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Research Article

Analysis of students' mathematical communication ability in solving STEM-based mathematics problems by gender of class VII students of SMPN 02 Ambulu, Jember district

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ABSTRACT

This research is motivated by public perceptions about the ability to solve math problems in male and female students. One of the abilities assessed for differences is mathematical communication ability. This study aims to describe mathematical communication skills in solving STEM-based math problems in class VII students of SMPN 02 Ambulu. The subjects chosen were 6 students consisting of male and female students with high, medium, and low mathematical communication abilities. This research is a descriptive study with data collection techniques: Observation, Tests, Interviews, Documentation. Data analysis refers to Miles and Huberman, namely, Data Condensation, Data Presentation and Conclusion Drawing. The research results obtained for male and female students with high mathematical communication skills showed no difference, LT and PT students were able to fulfill the same indicators of mathematical communication ability, as well as male and female students who had low mathematical communication abilities, their mathematical communication skills are the same. However, students with moderate communication skills have differences in indicators.

Keywords: Mathematical Communication Skills; Problem Solving; STEM; Gender

1. INTRODUCTION

As a science, mathematics has an important role in the field of education and technological progress (Apriyono, 2018; Ardianti et al., 2019; Fadiarahma et al., 2022; Wahyu, 2023; Wahyuni & Alfiana, 2022). In education, the purpose of mathematics is to assist in calculations and measurements in everyday life by using the necessary mathematical formulas. Mathematics can also be used as a science that can prepare humans to be able to face technological developments in the future (Rahmah, 2018; E. Utomo et al., 2020; E. S. Utomo et al., 2020). The development of technology is also marked by the development of mathematics in various fields, such as the material in mathematics, namely comparison, geometry, algebra and others (Apriyono, 2018). Mathematics is a subject that has an important role to teach in schools which is associated with patterns, numbers, and symbols. Both in elementary school, middle school to college (Wahyuni & Alfiana, 2022). As a continuous subject, mathematics is utilized in subjects such as physics, science, design and economics. [1]Mathematics learning is intended to emphasize reasoning and teaching communication skills in its application so that students can understand and apply what they have learned about problem solving in real life, so that they are able to communicate effectively (MZ, 2013; Sumarmo U et al., 2018). Thus, learning mathematics will be useful if used to solve problems.

In accordance with the overall goals of science learning as formulated by the Nation Council of Teacher of Mathematics (NCTM), especially learning to communicate (mathematical communication), and according to content standards in basic and secondary education units in mathematics (Regulation of the Minister of National Education according to the Law Number 22 of 2006 concerning content standards), states that one of the objectives of learning mathematics is for students to be able to explain situations or problems using symbols, tables, diagrams, or other media. Mathematical communication is one way for ideas to be shared, insights shared, and can help construct meaning and make it disseminate to the public.

By involving students in analyzing strategies for assessing other people's thinking to solve mathematical problems using the language of mathematics in conveying mathematical ideas, that is where the role of mathematical communication is involved.

The process of learning mathematics, especially when an educator and students interact to exchange thoughts, ideas, information, and clarification of understanding that they apply in learning is an example of mathematical communication. This knowledge demonstrates that oral and written communication is necessary to communicate effectively in mathematics. Written mathematical communication takes the form of statements of mathematical thinking using pictures, diagrams, tables, conditions, and the students' own language. While discussion and explanation are forms of oral mathematical communication (Arifah, 2021). One of the lessons that encourage schools related to the growth of science and technology to develop quality in a sustainable manner is STEM (Nurulwati et al., 2020). Key main STEM is a innovation, which is where the approach STEM can teach students how to think critically, creatively, collaboratively, and communicate effectively in the 21st century. In accordance with the use of STEM in learning, it will make it easier for students to provide an understanding of concepts, methods, and theories from Science, Technology, Engineering, and Mathematics that are used in everyday life (Khamhaengpol et al., 2021).

