



The Relationship Between Teacher's Communication Skills and Students' Learning Interest in the Fourth-Grade Social Science Learning Subject in Elementary School

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ABSTRACT

This paper discusses the relationship between teacher communication skills and students' learning interest in social science learning subjects. The research was conducted in class IV at SD Negeri Medan Johor. Researchers used associative quantitative research methods. The population used was 36 students at class IV SD Negeri 060938 Medan Johor. Sampling used saturated sampling. The research results indicate that the results obtained from the correlation test can be seen in the correlation coefficient, $r_{count} 0.946 \geq r_{table} 0.329$. Hence, it can be concluded that the alternative hypothesis (H_a) is accepted where there is a significant relationship between communication skills and students' learning interests at SD Negeri 060938 Medan Johor. In addition, it can be seen from the results of the t-test where $t_{count} 17.052 \geq t_{table} 2.030$, hence the hypothesis (H_a) is accepted. It shows that there is a positive significant relationship between teacher communication skills and students' learning interests in social science learning subjects in class IV at SD Negeri Medan Johor in the academic year 2022/2023.

Keywords: teacher communication skills, student learning interest, social science learning subject, elementary students

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INTRODUCTION

Education is the main factor that determines the continuity of development, besides that education also affects the progress of both information, social and cultural technology (Fuad, 2016: 43). With education the country is able to develop this country to be able to compete with other countries, with education can develop information technology as we know before we look for information from books in libraries or ask directly to people who know more about the information such as experts, professors, teachers, and others but now only by typing questions that want to be known after that immediately get the answers that we Want, of course, this is the impact of education. Through education, this country will be free from poverty and adversity, without strong education it is certain that the Indonesian state will continue to sink into adversity, without adequate education this country will be entangled in ignorance, backwardness, and poverty. Responding to the importance of education, all components of the state are required to be able to master various sciences that can be applied in everyday life, including teachers.

Mulyasa (2008: 37) argues that the teacher is an educator who is a role model for students, because the teacher is a figure who can be admired and imitated, admired in the sense that the message given by the teacher can be trusted and the teacher's lifestyle can be imitated or exemplified, in society a teacher is used as a role model, therefore a teacher must recognize the values that develop in society, Not only that, a teacher must also be responsible for what is done and have authority as a role model. In learning the teacher plays a role in delivering material, it is very impossible if the teacher does not communicate with students, therefore a good teacher is a teacher who is able to communicate how important the ability to communicate is because students will have difficulty achieving the expected learning results if they cannot communicate well,

therefore teachers must have skills in building students' ability to communicate, But before that the teacher must first improve his communication skills.

Dewi (2019: 72) suggests that teacher communication skills will affect the learning process in the classroom, with communication can shape the character of students mutual understanding, cause a sense of closeness, affection, sympathy, respect, pleasure, even jealousy, and hatred, through communication can experience various feelings. In every learning process every educator always tries so that what is conveyed can be easily understood by students, students will get difficulties if the teacher is not able to communicate well (communicative). The lack of communication between teachers and students will hinder the teaching and learning process in the classroom, this states the importance of good communication between teachers and students. Good communication is the establishment of a close relationship between teachers and students, so as to create a sense of community, courage to ask questions, build a positive attitude, and mutual respect. Therefore, teachers must have good communication skills, especially with students, which aims to make the message conveyed can be understood and implemented by students.

A teacher can influence students' interest in learning, in the sense that when students do not have an interest or feeling of liking for the subject will become interested of course with the teacher's communication skills, when communication between teachers and students is well established, it will make students more interested / like what is discussed by the teacher, student learning interest is greatly influenced by teacher communication, A teacher who is less communicative will experience failure in the teaching and learning process so that student learning outcomes are not as expected. According to Fuad (2016: 43) if students do not have an interest in an object being studied, it is difficult to expect that students will persevere and obtain good results from their learning, otherwise if the student follows the lesson with great interest in an object being studied, then the results obtained will be better. Therefore, interest is needed for teaching and educational purposes where students are successful in learning and teachers succeed in teaching and educating in accordance with the goals to be achieved, in learning activities interest has an important role.

It can also be seen in the fourth grade environment of SD Negeri 060938 Medan Johor that the teacher's ability to deliver teaching material is still less communicative, learning still uses conventional methods, teachers are not attentive, teachers are less friendly, not friendly to students, so students become less comfortable learning, dare not ask questions and give feedback to teachers.

