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Profile of Mathematical Connection Ability in Material Two-Variable Linear Equation System (SPLDV) In Grade IX SMP

Annisa Fachraini Siregar[1*], **Sevilla Tita Azzahra**[2], **Indah Widiati**[3]

[1,2,3] *Mathematics Education Study Program, Faculty of Teacher Training and Education, Islamic University of Riau*
Jl. Kaharuddin Nasution, Pekanbaru, 28284, Indonesia

Corresponding author's e-mail: 1 annisafachrainisiregar3234@gmail.com*

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ABSTRACT

This study was conducted to determine the mathematical connection abilities of ninth-grade junior high school students in learning mathematics on the subject of Two-Variable Linear Equation Systems (SPLDV). This study used a qualitative method with a descriptive approach, which aims to understand phenomena in depth through direct observation. The study was conducted at a junior high school in Riau, with a sample of 12 ninth-grade students who had studied the topic of Systems of Linear Equations with Two Variables (SPLDV). The sampling technique used in this study was purposive sampling, selecting three students for further analysis based on the following criteria: (1) students with high mathematical connection skills (all indicators met), (2) students with moderate mathematical connection skills, and (3) students with low mathematical connection skills. The instruments used in this study consisted of a written test and an interview guide. The written test comprised three essay questions designed to measure students' mathematical connection skills in the SPLDV material. The results and discussion of this study showed that 6 students had high mathematical connection skills, 2 students had moderate mathematical connection skills, and 4 students had low mathematical connection skills.

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1. Introduction

Based on the 2003 law [1] National instruction has the most work in creating capacities and forming a honorable character and civilization of the country in arrange to teach people's lives. The reason of this instruction is to create the potential of understudies to gotten to be people who accept and fear God All-powerful, have respectable character, are solid, learned, talented, imaginative, autonomous, and ended up equitable and dependable citizens.To realize this function, various levels of formal education, such as basic education (SD/MI), secondary education (SMP/MTs), higher education (SMA/MA), and Higher Education (PT), play an important role in its implementation.

According to the National Research Council in [2] Mathematics is a subject that has an important role for students. Learning mathematics helps students connect different concepts to solve problems in a logical, analytical, and structured way. A good understanding of mathematics can be the key for students to achieve career success in the future.

According to the National Council of Teacher Mathematics (NCTM, 2000), there are five aspects of mathematical skills (doing math), namely: the ability to communicate, reason, solve problems, connect various concepts, and build a positive attitude towards mathematics. In solving a mathematical problem, good mathematical connection skills are also needed as a supporting factor to relate various ideas. One of the mathematical skills that high school students must possess and develop is mathematical connections Amelia et al., (2021). Mathematical connection ability is a skill of students in utilizing the relationship between a topic or mathematical concept and other concepts, with other subjects or disciplines, and with daily life in solving mathematical problems. This ability is essential in helping students develop a deeper understanding of the interconnectedness between mathematical concepts and how they apply in different fields [4].

As for the indicators of connection ability according to NCTM (2000), the indicators of mathematical connection ability include: (1) Connecting between various topics in mathematics, (2) Connecting mathematical concepts with other fields of science outside of mathematics, and (3) Connecting mathematical concepts in daily life situations. Based on the NCTM statement, it can be seen that the ability to make mathematical connections is a student's skill in identifying and communicating relationships in mathematics, which includes the relationship between mathematical topics, relationships with other fields of science, and its application in daily life or real-world situations [5]. In other words, this skill is part of the ability to think at a higher level that supports students in understanding concepts more broadly and applicative.

One of the challenges in learning mathematics is that students' mathematical connection skills are still low. According to [6] Many students still have difficulty solving math problems related to daily life situations. Most of them have not been able to interpret the problem well and convert it into a mathematical model. This condition shows that students' mathematical connection skills are still weak, so they need to be strengthened through more contextual and applicative learning.

Based on the above explanation, we can see that the ability to make mathematical connections is a thinking ability that must be possessed by every student. This mathematical connection ability must be developed at the junior high school (SMP) level. Based on exposure [7] that in mathematics learning, students often face problems that are challenging and cannot be solved instantly. Therefore, they need to think logically, reason, try different approaches, model problems, and apply simple formulas before proving them. This thinking ability, including the skill of making mathematical connections, is an important aspect that every student must have.