Besides being used as an approach to the learning process, STEM is also used as an approach to creating questions which are then integrated by STEM itself. Pradana and Yustitia's research found that the learning media they used could be integrated into the STEM *Context approach* (Khamhaengpol et al., 2021), helping students not only solve math problems but also use other knowledge in STEM. So, it is undeniable that mathematics is very important to teach and understand. However, there are still irregularities in learning mathematics for both male and female students, as evidenced by the notion that mathematics is a scary and tiring subject. In the Qur'an gives a hopeful view of the equal position and existence of human beings before God. The measure of the majesty of seeing God is glory and quality regardless of nationality and gender which is interpreted in QS Al - Hujurat Verse 13

وَقَبَآىِٕلَ لِتَعَارَفُوْا ۚ اِنَّ اَكْرَمَكُمْ عِنْدَ اللّٰهِ اَتْقٰىكُمْ ۗاِنَّ اللّٰهَ عَلِيْمٌ خَبِيْرٌ

"*O people! Indeed, We have created you from a male and a female, then We made you nations and tribes so that you may know one another. Verily the most noble of you in the sight of Allah is the one who is the most pious. Indeed, Allah is All-Knowing, Researching*."

While the indicators that will be applied in this study refer to the elaboration and changes of the indicators proposed by NCTM by taking appropriate indicators from each component of mathematical communication which are described in **Table 1**.

Table 1. Indicator of Mathematical Communication Ability

No	Indicator of Mathematical Communication Ability	Indicator description
	The ability to express mathematical ideas through speech, writing, and demonstrating them and depicting them visually.	Able to express mathematical ideas with existing information in writing or orally
	The ability to understand, interpret, and evaluate mathematical ideas both orally, in writing, and in other visual forms.	Able to understand and interpret ideas to convey strategies and steps to solve problems systematically in writing or orally.
		Able to evaluate ideas from conclusions to solving problems in writing or orally.
	Ability to use terms, mathematical notations and structures to present ideas and describe relationships with other situational models	Able to use terms and symbols in solving written and verbal problem solving.

This study will use 6 subjects consisting of 3 male students and female students who have high, medium, and low levels of mathematical communication skills. To determine mathematical communication skills, students will be given STEM-based math problems. Based on the description that has been explained previously, the researcher feels it is very important to research mathematical communication skills that students need to understand and it is very important for students to have in order to help solve STEM-based math problems which can help in describing problems and solving problems in the real world both for male students - male and female students with the title "Analysis of Mathematical Communication Ability in Solving STEM-Based Mathematics Problems Based on Gender in Class VII Students of SMPN 02 Ambulu, Jember Regency."

2. RESEARCH METHOD

This research uses a type of qualitative research with a descriptive approach. The subjects of this study were 6 students in class VII SMPN 02 Ambulu, Jember Regency, with details of male and female students who had high, medium, and low mathematical communication skills. The selection of the subject was chosen based on consideration of the ability of students to be able to provide and convey ideas orally so that they are easily invited to interviews so that maximum data is obtained, then also based on the willingness of students to become research subjects, able to communicate well, and have a neutral attitude. The first step is to give a math problem solving test to all class VII B students of SMPN 02 Ambulu, then out of 36 students with details 19 male students and 17 female students who have mathematical communication skills as follows.

Table 2. Selected Research Subjects

Gender	Level of Mathematical Communication Ability			Total
	Tall	Currently	Low	
Man	1	9	9	19
Woman	3	8	6	17
Amount				36

The data on students who were selected as research subjects are presented in table 3, namely:

Table 3. Selected Research Subjects

No.	Student's name	Gender (L/F)	Level Ability	Code
1	Dzaikra Arkana Putra	L	Tall	LT
2	Fian Nur Abdulrahman	L	Currently	LS
3	Muhammad Wildan Dafa	L	Low	LR
4	Naila Syifa Griselda	P	Tall	PT
5	Frida Anjani Sifana	P	Currently	PS
6	Sofi Lailatul Asfia	P	Low	Homework

3. RESULTS AND DISCUSSION

3.1 Results

1. **Male students with a high level of mathematical communication ability (LT).**
2. **Following are the results of the mathematical communication ability test on male subjects with high levels of mathematical communication ability which are presented in Figure 1.**

