STUDENTS' ABILITY IN ANSWERING READING QUESTIONS WITH HOTS AT SMA N 3 BUKITTINGGI

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Abstract
This article is aimed to describe the students' ability in answering reading questions with HOTS and the mistakes made by the students in answering those questions. The population of this research was the eleven grade students at SMA N 3 Bukittinggi. The Students at XI MIPA 3 were chosen to be the sample of the research by using cluster random sampling. There were 36 students involved in this research. The instrument used in this research was reading test. In the reading test, the researcher provided the sample students five analytical exposition test with forty five multiple choice questions which is surrounded by analyzing, evaluating and creating questions. The indicators of the test were adopted from Bloom (1956) and Anderson Taxonomy (2001). Based on the result of this research, it was found that the students' ability to answer reading questions with HOTS was fairly good. It was proved by the average score obtained by the students which are analyzing (75.78), evaluating (75.05) and creating (72.19). Furthermore, the most mistake made by the students was producing idea to solve problem.

Key words: Reading, HOTS

A. INTRODUCTION

Critical and creative thinking are really crucial to be owned in this era. The capability of analyzing and evaluating the information will lead the students to be critical thinker. As a result, the students will be gradually capable to produce creative idea to overcome the problems. Those thinking skills can only be achieved by the students with developing their reading skill which demands the students to understand spoken words and decode written words that culminate to deep understanding of the text. Furthermore, it is known that reading provides the readers the knowledge of the world so that it can be stimulation for the readers to construct and develop the critical and creative thinking.

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In preparing the students to achieve critical and creative thinking, the teacher should base the learning to Bloom's Taxonomy which has six levels of cognitive domain. They are remembering, understanding, applying, analyzing, evaluating and creating (Anderson and Karthwol, 2001). The reason of using Taxonomy Bloom as foundation in learning because it is such a powerful tool to develop learning objectives as it describes the process of learning. Before the students understand a concept, they have to remember it. Then, to apply a concept, the students have to understand the concept first. After that, in order to evaluate information, the students first have to analyze it. Finally, to create an accurate conclusion, the students must have completed through evaluation. By following the process of learning, the students' thinking skills will gradually improve. In other words, by implementing Bloom's taxonomy in the learning process, the students will be encouraged to achieve those critical and creative thinking.

There are three levels of HOTS which are analyzing, evaluating and creating. Analyzing is the ability to breakdown the material into its constituent parts and detection the relationships of the parts and of the way they are organized. According to Bloom (1956), analyzing can be categorized into 3 which are analyzing of elements (the ability to detect the unstated assumptions, distinguish facts and hypothesis and distinguish conclusion based on statements which support it), analyzing of relationship (the ability to determine the connections and interactions among the elements) and analyzing of organizational principle (the ability to infer the author purposes, point of view, or traits of thought and feeling as exhibited in his work). Furthermore, evaluating is the ability to express opinion, make judgment, and comment about the information (Anderson and Karthwol, 2001). Lastly, creating is the ability to produce idea to solve problems.

Furthermore, there are also some efforts that have been done by the government in order to reach the higher order thinking skills of the students which indicates to critical and creative thinking. First, the government socializes the literacy education to all layers of citizen. Literacy is the capability of individual to explore all of their skill and potential that is not only limited to read and write (Education Development Centre). In the literacy education, there are some skills demanded for the 21st century students to be achieved which are communication, collaboration, critical thinking and creativity. Second, the government also declares to use curriculum 2013 as the referent in learning due to the curriculum encourage the students to master LOTS and achieve HOTS. Lastly, the ministry of education launched the regulation number 21 and 22 year 2016 dealing with reading questions. The teacher are required to test the students' achievement by giving high order ranking questions or HOTS. Thus, to measure the students' critical thinking, the teacher could test the students by giving them reading questions which are surrounded by analyzing and evaluating questions, while to measure the students' creativity, the teacher could test the students by giving them the creating questions.

B. RESEARCH METHOD

This research was a descriptive quantitative research that was aimed to see the students' ability in answering reading questions with HOTS. The population of this research was the second grade students of SMA N 3 Bukittinggi. The population was selected because in this semester, the students at grade XI have been taught about analytical exposition text since the text given in the questions was analytical exposition. In addition, this text also discusses about phenomena or issues that will stimulate the critical and creative thinking of the students. The students at XI MIPA 3 were chosen to be the sample of this research by using cluster random sampling. Therefore, there were 36 students involved in this research.