Communication skills in learning need to be developed among students, because they are not only tools but also as social activities in learning and as a vehicle for interaction between students and also communication between teachers and students. Where communication is a transactional process that involves the mind, verbal, hands, heart, and motor nerves contained within.

LITERATURE REVIEW

Teacher Communication Skills

Defining a teacher's ability to communicate The task of a teacher is closely related to the communication process. The roles and responsibilities of teachers are developed and maintained through communication. Therefore, a teacher must have the ability to communicate according to the Big Dictionary Indonesian the word "capable" means capable. In modern Indonesian, the word "ability" means the ability, strength, power and ability to do something. According to Riyanto (2014: 114), a teacher who has the ability to communicate with students will more easily complete the learning process, or it can be said that the learning process continues without problems if the teacher becomes more comfortable in communicating with students. Make students feel comfortable while studying. This pleasant feeling ensures that the relationship between teacher and student is established without problems/obstacles. Skandar (2019: 136) claims that communication between teachers and students aims to convey messages to increase students' interest in learning. Therefore, good communication is needed to develop the potential of students in order to develop as well as possible. In this case, teacher communication skills are the way teachers appear enthusiastic and deliver material with genuine passion and passion, attracting students' attention and helping students in teaching and learning. Meanwhile, according to Dewi (2019: 73), teacher communication skills

are the teacher's ability to communicate effectively and attentively with students, both verbally and non-verbally, so that students have the opportunity to get good grades in lessons. them. From some of the expert opinions above, researchers concluded that the teacher's ability to communicate is the teacher's ability to deliver material or the process of exchanging information in a more intimate, friendly and enthusiastic way, and attract students' attention. . In order for students to feel more happy, comfortable and able to learn without learning compulsion, this causes effective communication and affects the growth of student interest. Interested students are more willing to give feedback to teachers, so teacher communication skills are critical to achieving expected learning outcomes. According to Mulyasa (2008: 35), students' interests, talents, skills and potentials do not develop optimally without the help of teachers. Teachers who communicate well influence students' interest in learning. Students like/are interested in teachers who are able to communicate with good results (Communicative). From the following description, researchers concluded that teachers' communication skills can increase students' interest in learning. Meanwhile, according to Moekijat 1993 7), communication in a work organization has several tasks, yes it is 1) Communication conveys information and knowledge from one person to another. 2) Communication can make a person do something. 3) Communication helps build character and build trust to invite, persuade and influence behavior. 4) Communication helps acquire information about the physical and social environment. Meanwhile, Widjaja (2000: 64-66) stated that the function of communication is as follows. Information sharing, information gathering and dissemination of information, which includes information, images, facts, news, opinions and comments that can be understood by others. 2. As a motivator, encouraging people to make decisions about their choices and desires. Discussion and debate as well as the exchange of facts are necessary to resolve disagreements in public affairs. 4. Education and knowledge transfer can promote intellectual development, character building and adaptive skills and competencies needed at all levels of society. 5. Promotion of life, dissemination of cultural results to preserve the heritage of the past. 6. Entertainment, dissemination of signals, symbols, theatrical sounds, dance, art, literature and group and individual pleasure. 7. Through integration, through communication individuals, groups and nations can receive the messages they need. related to Forms of Communication.

Based on the number of interactions in communication according to Muhammad (2004: 158-205) This communication can be divided into three parts, namely:

1. Interpersonal Communication

It is the exchange of information between one person and another person or people and immediately study the reaction or response of his listener. Interpersonal communication can be divided into several categories, namely: intimate interactions, social conversations, surveys or research and interviews. Interpersonal communication needs include love and control. The objectives of interpersonal communication are: 1. describe yourself, 2. Define the outside world, 3. Build and maintain meaningful relationships, 4. Changes in attitudes and behavior, 5. For fun and games, 6. Help, 7. Communication in small groups. It is a collection of individuals who can influence each other, find satisfaction with each other, interact for various purposes, take roles, interact with each other and communicate face-to-face. The goals of group communication are: 1. Personal needs i.e. for social relationships, transmission, therapy and study groups, 2. Work objectives are often used to solve common tasks and for decision making and problem solving, 3. Public Communication.

