

# The Effect of Student Team Achievement (STAD) Cooperative Learning Model on the Fourth-Grade Students' Learning Outcomes at Assisi Medan Elementary School

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#### ABSTRACT

This paper discusses the effect of applying the Student Team Achievement Division (STAD) cooperative learning model on student learning outcomes on the theme of the area where I live in class IV of SD Assisi Medan in the academic year 2022/2023. The research uses quantitative methods. The research population involves 180 fourth-grade students at SD Assisi Medan. The sampling used simple random sampling and the sample used was 44 fourth-grade students. The research results indicate that students' learning outcomes using the Student Team Achievement Division (STAD) cooperative learning model are in the very good category with an average score of 83.48. The correlation test result is 0.958, which means  $r_{count}$  (0.958)  $\geq r_{table}$ (0.297), so that Ha is accepted. Thus, there is a significant effect between the use of the Student Team Achievement Division (STAD) cooperative learning model on students' learning outcomes on the theme of the area where I live in class IV of SD Assisi Medan. It can be seen from the results of the T-test research where  $t_{count} 21,720 \geq t_{table} 2,015$  so it can be stated that Ha is accepted. It indicates that there is a significant positive effect from the use of the Student Team Achievement Division (STAD) cooperative learning model on students' learning outcomes on the theme of the area where I live in class IV of SD Assisi Medan in the academic year 2022/2023.

Keywords: students' learning outcomes, cooperative learning model, STAD

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## **INTRODUCTION**

Education is very important to improve the quality of labor in Indonesia. Every human being will have the ability to deal with problems that arise in everyday life thanks to education. As stated in the Law of the Republic of Indonesia No. 20 of 2003 concerning the national education system, education is an activity that focuses on the present and the future in order to improve discipline in learning and the teaching process so that students actively develop their potential. within to have a strong spiritual foundation, self-control, personality, intelligence, noble character, as well as the necessary personal equipment, the nation's society and the state.

One that plays an important role in achieving success in education is the process of implementing learning. The implementation of learning goes well if it is done with good planning too. In the process of implementing teaching and learning there is interaction between teachers and students. Teaching and learning activities carried out by the teacher greatly affect student learning activities and student learning outcomes. In learning there is a system in which there are components that can influence success, achievement of learning objectives. This component includes objectives, teaching materials, teaching methods or strategies, media, teachers, and students. To manage the Nation effectively through the use of personality and the development of values, Teachers must have strategic planning.

Teachers play a strategic role in preparing the nation through personality development and instilling values as the nation's next generation. The teacher's strategic role has implications for the profile that a teacher



must have as a manifestation of the profession he carries. According to Saud (Prihantini, 2020: 4) the six duties and responsibilities of educators are as teachers, as mentors, as administrators in the classroom, as curriculum developers, as professional developers, and also maintain relationships with the surrounding community. In its implementation, the teacher must be able to create a pleasant atmosphere and learning process so that students are more interested in learning and easily understand the material presented. The teaching and learning process sometimes does not encourage students to develop thinking skills so that the information that has been conveyed does not get the desired learning outcomes. The lecture method used by most teachers is very likely to weaken student learning outcomes. One-way learning that is unknowingly still mostly carried out by teachers who make students in in class easily bored, sleepy, and uncomfortable in in class. The importance of collaboration between students and two-way communication between teachers and students, because when the two-way process takes place, learning in the classroom will not be boring. In learning, teachers must be able to choose methods or strategies and learning media that are appropriate to learning so that students are not passive in learning activities, are not bored and are motivated by students to learn so that learning objectives can be achieved.

In the world of education, the problem faced is the weakness of the teaching and learning process. The teaching and learning process sometimes does not encourage students to develop thinking skills so that the information that has been conveyed does not get the desired learning outcomes. The lecture method used by most teachers is very likely to weaken student learning outcomes. One-way learning that is unknowingly still mostly carried out by teachers who make students in in class easily bored, sleepy, and uncomfortable in in class. The importance of collaboration between students and two-way communication between teachers and students, because when the two-way process takes place, learning is in progress in class will not be boring. In learning, teachers must be able to choose methods or strategies and learning media that are appropriate to learning so that students are not passive in learning activities, are not bored and are motivated by students to learn so that learning objectives can be achieved.

based on results observation carried out by researchers in class IV SD Assisi Medan found a problem, namely learning tends to be boring. Teachers only use conventional learning models such as lectures without being interspersed with various other models so that they do not involve students playing an active role in learning which causes learning to only run in one direction and is monotonous. As well as in the delivery of learning material, it still focuses on books so that it has an impact on student learning outcomes, especially on Theme 8 The Area Where I Live . This can be seen from the learning outcomes obtained by students not in accordance with the standard of student learning completeness.

