THE LEVEL OF THE STUDENTS' READING COMPREHENSION ANALYZED BY USING BARRETT TAXONOMY

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Abstract

Students are expected to have strong reading comprehension skills to face the Industrial Revolution 4.0. This article reports the study results on measuring the students' reading comprehension level when reading a narrative text in one of the senior high schools in Padang using Barrett's taxonomy. Two hundred and eighty students of the eleventh grade of the science program were involved in this study. They had learned narrative text in the tenth grade. Eighty students were chosen as the samples using cluster random sampling. They were put into two classes. This is a descriptive quantitative study that uses tests and questionnaires as research instruments. The study results show that the average of the students' scores was 64.525, classified as in the good category. The students were categorized well in responding to questions in the form of appreciation level. This study also discovered that students have difficulties in answering questions from evaluation levels.

Keywords: The Level of Reading Comprehension, Narrative text, Barrett Taxonomy

1   Introduction

The Industrial Revolution 4.0 has affected all areas of human life. Education is one area that needs to be changed to accommodate the Fourth Industrial Revolution's development. Lase (2019) mentions that education should create a generation that is innovative, creative, and competitive. These forms are possible to attain through enhancing technology since educational guidance is intended to output capable of adapting to and improving the world. Furthermore, people and technology should intersect to generate new creative and innovative opportunities as a reaction to improve educational quality.

The 2013 Curriculum focused on teaching-learning activities to increase students' curiosity and critical thinking (Ghozali, 2018). The curiosity of the students should lead them to recognize and try to find the facts and experiences. Then, critical thinking is a crucial part of the Fourth Industrial Revolution. Critical is defined as a thinking process that encompasses all abilities required in today's world. The abilities are conceptualizing, applying, analyzing, synthesizing, and evaluating knowledge gained from the activities, such as communication, reasoning, reflection, experience, and observation.

The Industrial Revolution 4.0 period has an impact on English teaching and learning. Using technology and the internet as sources of information and learning through media will be enhanced (Arsaf, 2020). English is one of the subjects taught in schools and reading is one of the English language abilities that require a lot of concentration in the teaching process. It is because reading is

a component of literacy, students must read and understand the English passage well. However, according to research conducted by Central Connecticut State University in the United States, Indonesia has the second-lowest literacy rate among the world's 61 most literate nations. Moreover, according to Asmin (2020), in his research, students in Indonesian schools tend to be passive in communication when it comes to teaching and learning. Only a few of them inquired about the subject.

Furthermore, Walipah, Sopandi, & Sujana (2020) stated various aspects as reasons why literacy remains poor, including the family's socioeconomic status, communication and schools tutoring, facilities, technology, gender, as well as familial relationships, and community. The habit of Indonesians who are not willing to read books, novels, and newspapers makes it difficult for them to grasp the main idea, comprehend the text, and recognize the contents of texts. With the reading habits of Indonesians, fulfilling educational demands and catching up the literacy with other nations is difficult. Therefore, it is critical to understand students' reading comprehension levels to enhance Indonesia's literacy.

Bloom's Revised Taxonomy is used in Indonesian schools to assess students' cognitive levels as part of the national curriculum. Aside from that, another technique to assess students' cognitive and affective levels of reading comprehension is Barrett's taxonomy. Barrett's taxonomy of cognitive and emotional reading comprehension aspects is intended to aid the teacher in the construction of comprehension questions. It divides comprehension into five levels: literal, reorganization, inference, evaluation, and appreciation, which relate to students' reading comprehension of the text. Several studies have been conducted to determine students' reading comprehension; for example, Sarwo (2013) conducted a study on the students' ability to comprehend narrative text. Second, the study conducted by Noviandi (2014) researched student ability, student difficulty, as well as teacher effort. Fahli, Mahdum, & Ras (2015) then also performed a study on the student's ability to interpret recount material.

