My answer is 40 liters, sir

SKR has determined the final answer to question number 7 from the interview excerpts, but the answer still needs to be corrected. The error is because SKR needs to understand the meaning of the problem in detail.

Problem number 8 is as follows: "A pool that is 110 dm long, 45 dm wide, and 15 dm high is filled with water. $\frac{3}{5}$ is filled with water. What is the volume of water in the pool?". Here is the answer from SKR.

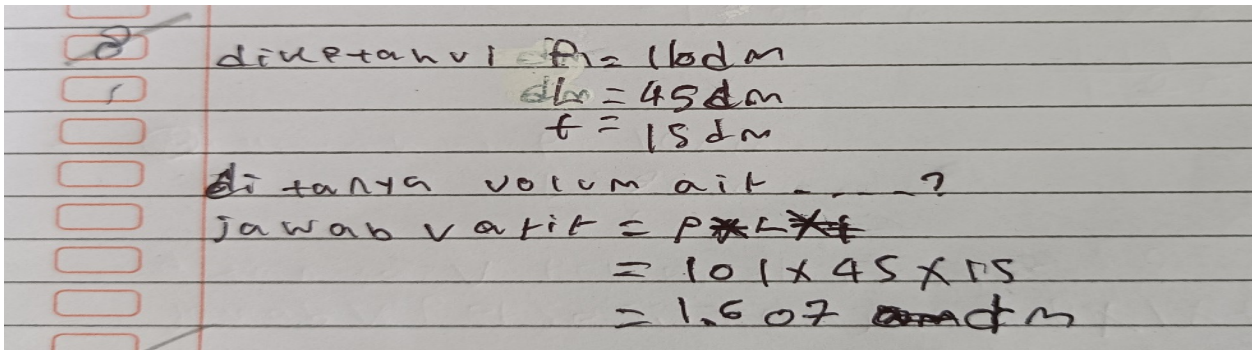

Figure 5. Question Number 8

Understanding the Problem

Based on the results of SKR's work above, SKR understands what is asked in question 8. In addition, SKR is also able to write what is known from question number 8:

P : For question number 8, what is the question?

SKR : Problem 8 is looking for the pool's total water volume.

The work results and interview excerpts show that SKR understood what was asked in question 8. However, he had difficulty answering the question.

Problem-Solving

Based on the results of SKR's work above, it can be seen that SKR has been able to write the formula for the volume of a beam but is still not careful in understanding problem number 8:

P : Did you need any help solving the problem?

SKR : There is

P : Where was the difficulty?

SKR : The meaning of 3/5 I do not understand sir

P : How did you solve the problem?

SKR : I wrote down the known from the problem, namely p = 110 dm, l = 45 dm, and t = 15 dm, then I wrote down the formula then I put the numbers into the father's formula

Based on SKR's work and the interview snippet above, it can be seen that SKR calculated the entire volume of the pool water. The correct answer should be to calculate $\frac{3}{5}$, the pool's water volume.

Determining the Final Answer to the Problem

P : So, what is the final result for question number 8 ?

SKR : 1.607 dm

SKR has determined the final answer to question number 8 from the interview excerpts, but the answer still needs to be corrected. The error is because SKR did not understand the meaning of the numbers in question number 8, precisely $\frac{3}{5}$.

Problem number 9 is as follows: "A block-shaped cardboard box is 50 cm long, 40 cm wide, and 24 cm high. A block-shaped toy measuring 5 cm long, 4 cm wide, and 8 cm high will be put into the box. How many toys can be loaded?". Here is the answer from SKR