The researcher also observed that when the learning process was carried out in class, it turned out that the researcher saw that there were still many fourth grade students at Assisi Medan Elementary School who were not conducive or were playing games during the lesson. The reason is because the model applied is still less varied. Therefore, it is difficult for students to interact and develop students' thinking skills in the learning process so that students are not interested in participating in learning.

By Because That, Teacher must choose model learning Which will interesting attention student . With an interesting learning model, the teaching and learning process goes well and achieves maximum learning outcomes. To overcome these problems the teacher must have a strategy so that students can learn effectively and efficiently, so as to achieve the expected goals. Teachers can use alternative learning models that are appropriate and with the technique of presenting the material to be delivered. One of these learning models is cooperative type *Student Team Achievement Division* (STAD). Simanjuntak & Tetty (2018), "The application of the cooperative learning model, not only requires students to be active, it is expected that students are also creative, able to work together, independently and can improve students' thinking skills". To find out the success or failure of applying *the Student Team Achievement Division* (*STAD*) cooperative learning model to improve learning outcomes, research was conducted using data collection instruments used in research, namely questionnaires, tests, observations, and documentation.



## LITERATURE REVIEW Learning Model

In general, learning models can be understood as plans or patterns that are used as guidelines by practitioners to determine learning tools in the classroom.

According to Sugiyono (2018: 45), "The Learning Model is a design that describes the process in detail and creates environmental situations that allow students to interact so that changes or developments occur within themselves." According to Istirani and Pulungan (2017: 271), "A learning model is a plan or pattern that can be used to design face-to-face classes or additional learning outside the classroom and to develop learning materials". According to Aunurrahman (2014: 146), "The learning model can be interpreted as a conceptual framework that describes systematic ways of organizing learning experiences to achieve certain goals and acts as a guide for designers. From this understanding, it can be concluded that the learning model is a design or plan that describes the process of carrying out learning that is arranged systematically by learning designers and teachers planning and carrying out the creation of environmental situations that allow students to interact in such a way that changes or developments occur within them.

# **Cooperative Learning Model**

As the name suggests, cooperative learning can be interpreted as learning together. This learning is done so that students can help each other in learning. The success of learning from the group

According to Kusumawati (2017: 5), "Cooperative learning comes from the word cooperative, which means doing something together by helping each other as a group or team". Then according to Huda (2015) Cooperative learning refers to learning methods where students work in small groups and help each other learn. . Meanwhile, according to Laa (2017: 45), "The cooperative learning model is a learning model that can improve student achievement in academic assignments, and assist students in achieving learning goals."

## Cooperative Learning Model Student Team Achievement Division (STAD) Type.

Cooperative learning type Student Teams Achievement Division (STAD) was first developed by Robert Slavin. Cooperative learning type Student Team Achievement Division (STAD) is one of the simplest cooperative learning models, and is one of the models that is widely used in cooperative learning.

According to Slavin (in Yusron, 2015: 144) explains that cooperative learning type Student Team Achievement Division (STAD) is a cooperative learning model using small groups with a heterogeneous number of members in each group consisting of 4-5 students. According to Kurniasih and Sanni (2016: 22) cooperative learning type Student Team Achievement Division (STAD) is a cooperative type that emphasizes activities and interactions between students to motivate each other and help each other in mastering subject matter in order to achieve maximum achievement. Then according to Esmiarto (2016: 45) cooperative learning type Student Team Achievement Division (STAD) is a group learning model to motivate each other and help understand the expected competencies and increase awareness that learning is fun, meaningful and important to do ".