The instrument used in this research was reading test. In the reading test, it consisted of five analytical exposition texts with forty five multiple choice questions. Those texts were taken from the English text book due to provide a reliable and to ensure the content validity. Furthermore, in creating the questions, the researcher adopted the indicators from Bloom (1956) and Anderson and Karthwol (2001). The multiple choice questions were surrounded by analyzing, evaluating and creating questions. Therefore, in finding the students' ability in answering reading questions with HOTS, the researcher firstly analyze each students' answer by using this formula (LeBlanc,2008):

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

Where:

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

After doing the stage, the data can be interpreted by the Criteria of Student HOTS Absorption Category as the table displayed below:

Tabel 8. Criteria of Student HOTS Absorption Category

Absorption Interval	Absorption Category
$85 \le X \le 100$	Excellent
$70 \le X < 85$	Good
$50 \le X < 70$	Adequate
$0 \le X < 50$	Poor

Source : (Depdiknas. 2007)

After finishing figure out each student's mean score, the researcher then calculate the average of score of all students to figure out their ability to answer each HOTS capability by using this formula:

$$\bar{X} = \frac{\Sigma X}{N}$$

Where:
$\bar{X}$ = Mean score
ΣX = Total of all sample score
N = Total number of samples

After that, in finding the mistake made by the students in answering reading questions with HOTS, the researcher adopted the theory from Bloom (1956) and Anderson and Karthwol (2001) as below:

No	Level of Thinking	Categories	Total of Mistakes	Percentage (%)
1	Analyzing	Distinguishing Facts from hypothesis and Recognizing the Unstated Assumption		
2		Determining the interrelationship among the ideas in the passage		
3		Inferring the Author's purpose and Point of View		
4	Evaluating	Justifying/ Critiquing the information		
5	Creating	Producing Idea to Solve Problem		
		TOTAL		

After calculating the total sentences containing mistakes on each category, it was converted into percentage. The formula that will be used to calculate the percentage of each mistake is described below.

$$P = \frac{f}{n} \times Smax\ (100\%)$$

Note:
P   = The percentage of the total of mistakes (%)
F   = The frequency of the total of mistakes found
N   = The maximum number of all mistakes
Smax = Scale used to classify the data (100%)

(Sudijono, 2011)

C. RESULT AND DISCUSSION
1. Research Finding
A. The students' ability in answering analyzing questions

In analyzing the students' ability to answer the analyzing questions, the researcher used theory from Bloom (1956). According to him, analyzing can be categorized into three which are analyzing of elements, analyzing of relationship and analyzing of organizational principle.

a. Analyzing of Elements

There were 5 questions provided in order to know the students' ability in answering these questions. The most frequent mistake made by the students in answering these questions was in number 43. The question is

Read the following statements!
1. Corruption is almost done by all layers of the government.

2. *Prabosutedjo bribes the Supreme Court for releasing him from all accusation.*
3. *It seems that there is no much effort to fight against corruption.*
4. *Police loves to be bribed by the citizen.*

Which one of the following best states the major premise of the arguments?
  a. *1 and 4*
  b. *2 and 4*
  c. *1 and 3*
  d. *all corrects*

The question number 43 is the most frequent mistake did by the students in answering the analyzing of elements questions. This question demands the students to distinguish facts from hypothesis that is presented in four statements. Based on the finding, there were 14 students who did the mistake. Therefore, it means that more than a quarter of the students could not differentiate the facts and hypothesis and compare with the information in the passage.

b. Analyzing of Relationship

There were 5 questions provided in order to know the students' ability in answering these questions. The most frequent mistake made by the students in answering these questions was in number 5. The question is

According to the text, how is the imbalance life similar to disaster? (paragraph 3, line 2)
  a. *Disaster could happen by the omission of the government*
  b. *By raising the fuel's price, it will decrease the cost living*
  c. *Raising the fuel's prices will cause some living's problem*
  d. *Imbalance life will happen as long as the society's low expense*

The question number 5 asks the students to find the relationship between words; imbalance life and disaster. This problem demands the students to correlate those words based on the information in the text. In fact, there were 14 students did mistake in answering this question. Therefore, it means that more than a quarter of the students could not compare those words as ideas in the passage.

c. Analyzing of Organizational Principle

There were 5 questions provided in order to know the students' ability in answering these questions. The most frequent mistake made by the students in answering these questions was in number 38. The question is

"Do we still care about the future of this country?" Why does the writer say so?
  a. *because all citizen concern of this country's condition*
  b. *because the government ignore the case of corruption*
  c. *because everyone seems ignorant with this case*
  d. *because everyone worried with this case*

The question number 38 is the most frequent mistake did by the students in answering the analyzing of organizational principle questions. This question demands the students to find out the writer's intended meaning from his stated argument. Based on the finding, there were 18 students who did mistake in answering this question. Therefore, it can be assumed that a half of the students cannot infer the author purpose from his argument.