Thus, it is important for students to have mathematical connection skills. Both in mathematics learning, as well as in learning in other fields and in students' lives, they are not hampered in working on existing problems. Therefore, this study was conducted with the aim of finding out how the mathematical connection ability of grade IX junior high school students in learning mathematics in the material of the Two-Variable Linear Equation System (SPLDV).

2. Research Methods

This study uses a qualitative method with a descriptive approach, which aims to understand the phenomenon in depth through direct observation. The data obtained were analyze to describe the situation being studied and formulate findings based on observations. [8].

This inquire about was conducted at a Junior Tall School (SMP) in Riau, with the investigate source of 12 understudies in review IX of junior tall school who had examined the fabric of the Two-Variable Linear Equation System (SPLDV). The examining strategies utilized in this consider are purposive inspecting, by selecting the investigate subject, 3 understudies were advance analyze with criteria, (1) understudies with the accomplishment of tall numerical association capacity (all markers were accomplished), (2) understudies with the accomplishment of medium numerical association capacity, (3) understudies with the accomplishment of moo scientific association capacity. Purposive examining could be a non-random inspecting strategy where the analyst guarantees the quotation of outlines

through the strategy of deciding an uncommon personality that matches the research objectives so that it is anticipated to reply to the investigate case [9].

Furthermore, the level of achievement of students' mathematical connection ability is divided into three categories, namely high, medium, and low which are adjusted to the category of mathematical connection ability. The categorization of the test score according to [10] as follows:

Table 1. Category Mathematical Connection Ability Level

Category	Achievement of Mathematical Connection Ability
Tall	$70\% \leq x < 100\%$
Keep	$50\% \leq x < 70\%$
Low	$0\% \leq x < 50\%$

The disobedient utilized in this think about comprised of composed tests and meet rules. The composed test is within the frame of 3 portrayal questions outlined to degree students' scientific association capacity in SPLDV fabric. These questions have been approved by specialists based on pointers of numerical association capacity.

Based on the investigate instrument, the analyst utilized a composed test to test the scientific association capacity of 12 understudies within the shape of 3 questions depicting the SPLDV fabric.

Table 2. SPLDV Questions According to Mathematical Connection Indicators

No	Mathematical Connection Ability Indicator	Description Questions
1	Connecting between different topics in mathematics	It is known that two triangles are of the same shape: and $\Delta ABC \Delta DEF$. The length of the sides of the triangle meets the following comparison: $\frac{AB}{DE} = \frac{BC}{EF} = \frac{AC}{DF}$ If the length of the sides of the triangle is known, it meets the following equation system: $2x + y = 12$ $x + 2y = 10$ Based on the above question, try to explain why the concept of SPLDV can be used to determine the length of the sides of a triangle in construction?
2	Connecting mathematical concepts with other fields of science outside of mathematics	In an ecosystem, there are two types of animal populations, namely chickens and birds. The populations of the two are interconnected, where the number of chickens is affected by the availability of food and the number of birds, while the number of birds depends on the availability of chickens as a food source. The relationship between these populations can be modeled with a system of equations $2x + 3y = 150$ $x + 4y = 120$ Where: - x is the number of chickens - y is the number of birds Based on the above explanation, use the elimination or substitution method to determine the number of chickens and birds in the ecosystem!
3	Connecting mathematical concepts in everyday life situations	Siti bought 2 packs of sweets and 3 packs of crackers at a price of Rp.10,000.00. Meanwhile, Rina bought 1 pack of candy and 2 packs of crackers at a price of Rp.6,000.00. However, Siti found that one of the packages of crackers she bought was broken, so she wanted to exchange it for a package of candy by adding Rp.1,000.00 to the seller. However, the seller refused on the grounds that the money was not enough. Students are expected to be able to clarify errors in the calculation of the money given by Siti.

Based on Table 2, three description test questions are presented to students as written tests on SPLDV material. These questions are arranged based on indicators of mathematical connection ability, which are described as follows:

1. The first question is to test students' ability to connect mathematical concepts, namely SPLDV material, with other mathematical concepts, namely flat building material (triangles).
2. The second question is to test students' ability to connect mathematical concepts, namely SPLDV material, with concepts in other fields of science, namely biology.

3. The third question is to test students' ability to connect mathematical concepts, namely SPLDV material with daily life.