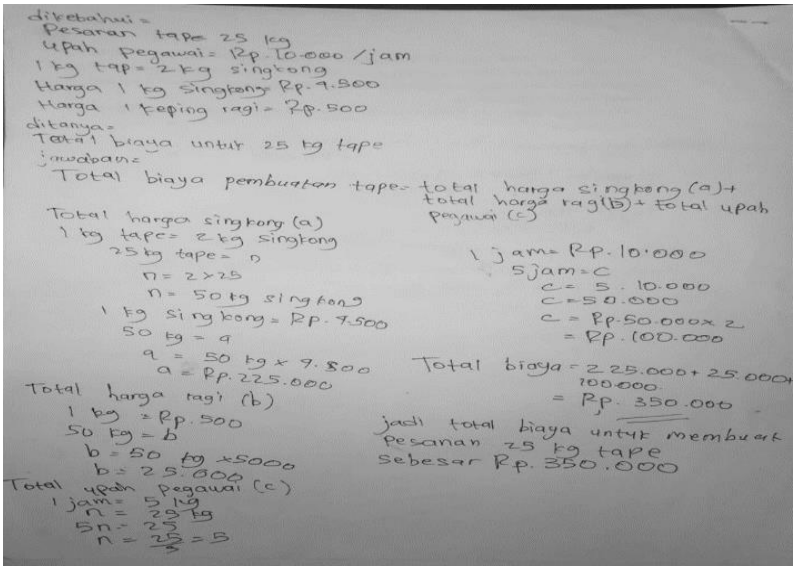

Figure 1. LT Answer Sheet

Based on the picture above, it can be seen that LT students have high mathematical communication skills in solving problems. LT students on the indicator of expressing mathematical ideas by writing information, order 25 kg of tape, the amount of employee wages is Rp. 10,000/ hour, then the statement that 1 kg of tape requires 2 kg of cassava, cassava costs Rp. 4,500/kg, and the price of yeast is Rp. 500/piece. On the completion sheet the LT students also wrote down what was asked in the problem or what problem would be solved, namely by writing down what was asked in the problem, namely the total cost for an order of 25 kg of tape. So that LT students on the indicators express mathematical ideas in the problem by writing down the information that is written fulfilling the criteria of being able to mention and write down something that is known and asked in the given problem correctly and completely.

LT students on indicators understand and interpret ideas to convey strategies and steps to solve problems systematically, write down strategies to calculate the total cost of making tape by adding up the total price of cassava, the total price of yeast, and the total employee wages. Then the LT students calculated each need to complete the cassava order. LT students calculate the total price by first calculating the cassava needed from the information obtained, namely 1 kg of tape requires 2 kg of cassava so that 25 kg of tape requires n kg of cassava. n here is compared to the amount of cassava needed in 25 kg of tape so that with n = $2 \times 25 = 50$ kg of cassava. then if 1 kg of cassava costs 4,500 then the total cost for 50 kg of cassava is $50\ kg \times 4.500 = Rp.225.000$. Furthermore, the total price of yeast, if 1 kg costs 500 then completing 50 kg of cassava costs $50\ kg \times 500 = 25.000$. Then to calculate employee wages with the information obtained if in 1 hour you can complete 5 kg of tape, then 25 kg of tape can be completed by counting the $25 \div 5 = 5$hours, then if the wages of employees are 10,000 per hour then if 5 hours are needed $5 \times 10.000 = 50.000$and there are 2 employees then $50.000 \times 2 = 100.000$. So, the total cost is $225.000 + 25.000 + 100.000 = Rp.350.000$. So that LT students on indicators understand and interpret ideas to convey strategies and steps for solving problems systematically in writing fulfilling the criteria of being able to complete by writing down the strategies and steps to solving the problems given correctly and completely.

LT students on indicators evaluate ideas from solving problem solving conclusions, LT students write down the results of calculating the total price of cassava, the total price of yeast and the total wages for 2 employees which are then added up to produce a total cost to complete a tape order of 25 kg, namely Rp. 350,000 and at the end also provides a conclusion from solving the given problem. So that LT students on indicators evaluating ideas from the conclusion of solving problems in writing can meet the criteria, namely writing conclusions at the end of solving problems completely and correctly.

LT students also use terms and symbols in solving problem solving. On the answer sheet LT students use mathematical notation such as the use of letters to find the variable to be searched for such as the use of letter a for the total price of cassava, letter b for the total price of yeast and letter c as the total employee wages. And the use of mathematical symbols is appropriate and correct. So that the indicators use terms and symbols in solving written problem solving, LT students fulfill the criteria, namely students write down the use of mathematical symbols in solving problems correctly and completely.

3. Male students with a moderate level of mathematical communication ability (LS).

The following are the results of the mathematical communication ability test on male subjects with moderate levels of mathematical communication ability which are presented in **Figure 2**.