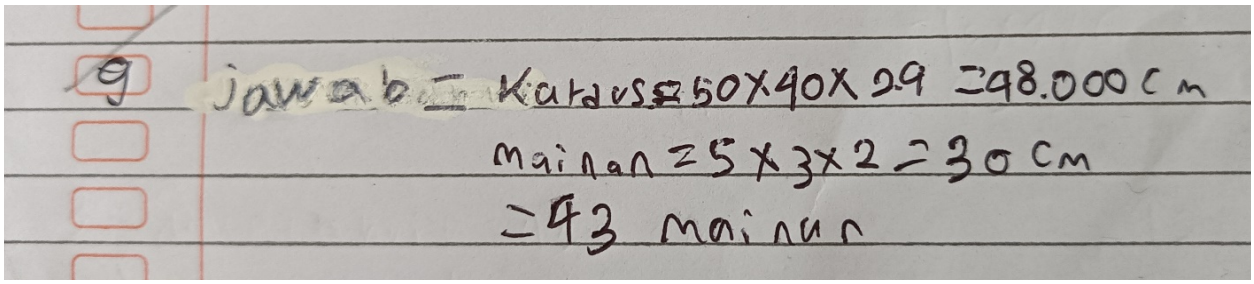

Figure 6. Question Number 9

Understanding the Problem

Based on the results of SKR's work above, it can be seen that SKR can understand what is asked from question number 9:

P : For problem number nine, what is the question?

SKR : Problem number 9 is looking for the number of toys that can fit in a cardboard box.

The work results and interview excerpts show that SKR understood what was asked in question 9. However, he had difficulty answering the question.

Problem-Solving

Based on the results of SKR's work above, it can be seen that SKR still needs to write what is known in problem number 9. SKR has been able to write the formula for the volume of cardboard and the volume of toys, but it still needs to be corrected when entering the width and height of the toy. The following is an excerpt from the interview with SKR:

P : Did you need any help solving the problem?

SKR : There is

P : Where was the difficulty?

SKR : The way to answer the question must be clarified, sir. What makes it confusing is the number of toys that can be put in.

P : How did you solve the problem?

SKR : I first looked for the volume of cardboard, sir, which is 50 x 40 x 24 = 48,000 cm. Then, I looked for the volume of the toy, which was 5 x 3 x 3 = 30 cm. Then I randomly answered, sir

Based on SKR's work and the interview excerpts above, it can be seen that SKR calculated the volume of cardboard and the volume of toys. However, she had difficulty determining the number of toys that could fit into the cardboard box, so she answered in a perfunctory manner.

Determine the Final Answer to the Problem

P : So, what is the final result for question number 9?

SKR : 43 toys

The results of the interview excerpt allowed SKR to determine the final answer to question number 9, but the answer still needed to be corrected because SKR answered carelessly.

Problem number 10 is as follows: "Nina has two crates of different shapes. The first crate is a cube with a side length of 4 cm, while the second crate is a block with a length of 5 cm, a width of 3 cm, and a height of 2 cm. Nina wants to store several small balls in the two crates. Each ball has a radius of 1 cm. Which crate can hold more balls? What can be concluded about the shape of the crates and their capacity to hold objects such as balls?". Here is the answer from SKR.

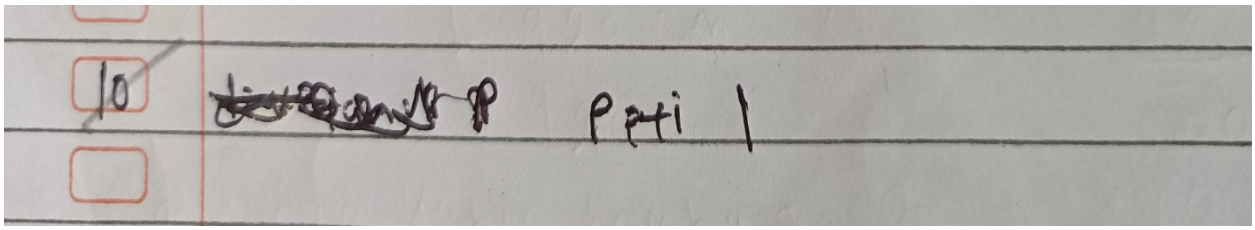

Figure 7. Question Number 10

Understanding the Problem

Based on the results of SKR's work above, it can be seen that SKR can answer question number 10:

P : For question number ten, what is the question?

SKR : There are two problems. The first is which crate can hold more balls. The second question is what can be concluded about the shape of the crate and its capacity to hold objects such as balls.

The work results and interview excerpts show that SKR understands what is asked in question 10 but needs help working on the problem.

Problem-Solving

P : Did you need any help solving the problem?

SKR : No, because I am just a sir.

P : How did you solve the problem?

SKR : I did it by using the cap cip cup method.