To obtain data related to the results of students' mathematical connection ability questions, scoring guidelines are needed. The following are the scoring guidelines according to Fajriani (2010) in [11] :

Table 3. Test Scoring Guidelines

Score	Information
0	Not answering questions
1	Lack of precision in making connections and incorrect answers
2	Not right in making connections but the right answer
3	Can make a good connection, but there are errors in the calculation process and incorrect answers
4	Can make good connections, good calculation and workmanship processes and right answers

In addition, interview guidelines are prepared to delve into students' thinking processes in building mathematical connections when solving questions. The interview is conducted in a semi-structured manner so that the researcher can dig deeper into information according to the students' answers to the written test.

This research is a descriptive qualitative research, where the analysis techniques used consist of 3 stages, namely: data reduction, data presentation, and data verification (Ompusunggu & Sari, 2019; Chevallard & Bosch, 2020) in [12]. In the data reduction stage, the researcher carried out several stages, which are as follows:

1. Calculating scores on each grain of the question based on the scoring guidelines of the student's mathematical connection ability
2. After the results of the mathematical connection ability test are assessed, the scores obtained are classified into specific categories. This classification aims to determine the level of mathematical connection ability of students, which are grouped into high, medium, or low categories, according to the indicators that have been set.
3. The selection of one student from each category was carried out for a more in-depth analysis through interviews, useful for strengthening the data results.

Then the data presentation stage, namely the data presentation stage, is a presentation in the form of tables and pictures which are then given descriptions that describe and are in accordance with the research results. The data verification stage, which is the conclusion made, should answer the formulation of the problem in this study that has been explained earlier. At this stage, in addition to answering the formulation of the problem, the conclusion should also reveal new findings that have never existed. The findings are descriptions or images of the object being examined and analyzed, and further examination of their veracity should be required.

3. Results And Discussion

3.1 Result

Based on the results of the mathematical connection ability test obtained from 12 students in grade IX of junior high school after the students completed the questions that had been given and arranged as in Table 2, an overview of the level of students' mathematical connection ability according to [13]:

Table 4. Results of the Student's Mathematical Connection Ability Test

No	Initials of Student's Name	Category Scores Based on Questions			Total Score	Percentage of Achievement of Mathematical Connection Ability	Category
		No.1	No.2	No.3			
1	S1	0	4	3	7	65%	Keep
2	S2	0	4	4	8	75%	Tall
3	S3	3	4	4	11	93,75%	Tall
4	S4	4	4	4	12	100%	Tall
5	S5	4	4	4	12	100%	Tall
6	S6	1	0	3	4	36,25%	Low
7	S7	1	0	3	4	36,25%	Low
8	S8	1	0	3	4	36,25%	Low
9	S9	3	4	4	11	93,75%	Tall
10	S10	1	0	3	4	36,25%	Low
11	S11	1	3	2	6	62,5%	Keep
12	S12	4	3	4	11	91,25%	Tall

Based on Table 4. It was shown that the majority of the 12 students had already reached a high category level in mathematical connection ability. The following is the calculation of the score on each question granular based on the scoring guidelines in Table 3 according to [14], Students' Mathematical Connection Ability:

Table 5. Mathematical Connection Ability Test Scores Based on Overall Scoring Guidelines

Number of Students Getting Scores	Question Number		
	1	2	3
4	3	6	6
3	2	2	5
2	0	0	1
1	5	0	0
0	2	4	0
Total	12	12	12

Based on Table 5, in the 1st question the majority of students got a score of 1, which means that students still have difficulty connecting the mathematical connection in the SPLDV material with the flat building material (triangle). But if you look at the 2nd and 3rd questions, it is shown that the majority of students get a score of 4, which means that students are already able or able to connect mathematical connections in SPLDV material with other fields and daily life. After the students' mathematical connection ability test was calculated and grouped based on the scoring guidelines in Table 3, the scores were classified into three categories, namely high, medium, and low categories according to [10] as follows:

Table 6. Classification of Students' Mathematical Connection Abilities

No	Categories Mathematical Connections	Percentage	Sum
1	Low	$0\% < x \leq 50\%$	4
2	Keep	$50\% < x \leq 70\%$	2
3	Tall	$70\% < x \leq 100\%$	6

Based on Table 6, it is shown that the majority of students are already in the category of high-level mathematical connection ability, which means that the majority of students are already able to make mathematical connections.