The steps of the Student Team Achievement Division (STAD) cooperative learning model according to Slavin (2015: 8) are as follows:

- 1. Delivering goals and motivating students: The teacher conveys all the learning objectives to be achieved during learning and motivates students to study to keep studying.
- 2. Organizing students into study groups: The teacher explains to students how to form study groups by dividing students mixed or heterogeneous and the teacher helps each group to make transitions efficiently so that learning takes place well.
- Group management in work and study: Guidelines for study groups that are formed while doing assignments, especially for groups that don't understand the questions.
- 4. Evaluation: Evaluate the learning outcomes of the material that has been studied today or ask the group to present the work results so that their friends can listen to the results of each group



5. Giving awards: Appreciating the learning outcomes of both individual and group efforts by giving prizes or praise to the group.

According to Shoimin (2014) the advantages of cooperative learning type Student Team Achievement Division (STAD) are as follows:

- 1. Students work together to achieve goals by following group norms.
- 2. Students actively help and encourage together to succeed.
- 3. Plays an active role as a peer tutor to encourage group success.
- 4. Interaction between students and improve their reasoning abilities.
- 5. Develop individual skills.
- 6. Improve group skills
- 7. Non-competitive
- 8. Do not feel revenge.

In addition, according to Shoimin (2014) the lack of cooperative learning type Student Team Achievement Division (STAD) is as follows:

- a. The contribution of low achieving students is reduced.
- b. High achieving students lead to disappointment because the role of smart members is more dominant.
- c. It takes a long time for students so it is difficult to achieve curriculum targets.
- d. It took longer for teachers to generally not want to use cooperative learning.
- e. Requires specific abilities so that not all teachers can implement this cooperative learning.
- f. Demanding certain traits, for example the nature of likes to cooperate.

## Learning outcomes

In the process of teaching and learning the learning outcomes desired by students and important to be known by the teacher, in order to design teaching and learning activities correctly. Learning outcomes must show a change or acquisition of new behavior from students that is sedentary, functional, positive and conscious. Therefore, some experts express opinions about the meaning of the following learning outcomes.

According to Purwanto (2017: 54) "Learning outcomes are changes in behavior that occur after participating in the teaching and learning process in accordance with educational goals". Then according to Susanto (2017: 5) states that "Learning results are changes that occur in students, which involve cognitive (knowledge), affective (attitude), and psychomotor (skill) aspects as a result of learning activities". Furthermore, according to Istirani and Pulungan (2017: 19) "Learning outcomes are a specific inclusion that is expressed in actions and reflections that are manifested in written form that are useful for describing the learning outcomes to be achieved from this behavior can be in the form of real facts and can be seen and disguised facts. Meanwhile, according to Nawawi (in Susanto, 2017: 5) states that "Learning results can be interpreted as the level of success of students in learning subject matter at school which is expressed in scores obtained from test results regarding a number of certain learning materials". According to Rusman (2017: 130) says that "Learning outcomes are abilities that students have after they receive their learning experience. Learning outcomes have such an important role in the learning process. the process of assessing learning outcomes can provide information to teachers about student progress in an effort to achieve their learning goals through learning activities.

## METHOD

## **Research design**

Research design in the experimental method according to Sugiyono (2019:112-115) has several forms of design, namely *Pre-Experimental Design, True Experimental Design, Factorial Design, and Quasi Experimental Design - There are 3 design forms of Pre-Experimental Design - namely One-Shot Case Study, One-Goup Pretest-Posttest and Intact-Group Comparison - The design used by researchers in this study is experimental research, namely the One-Group Pretest-Posttest design. In this design the researcher gives a* 



pretest, before being given treatment so that the results of the treatment can be known more accurately because they can be compared with the conditions before and after being given treatment.

# **Data Collection Techniques**

Data collection techniques used in this study were tests, questionnaires and documentation. The test is given by giving pre-test and post-test questions to respondents. The pre-test was given before the treatment while the post-test was given after giving the treatment.

Table 1. Standard Test score						
<b>Mastery Presentation</b>	Value category	Value Criteria				
100-85	А	Very good				
84-75	В	Good				
74-60	С	Enough				
59-40	D	Not enough				
39-0	E	Not good				

Questionnaire is a data collection technique by providing or distributing a list of questions to respondents. In this study researchers will use *a Likert scale*. Sugiyono (2019: 152) suggests that *"the Likert scale* is used to measure attitudes, opinions, and perceptions of a person or group of people about social phenomena". In this study using a cooperative learning model type *Student Team Achievement Division* (STAD) in determining the value or attitude in each answer contained in the questionnaire that will be given.