Based on the explanation above, the researcher has analyzed each student's answers. After that, the researcher has calculated the students' score and found that there were 7 students who got Excellent, 22 students who got Good, 6 students who got Adequate and 1 student got Poor. It can be seen in the table below.

Tabel 1. The Score Description of Students' Ability in Answering Analyzing Questions

No	Absorption Interval	Absorption Category	Total of Students
1	$85 \leq X \leq 100$	Excellent	7
2	$70 \leq X < 85$	Good	22
3	$50 \leq X < 70$	Adequate	6
4	$0 \leq X < 50$	Poor	1
Total			36

B. The students' ability in answering evaluating questions

In analyzing the students' ability to answer the evaluating questions, the researcher used theory from Anderson (2001). According to him, evaluating is dealing with the students' ability to express opinion and make critique, judgment and comment about the information. Therefore, the researcher provided 15 questions for this part. The most frequent mistake made by the students was in number 31. The question is

What is the challenge to implement this technique?
a. *It leads the passive learners to be active*
b. *It demands the teacher to be creative*
c. *It breaks many learning's obstacle*
d. *It demands many facilities*

The question number 31 is the most frequent mistake made by the students in answering the evaluating questions. It demands the students to give their opinion about the effective teaching technique after analyzing the passage then giving evaluation about the teaching technique. Based on the finding, there were 19 students who did the mistake in answering the question. Therefore, more than a half of the students misjudged with this question.

Tabel 2. The Score Description of Students' Ability in Answering Evaluating Questions

No	Absorption Interval	Absorption Category	Total of Students

1	$85 \leq X \leq 100$	Excellent	6
2	$70 \leq X < 85$	Good	22
3	$50 \leq X < 70$	Adequate	5
4	$0 \leq X < 50$	Poor	3
Total			36

C. The students' ability in answering creating questions

In analyzing the students' ability to answer the creating questions, the researcher used theory from Anderson (2001). According to him, creating is dealing with the students' ability to generate, plan and produce idea to solve problems. Therefore, the researcher provided 15 questions for this part. The most frequent mistake made by the students was in number 45. The question is

If you had access to all resources, how would you deal with this case?
a. *isolate the accused*
b. *investigate the accused*
c. *negate the accused*
d. *protect the accused*

The frequent mistake made by the students is at number 45. This question requires the students to produce idea to solve problem about the corruption. It asks the students if they had access to all the resources, how they can handle this case. Based on the finding, there were 20 students who did mistake in answering this question. Therefore, there were only 16 students who answered this question well. Most of the students choose option a. isolate the accused. The answer of this question should be b. investigate the accused because by investigating firstly the accused, we will get complete data about the case so that it would be easier to be processed. Isolating the accused means that we protect the accused so that the justice will not be reached. Then, it can be assumed that there were still many students cannot find out the way to solve this problem.

Tabel 3. The Score Description of Students' Ability in Answering Creating Questions

No	Absorption Interval	Absorption Category	Total of Students
1	$85 \leq X \leq 100$	Excellent	4
2	$70 \leq X < 85$	Good	20
3	$50 \leq X < 70$	Adequate	11
4	$0 \leq X < 50$	Poor	1
Total			36

D. The mistakes done by the students in answering reading questions with HOTS

After analyzing each item answered by the students, the researcher found that the most frequent mistake made by the students was producing idea to solve problems. This was known by putting checklist for every mistakes made by the students. After doing analysis, it was found that there were 149 of 413 mistakes found on the students' answers. That number was obtained by counting the total checklist on each indicator. Table 4 describes the total of mistakes found from all students' answers based on the categories stated in the scoring rubrics.

Tabel 4. The Total of Mistakes found in the Students' Answers

No	Level of Thinking	Indicators	Total of Mistakes	Percentage (%)
1	Analyzing	Distinguishing Facts from hypothesis and Recognizing the Unstated Assumption	39	9.4%
2		Determining the interrelationship among the ideas in the passage	51	12.3%
3		Inferring the Author's purpose and Point of View	39	9.4%
4	Evaluating	Justifying/ Critiquing the information	135	32.7%
5	Creating	Producing Idea to Solve Problem	**149**	**36.1%**
	TOTAL		**413**	**100%**

Based on the table above, it can be seen that there were 413 mistakes made by the students which mostly occurred on the fifth indicator is producing ideas to solve problem (36.1%). It is followed by the fourth indicator that is justifying/ critiquing the information (32.7%), determining the interrelationship among the ideas in the passage (12.3%), distinguishing facts from hypothesis and recognizing the unstated assumption (9.4%) and inferring the author's purpose and point of view (9.4%).

