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The Analysis of High Order Thinking Skills in the TPS Cooperative Learning Model for Narrative Text Materials in Class XI at SMA Darul Mustofa Bangkalan

Dwi Ratna Ningsih[1],Sulis Janu Hartat[2], Sri Yuni Hanifah[3]
ningsihdwiratna3@gmail.com[1], sulis.janu@unitomo.ac.id[2],
sriyuni.hanifah1986@gmail.com[3]
SMA Darul Mustofa[1], Universitas Dr. Soetomo Surabaya[2], Universitas Dr. Soetomo Surabaya[3]

Abstract:
In this study, there are several problem formulations, namely is there an effect of the TPS cooperative learning model for narrative text material at Darul Mustofa High School Bangkalan and is there an effect of high order thinking skills on the TPS cooperative learning model for narrative text material at Darul Mustofa High School Bangkalan. With the aim of the study to determine the effect of the TPS cooperative learning model for narrative text material at Darul Mustofa High School Bangkalan and to determine whether there is an effect of high order thinking skills on the TPS cooperative learning model for narrative text material at Darul Mustofa High School. This study uses a quantitative approach in which the type of experimental research is a quasi-experimental design in the form of a time series design. The advantages of this design are that it only uses one group so that it does not require a control group, so that the discussion is more detailed and focused to get the research objectives. With the pre-test before the treatment is carried out and the post-test after the treatment is carried out, the pre-test and post-test have the same types of items and have been validated. The TPS cooperative learning model on the dependent variable, namely learning outcomes called the determinant coefficient (R Square) obtained a value of 0.271, meaning that the influence of the variable, namely the TPS cooperative learning model, has a percentage of 27.1%, the effect of HOTS and TPS cooperative learning model on student learning outcomes obtained 0.233 or 23.3% affect.

Keywords: High Order Thinking Skill, TPS Cooperative Learning Model

Introduction

Learning inspires every student to improve their creative thinking skills, with the benefit of developing thought processes that are highly relevant to

learning and emphasizing problem solving or learning based on higher order thinking skills. Based on the findings of Sumaryanta (2018), the HOTS assessment is designed to improve students' HOTS skills (critical, logical, reflective, metacognitive, creative thinking, non-routine problem solving, non-algorithmic analysis, evaluative, creation, concept formation, critical). thinking, creativity/brainstorming, problem solving, mental expression, use of rules, reasoning and logical thinking, and/or thinking at a higher level than simply repeating facts.

In learning it is hoped that students will get learning experiences that really trigger students to think critically so that educators can assess the achievement of educators in a lesson. In learning with HOTS where students get questions designed by educators to trigger critical thinking. Higher Order Thinking Skills (HOTS) in the form of analyzing questions, evaluating skills in the form of critical thinking skills and creation or creation, namely developing the ability to think creatively in solving given or faced problems.

According to Setiawati et al. (2018), in the context of assessment, HOTS questions measure the ability to: 1) transfer one concept to another, 2) process and apply information, and 3) navigate between different types of information, 4) use information to solve problems; 5) critically examine ideas and information; This opinion explains the pressure of HOTS questions. Ability to understand initial concepts, process and apply information based on problem presentation, and act in the form of critical thinking skills.

According to Sumaryanta (2018) argues that the questions used to measure HOTS cannot be just any questions, but questions that have properties including: non-algorithmic, tend to be complex, have more than one possible solution (open ended approach), and require effort. to find structure in irregularities so that questions that have these characteristics will encourage students to analyze, evaluate, and/or create a method or procedure needed to solve the problem at hand.

Review of Literature

A. HOTS (*High Order Thinking Skill*)

Based on the findings of Sumaryanta (2018), the Higher-order Thinking Skills (HOTS) assessment is a measure of students' Higher-order Thinking Skills (HOTS) abilities (critical, logical, reflective, meta-cognitive, creative thinking). , do not think). - everyday problem solving skills, including non-algorithmic, analytical, evaluative, creative, concept formation, critical thinking, creativity/brainstorming, problem solving, mental expression, rule application, reasoning and reasoning, and/or singular facts Country of need higher level of thinking. HOTS (Higher Order Thinking Skills) first emphasizes the ability to understand concepts, process and apply information based on problems, then act in the form of critical thinking skills. Furthermore, according to Sumaryanta (2018), the questions used to measure HOTS (Higher Order Thinking Skills) should not only be questions, but questions which include: Several solutions are possible (open approach).

HOTS (Higher Order Thinking Skills) is characterized by educational thinkers such as Dewey (1859-1952) and Vygotsky (1896-1934) and their solutions to problems when faced with a situation or problem. Higher-order thinking is always associated with the process of exploring ideas, forming different possibilities and choices that can ultimately determine solutions. The higher order thinking process that is often referred to is Bloom's taxonomy, revised by Anderson and Kraswall (2001). In Bloom's revised taxonomy, there are six levels of higher thought processes.