In Sugiyono (2016: 46) documentation is used to obtain data sourced from journals, printed books, research results, newspapers, and so on. The authenticity of the data source can still be maintained and the data contained in the document will not change. Researchers need to ensure that the data collected is related to the issues raised in the research.

# Validity Test

Arikunto (2021:211) argues that "Validity is a measure that indicates the levels of validity or validity of an instrument". A valid instrument has high validity. Conversely, an instrument that is not valid means it has low validity.

The correlation formula used in this study is that proposed by the person, known as the *product moment correlation formula*.

Product moment formula :  $N \sum XY - (\sum X)(\sum Y)$ 

 $r_{XY} = \frac{N \sum X^{1} - (\sum X)(\sum Y)}{\sqrt{\{(N \sum X^{2} - (\sum X)^{2})(N \sum Y^{2} - (\sum Y)^{2}\}}}$ 

Information:

 $R_{XY}$  = Correlation coefficient between X and Y variables

- $\sum xy =$  Number of multiplication x with y
- N = Number of test takers
- X = Total score obtained by students for each statement item
- Y = Total score sum

In order to determine whether an instrument is valid or not, assistance from the SPSS *Version 22.0 program is needed* with the following conditions:

- 1. If r count  $\geq$  r table with a significance level of 0.05, then the instrument is valid.
- 2. If r count  $\leq$  r table with a significance level of 0.05, then the instrument is invalid.

# **Reliability Test**

Reliability test is needed in a study, because the reliability test can show the extent to which the level of an instrument can be trusted even though it has been used repeatedly. This agrees with Farida & Musyarofah



(2021) that "reliability is a coefficient that shows the extent to which an instrument/measuring device can be trusted, meaning that if an instrument is used repeatedly to measure the same thing, the results are relatively stable or consistent." This means that a study can be relied upon if the measurement results are the same and not capricious. To test reliability, the Kuder-Richardson formula or the KR-20 formula is used , namely:

$$\mathbf{r}_i = \left(\frac{k}{k-1}\right) \left(\frac{s_t^2 - \sum pq}{s_t^2}\right)$$

Information:

 $r_i$  = instrument reliability

k = number of items in the instrument

p = the proportion of the number of subjects who answered correctly

 $q = 1 - p_i$  (proportion of the number of subjects who answered incorrectly)

$$S_t^2 = \text{total variant}$$

To find the total variance, the following formula is used:

$$S_t^2 = \frac{\sum X^2 - \frac{(\sum X)^2}{N}}{N}$$

Information:

 $S_t$  = total variant

 $\sum x$  = total score sum

 $\sum x^2$  = number of squares of questions

N = the number of students taking the test

# Normality test

Before testing the hypothesis, the normality of the data is tested first. The normality test is to test whether or not the distribution of the data to be analyzed is normal. The normality test was carried out on the variables studied, namely the independent variable (X) and the dependent variable (Y). To find out whether the data is normally distributed or not, the researcher uses the *Kolmogrov-Smirnov* analysis with the help of the *SPSS version 22.0 program*. The calculation results show that the data is normally distributed if the *Asymp. sign* greater than  $0.05 \ge 0.05$ . Conversely, if the *Asymp. sign* less than equal to  $0.05 \ge 0.05$  then the data can be said to be not normally distributed. Asymp value . *Sign* this significant test on the calculation results of *the Kolmogov-Smirnov test*. The data normality test carried out in this study used the liliefors test, (Sudjana, 2018: 466)

- a. Observations X<sub>1</sub>, X<sub>2</sub>, ..., X<sub>n</sub> is used as a standard number Z<sub>1</sub>, Z<sub>2</sub>, Z<sub>n</sub> using the formula  $Z_{1} = X i X$ SD
- b. For each of these standard numbers and using the standard normal distribution list, then calculate the probability  $F(zi) = P(Z \ge Z i)$
- c. Next, the proportions Z1, Z2, ..., Zn which is less than or equal to Zi. If this proportion is expressed by S(Zi), then  $S(Zi) = \frac{\text{the number of } Z1, Z2, ..., Zn \text{ which } \le Zi}{n}$
- d. Calculate the difference F(Zi) S(Zi) then determine the absolute price.
- e. Take the absolute value of the spread (L  $_0$ ) to accept or reject the hypothesis, then compare L  $_0$  with the critical value taken from the list, for the significance level  $\infty = 0.05$ .