After the mathematical connection ability score was classified into three categories, the researcher selected three students with the criteria, (1) students with a high level of mathematical connection ability, (2) students with a moderate level of mathematical connection ability, (3) students with a low level of mathematical connection ability.

The three students were selected by *purposive sampling* to be analyzed and interviewed further with the aim of obtaining a deeper picture related to the explanation of their thinking characteristics and mathematical connection abilities in solving mathematical problems in SPLDV material. The list of three students selected for further respondents is presented as follows:

Table 7. List of names of three students as further respondents

No	Student Code	Subject Description
1	S5	Students with a high category of mathematical connection ability level
2	S1	Students with a moderate level of mathematical connection ability
3	S6	Students with a low category level of mathematical connection ability

Based on Table 7, a list of three students who were selected as the subjects of further research was presented, namely students with high, medium, and low categories. The three subjects have been selected and interviewed, and the interview will be held on May 15, 2025. This selection aims to get a more comprehensive picture of the characteristics of mathematical connection ability in solving story problems in SPLDV material from each level of achievement.

Discussion

Based on the comes about depicted prior, this ponders points to discover out and clarify the mathematical connection capacity of review IX junior tall school understudies in understanding issues in SPLDV fabric. The taking after are displayed the comes about of the numerical association capacity test of understudies from tall, medium, and moo scholarly levels agreeing to [15]:

1. High Academic Level Mathematical Connection Ability

Table 8. S5 Test Results at a High Academic Level

Mathematical Connection Ability Indicator	Question Number	Description
Ability to connect mathematical concepts with other topics	1	S5 can work on the problem at number 1, and can relate the concept of SPLDV to the flat shape of a triangle and can work on the problem with the right calculations. And students are

Mathematical Connection Ability Indicator	Question Number	Description
		also able to work on problems in systematic steps, by writing down known, asked, and completion steps.
Ability to connect mathematical concepts with other fields	2	S5 can work on the questions in number 2, and can connect SPLDV material with other fields, namely the field of Natural Sciences (Biology). And students are also able to work on problems in systematic steps, by writing down known, asked, and completion steps.
Ability to connect mathematical concepts with everyday life	3	S5 can work on the problem at number 3, and can relate the concept of SPLDV to daily life, and can do the problem with the right calculations. And students can work on the problem in systematic steps, by writing down known, asked, and completion steps, as well as writing the conclusion correctly.

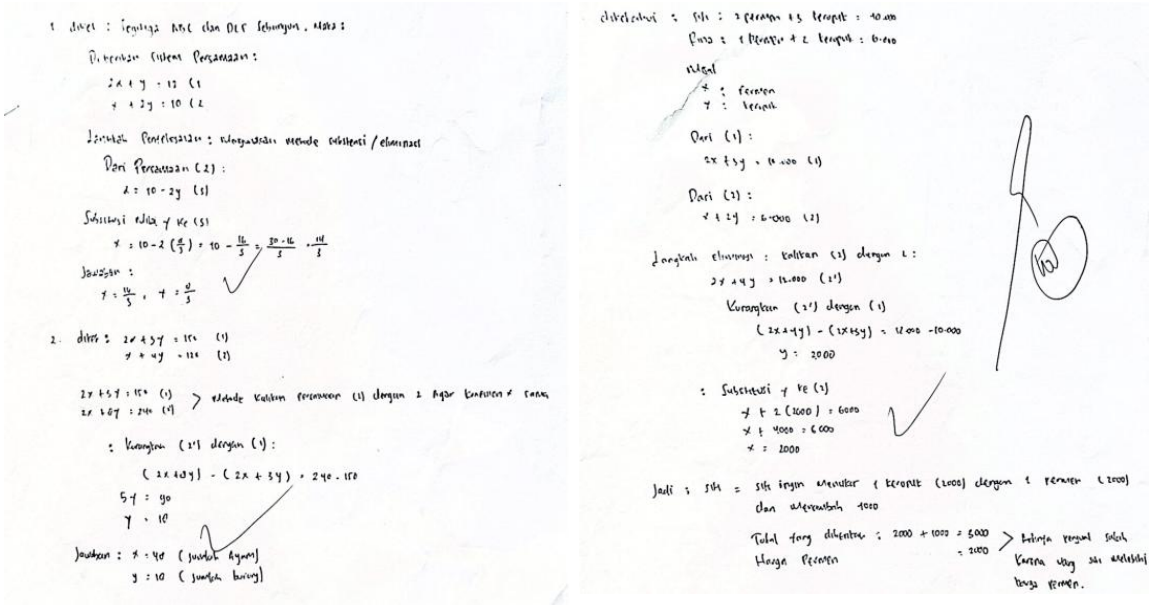

Figure 1. S5 Answers at High Academic Level

Based on Figure 1. The results of the S5 answer with a high academic level, in question number 1 S5 can correctly explain why the SPLDV concept can be used to determine the length of the sides of a triangle in construction. In question number 2, S5 can correctly determine the number of chickens and birds in the ecosystem according to what is asked in the question. Then in question number 3, S5 can clarify errors in the calculation of money explained in the question.