1. C1 = Remembering
2. C2 = Understand (understanding)
3. C3 = Applying (applying)
4. C4 = Analyzing (analyzing)
5. C5 = Evaluating (evaluating)
6. C6 = Creating (creating)

B. TPS Cooperative Learning Model

According to Trianto, the Think Pair Share (TPS) model is a form of collaborative learning that aims to influence student interaction patterns (Rianingsih et al, 2019). This model is also effective for adding variety to class discussion patterns.

The advantage of the Think Pair Share model is that it can create a communicative learning atmosphere among students. The TPS model also provides opportunities for students to develop thinking processes and share ideas in solving problems (Indrani, 2014). Model steps provide opportunities for students to think, react, and help one another. The Think Pair Share model is a form of collaborative learning where students can think, share and work with other students (Trianto in Yustitia et al., 2018). One of the steps in this model, the Thinking Process, provides space for students to develop ideas and their ability to express ideas. Students can also compare their ideas.

C. Narrative Text

There are four skills that students must master in language teaching. In particular, speaking and writing are productive skills in English, one of the four language skills. These skills, including students' writing and speaking results, are the ultimate goal of the learning process. Speaking and writing skills are very dominant in teaching. Because writing and speaking can be a tool to convey ideas, ideas, and messages to readers with certain expectations. (Mardiyah (2019). To write a narrative text there are four components that must be considered, namely:

a. Orientation

Orientation is the part of the text that serves as an opening about the contents of the narrative text or provides an initial description of the contents of the story so that the setting of the story can be understood at the beginning of the text.

b. Complications

Complication is the part of the text which functions to provide information about the conflict that occurs in a story so that it can be studied by the reader.

c. Resolution

Resolution is the part of the text which functions to describe a reaction or response to solve the problems that occur in the story.

d. Coda

The coda is a part of the text that has the function of providing a reflection or evaluation of the conflict contained in a narrative text.

Method

This study uses a quantitative approach and the type of research used is experimental research. The research method used in this research is a quasi-experimental design research in the form of Time Series Design. This research design uses only one group, so it does not require a control group. Pre and post treatment pre-test and post-treatment test, pre-test and post-test have the same type of questions and are validated.

Quantitative research methods can also be interpreted as research methods based on a positivist philosophy, the purpose of which is to study a particular population or sample, collect data using research tools, and test the hypotheses given. used to analyze quantitative/statistical data.

The survey subject is the population. Population is data of interest in a certain range and time period. All students of SMA Darul Mustafa Bangkalan who became the population in this study.

In the population there is a small part of the population that will be representative of the population itself. The sample is the smallest part of the population that can represent the population itself, namely class XI-A. There are several sampling techniques or sampling techniques that we can use according to the circumstances and needs of researchers. In this study, researchers used a non-probability sample, namely purposive sampling. Researchers use this technique on the grounds that the sample chosen is a sample that uses certain considerations and has certain criteria in accordance with the research objectives. The number of students in class XI-A is 36 students.

Results and Discussions

Analysis of the data used by researchers in this study using quantitative analysis. Data analysis techniques in quantitative research use statistics. The data from the research results were tested for normality and linearity before being used to test the hypothesis. To determine the degree of relationship or correlation between the independent variable (X) and the dependent variable (Y) it is calculated by the correlation coefficient (r).

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

The rxy value gives a correlation index between the three variables X and Y and the three variables are correlated. information:

r : correlation coefficient between variable X and variable Y
X : Rating for a particular item
Y: total score
N: Number of subjects

From the data obtained before learning (pretest) and after learning (Posttest), the data obtained the highest score in class XI-A with a total of 36 students with a pretest score of 75 and the lowest score obtained was 40, then the posttest score obtained after learning obtained a score the highest score was 85 and the lowest score was 65. The XI-A experimental class, which was taught using the PBL model, contributed to improving learning outcomes.

HOTS assessment data was obtained from students' answers when answering questions that had been provided to measure the HOTS of each individual student. With a collaboration skills assessment rubric that has a score of 3; 2; 1; and 0 according to the scoring in table 4.2. HOTS assessment with a total of 15 questions.

Table 1. Class XI A Homogeneity Test Results

Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
Hasil Belajar XI-A	Based on Mean	2.909	1	66	.093
	Based on Median	2.417	1	66	.125
	Based on Median and with adjusted df	2.417	1	61.335	.125
	Based on trimmed mean	3.009	1	66	.087

The results of the homogeneity test in the experimental class, namely XI-A based on the output on IBM SPSS v25, obtained a significance value based on the mean of 0.093, based on the conditions contained in the homogeneity test, it is assumed that if the significance value is > 0.05, then the data can be assumed to have the same variance but if the significance value is <0.05 then the data can be said to have unequal variance. From the output data obtained a significance value of 0.093 > 0.05, which means that the data tested has the same variance.