2. Discussion

This discussion focused on the students' ability to answer the reading questions with HOTS at SMA N 3 Bukittinggi. HOTS can be classified into three which are analyzing, evaluating and creating. Therefore, to know the students' ability to answer reading questions with HOTS, the researcher gave a test to the students which surrounded by analyzing,

evaluating and creating questions. There were 15 questions for each skill. Thus, there were 45 questions provided by the researcher that had been answered by the students. Therefore, there were 1620 answers collected from the students.

The first research question aimed to find out the students' ability in answering analyzing questions. The findings that have been obtained from the analysis of students' answers in answering analyzing questions by second grade students at SMA N 3 Bukittinggi was fairly good because the average score of the students was 75.78; moreover there were 7 students who categorized excellent, 22 students who categorized good, 6 students who categorized adequate and only 1 student categorized poor. Therefore, it can be assumed that the students are quite good in analyzing the information exactly in distinguishing facts from hypothesis and recognizing the unstated assumption, determining interrelationship among ideas in the passage and inferring author's purpose and point of view. This is the objective stated by Bloom (1956) in enriching the analyzing skills. However, this finding was different with the research conducted by Elyana et. al. (2016) who found that the students' ability to answer analyzing question was less well categorized. Due to this fact, it was assumed that the different sample taken influenced the result of the research.

The second research question aimed to find out the students' ability in answering evaluating questions. The findings that have been obtained from the analysis of students' answers in answering evaluating questions by eleven grade students at SMA N 3 Bukittinggi was fairly good because the average score of the students was 75.05; moreover there were 6 students who categorized excellent, 22 students who categorized good, 5 students who categorized adequate and only 3 students categorized poor. Therefore, it can be assumed that the students are quite good in making judgment and comment, justifying the information and critiquing the information whether they are agree or not with the information. However, this finding was different with the research conducted by Elyana et. al. (2016) who found that the students' ability to answer evaluating question was less well categorized. Due to this fact, it was assumed that the different sample taken influenced the result of the research.

The third research question aimed to find out the students' ability in answering creating questions. The findings that have been obtained from the analysis of students' answers in answering creating questions by eleven grade students at SMA N 3 Bukittinggi was fairly good because the average score of the students was 72.19; moreover there were 4 students who categorized excellent, 20 students who categorized good, 11 students who categorized adequate and only 1 student categorized poor. Therefore, it can be assumed that the students are relatively good in producing thoughtful idea to solve problems. This finding was quite in line with the research conducted by Fitri (2018) who found that the average score of students' problem solving skills was 82,25 which can be categorized good.

The fourth research question aimed to find out the mistakes made by the students in answering reading questions with HOTS. From the findings, it was found that the most frequent mistake made by the eleven grade students at SMA N 3 Bukittinggi was producing idea to solve problems (36.1%). Due to this fact, it can be concluded that the most difficulty thing that the students face in answering reading questions with HOTS was problem-solving skills. This finding was quite in line with the research conducted by Maulana (2016) that aimed to describe the students' high-level thinking skills in aspect of analyzing, evaluating and creating in solving mathematical words problem. He found that the students are still not able to plan the right solution in accordance with the problem. In addition, the research that was conducted by Wicasari and Ernaningsih (2016) about the analysis of students' thinking skills in solving mathematic problem oriented to HOTS found that most of the students are not able to reach the stage of creating level due to the lack of the students' practice of producing a result of the knowledge that has been gained.

D. CONCLUSION AND SUGGESTIONS

Based on 1620 items analyzed, it was found that the eleven grade students' ability in answering reading questions with HOTS at SMA N 3 Bukittinggi was fairly good. It was also found that the most frequent mistake was producing idea to solve problems, and it was followed by justifying/ critiquing the information, determining the interrelationship among ideas in the passage, distinguishing facts from hypothesis and recognizing unstated assumption and inferring the author's purpose and point of view. The total mistakes in the categories of distinguishing facts from hypothesis and recognizing unstated assumption and inferring the author's purpose and point of view were equal.

Regardless of the findings of this thesis, there are some suggestions offered by the researcher to the following parties. First, the second grade students at SMA N 3 Bukittinggi should improve their ability in answering the reading questions with higher order thinking skills. The most important aspect that should be learnt more is about producing idea to solve problems. Second, it is expected that the result of this research could be used by the next researchers as a reference to conduct a similar research about students' ability in answering reading questions with HOTS.

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