The following are presented the results of the interview on students' mathematical connection skills according to [16]

Table 9. Results of S5 Interviews at the Higher Academic Level

Student Name Code	Interview Results
S5	S5 has studied SPLDV material in grades 7 and 8. According to him, this SPLDV material is very interesting and quite easy to understand and work on. The S5 admitted that when working on the SPLDV problem, S5 felt challenged by the resolution steps that used elimination and substitution. Then, S5 felt happy because the SPLDV material often uses story problems with daily life, which makes it easier to work on these problems.

Based on the results of the interviews in Table 9. It is presented that S5 shows an excellent understanding of SPLDV material. S5 has a good problem-solving strategy, and is able to master story problems that are relevant to daily life.

Based on the results of the study, S5 subjects meet all three indicators of mathematical connection in mathematics and can make problem-solving planning which means that S5 has a high academic mathematical

connection. This is in line with Widiyawati's research in [17] stating that students are said to have the ability to make mathematical connections, when students are able to meet three indicators of mathematical connection, namely the connection of mathematics topics with other mathematical topics, the connection of mathematics topics with other fields of science, and the connection of mathematical concepts with daily life.

2. Medium Academic Level Mathematical Connection Ability

Table 10. S11 Test Results at Medium Academic Level

Mathematical Connection Ability Indicator	Question Number	Description
Ability to connect mathematical concepts with other topics	1	S11 cannot work on the question on number 1, and also S11 is not able to write down what is known and asked in the question.
Ability to connect mathematical concepts with other fields	2	S11 can work on the questions in number 2, and can connect SPLDV material with other fields, namely the field of Natural Sciences (Biology). But S11 is not able to work on the problem in a systematic step by writing it down in advance, knowing and asking but directly to the solving section.
Ability to connect mathematical concepts with everyday life	3	S11 can work on the problem at number 3, and can relate the concept of SPLDV to daily life, and can do the problem with the right calculations. But S11 is not able to work on the problem in a systematic step by writing it down in advance, knowing and asking but directly to the solving section. And when at the end of the answer, S11 cannot write down the conclusion that is the answer to the question.

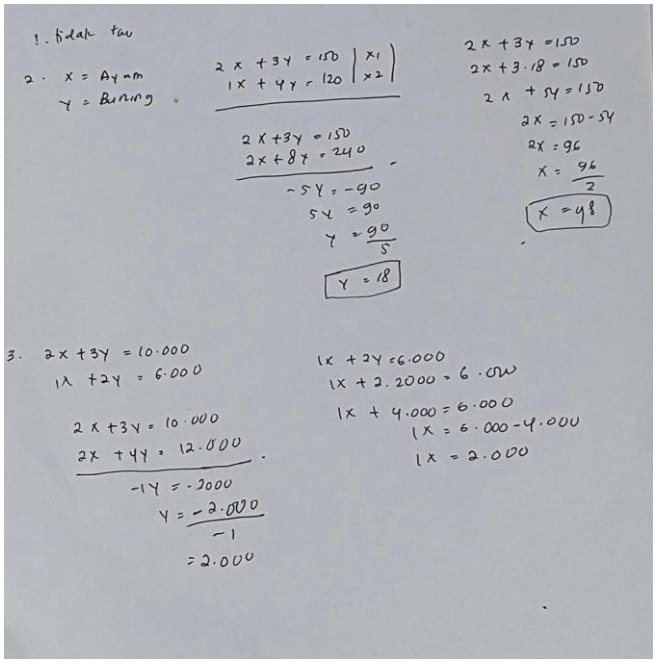

Figure 2. S11 Answers at Medium Academic Level

Based on Figure 2. In the S11 answer sheet with a moderate academic level, in question number 1 S11 cannot answer and explain correctly why the SPLDV concept can be used to determine the length of the sides of a triangle in construction. In question number 2, S11 can correctly determine the number of chickens and birds in the ecosystem according to what is asked in the question. Then in question number 3, S11 can determine the price of 1 pack of crackers and candy, but cannot clarify the error in the calculation of money described in the question.