# By criteria:

if L  $_{count} \leq L_{table}$  then the sample is not normally distributed

If  $L_{\text{count}} \ge L_{\text{table}}$  then the sample is normally distributed.

# Correlation Test

The correlation coefficient test is used to determine whether or not there is an influence between the independent variables and the dependent variable . The requirement to test the correlation coefficient is to look at t <sub>count</sub>  $\geq$  t <sub>table</sub> or you can also use *the Product moment* correlation formula , namely:



 $N \sum XY - (\sum X)(\sum Y)$ 

 $r_{xy} = \frac{1}{\sqrt{\{(N\sum X^2 - (\sum X)^2)(N\sum Y^2 - (\sum Y)^2\}}}$ 

Information:

- = Coefficient of *Product moment correlation*  $r_{XY}$
- Ν = Total number of students
- $\sum X$ = Item score
- $\sum Y$ = Total score of all students
- $\sum XY =$  Multiplication of the score "X" and the score "Y"

Table 2. Interpretation of the Correlation Test					
Coefficient Intervals	<b>Relationship Level</b>				
0.00-0.199	Very low				
0.20-0.399	Low				
0.40-0.599	Currently				
0.60-0.799	Strong				
0.80-1.000	Very strong				

## Hypothesis testing

To find out that X has a significant influence on variable Y, it is done by testing the hypothesis using the t-test as follows:

 $t = \frac{r\sqrt{n-2}}{\sqrt{1-r^2}}$ 

Information:

r =Correlation Coefficient

n =Sample

to find out whether the hypothesis is accepted (Ha) then  $t_{hitung} \ge t_{tabel}$  vice versat  $t_{hitung} \le t_{tabel}$  then the hypothesis is rejected (Ho).

## **RESULTS AND DISCUSSION Pre-Test Results**

The initial action taken by the researcher was to give the Pre-Test to students. This pre-test was conducted to determine students' abilities before being given treatment. the ability of student learning outcomes in understanding the material for theme 8 My Living Area sub-theme 1 learning 1, most students have not received grades in the complete category according to the Maximum Completeness Criteria (KKM). Of the 44 students in grade I V, 40 students got incomplete grades while 4 students got complete grades. To make it clearer about the results of the class V Pre-Test values, below is the table of the frequency of class V Pre-Test values briefly as follows:

	Table 5. Frequency Distribution of Pre Test Data						
Х	F	FX	$x = X - \overline{x}$	X <sup>2</sup>	FX <sup>2</sup>		
30	5	150	-17.34	300.68	1503.38		
33	8	264	-14.34	205.64	1645.08		
37	4	148	-10.34	106.92	427.66		
40	4	160	-7.34	53.88	215.50		



43	2	86	-4.34	18.84	37.67
47	1	47	-0.34	0.12	0.12
50	4	200	2.66	7.08	28.30
53	3	159	5.66	32.04	96.11
60	5	300	12.66	160.28	801.38
67	1	67	19.66	386.52	386.52
70	3	210	22.66	513.48	1540.43
73	4	292	25.66	658.44	2633,74
Х	F = 40	FX ΣFX=2083	$  x = X - \overline{x} $ <b>SX=34.92</b>	X <sup>2</sup> ΣX <sup>2</sup> = 2443.87	FX <sup>2</sup> <b>2FX<sup>2</sup>=9315. 89</b>

Based on the data above, the mean, standard deviation and standard error can be as follows: Average(mean) 47.34, Standard Deviation 14.55, Error Standard 2.22. To find out the success rate of the given action, the results of the student's pre-test scores can be seen in the image below.



Figure 1 . Histogram of Pre Test Value Frequency Distribution

Based on the frequency of the histogram above, it can be seen that the students' Pre Test scores on 17 respondents obtained a score of around 30-37 at 37%, 6 respondents obtained a score of around 38 -45 at 15%, 8 respondents obtained a score of around 46 -53 at 18%, 5 respondents got a score of around 54-61 at 11%, 1 respondent got a score of 62-69 at 2% and 7 respondents got a score of 70-77 at 17%.

