

APPLYING HIGH ORDER THINKING SKILL (HOTS) ON TEACHING READING SKILLS FOR THE X GRADE STUDENTS OF SMAN 2 KALUKKU

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Abstract

The aim of this research was to find out whether or not the students' reading ability improved through High Order Thinking Skill (HOTS) for the X grade students of SMAN 2 Kalukku. The method was used was quantitative method. The instrument used to collect the data was reading test. The number of test consisted of 15 and the form is multiple choices. The population of this research was the grade of X students of SMAN 2 Kalukku. The number of the population was 119. The sample of this research was X IPS 1, the number of the students was 27. Within analyzing the data collected through quantitative analysis. The result of this research was the applying of HOTS can improved the students' reading ability for the X grade students of SMAN 2 Kalukku. It is supported by the result of the test which given for the students after given treatment. The result showed that there was an enhancement significantly between pre-test and post-test. The mean score of pre-test is 64.59 while post-test is 83.00. The result of the t-test analysis is 16.883 than t-table value was 2.056. It showed that the t-test value was greater than the t-table value ($16.883 > 2.056$).

Keywords: *High Order Thinking Skill (HOTS), Quantitative research, and Reading Skills*

Introduction

English has function as a means to communicate in the daily communication, to get knowledge, to make interpersonal communication, to share information and to enjoy language lesson in English culture. In Indonesia, English language has an important role in educational world. So, it puts English in curriculum of their education at program. There are four language skills that should be mastered by language learner. They are listening, speaking, reading, and writing.

Reading is one of the four language skills that should be mastered in language learning. It is usually taught in integration with one of the other language skills (listening, speaking, and writing) in the new trends of language instruction. Generally, the teaching of reading in English as a foreign language (EFL) in Indonesia aims at enabling students to read and comprehend texts and other materials written in English. According to Islam, S. (2020) Reading is one of English language skills considered important for the students' growth as an individual in many

aspects of life. In addition, Andini, R.U. and Ratmadina (2019) stated that reading is an important skill that is needed to get information from written text. In reading skill, students not only have to read but they have to comprehend the text in order to get the meaning from the text that they have been read.

According to Retnowati (in Rosdia, 2021), stated that “Reading is a passive skill which requires interactive process in comprehending the meaning in order to get information or ideas from written text. Understanding the meaning of the reading skill including the ability in reading from many experts who have different points of view is definitely important for the teacher of reading”

Reading skills are important for students both in the learning process at school and in the community. By mastering reading skills, a person is able to understand words interpretatively, evaluative and creatively.

Based on the researcher’s observations and teaching experience, it was found that most of the X grade students of SMAN 2 Kalukku were still lacking in Reading, including: 1) there are students who had not been able to pronounce each word well while reading; 2) students have not been able to check or identify the entire text 3) students tend to forget what they have read 4) not all students are confident to go ahead and read in front of the class.

There are several strategies that can be used to improve students’ reading namely High Order Thinking Skill(HOTS). According to Susanti, A. et al. (2020) HOTS allows someone to apply new knowledge and information in order to be able to respond in a new condition. High Order Thinking Skill is the ability to think critically, logically, reflectively, metacognitively, and think creatively, which higher order are thinking skills. High Order Thinking Skill (HOTS) or the ability to think at a high level is a thinking ability that not only requires the ability to remember, but requires the abilities, such as the ability to think creatively and critically.

HOTS is defined in terms of (1) transfer, (2) critical thinking and, (3) problem solving (Brookhart, 2010). In describing transfer, Brookhart in Yoke S.K et al. (2015) states that students not only acquire knowledge and skills, but also the ability to apply the knowledge and skills to new situations. Yee et al. (2012) argues that students should be taught to acquire HOTS so that they will be able to answer questions in the exam that requires thinking skills.

By on the previous the problems which explained, the students still needed guidance in improving reading skills, the researcher was interested in conducting experimental research with the title "The influence of High Order Thinking Skill (HOTS)for students' reading skills at SMA Negeri 2 Kalukku, Mamuju Regency.