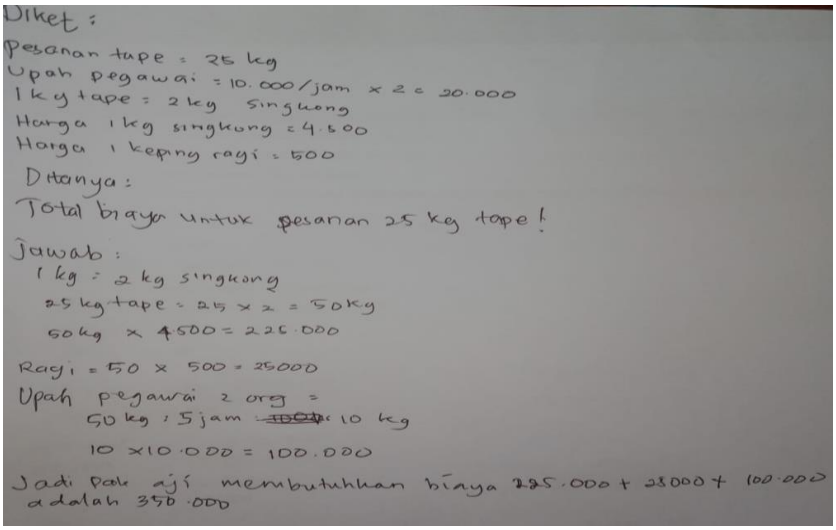

Figure 2. LS Answer Sheet

Based on the **Figure 2**, it can be seen that LS students who have mathematical communication skills are solving problems. LS students on indicators express mathematical ideas with information, provide information on each information such as writing down an order for 25 kg of tape, the amount of employee wages is Rp. 10,000/hour then multiplied by 2 employees so that it becomes 20,000/hour for 2 employees, the information is that 1 kg of tape requires 2 kg of cassava, the price of cassava is Rp. 4,500/kg, and the price of yeast is Rp. 500/piece. On the completion sheet the LS students also wrote down what was asked in the problem or what problem would be solved, namely the total cost for an order of 25 kg of tape. So that the LS students on the indicator express the mathematical ideas that exist in the problem by writing down the information in writing that meets the high criteria, namely LS students can write down something that is known and asked in the given problem correctly and completely.

LS students on indicators understand and interpret ideas to convey strategies and steps to solve problems systematically, LS students write down calculations of the need to complete tape orders by starting to calculate the need for cassava which for a 25 kg tape order requires 50 kg of cassava, then $50\,kg \times 4.500 = 225.000$which is the total cost of buying cassava, to determine the cost of yeast, the LS student calculates the amount of cassava multiplied by the price of yeast per piece. $50\,kg \times 500 = 25.000$.Then to calculate the wages of 2 employees, the LS student calculates $50\,kg \div 5\,jam = 10\,kg,$ then $10\,kg \times 10.000 = 100.000$. So, the total cost is $225.000 + 25.000 + 100.000 = Rp.350.000$. Even though the final results and calculations are correct, there are several calculations that are not explained or given full explanations such as, the calculation on the total cost of yeast that is not explained is 50 for what it is and multiplied by 500 for the price of yeast per chip. In employee calculations, there is also no clear explanation, such as where the 5 hours come from. So that LT students on indicators understand and interpret ideas to convey strategies and steps for solving problems systematically in writing, LS students meet the criteria for writing strategies and solving steps for problems that are given correctly but incompletely.

LS students on indicators are able to evaluate ideas from the conclusions of solving problems, LS students write down the results of calculating the total price of cassava, the total price of yeast and the total wages for 2 employees which are then added up to produce a total cost to complete a tape order of 25 kg, namely Rp. 350,000 and at the end also provides a conclusion from solving the given problem. So that LS students on indicators evaluating ideas from the conclusion of solving problems in writing can meet the criteria for writing conclusions at the end of solving problems correctly but incompletely.

LS students also use terms and symbols in solving problem solving. LS students write down several quantity symbols in their answers, such as the description of kg and other mathematical symbols correctly but do not use mathematical notation for solving. So that the indicators use terms and symbols in solving written problem solving, LS students fulfill the criteria, namely students write down the use of mathematical symbols in solving problems correctly but incompletely.

4. Male students with a low level of mathematical communication ability (LR).

The following are the results of the mathematical communication ability test on male subjects with low levels of mathematical communication ability which are presented in **Figure 3**.