# Post Test Results

After all the lessons have been taught using the Student Team Achievement Division (STAD) cooperative learning model, the researcher then gives a Post Test which aims to determine the level of success of the given action.



		Tal	ole 4 . Frequen	cy Distribution	
Х	F	FX	$X=x-\overline{x}$	X2	FX <sup>2</sup>
67	4	268	-16.48	271.59	1086.36
70	4	280	-13.48	181.71	726.84
77	4	308	-6.48	41.99	167.96
80	7	560	-3.48	12.11	84.77
83	5	415	-0.48	0.23	1.15
87	6	522	3.52	12.39	74.34
90	4	360	6.52	42.51	170.04
93	4	372	9.52	90.63	362.52
97	4	388	13.52	182.79	731.16
100 <b>Total</b>	2 <b>SF</b> = 44	200 Σ <b>FX=3673</b>	16.52	272.91 Σ <b>Χ<sup>2</sup>=1108. 86</b>	545.82 ΣFX² <b>= 3950.98</b>
97 100 <b>Total</b>	4 2 ΣF = 44	388 200 ΣFX=3673	13.52 16.52	182.79 272.91 ΣX <sup>2</sup> =1108.86	731.16 545.82 ΣFX <sup>2</sup> = <b>3950.9</b>

Based on the data above, the mean, standard deviation and standard error can be as follows: The average (mean) variable X  $_1$  83.48, Standard Deviation variable X  $_1$  9.48, Standard Error Variable X  $_1$  1.45. The following is a histogram frequency table of students' Post Test scores:



Figure 2 Histogram Distribution of Post Test Value Frequency

Based on the data above, it can be seen that the students' Post Test scores were: 8 respondents obtained a score of around 67-71 at 18%, 4 respondents obtained a score of around 73-77 at 9%, 12 respondents obtained a score of around 78-85 at 27%, 10 respondents got a score of around 86-90 at 23%, 4 respondents got a score around 91-95 at 9% and 6 respondents got a score around 96-100 at 14%.

The results of the Post Test scores indicate an increase in the learning completeness of class V students. These results can be seen from the Post Test scores being higher than the Pre Test scores. Where the average value of the Post Test is 83.5 while the average Pre Test value is 47.34. For more details, it can be seen from the average value of the Pre Test and Post Test in the diagram below:



Figure 3. Pre-test and post-test average score diagrams

Based on the diagram above, it can be seen that the average value of the Post Test is higher than on the average value of the Pre Test in subject matter theme 8 sub-theme 1 learning 1. Based on the table above, it can be seen that the average value obtained by students is 80.5 in the very good category.

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Correlation coefficient	Meaning
80-100	Very well
70-79	Good
60-69	Enough
50-59	Not enough
0-49	Fail

# **Results of Questionnaire Model Mastery Learning**

At the end of learning, after being given the Post Test, then there will be provide a questionnaire on the Mastery Learning learning model which aims to see teacher activity while teaching using the Mastery Learning learning model.

		Table 6. Freq	uency Distribution	of Questionnaire Result	S
X	F	FX	$X=x-\overline{x}$	<b>X</b> <sup>2</sup>	FX <sup>2</sup>
60	2	120	-23.48	551.31	1102.62
65	2	130	-18.48	341.51	683.02
68	2	136	-15.48	239.63	479.26
69	3	207	-14.48	209.67	629.01
70	2	140	-13.48	181.71	363.42
72	1	72	-11.48	131.79	131.79
78	3	234	-5.48	30.03	90.09
79	6	474	-4.48	20,07	120.42
80	5	400	-3.48	12.11	60.55
82	3	246	-1.48	2.19	6.57
85	1	85	1.52	2.31	2.31
86	1	86	2.52	6.35	6.35

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87	1	87	3.52	12.39	12.39
89	6	534	5.52	30.47	182.82
90	3	270	6.52	42.51	127.53
93	1	93	9.52	90.63	90.63
98	1	98	1.52	210.83	210.83
99 <b>Total</b>	$\frac{1}{\Sigma \mathbf{F}} = 44$	99 ΣFX=3511	15.52	240.87 Σ <b>X<sup>2</sup>=2356 .39</b>	240.87 ΣFX²= <b>4540.50</b>