Method

This research used quantitative method. The instrument used to collect the data was reading test. The tests consisted of pretest and posttest made by the researchers. The number of test consists of 15 and the form is multiple choices. The pre-test was given in the first meeting then the students were given treatment for six times and the students conducted post-test in the last meeting.

According to Sugiyono (2016) "Generalization region population consists of: objects/subjects that have certain qualities and characteristics applied by researcher to be studied and then drawn conclusions.

The population in this research was students of SMAN 2Kalukku Class X, It consisted of 4 clases and the number of the students were 119.

Table 1. Population of the Research

No	Classes	The Number Of Students
1.	X.IPA1	32
2.	X.IPA2	30
3.	X.IPS 1	27
4.	X.IPS 2	30
Total		119

According to Sugiyono (2016) the sample is part or number and characteristic possessed by the population. To determine the sample to be chosen, the research takes a random method by giving a small paper and anyone who gets the paper contains the numbers, so the sample is class X.IPS 1, and the number of the students was 27.

The instrument was be used for collecting data namely Reading text. The students was given 15 questions multiple choice in the reading text. Students should answer it in 60 minutes.

The procedure of collecting data will be done as followed:

a. Pre-test

Pre-test was used to know prior knowledge in students' reading skill. The test was given before treatment. The students were given the test namely multiple choice for 60 minutes to find out level of students' reading skill.

b. Treatment

In this research, the researcher gave six treatments to the students, and it was given after pre-test. The procedures of the treatment of all the six meetings was chronologically performed as follows:

- a) Beginning the class (10 minutes).
 1. Said greeting and praying.
 2. Mentioned students' name one by one.
 3. Researcher told the students about the aim of research.
- b) Running the class (75 minutes).
 1. The researcher explained about Material
 2. The researcher gave the students explanation about Reading.
 3. The researcher asked the students to begin Reading.
 4. The researcher gave instruction to think high about the text and discussion/share it with their friends.
 5. The researcher checked the students' assignment.
 6. The students collected their task.
- c) Closing the class (5 minutes).

The researcher and the student concluded about material. Ending the lesson and said good bye. In conducting this treatment, the steps were same but using different themes for six meetings.

c. Post-test

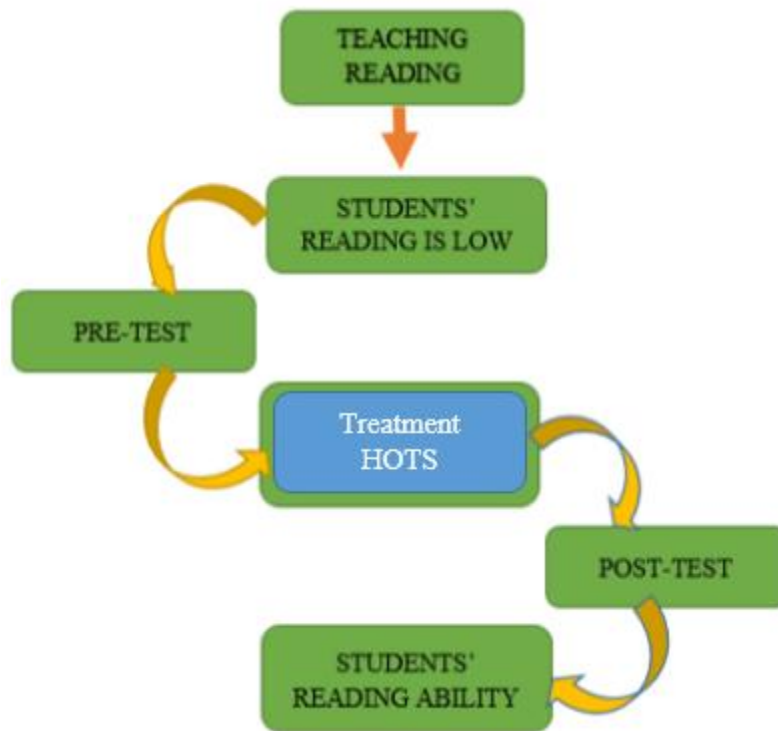
Post-test was conducted after doing the treatment. It was used to point out the students' Reading skill score after treatment. The researcher had given the post-test to point out the result of the treatment whether or not it was better than the result of pre-test. The procedure of the post-test was same of the pre-test. The students was given an Reading test for 60 minutes to answer.