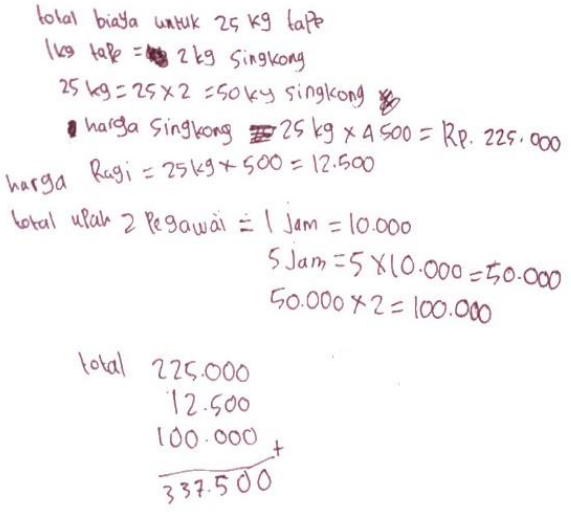

Figure 3. LR Answer Sheet

Based on the **Figure 3**, it can be seen that LR students have low mathematical communication skills in solving problems. LR students on the indicator express mathematical ideas with information, do not write down information so that LR students cannot express mathematical ideas. LR students do not give or write down what is known and also what is asked on the answer sheet. So, it can be concluded that LR students did not provide the listed information. So that LR students on indicators express mathematical ideas that exist in problems by writing existing information in writing fulfilling the criteria of students not writing conclusions at the end of solving a given problem.

LR students on indicators understand and interpret ideas to convey strategies and steps to solve problems in a less systematic way, LR students calculate the total cost of 25 kg of tape giving information that 1 kg of tape is equal to 2 kg of cassava then calculating the amount of cassava needed if 1 kg of tape = 2 kg of cassava, if 25 kg of tape then $25\ kg \times 2 = 50\ kg$cassava, then for the total cost of cassava LR students multiply $25\ kg \times 4.500 = Rp.255.000$here an error occurs where LT students should multiply the amount of cassava needed which is 50 kg but LR students multiply 25 kg and for the multiplication results $25 \times 4.500 = 112.500$ so there was a mistake that many cassava is needed and the total cost to buy cassava. Then for the price of yeast, LR students also made a mistake where cassava should have needed as much as 50 kg but LR students multiplied it $25\ kg \times 500 = 12.500$. and the total for the wages of 2 employees calculates if 1 hour = 10,000 then if $5\ jam = 5 \times 10.000 = 50.000$, from here the LR student does not explain the origin of the 5 hours. Then because there are 2 employees then $50.000 \times 2 = 100.000$. Then a total of 225,000 + 12,500 + 100,000 = 337,500.

Based on the explanation above, LR students on indicators understand and interpret ideas to convey strategies and steps for solving problems systematically in writing fulfilling the criteria of being able to solve by writing down strategies and steps for solving problems given but wrong.

LR students on indicators evaluate ideas from solving problem solving conclusions, LR students do not write down the results of calculations and also do not provide conclusions from solving given problems. So that LR students on indicators evaluating ideas from the conclusion of solving problems in writing can meet the criteria, namely not writing conclusions at the end of solving a given problem.

LR students also use terms and symbols in solving problem solving. Such as the use of the symbol kg and then also the symbols for number operations such as addition and multiplication. So that on the indicators of using terms and symbols in solving written problems, LR students fulfill the criteria, namely students write down the use of mathematical symbols in solving problems correctly but incompletely.

5. Female students with a high level of mathematical communication ability (PT)

Following are the results of the mathematical communication ability test on female subjects with high levels of mathematical communication ability which are presented in **Figure 4**.