It is an exchange of messages with several people inside or outside the organization directly or in the media. To make a good oral presentation, the following are required: Eye contact, singing, accuracy, planning. The general purpose of public communication is primarily to provide information to many people and to establish relationships between organizations and the public. In addition, concrete goals should be set that must be achieved with the selected subjects.

Student learning interests

Learning requires great interest because when someone is interested, they enjoy engaging in the activity, which has a positive impact on learning outcomes. According to Fuad (2016: 45) Learning interest

is a psychological aspect of an individual that displays several symptoms such as passion, desire and interest to complete the process of behavior change through activities that seek knowledge and experience, ie. H. Interest in learning is the attention or liking and interest of a person (student) in learning, which is expressed in enthusiasm, activeness and participation in learning and understanding of the meaning of activities. When students are interested in learning, they learn and continue to learn so that there is a change in students in the form of skills, attitudes, habits, knowledge, skills and learning experiences. According to Mailawati (2017: 9) Interest in learning is a tendency for a person to feel comfortable and feel without coercion, which can result in changes in knowledge, skills and good behavior. When students are interested in a subject, students feel happy, comfortable and without obligation, students will be more interested in studying the subject to gain knowledge from ignorance. We are also interested in acquiring skills that are useful in their daily lives during Mulyana (2020:7) Interest in learning is a feeling of interest in a subject that motivates individuals to learn and continue learning. In this case, someone who is interested in learning will be more trying and more motivated to complete his learning.

From some of the expert opinions above, researchers concluded that interest in learning is a feeling full of passion, desire, love and interest that arises from within students without any coercion from outside students during learning. Activity, in this case students have high ambitions. Love to learn and learn more about the lesson, which then motivates the individual to study and continue the lesson happily, enthusiastically and without coercion. Interest has a significant influence on learning success because interest is the most important factor that can determine it, students are more excited and engaged in learning when a subject is not interesting. Students do not study seriously because they are not interested in the subject.

METHOD

Correlation Test

To find out whether there is a relationship between the independent variable (X) and the bound variable (Y) with the *product moment* correlation formula, namely:

$$r_{xy} = \frac{N \sum xy - (\sum x)(\sum y)}{\sqrt{\{N \sum x^2 - (\sum x)^2\} \{N \sum y^2 - (\sum y)^2\}}} \dots \text{Sugiyono, 2018:183}$$

Information:

r_{xy} : *Product moment* correlation coefficient

n : Total number of students

$\sum xy$: The number of multiplication results between the X score and the Y score

$\sum x$: Item score

$\sum y$: The total score of all students

The $r_{calculated}$ price is then consulted with the r_{table} at a significant level of 0.05. If if r count is smaller or equal to r table ($r_{count} \leq r_{table}$) it means that both variables can be concluded not to have a significant positive influence, on the other hand if F count is greater than r table ($r_{count} \geq r_{table}$) it means it can be concluded that the variable has a significant positive influence.

Table 1. Interpretasi nilai “ r “

Great r Product Moment (r_{xy})	Relationship Level
0,00 – 0,199	Very Low
0,20 – 0,399	Low
0,40 – 0,599	Enough
0,60 – 0,799	Tall
0,80 – 1,000	Very Powerful

Sumber : Sugiyono (2015: 184)

Test the Hypothesis

The method of data analysis in this study is to use a hypothesis test . Hypothesis test testing aims to determine the relationship between teacher communication skills and student learning interest in social studies subjects . With the product *moment* correlation significant test formula with the help of the SPSS program version 25.0. The formula is as follows:

$$t = \frac{r\sqrt{n-2}}{\sqrt{1-r^2}} \dots \dots \dots \text{(Sugiyono, 2021: 259)}$$

Information:

r : Correlation Coefficient

n : Sampel

The hypothesis is accepted if t counts \geq t table and vice versa if t counts \leq t table the hypothesis is rejected, with an error rate of 5% or 0.05. Then the hypothesis is rejected (Ho).

RESULTS AND DISCUSSION

The study was conducted in classes IV^{A-IV^B} which amounted to 36 students. Researchers first distributed questionnaires totaling 30 and 30 statements. To determine the relationship between teacher communication skills and student learning interest in social studies subjects, a correlation coefficient test was carried out which was the result.