The following data analysis is an analysis of the prerequisite regression data that has been obtained in the field, the results of the pre-test and post-test with different treatments, a partial field test is carried out which intends to determine the effect or effect size of the treatment has a partial significant effect , then it has been carried out in 1 type of class in the experimental class and the control class. In the first field test the researcher used the cooperative learning model and collaborated with HOTS questions and assessments. Then the following results were obtained in the field with the help of the IBM SPSS V25 program, the following results were obtained.

1. Prerequisite Test

a. Class XI A TPS cooperative learning model

Class XI A, which is the first experimental class with 36 students. From the results of the normality test, a significance level of 0.2 is obtained, meaning that it can be said that the data obtained is normal data, provided that the significance level obtained is greater than 0.05. Then the data is normal and can be used for research purposes.

Table 2. Class XI A Normality Test

One-Sample Kolmogorov-Smirnov Test

N		36
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	4.99417498
Most Extreme Differences	Absolute	.108
	Positive	.092
	Negative	-.108
Test Statistic		.108
Asymp. Sig. (2-tailed)		.200[c,d]

The results obtained in the normality test were 0.2, which means data are declared normal and can be used.

Table 3. Class XI A Linearity Test

ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
postes * pretes	Between Groups	(Combined)	97.715	7	13.959	.482	.840
		Linearity	35.926	1	35.926	1.240	.275
		Deviation from Linearity	61.789	6	10.298	.355	.901
	Within Groups		811.174	28	28.970		
	Total		908.889	35			

In the next stage is the linearity test stage which aims to find out whether the two variables have a linear relationship. Because if the independent variable and the dependent variable have a good correlation, the significance can be seen from the linearity relationship between the two variables. To detect whether the model is linear or not can be done by comparing the value of the F-Statistics with the F-Table with a significant level of 5%, namely:

a) If the value of F-Statistics> F-Table, then the hypothesis which states that the model is linear is rejected.

b) If the value of F-Statistics <F-Table, then the hypothesis which states that the model is linear is accepted.

From the SPSS calculation results, a significance value of 0.901 is obtained, which means greater than 0.05, it can be concluded that there is a significant linear relationship between the independent variables and the dependent variable. Then in terms of the F value where the calculated F value

or the F value generated by the SPSS calculation must have a smaller value than the F table value. From the results of SPSS calculations, it is obtained that F count is 0.355 then the F table value is 2.45 meaning that F count <F table where by calculating the F value that there is a significant linear relationship between variables.

In the next stage, there is a multicollinearity test which functions to detect whether there are symptoms of multicollinearity before the data is processed statistically with a regression model which will be reviewed from the tolerance value and variance inflating factor (VIF). If the tolerance value is guided by the tolerance value greater than 0.10, it means that there is no multicollinearity and vice versa. When viewed from the VIF value, the VIF value is less than 10.00, meaning that there is no multicollinearity and vice versa.

Table 4. Class XI A Multicollinearity Test

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	T	Sig.	Tolerance	VIF
1	(Constant)	70.370	5.297		13.285	.000		
	pretes	.102	.086	.199	1.183	.245	1.000	1.000

a. Dependent Variable: postes

From the SPSS calculation data, the tolerance and VIF results are 1 or 1.000, where the value is greater than 0.10 based on the tolerance value, which means that there is no multicollinearity and less than 10.00, which means that the calculated VIF value from SPSS is smaller than the VIF value guideline. which can be interpreted that there is no multicollinearity in these variables in

terms of the VIF value. The next stage is the heteroscedasticity test. The purpose of the heteroscedasticity test is to test whether there are unequal deviations from the residual values.

Table 5. Class XI A Heteroscedasticity Test

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	-70.370	.000		-16091558 2.003	.000
	pretes	-.102	.000	-.203	-34938422 .709	.200
	postes	1.000	.000	1.020	17573225 6.619	.102

In accordance with the guidelines for the decision maker of the heteroscedasticity test where the SPSS calculated value is greater than 0.05. The conclusion is that there are no symptoms of heteroscedasticity.

In the next stage is the autocorrelation test where this test aims to see the presence of autocorrelation symptoms or the absence of lag variables among the independent variables. The autocorrelation test can be seen from Durbin Watson.