Based on the data above, the mean, standard deviation and standard error can be as follows: Average 79.80, Standard Deviation 10.16, Error Standard 1.55. For more details can be seen from the diagram below:



Figure 6 . Histogram of Questionnaire Value Frequency Distribution Normality test

The normality test was carried out to find out whether the data from the Post Test learning outcomes of class V students were normally distributed or not. Based on the results of calculations using *SPSS Version 22 normality* testing, namely by using the *Test of Normality test, it is known that the Test of Normality* value is significant  $\geq 0.05$ , it can be concluded that the data is normally distributed. Below is the result of the calculation of normality using the *SPSS Version 22 program*.

			Table 7	7. Normal	lity Test		
		Kolmog	gorov-Smiri	nov <sup>a</sup>		Shapiro-V	Vilk
CLASS		Statistics	df	Sig.	Statistics	df	Sig.
RESULTS	Pre Test	, 168	44	,003	,887	44	,000
	Post test	,102	44	.200 *	,952	44	,068

The significant level value used by researchers is a significance level of 5% or 0.134. Based on the Lilifors test (Kolmogorof Smirnov) decision making with using a significant level of 5% is If L count  $\geq$  L table . then  $0.200 \geq 0.134$  so class IV data is normally distributed.



# **Correlation Coefficient Test**

The correlation coefficient test is used to determine whether there is influence between the independent variable (X) and the dependent variable (Y). The requirement to test the correlation coefficient is by looking at r count  $\geq$  r table with the product moment correlation coefficient formula. To see the relationship of the two variables can be done by comparing between r count and r table if r count  $\geq$  r table then correlate. Below is the correlation test calculation with the help of SPSS Version 22 as follows :

		STAD TYPE COOPERATIVE	LEARNING
		MODEL	OUTCOMES
STAD TYPE COOPERATIVE	Pearson Correlation	1	.958 **
MODEL	Sig. (2- tailed)		,000
	Ν	44	44
LEARNING OUTCOMES	Pearson Correlation	.958 **	1
	Sig. (2- tailed)	,000	
	Ν	44	44

# **Table 8. Correlation Coefficient Test**

The table above shows that the correlation coefficient is 0.958. If  $r_{count} \ge r_{table}$  then  $0.958 \ge 0.297$ . This means that there is a very strong correlation between the cooperative learning model of *the Student Team Achievement Division* (STAD) type on the learning outcomes of fifth grade students at SD Negeri 097795 Perasmian. This can be seen from the table below:

Table 9. Interpretation _						
No	Mark	interpretation				
1	0.00-1.199	Very low				
2	0.20-0.399	Low				
3	0.40-0.599	Currently				
4	0.60-0.799	Strong				
5	0.80-1.000	Very strong				

# Hypothesis test

After the data is declared to be normally distributed and the sample is from the same population, then hypothesis testing can be carried out using the "t test". The statistic used to test the research hypothesis is the t-test. The hypothesis put forward is: hypothesis using "t test". The statistic used to test the research hypothesis is the t-test. the following is the result of the t-test calculation:

Table 10. T-test results						
	Unstandardized Coefficients		Standardized Coefficients			
Model		В	std. Error	Betas	t	Sig.
1	(Constant)	-,118	3,703		032	,975
	RESULTS	,957	.044	,958	21,720	,000



The result of the t-test calculation from *SPSS ver* 22 is 21,720 and the t table for 44 respondents is 2,015. To find out whether the hypothesis is accepted or rejected, t count  $\geq$  t table that is 21,720  $\geq$  2.015 which means there is an influence of the learning model cooperative type *Student Team Achievement Division* (STAD) on student learning outcomes.