In analyzing the data collected through reading test, the researchers used the quantitative analysis such as calculating the rate frequency and percentage of pre-test and post-test, the mean score and standard deviation, and t-test Value of the Students in Reading.

The step of this research was proved on the following figure.

Figure 1

Steps in Conducting of the Research



Results

Based on the test result of the students' reading ability, the researchers found that the students still have difficulties in reading well and the students also have difficulties in identifying the content of text but they can improve their reading's ability because they were interested and active in teaching and learning process through HOTS method. So, the result of this research can be seen from following explanation.

a. The Rate Frequency and Percentage of Pre-test, Mean Score, and Standard Deviation

Table 2
The Rate Frequency and Percentage of Pre-test, Mean Score,
and Standard Deviation

No	Category	Score	Pre-test	
			Frequency	Percentage
1.	Excellent	96 – 100	0	0%
2.	Very good	86 – 95	0	0%

3.	Good	76 – 85	0	0%
4.	Fairly good	66 – 75	8	30%
5.	Fair	56 – 65	19	70%
6.	Fairly Poor	36 – 55	0	0%
7.	Poor	0 – 35	0	0%
Total score			27	100%
Mean Score			64.59	
Standard Deviation			4.84	

The table above shows, there was no students who reached excellent, very good, good, fairly poor, and poor categories. There was 8 (30%) students who got fairly good category, and 19 (70%) students who stood at Fair category. The mean score of the pre-test was 64.59 and the standard deviation of the pre-test was 4.84.

b. The Rate Frequency and Percentage of Post-test, Mean Score, and Standard Deviation

Table 3
The Rate Frequency and Percentage of Post-test, Mean Score,
and Standard Deviation

No	Category	Score	Pre-test	
			Frequency	Percentage
1.	Excellent	96 – 100	0	0%
2.	Very good	86 – 95	6	22%
3.	Good	76 – 85	18	67%
4.	Fairly good	66 – 75	3	11%
5.	Fair	56 – 65	0	0%
6.	Fairly Poor	36 – 55	0	0%
7.	Poor	0 – 35	0	0%
Total score			27	100%
Mean Score			83.00	

Standard Deviation	4.40
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The table 3 indicates that there is an improvement of the students' reading ability in post-test. There were 6 (22%) students who got very good classification, 18 (67%) students reached good classification and only 3 (11%) who got fairly good classification while none students that fair, fairly poor and poor Classification. Meanwhile the mean score of post-test was 83.00 and standard deviation of post-test was 4.40.

Standing by this result, the researchers concluded that there was an improvement between pre-test and post-test. It was proved from data that many students placed in Very Good and Good classification while fair, fairly poor and poor were not found.

c. The difference of Mean Score and Standard Deviation of Pre-test and Post-test

Table 4
The difference of Mean Score and
Standard Deviation of Pre-test and Post-test

Test	Mean Score	Standard Deviation
Pre-test	64.59	4.84
Post-test	83.00	4.40
Difference	18.41	0.48

The table 4 showed that the mean score of pre-test was 64.59 while post-test was 83.00. So, the difference means score between pre-test and post-test was 18.41 point. It indicated that the mean score of post-test was higher than pre-test. So, it can be concluded that there was significant different between pre-test and post-test.

d. T- Test and T-Table Value

To find out the significant difference between pre-test and post-test t-test, it can be seen in the table below:

Table 5
T- Test and T-Table Value

Variable	T-Test Value	T-Table Value
X2 – X1	16.883	2.056

The result of the t-test analysis is 16.883 than t-table value was 2.056. It showed that the t-test value was greater than the t-table value ($16.883 > 2.056$). The degree of freedom (df) was 27 ($n-1$ or $27-1=26$), the level of significant (p) =0.05, the t-test value = 16.883 and the t-table value = 2.056. This result showed that there was an improvement on teaching reading ability by High Order Thinking Skill (HOTS) significantly.

