
An Analysis of Students' Higher Order Thinking Skill (HOTS) in Answering Essay Tests in SMAN 1 Napabalano

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ABSTRACT

This research was described the students' HOTS in answering essay tests. This research was descriptive quantitative. The population of this research was the eleven grade students SMAN 1 Napabalano. The students were chosen to be the sample of the research by using purposive sampling. There were 42 students chosen as the sample. In collecting the data, the researcher used an essay HOTS test as a tool to measure students' HOTS and the indicators of the tests was adopted from Anderson and Katrwhol (2002). In this research, the researcher found that, in analyzing skill students getting total score 606, evaluating skill 592, and creating 600, with total 27 students or 53% are in the category of " good " and 15 student or 47% are in the adequate category, with an average of 71.3%. From the attainment of achievement scores average it can be conclude that students' HOTS at Class XI MIA in *Senior High School 1 Napabalano* is in the "GOOD" category. **Keywords:** *Higher Order Thinking Skill (HOTS) and Essay Test*

1. Introduction

Nowadays, higher-level abilities or Higher-Order Thinking Skills (HOTS) are needed, due to the fact the 2013 curriculum requires getting to know that can familiarize students with higher-order thinking skills. Students are no longer led to be told, but find out on their own, therefore students need smart and creative thinking that can lead them from remembering, understanding, and even solving complex problems. Complex thinking skills will make students face something difficult. To deal with something difficult requires higher-order thinking skills. With High Order, Thinking Skills (HOTS) students can assess ideas between ideas, be able to express opinions well, be able to solve problems, be able to construct texts, be able to hypothesize, and be able to understand complex matters more clearly Widodo & Kardawati, (2013).

Actually, the level of human thought is divided into two parts: LOTS (Low Order Thinking Skill), and Benjamin S. Bloom (1956) or we called it as Bloom's taxonomy and the revised of bloom's taxonomy by Krathwol and Anderson (2001), cognitive process dimension consists of six levels: (1) Remembering-C1 means that the competency to remember factual and conceptual knowledge; (2) understanding-C2 means has a basic understanding capabilities and able to build their own meaning; (3) aplying-C3 means the ability to carry out or using procedures in any situations to solve the problem; (4) analyzing-C4 means the competency to break

down information or material into constituent parts ,to find out how the parts information have a link with one another and to the overall structure of information, and it includes the ability to distinguish, organizing, and connecting; (5) evaluating-C5 is the ability to judge object by looking at the criteria (justification) and standards, it also involves the ability to examine and scrutinize; (6) creating-C6 means gathering all different elements and putting it together to form a new unity or reorganize the elements to form a new structure or product. It is including the process of generating, planning, and producing.

HOTS is the highest level in Bloom's cognitive domain taxonomy. Higher Level Thinking Skills were introduced by Benjamin S. Bloom and his team in a book entitled *Taxonomy of Educational Objectives: Classification of Educational Goals* (1956). In this book, the division of thought levels is known as The Bloom Taxonomy Concept. The purpose of this framework is to introduce high-level thinking in the world of education, by analyzing and evaluating educational activities through the cognitive, affective, and psychomotor domains of students Collin, (2014).

Higher Order Thinking Skill (HOTS) covering three aspect of thinking skills such as critical thinking, creative thinking, and abilities solve the problem. Critical thinking is the ability to analyze, create and using objective criteria, and evaluate the data. Creative thinking is the ability to use the complex structural thinking that raises new and original ideas. Problem solving is a process of finding information; a strateachieve a goal, or to overcome an aobstacle (Vockell, 2001).

HOTS, can generate critical and creative thinking patterns for students. HOTS will help students solve the problem they will face because higher thinking skills can make students have intelligence in analyzing the environment, intelligence in reading analyzing, intelligence in socializing, in understanding the existence of others, and even intelligence in solving personal problems. Critical and creative thinking is very important to have in this era. Because in analyzing and evaluating a problem or information students must have critical and creative thinking, therefore teacher must improving their students' higher order thinking. To improve students' thinking skills teachers can be used several tests as a media to increase students' thinking skills, One of test that can be used is an essay test.

According to Kubiszyn & Borich (1987), essay tests are considered to measure the complex cognitive level of students who must be able to compose, interpret and unify knowledge, and use information to solve new problems, or be original. and innovative in problem solving. The essay test is a form of questions that requires students to answer in the form of describing, explaining, discussing, comparing, giving reasons, and other similar forms according to the demands of the questions using their own words and language. Description tests have the characteristics of questions that begin with words such as describing, explaining, why, how, comparing, concluding, and so on Putra (2019) .

This research was conducted at class XI MIA in *SMAN 1 Napabalano*. The researcher took the class XI MIA because in this class have learned about text analytical test . This is known because at the beginning the researcher does an interview with one of the English teachers at the school by telephone on the date 10 September 2020. Analysis in a text is an attempt to understand, explain, and see the

relationship between various things in the text. In addition, to solve problems with “analysis we need to require thinking skills to get a solution. Seen from these two aspects, it makes the researcher interested to analysis HOST XI MIA in SMAN 1 Napabalano.