Table 11. S11 Interview Results at the Medium Academic Level

Student Name Code	Interview Results
S11	S11 has studied SPLDV material in grade 7 and returned to study it in grade 8. Therefore, S11 felt that this material was quite familiar and relatively easy. According to him, the story questions in the opportunity material are not difficult, but it requires precision in understanding the content of the questions so that they can be converted into mathematical forms. S11 explained that in question number 1, it is quite difficult to understand the problem, because it is related to the concept of triangle and development, where in this material S11 also tends to not understand.

Based on the results of the interviews in Table 11. It is presented that S11 has difficulty in connecting mathematical concepts with triangle concepts, but S11 can also be said to have a fairly good mastery of SPLDV material. This suggests that the understanding of the relationships between mathematical materials should be strengthened, especially in cases that require cross-conceptual understanding.

Based on the results of the study, S5 subjects have met the 2nd and 3rd mathematical connection indicators in mathematics, but have not been able to meet the first indicator, namely the connection between mathematics topics, which means that S5 has a moderate academic mathematical connection. This is in line with research conducted by [18] states that students cannot look for connections between different concepts because they do not understand mathematical concepts from one mathematics to another, and are unable to choose the right way to solve the problem.

3. Low Academic Level Mathematical Connection Ability

Table 12. S6 Test Results at Low Academic Level

Mathematical Connection Ability Indicator	Question Number	Description
Ability to connect mathematical concepts with other topics	1	S6 could not work on the question on number 1, but S6 tried to answer the question even though in the end the answer that S6 wrote was not able to answer what was expected of the question. And also S6 is not able to write down what is known and asked in the question.
Ability to connect mathematical concepts with other fields	2	S6 cannot work on the problem on number 2, but only write or make a mathematical model on the problem. And also S6 is not able to work on the problem with a systematic step by writing it down in advance, knowing and being asked.
Ability to connect mathematical concepts with everyday life	3	S6 can work on the problem at number 3, and can relate the concept of SPLDV to daily life, and can do the problem with the right calculations. Then, S6 is able to work on the problem in a systematic step by writing down in advance known, asked, solved, and written conclusion.

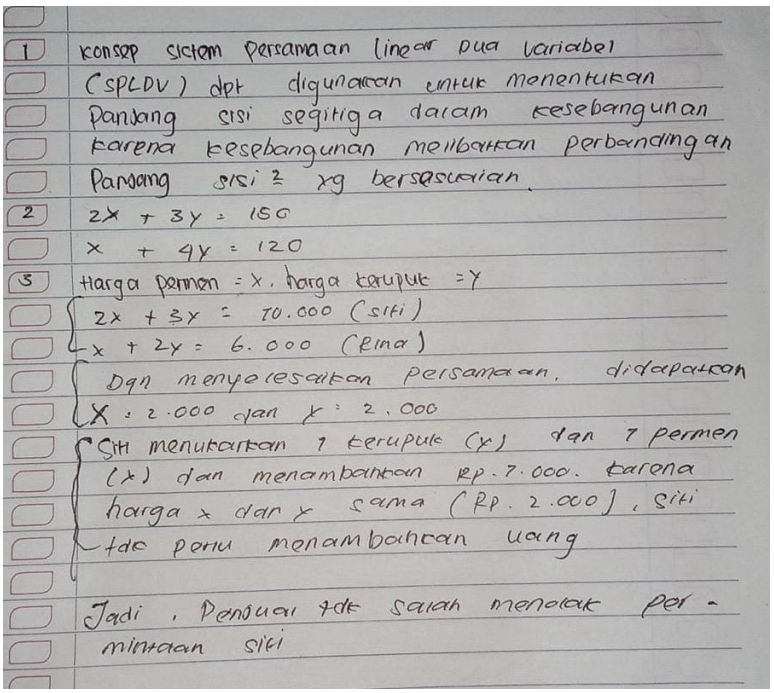

Figure 3. S6 Answers at Low Academic Level

Based on Figure 3**.** On the S6 answer sheet with a moderate academic level, in question number 1 S6 cannot state and explain correctly why the SPLDV concept can be used to determine the length of the sides of a triangle in construction. In question number 2, S6 can only write the form of equation that S6 obtained from the story problem. But in question number 3, S6 was able to determine the price of 1 pack of crackers and candy, and could write a conclusion that could clarify errors in the calculation of money explained in the question.