# **Discussion of Research Results**

If observed from the variable coefficients, this study can be stated that the learning model cooperative type *Student Team Achievement Division* (STAD) is higher than students who get conventional learning. The results of the analysis obtained provide an illustration that it turns out to be a learning model cooperative type *Student Team Achievement Division* (STAD) effect on learning outcomes in theme 8 sub-theme 1 learning 1. Based on the results of the research, the findings of the researchers are as follows:

- 1. This research was conducted in class IV SD Assisi Medan. To find out students' initial abilities, the researcher conducted a Pre-Test with multiple choice questions and the same type of questions, the results were obtained with an average of 47.34, it can be said that students' initial abilities were still lacking.
- 2. After conducting the Pre-Test, the researcher delivered the material using the learning model cooperative type *Student Team Achievement Division* (STAD). at the end of the lesson, the researcher again gave the Post-Test to determine the level of success. The results of the Post-Test have an increase from the results of the Pre-Test given previously. The Post-Test result that has been tested is 83.48. From these data, it can be said that the success rate of learning outcomes has increased.
- 3. There is a significant influence on the use of learning learning models cooperative type *Student Team Achievement Division* (STAD) on student learning outcomes in theme 8 the area where I live sub-theme 1 learning 1. It can be proven through the results of the total score with normality test results with normality testing criteria, namely significant value (sig)  $\geq 0.05$ , namely  $0.200 \geq 0.05$ , so the sample is normally distributed.
- 4. The results of the correlation coefficient prove that there is an influence of the learning model of learning cooperative type *Student Team Achievement Division* (STAD) (X) on student learning outcomes (Y) where t <sub>count</sub>  $\geq$  t <sub>table</sub>, namely 0.958  $\geq$  0.297, it can be concluded that there is a very strong influence.

In the hypothesis test, namely t<sub>count</sub>  $\geq$  t<sub>table</sub> where the results are 21,720  $\geq$  2,015 with a significant level ( $\alpha = 0.05$ ) with this it can be proven that the alternative hypothesis (Ha) is accepted, namely there is a significant positive effect from the use of learning models cooperative type *Student Team Achievement Division* (STAD) on the learning outcomes of fourth grade students of SD Assisi Medan in the 2022/2023 Learning Year. This proves that the learning model of learning cooperative type *Student Team Achievement Division* (STAD) is very effectively used in thematic learning.

# CONCLUSIONS AND RECOMMENDATION

Based on the discussion of this chapter, the researcher outlines the conclusions compiled based on research activities regarding the effect of the *Student Team Achievement Division* (STAD) type cooperative learning model on student learning outcomes of class I V SD Assisi Medan on student learning outcomes for the 2022/2023 academic year as follows:

- 1. The process of implementing the cooperative learning model type *Student Team Achievement Division* (STAD) on the learning outcomes of fourth grade students at SD Assisi Medan is by giving the Pre-Test and Post-Test to the respondents, the test is given 30 questions each. Before being given the treatment the researcher gave a Pre-Test to find out the extent of students' knowledge of the material on theme 8 sub-theme 1 learning 1. After getting the results of the Pre-Test, the researcher then gave treatment to students using a learning model cooperative type *Student Team Achievement Division* (STAD) after giving the treatment the researcher gave the Post-Test, this was done so that the researcher found out how far the students' abilities were after being given the treatment.
- 2. After implementing the learning model cooperative type *Student Team Achievement Division* (STAD) to the learning outcomes of fourth grade students of SD Assisi Medan student learning outcomes increased.



This can be seen from the students' average Pre-Test score of 47.34 which is in the low category, while the Post-Test average score is 83.48 which is in the very good category.

3. There is the influence of learning models cooperative type *Student Team Achievement Division* (STAD) on student learning outcomes in class IV material theme 8 the area where I live sub-theme 1 learning 1 at SD Assisi Medan Academic Year 2022/2023. This can be proven by the correlation coefficient value of 0.958 which is in a very strong interference. T-test calculation results To find out whether the hypothesis is accepted or rejected, then t <sub>count</sub>  $\geq$  t <sub>table</sub>, namely 21,720  $\geq$  2.015 which means there is an influence of the learning model cooperative type *Student Team Achievement Division* (STAD) on student learning outcomes. Thus Ha is accepted and <sub>HO</sub> is rejected.

This study shows that student learning outcomes by using a learning model cooperative type Student Team Achievement Division (STAD) is more effective than without using a learning model cooperative type Student Team Achievement Division (STAD). Therefore, in improving student learning outcomes it is necessary to utilize learning models that can focus students' attention, especially on learning theme 8 subtheme 1 learning 2, one of which is the learning model cooperative type of Student Team Achievement Division (STAD) displayed by researchers.

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