Based on the results of SKR's work and the interview excerpts above, it can be seen that SKR had difficulty working on problem number 10, so SKR answered nasally.

Determine the Final Answer to the Problem

P : So, what is the final result for question number 10?

SKR : Crate 1, which holds more balls.

SKR has determined the final answer to question number 10 from the interview excerpts, but the answer is wrong, and it has yet to answer the whole question number 10.

Based on the results of interviews with SKR, it was found that students have difficulty solving problems in the form of story problems. They need help understanding the volume of space in a more complex context and require a deeper understanding of the concept. This is what Ariani, Y., & Kenedi, A. K. (2018) stated: Students often find it difficult to solve problems in the form of story problems. Learners need help understanding the definitions or terms contained in the story problem. As a result, students need clarification on what is known and what is asked of the given problem.

The difficulties experienced by students in working on story problems about the volume of space are the following: 1) Learners tend to need help understanding how the concept of volume of a space can be applied in more complex story situations in story problems. 2) Learners are in a hurry and need to be more careful in seeing the known units in the problem. 3) Learners need to be more careful in understanding the problem. 4) Learners have difficulty in finding what is known from the question.

CONCLUSION

Fundamental Finding: Based on the results of simple research and discussion, it can be concluded that all fifth-grade students who are used as research subjects have not been able to work on questions about the volume of cube and beam building materials. This is because the average value of students who work on the instrument test in this study gets an average value of 30. There are even six questions, and the percentage of students' errors in answering the questions reaches 100%. Learners have difficulty working on problems in the form of story problems. This difficulty causes students to make mistakes in their answers. The causes of students making mistakes include 1) students being in a hurry and needing to be more careful in seeing the known units in the problem. 2) Learners are less careful in understanding the problem. (3) Learners need help finding what is known from the problem. **Implications:** Based on the results of this simple research, it is hoped that teachers ensure that students understand basic concepts related to volume, including how to calculate them for cubes and beams. Re-explain basic concepts in depth before introducing more complex story problems. Use visualizations such as Cube and block models or pictures that illustrate the situation in the story. This can help students understand the context of the problem and visualize the solution. Give examples of real-life cases where cube or block volumes are used daily. This can help students see the relevance of the material to the real world so they are more motivated to understand it. Provide guiding questions that help students break down the story problem into steps that are easier to understand. By decomposing the problem, students can more easily identify the information given and the steps needed to solve the problem. Hold group discussions where students can help each other and share their understanding. Collaboration between students can help them see the problem from different perspectives and gain new insights. Provide diverse exercises and gradually increase the level of difficulty. With enough practice, students can strengthen their understanding of the volume concept and improve their skills in solving story problems. If needed, provide additional support such as extra tutorials, online learning resources, or extra time outside of class hours to help students with difficulty. Provide constructive feedback to students after they have completed the story problems. Praise their efforts, point out where they made mistakes, and give clear directions on correcting them.

Limitation: This simple research is limited to obtaining data from interviews with students and test results on the volume of cubes and beams. Furthermore, the data obtained is used to analyze the essential ability of students to work on problems about the volume of cubes and beams and analyze the difficulties students face in solving volume problems of cubes and beams. **Future Research:** The results of this simple research can be used as a reference and basis for further researchers to develop models, approaches, and learning media that can improve students' skills in the volume of cubes and beams.

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***Fajar Witdanarko (Corresponding Author)**
Master Study Program, Faculty of Education
Universitas Negeri Surabaya,
Jl. Lidah Wetan, Lidah Wetan, Kec. Lakarsantri, Surabaya, Jawa Timur 60213
Email: fajar.22041@mhs.unesa.ac.id

Wiryanto
Master Study Program, Faculty of Education
Universitas Negeri Surabaya,
Jl. Lidah Wetan, Lidah Wetan, Kec. Lakarsantri, Surabaya, Jawa Timur 60213
Email: wiryanto@unesa.ac.id

Neni Mariana
Master Study Program, Faculty of Education
Universitas Negeri Surabaya,
Jl. Lidah Wetan, Lidah Wetan, Kec. Lakarsantri, Surabaya, Jawa Timur 60213
Email: nenimariana@unesa.ac.id