2. Method

This study used descriptive quantitative because this study described students' HOTS ability in answering the essay test . According to Arikunto in Putra: (2015) descriptive research is not envisions test definite theories, but defines what it is about a variable. In quantitative research is required to use numbers, starting from interpreting the data, as well as the attendance of the results. So it can be denied that descriptive quantitative research in this research is to see, review, and describe the data in numbers about the object under study as it is interesting about it according to the phenomena that appear at the time the research was directed., the population of the study was students class XI MIA 1 consists of 21 students and XI MIA 2 consists of 21 students in SMAN 1 Napabalano. The technique of sampling is purposive sampling. In collecting the data, the researcher used essay test, the tests consists of three levels items of HOTS namely: analyzing, evaluating and creating. Therefore, in finding the students’ ability in answering essay HOTS test, the researcher firstly analyze each students’ answer by using this formula:

$$N = \frac{sm}{si} \times smax$$

Where: N = Final Scores
 Sm = Total of Score Obtained
 Si = Total of Maximum Score
 Smax = Scale used to classify the data (100)

After getting the final score for each student, the researcher calculated the average score of all students to determine the students' HOTS ability in answering the essay test used this formula.:

$$X = \frac{\sum x}{N}$$

Where:
 X= Mean score
 ΣX = Total of all sample score
 N = Total number of samples

After determining the average grade of achievement for each class, the next step is to determine the Criteria for the Student HOTS Absorption Category as shown in the table below

Table 1 Criteria of Student HOTS Absorption Category

| Absorption Interval | Absorption Category |
|---------------------|---------------------|
|---------------------|---------------------|

| | |
|----------------------|-----------|
| $86 \leq X \leq 100$ | Excellent |
| $71 \leq X < 85$ | Good |
| $51 \leq X < 70$ | Adequate |
| $0 \leq X < 50$ | Poor |

(Depdiknas. 2007)

3. Result

Table 2 The Result of Students Absorption Category XI MIA1 and XI MIA 2

| Absorption Interval | Total of students | Absorption Category | Percentage (%) |
|----------------------|-------------------|---------------------|----------------|
| $86 \leq X \leq 100$ | - | Excellent | |
| $71 \leq X < 85$ | 27 | Good | 53% |
| $51 \leq X < 70$ | 15 | Adequate | 47% |
| $0 \leq X < 50$ | - | Poor | |

Based on table above , as many as 27 people or 53% of students are in the category of " good " and 15 people or 47% of students are in the adequate category.

category with the average acquisition as below:

$$X = \frac{2995}{42} = 71,31$$

Where:

X= Mean score

ΣX = Total of all sample score (2995)

N = Total number of samples (42)

Table 3 Statistic Distribution Statistics

| var001 | | |
|--------------------|---------|-----------------|
| N | Valid | 42 |
| | Missing | 0 |
| Mean | | 71.31 |
| Std. Error of Mean | | .806 |
| Median | | 72.00 |
| Mode | | 68 ^a |

| | |
|----------------|--------|
| Std. Deviation | 5.224 |
| Variance | 27.292 |
| Range | 25 |
| Minimum | 60 |
| Maximum | 85 |
| Sum | 2995 |

From the acquisition of the average student above we can conclude that students' higher-order thinking skills in XI MIA in SMAN 1 Napabalano are in the category of "good" which means that students have started to be able to apply higher-order thinking skills at the level of analysis (C4) where students can separate the information from a text into several parts but not yet able to determine each part that is interconnected with each other part, at the evaluating level (C5) where students can give judgment or a statement regarding a text but students have not been able to provide supporting arguments in the text to strengthen their statement, at the level of creating (C6) Students can plan and find solutions to problems but have not been able to produce a product based on a pattern that has been given.

4. Discussion

HOTS can be classified into three which analyzing, evaluating and creating. Therefore, to know the students HOST the researcher gave a essay tests. The essay test used as the measuring instrument to determine the students' HOTS which surrounded by analyzing, evaluating and creating.

From students' answers in answering HOTS questions based on appendix 9, it was found that there are 27 students or 53% in " good" category, and 15 people or 47% of students are in "adequate" category with total average " 71,31". Judging from the average score, it can be assumed that the students' ability of class XI MIA in answering essay HOTS questions is in the "Good" category. Which means that students be able to applied their HOTS skill starting from analyzing information appropriately in distinguishing facts from hypotheses and recognizing assumptions that are not stated, determine the relationship between ideas in the text and conclude the goals and points of view of the author, in providing ratings and comments, justifying information and criticizing information whether or not they agree with the information, and students are relatively good in producing thoughtful ideas to solve problems.

5. Conclusion

Based on the results of the research that has been done, it was found that from 15 question of HOTS students gets total average " 71,31" and it can be concluded that the students' ability of class XI MIA in answering essay HOTS questions is in the "Good" category. Where students are able to formulate problem points and reveal existing facts and detecting with different points of view, students are able to

express arguments in a relevant manner. Students can already handle questions based on several aspects but this is disconnected. And for students' thinking skills at the Relational level, students are able to work on problems well, understand the subject matter, are able to connect several things properly and correctly, and are able to draw conclusions correctly.

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