Some other scholars did a study on Barrett's taxonomy, which is used to assess the reading comprehension levels of students. Junika (2018) performed research on the reading comprehension of students and the Barrett Taxonomy's difficulty. Furthermore, Fitri & Rozimela (2020) conducted Barrett's taxonomic study in West Sumatera. They employed Barrett's taxonomy including four indications: literal, reorganization, inference, and evaluation.

The previous studies may have provided information about the students' ability to grasp narrative text and their difficulties in doing so; however, according to the researcher, they did not provide information about the students' reading comprehension level analyzed by using Barrett's taxonomy for narrative text.

Therefore, this study fulfills the gap in determining the level of students' reading comprehension using Barrett Taxonomy. The title of this research is "The Analysis of The Level of the Students' Reading Comprehension by Using Barrett Taxonomy.
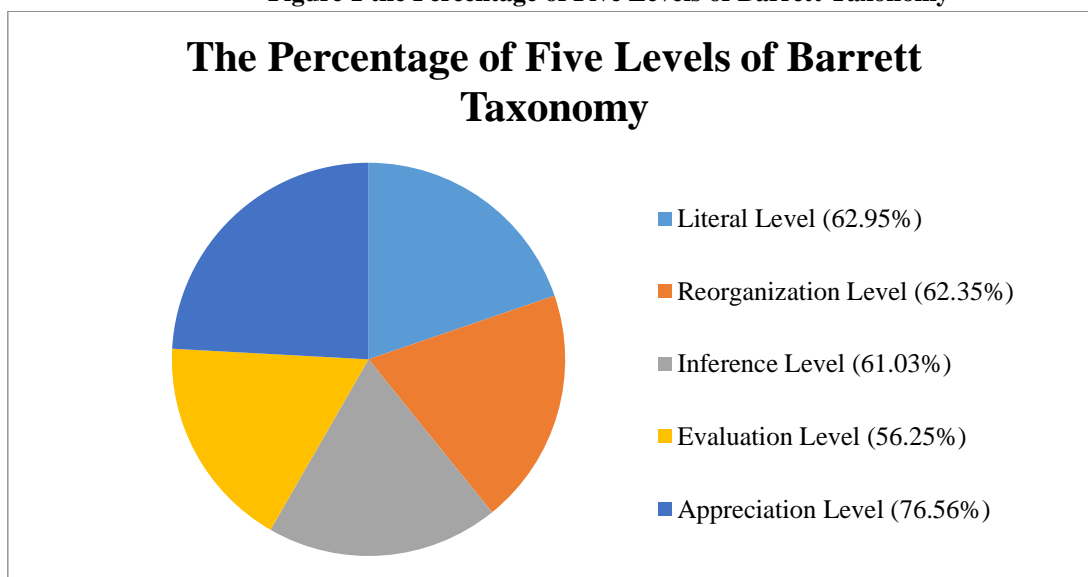
2   Methodology

This quantitative study used a descriptive approach to describe an incident or phenomenon to get information without affecting the environment or changing the variables. Gay, Mills, & Airisian (2012) mentioned, "Quantitative research is the collection and analysis of numerical data to describe, explain, predict or control phenomena of interest". Its technique, however, includes more than just using data in numbers.

This study's population consisted of 11th-grade students of SMA N 1 Lubuk Alung who were enrolled in the 2021/2021 curriculum. The researcher selected a sample using the cluster random sampling technique in this study. The primary instrumentation is a test, and the secondary instrumentation is a questionnaire. The exam consisted of multiple-choice questions. The researcher selected 60 multiple-choice questions based on Barrett's taxonomy of reading comprehension levels. Barrett's taxonomy indications were used to create the questionnaire as well. There are 27 items to determine the level where the students struggled in reading comprehension. The students were asked to choose which levels of comprehension are challenging or difficult to answer.