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.521[a]	.271	.111	5.067	1.789

a. Predictors: (Constant), pretes
b. Dependent Variable: postes

Based on SPSS calculations, the Durbin Watson value is 1.789, then in terms of the distribution table, the Dubin Watson value table has a significance of 5%. With the formula (k ; N) where k = is the independent variable and N is the number of samples, then (k ; N) = (2 ; 36). It was found in the Durbin Watson table that the dL was 1.354 and the dU was 1.587. In the SPSS Durbin Watson calculation, a value of 1.789 is obtained, which is greater than the dU value of 1.587 and less than (4-dU) = 2.413. So as the basis for decision making in the autocorrelation test, it can be concluded that there are no problems or symptoms of autocorrelation.

Table 6. Correlation between Independent and Dependent Variables

		HB	HOTS	TPS
Pearson Correlation	HB	1.000	.393	.483
	HOTS	.393	1.000	.344
	TPS	.483	.344	1.000
Sig. (1-tailed)	HB	.	.294	.047
	HOTS	.294	.	.020
	TPS	.047	.020	.

N	HB	36	36	36
	HOTS	36	36	36
	TPS	36	36	36

The results obtained provide information that the correlation in the Pearson Correlation column shows the correlation between HOTS and HB or learning outcomes obtained 0.393 or 39.3%, then the correlation between the TPS cooperative learning model and HB or learning outcomes is obtained 0.483 or 48.3%, and the correlation between the independent variables is the model TPS cooperative learning on HOTS was obtained by 0.344 or 34.4%. so that each independent variable and also the dependent variable are correlated with each other.

The next calculation stage is to look at the effect when the independent variable is tested to get the percentage effect on the dependent variable, then it can be seen in the following table.

Table 7. Effect of HOTS, TPS on HB

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					
					R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
1	.483[a]	.233	.025	10.287	.233	1.443	2	33	.251	1.042

a. Predictors: (Constant), TPS, HOTS

b. Dependent Variable: HB

The results of the calculation obtained a correlation value in terms of the R value obtained by a value of 0.483 or the correlation between HOTS and the TPS cooperative learning model for learning outcomes was obtained by 48.3%. then the effect of HOTS and the TPS cooperative learning model

on student learning outcomes was obtained 0.233 or 23.3% affecting the increase in student learning outcomes.

Analysis of data that has been processed with the help of IBM SPSS V25 obtained results where the influence of the TPS cooperative learning model on student learning outcomes that have learning objectives and learning model syntax to improve learning outcomes.

a. Class XI A regression test TPS cooperative learning model

Table 8. Class XI A Variables

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	TPS[b]	.	Enter

a. Dependent Variable: HB

Table 8 provides information about the variables obtained and processed with the help of IBM SPSS V25.

Table 9. The Results of the Regression Test of the TPS Cooperative Learning Model

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.521[a]	.271	.111	5.067	1.789

a. Predictors: (Constant), TPS
b. Dependent Variable: HB

The summary model table explains the correlation/relationship (R) value of 0.521 and explains the percentage influence of the independent variable, namely the TPS cooperative learning model on the dependent

variable, namely the learning outcome called the determinant coefficient (R Square) which is the result of squaring (R) . then a value of 0.271 is obtained, meaning that the influence of the variable, namely the TPS cooperative learning model, has a percentage of 27.1%, while the rest is influenced by other variables not examined.

Conclusion

The conclusions obtained from this study are the effect of High Order Thinking Skill on the TPS Cooperative Learning Model for Narrative Text Material on Learning Outcomes at SMA Darul Mustofa Bangkalan, the correlation relationship between HOTS on HB or learning outcomes is obtained 0.393 or 39.3%, then the correlation of the TPS cooperative learning model on HB or outcomes learning obtained 0.483 or 48.3%, and the correlation between the independent variables, namely the TPS cooperative learning model for HOTS, was obtained for 0.344 or 34.4%. so that each independent variable and also the dependent variable are correlated with each other. The results of the calculation obtained a correlation value in terms of the R value obtained by a value of 0.483 or the correlation between HOTS and the TPS cooperative learning model for learning outcomes was obtained by 48.3%. then the effect of HOTS and the TPS cooperative learning model on student learning outcomes was obtained 0.233 or 23.3% affecting the increase in student learning outcomes.

There is an influence of the TPS cooperative learning model for narrative text material on learning outcomes at SMA Darul Mustofa Bangkalan, where in the calculations the correlation/relationship (R) value is obtained which is equal to 0.521 or 52.1% and it is explained that the large percentage of influence of the independent variable is the learning model cooperative TPS on the dependent variable, namely learning outcomes called the determinant coefficient (R Square) which is the result of squaring (R). then the value obtained is 0.271, meaning that the influence of the variable, namely the TPS cooperative learning model, has a percentage of 27.1%.

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