Table 13. S6 Interview Results at Low Academic Level

Student Name Code	Interview Results
S6	S6 has studied opportunity material in grade 8 semester 2. According to him, this material is quite difficult, especially in the triangle and biology sections. S6 finds it quite easy to turn the story problem into the right form of math, but in solving the equation or the mathematical form, S6 finds it a bit difficult. And when S6 worked on question number 1, he had difficulty understanding what the question meant.

Based on the comes about of the interviews in Table 13. It is displayed that understudies have trouble in understanding thoughts and understanding issues that require exact scientific representations, recommending that abilities in changing over data into formal numerical shapes still ought to be moved forward.

Based on the comes about of the think about, S6 subjects may as it was meet the pointers of mathematical connection, specifically the connection of mathematical concepts with everyday life, but seem not meet the other 2 pointers of mathematical connection. This is contrary to research conducted by Maulyda., et al., (2020) in [13] that students with low abilities could not meet the three indicators of mathematical connections well because they had weaknesses in connecting ideas and methods in solving given problems.

4. Conclusions

Based on the information on the comes about and discourse of the investigate, it can be concluded that the profile of mathematical connection capacity within the Two-Variable Linear Equation System (SPLDV) fabric in review IX of junior tall school is as takes after: 6 understudies with a tall level of mathematical connection capacity, 2 understudies with a medium level of mathematical connection capacity, and 4 understudies with a moo level of mathematical connection capacity. At that point, from the comes about of the inquire about conducted, the 3 research subjects that were selected for further analysis can be concluded with, (1) S5 subjects obtained the achievement of mathematical connections at a high academic level and met all indicators of mathematical connection, these indicators include: connections between mathematics subjects and other numerical themes, connections between science themes with other areas, and connections between science themes with everyday life. (2) S11 subjects can attain mathematical connections with a direct scholastic level, and are able to meet two markers in mathematical connections, the two pointers are the connection between arithmetic points with other areas and the connection of arithmetic points with lifestyle. (3) S6

subjects get a moo level of scientific association with a moo scholarly level and are as it were able to meet one pointer on the mathematical connection, which is the connection of mathematical subjects with everyday life.

References

[1] Depdiknas, "Undang-Undang Republik Indonesia Nomor 20 Tahun 2003 Tentang Sistem Pendidikan Nasional," *Tek. bendungan*, no. 1, pp. 1–7, 2003.

[2] H. D. Putra, H. Setiawan, D. Nurdianti, I. Retta, and A. Desi, "Kemampuan Pemahaman Matematis Siswa Smp Di Bandung Barat," *J. Penelit. dan Pembelajaran Mat.*, vol. 11, no. 1, 2018, doi: https://dx.doi.org/10.30870/jppm.v11i1.2981.

[3] S. Amelia, A. A. Awwalin, and W. Hidayat, "Analisis Kemampuan Koneksi Matematis Siswa Smp Pada Materi Spldv," *J. Pembelajaran Mat. Inov.*, vol. 4, no. 1, pp. 169–176, 2021, doi: 10.22460/jpmi.v4i1.169-176.

[4] D. Y. Yunita, R. E. Utami, and A. N. Aini, "Analisis Kemampuan Koneksi Matematika pada Materi Statistika Ditinjau dari Self Confidence," *Imajiner J. Mat. dan Pendidik. Mat.*, vol. 6, no. 3, pp. 89–94, 2024, doi: 10.26877/imajiner.v6i3.18966.

[5] S. H. Fatunnisa and H. Fitri, "Kemampuan Koneksi Matematis Siswa Kelas VII.4 SMP N 1 2 X 11 Kayutanam," *Circ. J. Pendidik. Mat.*, vol. 1, no. 02, pp. 39–51, 2021, doi: 10.28918/circle.v1i02.3930.