3   Results and Findings

Research Finding

Figure 1 the Percentage of Five Levels of Barrett Taxonomy

The Percentage of Five Levels of Barrett Taxonomy

- Literal Level (62.95%)
- Reorganization Level (62.35%)
- Inference Level (61.03%)
- Evaluation Level (56.25%)
- Appreciation Level (76.56%)

A. Test

As mentioned previously according to Barret's taxonomy there are five levels of cognitive. They are literal level, Reorganization Level, Inference Level, Evaluation Level, and appreciation Level. Each of these levels is described as follows:

1.   Literal Level

There are six parts of the literal level: recognition or recall of detail, main idea, sequence, cause and effect, comparison, and character traits. The participants were asked to answer the questions at this level. The following table shows the results.
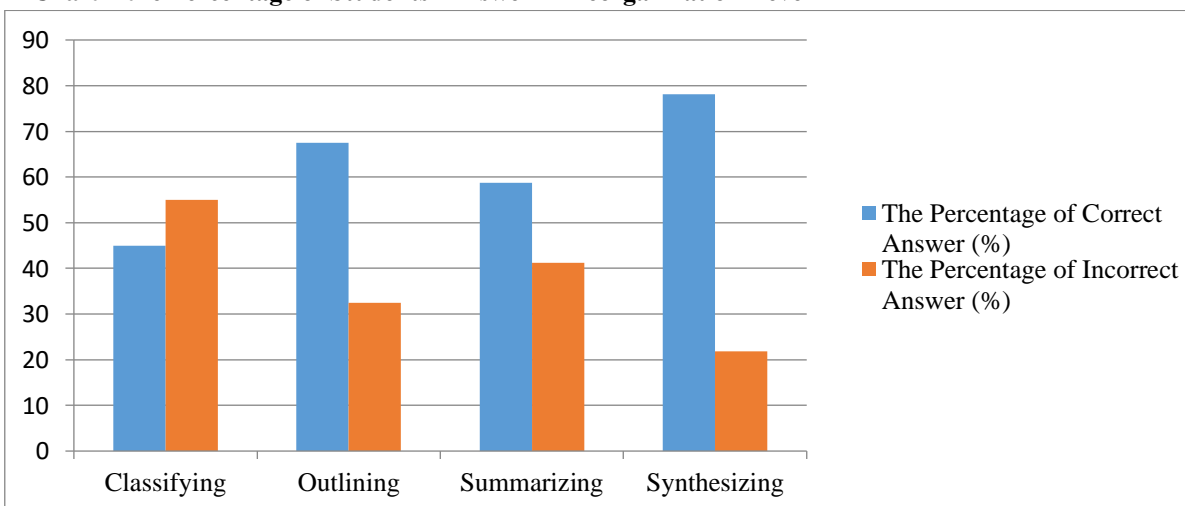
Chart 1 the Percentage of Students' Answer in Literal Level
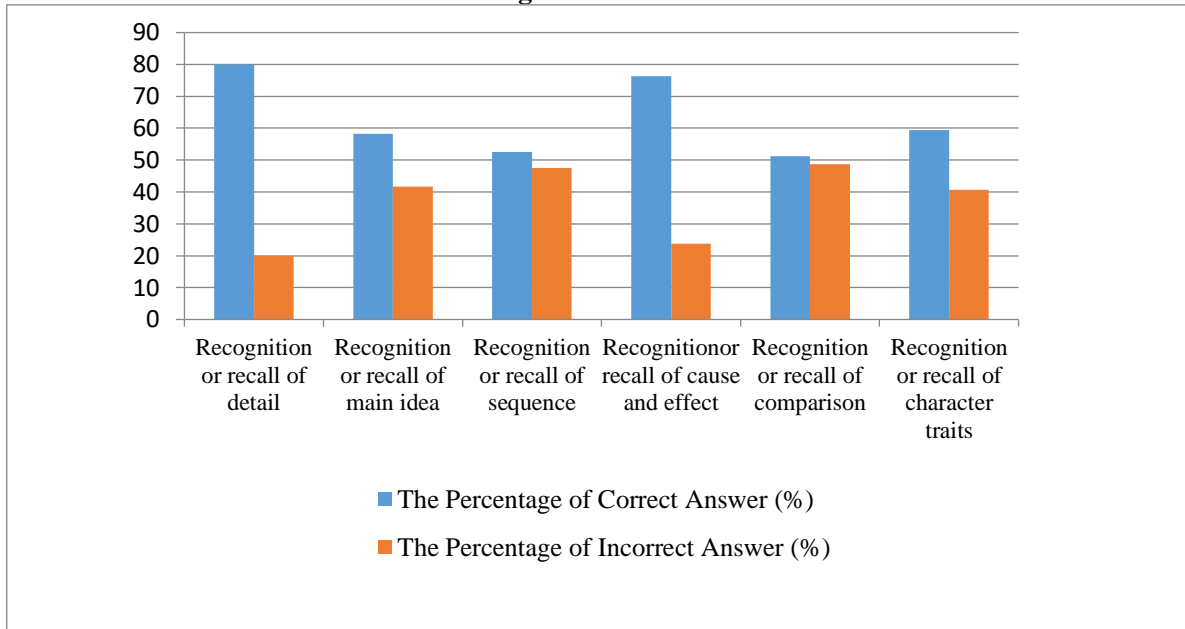
The chart above showed the percentage of students 'answers in literal level for each indicator. It can be seen that recognition or recall of detail got the highest percentage among others. It showed 80% of students answered the questions correctly. Then, the second high percentage was recognition or recall of cause and effect (76.25). It means that the students had no difficulty in answering those questions.