Table 2. Data Frequency Distribution of Teachers' Communication Skills

X	F	Xi	Fx	X= \bar{x} -x	X ²	FX ²
103-113	2	108	216	-34,9	1.218,01	2.436,02
92-102	3	97	291	-23,92	572,1664	1.716,4992
81-91	7	86	602	-12,92	166,9264	1.168,4848
70-80	11	75	825	-1,92	3,6864	40,5504
59-69	5	64	320	9,08	82,4464	412,232
48-58	8	53	424	20,08	403,2064	3.225,6512
Total	36		2.678			8.999,4376

From the calculation results obtained from teacher communication skills data, the average value (mean) is 74.38 while the result of the standard deviation (SD) is 15.81, the result of the standard error is 2.67.

Table 3. Frequency Distribution of Teachers' Communication Skills

Score	Score Range	Frequency	Percentage	Category
1	103-113	2	6%	Very High
2	92-102	3	8%	Tall
3	81-91	7	19%	Enough
4	70-80	11	31%	Less
5	59-69	5	14%	Low
6	48-58	8	22%	Very Low
Total		36	100%	

Based on the table above, the frequency of the influence of teacher communication skills is in the category of less than 31%.

Table 4. Frequency Distribution of Student Learning Interest

X	F	Xi	Fx	$X = \bar{x} - x$	X^2	FX^2
105-115	3	110	330	-34.62	1.198.54	3.595.63
94-104	2	99	198	-23.62	557.90	1.115.80
83-93	6	88	528	69.38	4.813.58	28.881.50
72-82	12	77	924	63.38	4.017.02	48.204.29
61-71	6	66	396	9.38	87.98	527.90
50-60	7	55	385	68.38	4.675.82	32.730.77
Total	36		2.761			115.055.91

From the calculation results obtained from teacher communication skills data, the average value (mean) is 76.69 while the result of the standard deviation (SD) is 5.53, the result of the standard error is 9.56. The frequency distribution of data on student learning interest variables can be seen below:

Table 5. Category Frequency

Skor	Rentang Skor	Frekuensi	Persentase
1	105-115	3	8%
2	94-104	2	6%
3	83-93	6	17%
4	72-82	12	33%
5	61-71	6	17%
6	50-60	7	19%
Total		36	100%

Based on the table above, the frequency of the influence of student learning interest is in the category of less than 33%.

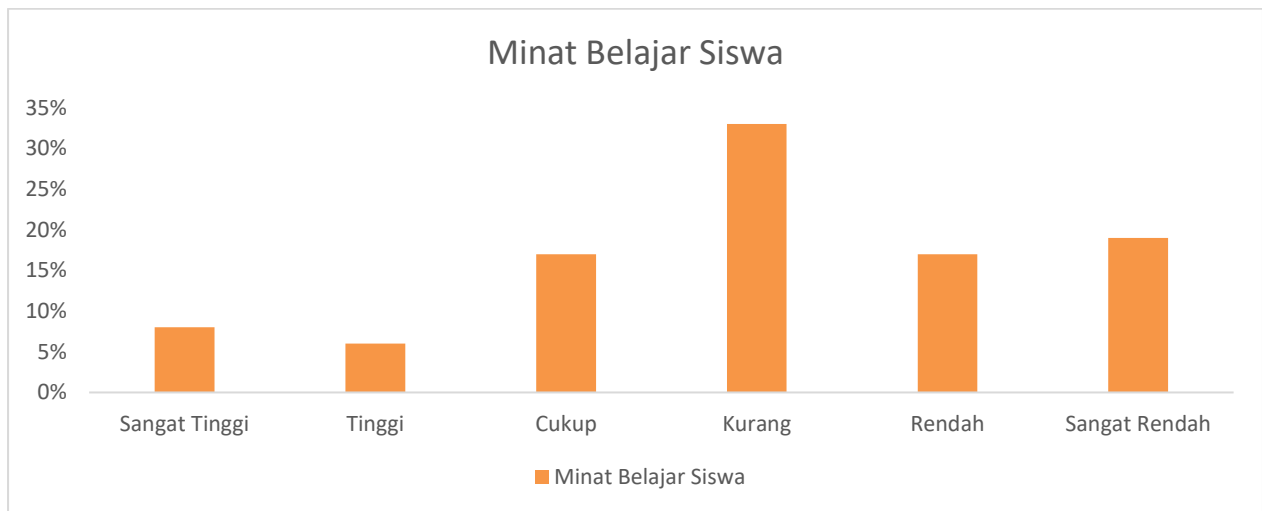


Figure 1. Histogram of Frequency Distribution of Learning Interest

Based on the diagram above, it can be concluded that the level of student interest in learning at SD Negeri 060938 Medan Johor is in the Less category.