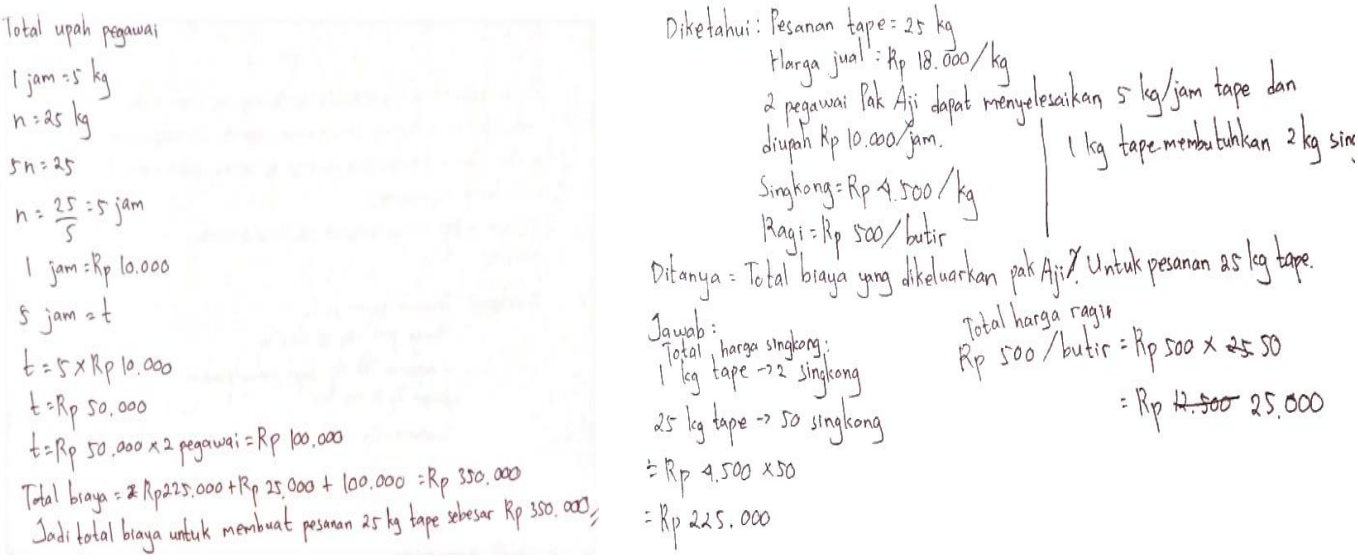

Figure 4. Answer Sheet PT

Based on the **Figure 4**, it can be seen that PT students have high mathematical communication skills in solving problems. PT students on indicators express mathematical ideas with written information, it is known that tape orders are 25 kg, tape selling prices are 18,000/kg, information that there are 2 employees who can complete 5 kg tape/hour with a wage of 10,000 per hour, cassava prices are 4,500/hour kg, yeast 500/item, and information that 1 kg of tape requires 2 kg of cassava. PT students also wrote down what was asked in the question, namely the total costs incurred by Mr. Aji to make an order of 25 kg of tape. So that PT students on indicators express mathematical ideas that exist in problems by writing down information that is written fulfilling the criteria of being able to mention writing down something that is known and asked in the problem that is given correctly and completely.

PT students on indicators understand and interpret ideas to convey strategies and steps to solve problems systematically, write down strategies to calculate the total cost of making tape. PT students calculate every need to complete cassava orders. PT students calculate the total price by first calculating the cassava needed from the information obtained, namely 1 kg of tape requires 2 kg of cassava so that 25 kg of tape requires 50 kg of cassava, then the total cost for 50 kg of cassava is $50\ kg \times 4.500 = Rp.225.000$. Furthermore, the total price of yeast, if 1 kg costs 500 then completing 50 kg of cassava costs $50\ kg \times 500 = 25.000$. Then to calculate employee wages with the information obtained if in 1 hour they can finish 5 kg of tape, then 25 kg of tape can be completed n hours, here homework students use comparative calculations which calculate , then if the wages of employees are 10,000 per hour then $1\ jam \times 25\ kg = 25$, $n \times 5 = 5 nif\ n = \frac{25}{5} = 5\ jam 5$ hours require $5 \times 10.000 = 50.000$and there are 2 employees then $50.000 \times 2 = 100.000$. So the total cost is $225.000 + 25.000 + 100.000 = Rp.350.000$. So that PT students on indicators understand and interpret ideas to convey strategies and steps for solving problems systematically in writing meeting the criteria of being able to complete by writing down the strategies and steps to solving the problems given correctly and completely.