On the other hand, recognition or recall of comparison was the most difficult indicator in the literal level (48.75%). It was because many students had difficulty answering the questions recognition or recall of comparison. It was proved by the percentage of recognition or recall of comparison that only48.75% of students answered correctly. Then, the second indicator categorized into the difficult indicator was recognition or recall of sequence. There were 47.5% of students who could not be able to achieve the correct answer

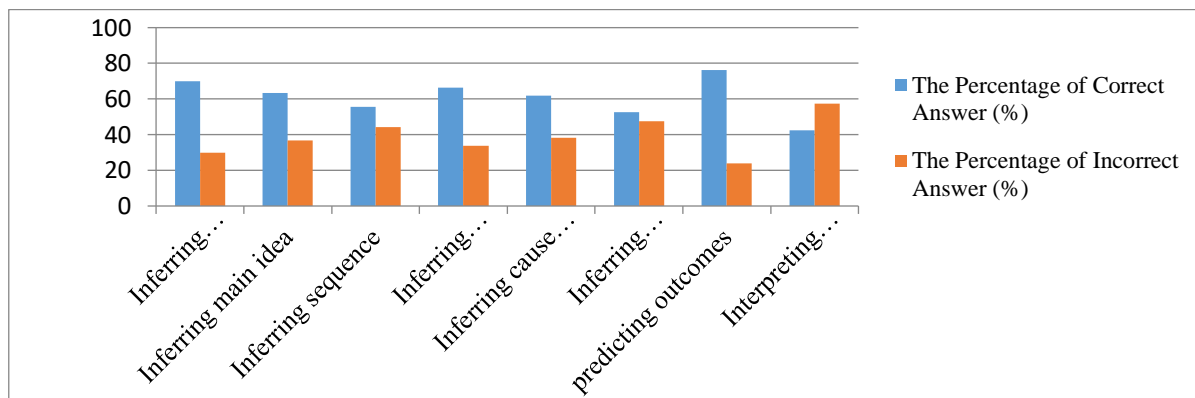**Chart 2 the Percentage of Students 'Answer in Reorganization Level**

The chart showed the percentage of students that answered correctly in the form of reorganization level. Synthesizing got the highest percentage among others. It got 78.125% of

students answered correctly, and 21.875 % of students answered incorrectly. Many of them could get the answer to the question in synthesizing correctly.