Coleration Coefficient Test

The correlation coefficient test is used to determine whether there is an influence between the independent variable (X) on the dependent variable (Y), and the condition for the correlation coefficient test is to calculate $r_{\text{calculate}} \geq r_{\text{table}}$ with the product moment correlation formula.

Table 6. Correlation

		Teacher Communication Skills		Student Learning Interest	
Teacher Communication Skills	Pearson Correlation	1		.946**	
	Sig. (2-tailed)			.000	
	N	36		36	
Student Learning Interest	Pearson Correlation	.946**		1	
	Sig. (2-tailed)	.000			
	N	36		36	

The results of the calculation of the relationship between teacher communication skills and student learning interests are shown with a correlation of 0.94. Based on the table of interpretation of r values, correlation 0.94 is located in the range of values 0.80 – 1.000. So it can be concluded that the teacher's communication ability with students' learning interests has a very high influence.

Table 7. Interprensi

No	Value	Interference
1	0.00-1.199	Very Low
2	0.20-0.399	Low
3	0.40-0.599	Keep

4	0.60-0.799	Strong
5	0.80-1.000	Very Powerful

Hypothesis Testing

After the data is declared normally distributed and samples from the same population, then hypothesis testing is carried out using a statistical "t-test" that is used to test the hypothesis is a hypothesis t-test that

The following is the result of the t-test calculation:

Table 8. T-Test Results

	Type	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.048	4.279		.946	.351
	Teacher Communication Skills	.976	.057	.946	17.052	.000

Based on the table above, it is known that the value of 17,052 and amounted to 2.03. If it is consulted with the value at degrees of freedom (df) = 30 of 2.03 so that 17.05 > 2.03, so that H_0 is accepted, that is, there is a significant relationship between the teacher's communication ability (X) and students' learning interest (Y) in social studies subjects, then the hypothesis is accepted. The t-test calculation result of SPSS ver 25 is 17,052.

The results of the manual t-test above of 8,611 can be known from the t-value of the t-count \geq the table, which is $17.05 \geq 2.03$ which means that there is a positive influence between the teacher's communication skills and students' learning interests.

Discussion of Research Results

Based on the results of the analysis and discussion in grade IV of SD Negeri 060938 Medan Johor for the 2022/2023 Learning Year, the following decisions can be made. The communication ability of teachers in grade IV SD Negeri 060938 Medan Johor is included in the less category with a percentage level of 31%. From the questionnaire that has been filled out by grade IV students, obtained an overall score of 2,631 with an average of 73.08 x max 110 scores, x min 48 values, Mi 79 scores, Sdi 10.33 scores. The results of the distribution table of teacher communication skills so that the average (mean) can be known with a score of 74.38, standard deviation value 15.81, standard error value 2.67.

Student interest in grade IV SD Negeri 060938 Medan Johor is included in the less category with a percentage level of 33%. From the questionnaire that has been filled out by grade IV students, obtained an overall score of 2,714 with an average of 75.38 x max 113 scores, x min 50 values, Mi 81.5 scores, Sdi 10.5 scores. The results of the distribution table of teacher communication skills so that the average (mean) can be known with a score of 76.69, standard deviation value 56.53, standard error value 9.56.

Based on the normality test between teacher communication skills and student learning interests, the significance value of teacher communication skills is $0.20 \geq 0.05$. While students' learning interest is $0.20 \geq 0.05$. Based on the results of these calculations, it can be known that the significance value of teacher communication skills and student learning interests is normally distributed

Based on the linearity test between the independent variable of the teacher's communication ability with the variable tied to student learning interest, it can be seen from the sig value. *Deviation from linearity*, 0.09. Based on the calculation results, it can be concluded that $0.09 \geq 0.05$ then between communication skills and student learning interests there is a linear relationship.

Based on the correlation test, the results of this study show that teachers' communication skills have a relationship with interest in learning, as evidenced by the value 0.94. Based on the table of interpretation of r-values, correlation 0.94 lies in the vulnerable value of 0.80 – 1.000 so, it can be concluded that the level of relationship is very high.