[6] J. Fahira, A. Arjudin, A. Amrullah, and S. Subarinah, "Analasis Kemampuan Koneksi Matematis Ditinjau Dari Tipe Kepribadian MBTI (Myers Briggs Type Indicator) Siswa Kelas VII SMPN 6 Mataram pada Materi Perbandingan Tahun Ajaran 2022/2023," *J. Ilm. Profesi Pendidik.*, vol. 8, no. 3, pp. 1768–1774, 2023, doi: 10.29303/jipp.v8i3.1581.

[7] A. Sukma, T. Wibowo, and I. Maryam, "Analisis Kemampuan Koneksi Matematis Siswa SMP Kelas VII Dalam Menyelesaikan Masalah Perbandingan," *JLEB J. Law, Educ. Bus.*, vol. 1, no. 2, pp. 813–817, 2023, doi: 10.57235/jleb.v1i2.1150.

[8] B. Bungin, *PENELITIAN KUALITATIF*, 2nd ed. Jakarta, Indonesia: Kencana, 2007.

[9] I. Lenaini, "Teknik Pengambilan Sampel Purposive dan Snowball Sampling," *Hist. J. Kajian, Penelit. Pengemb. Pendidik. Sej.*, vol. 6, no. 1, pp. 33–39, 2021, doi: 10.31764/historis.vXiY.4075.

[10] Widiyawati, A. Septian, and S. Inayah, "Analisis kemampuan koneksi matematis siswa SMK pada materi trigonometri," vol. 6, no. 1, pp. 28–39, 2020, doi: https://doi.org/10.15575/ja.v6i1.8566.

[11] K. Wismayani, A. Arjudin, N. Kurniati, and K. Sarjana, "Pengaruh Pendekatan RME (Realistic Mathematics Education) Terhadap Kemampuan Koneksi Matematis Siswa Kelas VIII MTs Al-Aziziyah Putri Kapek Gunungsari," *Griya J. Math. Educ. Appl.*, vol. 3, no. 1, pp. 76–87, 2023, doi: 10.29303/griya.v3i1.299.

[12] A. Purnamasari and E. A. Afriansyah, "Kemampuan Komunikasi Matematis Siswa SMP pada Topik Penyajian Data di Pondok Pesantren," *Plusminus J. Pendidik. Mat.*, vol. 1, no. 2, pp. 207–222, 2021, doi: 10.31980/plusminus.v1i2.1257.

[13] A. G. Risdayani, Dinda., Adirakasiwi, "Profil Kemampuan Koneksi Matematis Siswa Smp Dalam Menyelesaikan Soal Persamaan Garis Lurus," *EduMatSains J. Pendidikan, Mat. dan Sains*, vol. 6, no. 2, pp. 343–362, 2022, doi: https://core.ac.uk/download/pdf/524961924.pdf.

[14] Suhandri, H. Nufus, and E. Nurdin, "Profil Kemampuan Koneksi Matematis Mahasiswa dalam Menyelesaikan Masalah Matematika Berdasarkan Level Kemampuan Akademik Suhandri, Hayatun Nufus, Erdawati Nurdin *)," *J. Anal.*, vol. 3, no. 2, pp. 115–129, 2017, doi: https://doi.org/10.15575/ja.v3i2.2012.

[15] E. Y. Putri and Suripah, "Kemampuan Berpikir Kreatif Matematis Siswa SMPN 02 Meral," *J. Pembelajaran Mat. Inov.*, vol. 5, no. 1, pp. 43–54, 2022, doi: 10.22460/jpmi.v5i1.43-54.

[16] S. Julaeha and A. H. Fathani, "Profil kemampuan koneksi matematis peserta didik dalam menyelesaikan soal cerita ditinjau dari kemampuan matematika 1,2,3," vol. 04, no. 02, pp. 800–810, 2020.

[17] V. Harumawati, F. Adibah, and R. Antonius, "Analisis Kemampuan Koneksi Matematis Siswa Pada Materi Sistem Pertidaksamaan Linear Dua Variabel Kelas X Mipa Sma Widya Darma Surabaya," *J. Widyaloka*, vol. 10, no. 2, pp. 212–225, 2023.

[18] S. H. Ziliwu, R. Sarumaha, and D. Harefa, "Analisis Kemampuan Koneksi Matematika Pada Materi Transformasi Siswa Kelas Xi Smk Negeri 1 Lahusa Tahun Pembelajaran 2020/2021," *AFORE J. Pendidik. Mat.*, vol. 1, no. 12, pp. 2439–2450, 2022, doi: https://doi.org/10.57094/afore.v1i1.433.