From the chart, it can be found that 45% of students replied properly for classifying, whereas 55% answered incorrectly. It can be concluded that the students mostly could not answer the classifying in reorganization level correctly. Therefore, it means that less than half of the students could answer the question well.

Chart 3 the Percentage of Students' Answer in Inference Level

Based on the chart above, the highest percentage of students' answers was predicting outcomes. In terms of predicting outcomes, 76.25 percent of students received the proper response; nevertheless, 23.75 percent of students were unable to answer correctly. Predicting outcomes provided two questions: numbers 39 and 54. These questions demanded students to read an initial portion of a selection based on this reading and conjecture about the outcome of the text. Many students could answer predicting outcomes items.

From the chart above, the highest percentage of students who had difficulty in inference level was interpreting figurative language; 42.5 percent correctly answered the questions, whereas 57.5 percent inaccurately answered them. This question demanded students to infer literal meanings from the author's figurative use of language. Therefore, it could be seen in the table above it was difficult for the students to answer the question in the form of interpreting figurative language.

Chart 4. The Percentage of Students' Answer in Evaluation Level
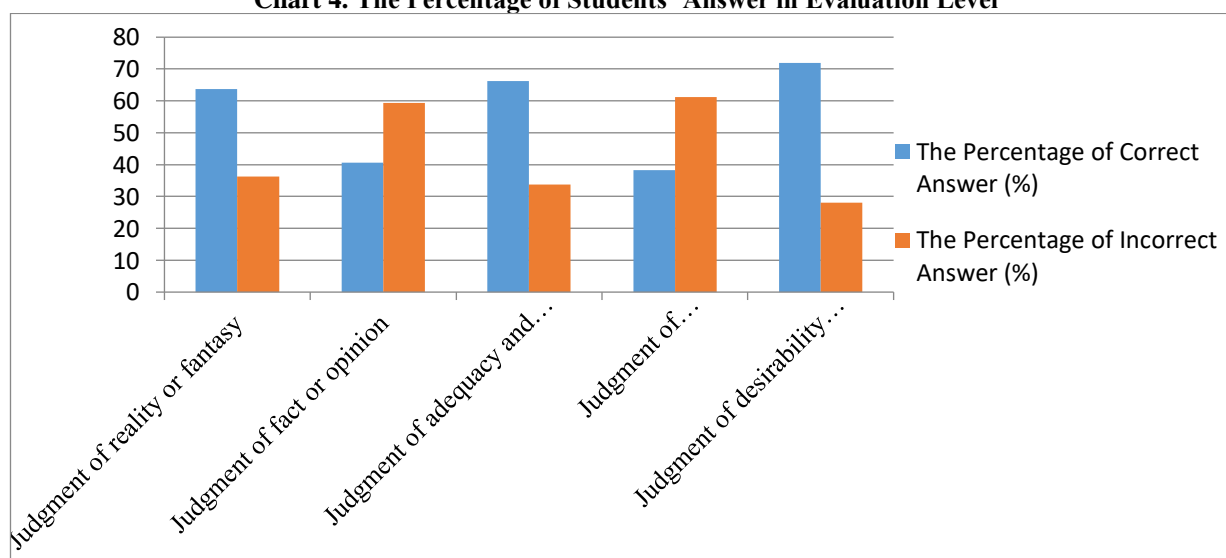
The chart above shows that 71.875 percent of students correctly answered the question on the numbers 12 and 26 in the judgment of worth, desirability, and acceptability while 28.125 percent of students were unable to achieve the right. These questions expected students to pass judgments on the suitability of a character's actions in a particular incident in the reading text.

The judgment of appropriateness and worth items was a difficult part of the test. It was question number 42. Only 38.75 % of students properly answered the question, while 61.25 % of students did not. The item asked the students to determine whether the part of the passage is relevant and can contribute to resolving an issue or a problem. 31 students chose c as the answer; meanwhile, 49 students preferred to choose other options. Therefore, it can be seen that less than half of the students could answer the question correctly.