Based on the hypothesis test of the research results, it is known that the value 5.05pm and amounted to 2.03. If it is consulted with the value at degrees of freedom (df)=30 of 2.03 so that H_a is accepted, that is, there is a significant relationship between the teacher's communication ability (X) and students' learning interest (Y) in social studies subjects, then the hypothesis is accepted.

CONCLUSIONS AND RECOMMENDATION

Based on the discussion of this chapter, the researcher elaborated on the conclusions compiled based on research activities regarding the relationship between teacher communication skills and student learning interests in social studies subjects in grade IV SD Negeri 060938 Medan Johor The 2022/2023 learning year is as follows:

For the school to create meeting activities that can encourage teachers to be better and proficient in communicating with students, For Parents after knowing the positive influence between the teacher's communication skills and interest in learning, it is better for parents to encourage children to maintain communication with the teacher, To the Teacher after knowing that there is a significant influence between the teacher's communication skills and the teacher's interest in learning, it is expected that they will be more familiar and able to communicate well so that students are more interested in the subjects taught by the teacher.

REFERENCES

- Akrim. (2021). *Strategies to Increase Student Learning Interest*. <https://www.aksajurnal.com/index.php/aj/article/download/183/157/> January 7, 2021
- Alivah. (2022). *The Influence of the Use of Youtube Media on Student Learning Interest During the Pandemic in Cibeunying Kaler District Elementary School*.
- Goddess, A.Y.P. (2019). *The relationship of the teacher's communication style to the level of effectiveness of the learning process*. *Journal of Religion and Culture*. 3(2): 71-78. <https://jurnal.stahnmpukuturan.ac.id/index.php/Purwadita/article/view/365>
- Friantini, N.R. (2019). *Analysis of Learning Interest in Mathematics Learning*. 4 (1), 6-11. <https://core.ac.uk/download/pdf/326447327.pdf>
- Fuad, A.Z. (2016). *Factors Influencing the Learning Interest of Grade 1 Students of SDN 7 Kute Panang*. *Journal of Tunas Bangsa*. 3 (2) : 42-54.
- Iskandar, W. (2019). *Teachers' Ability to Communicate to Increase Student Learning Interest at SDIT Ummi Darussalam Bandar Setia*. *Journal of Basic Education*. 3(2) : 138-149. <https://scholar.archive.org/work/oniiuah4jb43n5e7tepdo7qgm/access/wayback/http://journal.iaincurup.ac.id/index.php/JPD/article/download/1126/pdf>
- Star. (2019). *The Influence of the Quality of Facilities and Infrastructure on Student Learning Interest in Learning Islamic Religious Education*. 7(1), 113 -126. doi:<https://doi.org/10.36667/jppi.v7i1.360>
- Laily. (2021). *Development of Mathematics Learning Tools with a Think Pair Share (TPS) Type Cooperative Learning Model on Quadrilateral Material in Class VII Junior High School*. <http://repository.uir.ac.id/id/eprint/14687/> Aug 31, 2022 10:46 AM
- Lunandi. (1987). *Communication Affects the Effectiveness of Interpersonal Communication*. Yogyakarta: Canisius.
- Mailawati. (2017). *The Relationship Between Interest and Learning Motivation with Learning Achievement PAI field of study at SMA N 1 Sidomulyo South Lampung*. <http://repository.radenintan.ac.id/id/eprint/1800>
- Masdul. R.M. (2018). *Learning Communication*. Faculty of Islamic Religion, University of Muhammadiyah Palu, Indonesia. 13 (2), 1-9. doi: <https://doi.org/10.56338/iqra.v13i2.259>
-