Discussion

Based on previous result, it indicated that the reading skills of the X Grade students of SMAN 2 Kalukku improved significantly. It was also supported by the students' frequency and rate percentage of the students' pre-test and post-test. It was also measured based on the students' mean score of pre-test and post-test scores. The improvement occurred due to students' score rocketed from fair category to be good category. Then, the explanation of the result would be discussed on the following.

- a. Comparison of Frequency and Percentage in Pre-Test and Post-Test :

Table 6
The Rate Frequency and Percentage

No	Category	Score	Pre-test		Post-test	
			F	Percentage	F	Percentage
1.	Excellent	96–100	0	0%	0	0%
2.	Very good	86 – 95	0	0%	6	22%
3.	Good	76 – 85	0	0%	18	67%
4.	Fairly good	66 – 75	8	30%	3	11%
5.	Fair	56 – 65	19	70%	0	0%
6.	Poor	36 – 55	0	0%	0	0%
7.	Very poor	0 – 35	0	0%	0	0%
Total Score			27	100%	27	100%
Mean score			64.59		83.00	

Based on the table above, it is explained that there is significant difference between students' score in pre-test and post-test after given treatment by using the High Order Thinking Skill (HOTS) method. The results showed that the sufficient category was 19 (70%) students in the pre-test while 0 (0%) students got the poor category on the post-test. It means that the students' ability to read is improving. In fairly good category, there are 8 (30%) students on the pre-test while 3 (11%) students on the post-test. For the good category is non student (0%) in the pre-test while 18 (67%) students reached it in post-test. The last, in pre-test non students got very good category, while there are 6 (22%) students got it in the post test. Based on this comparison of the frequency and percentage of the students' pre-test and post-test scores, it shows that the students' ability to read has improved.

b. Comparison of Mean Score and Standard Deviation

Table 7
The Comparison of Mean Score and Standard Deviation of
Pre-Test and Post-Test

Test	Mean Score	Range	Standard Deviation	Range
Pre-test	64.59		4.84	
Post-test	83.00	18.41	4.40	0.44

Based on the table 7, it shows that the mean score in pre-test is 64.59 while post-test is 83.00. The range of mean score from pre-test to post-test is 18.41. Based on this change the students' categories also improved from fair to good category. Then, the score of standard deviation of pre-test is 4.84 and post-test is 4.40. So that, the range of standard deviation from pre-test to post-test is 0.44. So, it can be concluded that the mean score in pre-test is lower than post-test. The other words, the reading skill of the students SMAN 2 Kalukku improved after given treatment by using HOTS method.

c. Analysis of Hypothesis Testing

Based on the result of t-test and t-table on the previous finding, the value of the t-test was greater than t-table ($16.883 > 2.056$). It means that the Alternative Hypothesis (H_1) was accepted while the Null Hypothesis (H_0) was rejected. In other words, the applying of High Order Thinking Skill (HOTS) method in teaching learning process can improve students'

reading skill for the X grade students of SMAN 2 Kalukku. So, the researchers can state that the using of HOTS method in teaching reading skill improved significantly.

Conclusion

Based on the findings and discussion in the previous, the researchers summed up that the applying of High Order Thinking Skill (HOTS) method can improve the students' reading skill at the X grade students of SMAN 2 Kalukku. It is supported by the result of the test which given for the students after given treatment. The result showed that there was an improvement significantly between pre-test and post-test. So, this result is also line with theory of Heong et al. in Indriyana and Kusmandono, P. (2019) *High Order Thinking Skill are defined as using the mind more broadly to find new challenges. This higher order thinking skill ability requires a person to apply new information or previous knowledge and manipulate information to reach possible answers in new situations.*

Based on the previous conclusion, the researchers would like to propose some suggestion as follows:

1. The educators are expected more creative in choosing methods and materials for the process of learning English that support the students ability such as using HOTS method.
2. The students should be more active in learning process and support the atmosphere in teaching learning process more conducive.
3. For other researchers has still chance to use this research as comparison and as material for their researches in the future.

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