Chart 5. The Percentage of Students' Answer in Appreciation Level
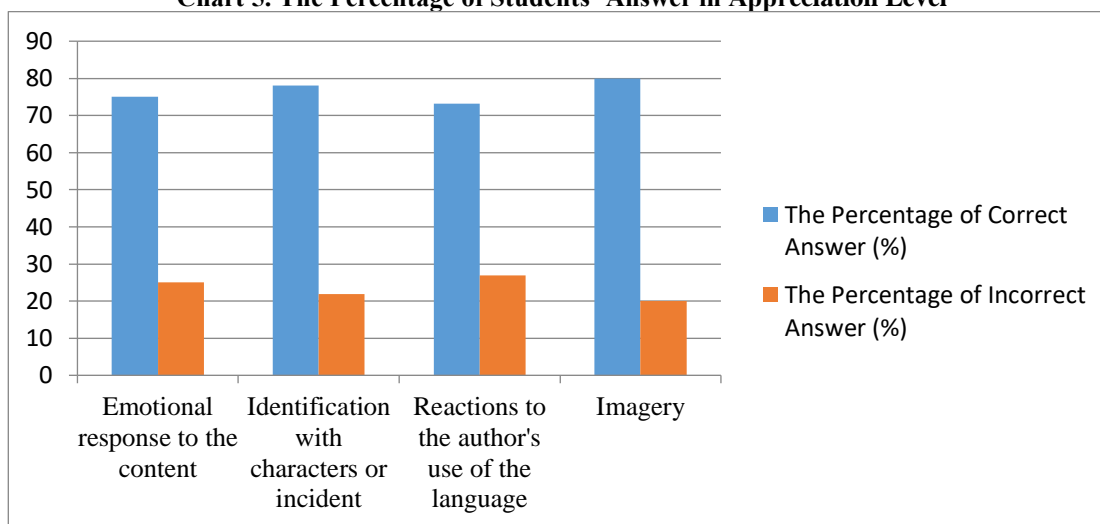
The imagery part showed that 80% of students were able to obtain the correct answer; while, 20% of students were unable to obtain the proper response. These questions demanded the students to verbalize their feelings regarding the writer's artistic ability to paint word pictures causing them to visualize, smell, taste, hear or feel. 60 students got the correct answer for item number 14; 68 students answered question number 29 correctly, and 64 students got the correct answer for question number 60. Therefore, more than half of the students could answer the question correctly.

The chart above explained that 73.125% of students got the correct answer, while 26.875% did not. Therefore, most students got the right answer in this indicator.

B. Questionnaire

The questionnaire was used to find out which levels of the questions were difficult to answer. The questionnaire was given to students; and they were expected to determine the difficulty level of items in reading comprehension of narrative text based on Barret taxonomy to answer(literal level, reorganization level, inference level, evaluation level, or appreciation level. The findings of this study show the mean percentage of each indicator in the table below.

A.   Literal level

No	Statements	1 Never	2 Rarely	3 Sometimes	4 Many times	5 Always	
				Literal Level			
	MeanPercentage	4.79%	18.55%	36.04%	28.95%	11.875%	80

According to the data, the percentage of students who had difficulties responding to the questions depending on the level of Barrett's taxonomy was dominated by the option "sometimes."

B.   Reorganization level

No	Statements	Reorganization Level					N
		1 Never	2 Rarely	3 Sometimes	4 Many times	5 Always	
	Meanpercentage	7.375%	21.93%	35%	28.12%	6.25%	80

According to the table above, the difficulties of the students were classified as not too difficult for them. It is due to the fact that more than half of the students selected "sometimes" or "many times."