PT students on indicators evaluate ideas from the conclusions of solving problem solving, PT students write conclusions, namely the total cost to complete a tape order of 25 kg is Rp. 350,000 and at the end also provides a conclusion from solving the given problem. So that PT students on indicators evaluating ideas from the conclusions of solving problems in writing can fulfill the criteria, namely writing conclusions at the end of solving problems completely and correctly. PT students also use terms and symbols in solving problem solving. On the answer sheet PT students use letter symbols to find the variables to be searched for such as using the letters n and t as variables to be searched and also using mathematical symbols to operate properly and correctly. So that the indicators use terms and symbols in solving written problem solving, PT students fulfill the criteria, namely students write down the use of mathematical symbols in solving problems correctly and completely.

6. Female students with a moderate level of mathematical communication ability (PS)

The following are the results of the mathematical communication ability test on female subjects with moderate levels of mathematical communication ability in **Figure 5**.

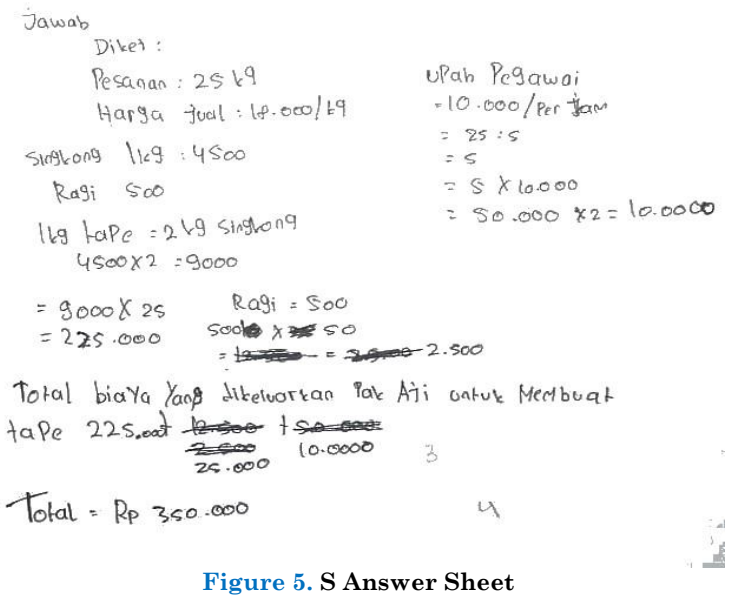

Figure 5. S Answer Sheet

Based on the **Figure 5**, it can be seen that PS students who have mathematical communication skills are solving problems. PS students on indicators Expressing mathematical ideas with information, providing information on each information such as writing down a tape order of 25 kg, selling price 18,000/kg, cassava price 1 kg = 4,500, and yeast price 500. PS students do not write down what is asked in question. So that PS students on the indicator express mathematical ideas that exist in the problem by writing down the information in writing that meets the criteria, namely students are able to mention something that is known and asked from the problem given correctly but incompletely.

PS students on indicators understand and interpret ideas to convey strategies and steps to solving problems, PS students write down calculations of the need to complete tape orders by starting to calculate 1 kg of tape requires 2 kg of cassava, then 1 kg of tape costs cassava by $4.500 \times 2 = 9000$, then if 25 kg of tape $9.000 \times 25 = 225.000$. Next the cost of yeast $500 \times 50 = 2.500$. For employee wages = 10,000/hour, then $25 \div 5 = 5 \times 10.000 = 50.000 \times 2 = 100.000$the total cost is IDR 350,0000. So that PS students on indicators understand and interpret ideas to convey strategies and steps for solving problems systematically in writing, PS students meet the criteria for writing strategies and steps to solve problems that are given in full, but something is not correct.

PS students on indicators are able to evaluate ideas from solving problem solving conclusions, PS students write down the results of calculating the total price of cassava, the total price of yeast and the total wages for 2 employees which are then added up to produce the total costs incurred by Mr. Aji to make tape 225,000 + 25,000 +100,000 = IDR 350,000. So that PS students on indicators evaluating ideas from the conclusions of solving problems in writing can meet the criteria for writing conclusions at the end of solving problems correctly but incompletely.

PS students also use terms and symbols in solving problem solving. On the PS student's answer sheet, the mathematical symbols were used correctly, but there were a number of errors, such as writing the wages of employees that should be 100,000, but PS students wrote 10,0000 and there were also some writings that lacked dots to write costs. So that on the indicators of using terms and symbols in completing written problem solving, PS students fulfill the criteria, namely writing down the use of mathematical symbols in solving problems completely, but something is not correct.

7. Women with low level of mathematical communication skills (PR)

Following are the results of the mathematical communication ability test on female subjects with low levels of mathematical communication ability.