- Moekijat. (1993). *Communication Theory*. Bandung: CV Mandar Maju.
- Muhammad, A. (2004). *Organizational Communication*. Jakarta: PT Bumi Aksara.
- Mulyana, A. (2020). *Understanding Student Interests and Learning Interests*. https://ainamulyana.blogspot.com/2012/02/minat-belajar.html?m=1/01_April_2020.
- Mulyasa. (2008). *Being a Professional Teacher Creates Creative and Fun Learning*. Bandung: PT Remaja Rosdakarya.
- Praptiyono, K and Tantri, D. M. (2022). The role of the Student Teams Achievement Division (STAD) learning model in increasing student interest in learning. <https://stabahaprajna.ejournal.id/JM/article/view/13> 1(2), 80-88.
- Prasetyo, B and Jannah, M.L. (2014). *Quantitative Research Methods*. Jakarta: PT Rajagrafindo Persada.
- Purnamasari, L. (2020) *Principles of Effective Educational Communication for PGSD Teacher Candidates in Conveying Their Ideas in Public in Curriculum-Based English 2013*, Journal of Education, 5 (2) : 90-93. https://digilib.esaunggul.ac.id/public/UEU-Journal-23321-11_2303.pdf.
- Riyanto, T. (2015). *Teacher Communication Learning Becomes Effective*. Yogyakarta: PT Kanisius.
- Sari, F.S. (2022). *The Relationship of Teachers ' Interpersonal Communication Skills to Student Learning Interests in Social Studies Learning in Class VII at SMP N 01 Sungai Rumbai Dharmasraya*. 6(2) <https://jptam.org/index.php/jptam/article/view/3762>
- Setiawan, A. (2022). *The influence of interest in learning on the learning outcomes of grade VI students of SDN 1 Gamping*. Journal of Basic Education Research and Innovation. 2 (2) : 92-109. <https://jurnal.stkipgiritrenggalek.ac.id/index.php/tanggap/article/view/373>
- Silaban, P. J. (2019). Penerapan Model Pembelajaran Inkuiri untuk Meningkatkan Hasil Belajar Siswa pada Mata Pelajaran Matematika di Kelas VI SD Negeri 066050 Medan Tahun Pembelajaran 2018/2019. *Jurnal Ilmiah Aquinas*, 2(1), 107-126.
- Silaban, P. J. (2019). Penerapan Model Pembelajaran Inkuiri untuk Meningkatkan Hasil Belajar Siswa pada Mata Pelajaran Matematika di Kelas VI SD Negeri 066050 Medan Tahun Pembelajaran 2018/2019. *Jurnal Ilmiah Aquinas*, 2(1), 107-126.
- Silaban, P. J. (2015). *Meningkatkan Motivasi dan Kemampuan Pemahaman Matematis Siswa Melalui Pembelajaran Kooperatif Tipe Tgt Berbantuan Alat Peraga Pada Mata Pelajaran Matematika di Kelas VI SD Methodist-12 Medan Tahun Ajaran 2014* (Doctoral dissertation, UNIMED).
- Silaban, P. J., & Hasibuan, A. (2021). Hubungan Lembar Kerja Peserta Didik Berbasis Cat Terhadap Kemampuan Pemahaman Matematis Siswa. *Jurnal Ilmiah Aquinas*, 4(1), 48-59.
- Silaban, P. J. (2019). Efektivitas Pembelajaran Melalui Pembelajaran Kooperatif Tipe Tgt Berbantuan Alat Peraga Di Kelas Vi Sd Methodist-12 Medan Pada Kompetensi Dasar Luas Bangun Datar Sederhana. *Jurnal Ilmiah Aquinas*, 2(2), 175-199.
- Silaban, P. J. (2017). Meningkatkan Motivasi Dan Kemampuan Pemahaman Matematis Siswa melalui Alat Peraga Montessori Pada Mata Pelajaran Matematika Kelas IV SD ASSisi Medan. *ELEMENTARY SCHOOL JOURNAL PGSD FIP UNIMED*, 7(4), 502-511.
- Simbolon, N. (2013). *Factors Influencing Learners ' Learning Interest*. 1 (2) : 14-19. <https://jurnal.unimed.ac.id/2012/index.php/elementary/article/view/1323>
- Slameto. (2010). *Learning and the Factors That Influence It*. Jakarta: Rineka Cipta.
- Sugiyono. (2015). *Qualitative Quantitative Research Methods and R&D*. Bandung: Alfabeta
- Sugiyono. (2018). *Qualitative Quantitative Research Methods and R&D*. Bandung: Alfabeta.
- Sugiyono. (2021). *Educational Research Methods Quantitative, qualitative, and R&D Approaches*. Bandung: Alfabeta.
- Susanto, A. (2013). *Learning Theory of Learning in Elementary School*. Jakarta: Prenadamedia Group
- Suyanto and Jihad, A. (2016). *How easy it is to compile scientific writing*. Yogyakarta: The essence of Erlangga Group.
- Widjaja. (2000). *Communication Studies Introduction to Study*. Jakarta: PT Rineka Cipta.
- Joseph, M. (2014). *Qualitative, qualitative & Combined Research Methods*. Jakarta: Prenadamedia Groub.