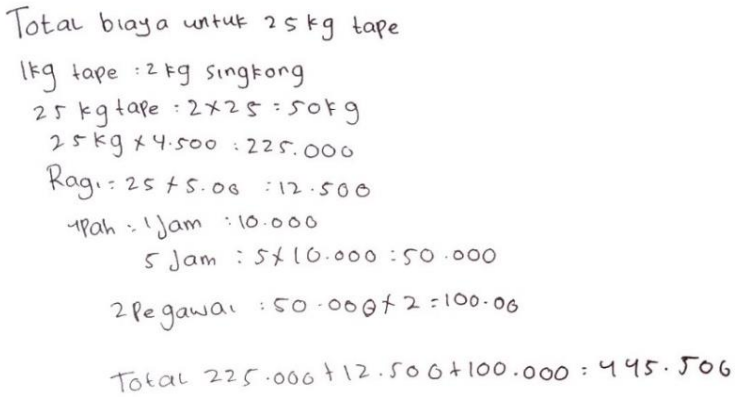

Figure 6. PR Answer Sheet

Based on the picture above, it can be seen that PR students have low mathematical communication skills in solving problems. Homework students on the indicator express mathematical ideas with information, do not write down information so that homework students cannot express mathematical ideas. The PR students wrote down the number of tape orders, and also explained that 1 kg of tape needed 2 kg of cassava. PR students also did not provide information about what was asked in the questions. So that homework students on indicators express mathematical ideas that exist in problems by writing down the information in writing fulfilling the criteria of not writing down something that is known and asked in a given problem.

PR students on indicators understand and interpret ideas to convey strategies and steps to solve problems systematically, homework students do not write clearly and their calculations are wrong. Homework students calculate if

1 kg of tape is equal to that if 25 tapes need $2 \times 25 = 50\ kg$ cassava, from here an error occurs that there should be a lot of cassava needed, namely 50 kg of cassava multiplied by the price of cassava per kilo but homework students calculate with $25 \times 4.500 = 225.000$. Furthermore, in the yeast $25 \times 500 = 12.500$, there was also an error that should have multiplied the amount of cassava used, namely 50 kg, but instead counted 25 kg. For wages if 1 hour = 10,000 then if $5\ jam \times 10.000 = 50.000$.there are 2 employees $50.000 \times 2 = 100.000$.a total of 225,000 + 12,500 + 100,000 = 445,500 and in the final result the calculation is wrong and not appropriate. So, homework students on the indicator understand and interpret ideas to convey strategies and steps for solving problems systematically in writing fulfilling the criteria of being able to solve by writing strategies and solving steps for problems that are given but wrong.

PR students on indicators evaluate ideas from solving problem solving conclusions, PR students do not write down the results of calculations and also do not provide conclusions from solving given problems. So that homework students on indicators evaluating ideas from the conclusions of solving written problems can meet the criteria, namely not writing conclusions at the end of solving a given problem.

PR students also use terms and symbols in solving problem solving. Such as the use of the symbol kg and then also the symbols for number operations such as addition and multiplication. So that the indicators use terms and symbols in solving written problem solving, PR students fulfill the criteria, namely students write down the use of mathematical symbols in solving problems correctly but incompletely. The above data is also supported by the results of interviews with PR subjects which describe or explain how to solve problems orally to researchers.

4. CONCLUSION

The results of data analysis on male and female students who have high mathematical communication abilities, namely LT students and PT students are able to fulfill 4 indicators of mathematical communication skills both written and oral completely and correctly. For male students with moderate mathematical communication skills, LS students on indicator 1 of mathematical communication both written and verbally properly and correctly, but on indicators 2, 3 and 4 mathematical communication skills both written and verbal are only able to answer correctly but incompletely. PS students with mathematical communication skills on indicators 1 and 3 can fulfill the indicators of mathematical communication skills correctly but incompletely, while indicators 2 and 4 are able to fulfill the indicators of mathematical communication skills but something is wrong. Whereas male and female students have low mathematical communication abilities, LR and PS students on indicators 1 and 3 are unable to write or answer in writing or orally, on indicator 2 mathematical communication skills are able to answer but are wrong and on indicator 3 are able to answer correctly but incomplete in writing or orally.

ONFLICT OF INTEREST

There are no conflicts of interest declared by the authors.

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