C.   Inference level

No	Statements	Inference Level					N
		1 Never	2 Rarely	3 Sometimes	4 Many times	5 Always	
	Meanpercentage	9.375%	23.75%	32.6%	26.875%	7.65%	80

According to the table above, the level of inference of the students was considered fairly difficult. It was due to the mean of the students' responses to "rarely" and "never" being high. The mean percentage for "rarely" was 23.75 percent, while the mean percentage for "never" was 9.375 percent. Then, 32.6 percent of students in the inference level selected "sometimes".

D. Evaluation level

No	Statements	Evaluation Level					N
		1 **Never**	**2** **Rarely**	**3** **Sometime**	**4** **Many times**	**5** **Always**	
	Meanpercentage	12%	26.75%	30.5%	19.95%	10%	80

According to the chart, the choice "always" had the smallest percentage of respondents (10%) in the evaluation level. Students who were categorized as having a high level of difficulty in their evaluations face several challenges.

E. Appreciation level

No	Statements	Appreciation Level					N
		1 **Never**	**2** **Rarely**	**3** **Sometime**	**4** **Many times**	**5** **Always**	
	Meanpercentage	1.56%	11.25%	38.75%	31.56%	17.81%	80

According to the table above, students' appreciation level of difficulty was rated as less challenging. It was due to the fact that the mean percentage of "sometimes" was 38.75 percent. It demonstrated that students had little difficulty answering questions about the appreciation level.

Discussion

The first research questions attempted to know the degree of reading comprehension among students by employing five indicators from Barrett's taxonomy. The results of the analysis show that students' answer in the reading comprehension test in SMA Negeri 1 LubukAlung was in a good category because their average score was 64.525. This finding is in line with the research conducted by Marzona & Ikhsan (2019) who analyzed students' ability in comprehending narrative text at second grade at SMAN 1 Talamau. It was based on the student's problem found during the teaching-learning process, such as students cannot determine the main ideas, find the topic of the text, and understand the meaning of the words. The result showed that the student's ability to comprehend narrative text was a good category with a mean score of 75.86.

The majority of students at SMA Negeri 1 Lubuk Alung have a high level of appreciation comprehension. The percentage of right answers was 76.562 percent in the appreciation level. It signifies that more than half of the students correctly answered the question. The evaluation level, on the other hand, received the lowest percentage of correct responses. The correct answer rate was 56.25 percent.

The next research question focused on determining the degree to which students found it challenging to respond to the question. The results of the analysis show that the students believed that they had the most difficulty in the evaluation level. It was due to the fact that the mean percentage of "never" and "rarely" was the greatest compared to the other levels. It was 12 percent and 26.75

percent, respectively. The questionnaire result corresponded to the results of the students' test, where the percentage of correct answers was only 56.25 percent, the lowest number among others. It is reasonable to presume that the students did not fully understand the evaluation level.

There are various reasons why the students found it difficult to answer the evaluation level questions. The teacher might not provide the students with a high level of comprehension questions during the teaching-learning process. Thus, they were used to respond to low-level questions. (Zainil & Lena, 2020). Students struggled as a result of their limited exposure to the evaluation level. Furthermore, the online and offline learning in Covid-19 made the educational method ineffective. As a result, to fulfill the needs of the 2013 curriculum and to face the Fourth Industrial Revolution, teachers are recommended to expose children to high-level questions so that they may think critically, rationally, methodically, inductively, and deductively (Zaim, Zainil, & Fitrawati, 2021; Zainil & Lena, 2020).

Although several students found it difficult to respond to the questions based on Barrett's taxonomy, the category of students' scores was good, and the students were able to pass the test. They have a high level of ability in answering appreciation level questions, as seen by the 76.562 percent mean percentage of right answers. The conclusion corresponded with the questionnaire results, indicating that appreciation level has less difficulty. The mean percentage of "always" was 17.81 percent, which was higher than the other levels. The mean proportion of "never" in appreciation level was just 1.56 percent, the lowest rate among the others.

4   Conclusion

Based on the findings and discussion in the previous chapter on the level of students' reading comprehension using Barrett's taxonomy in SMAN 1 Lubuk Alung using Barrett's taxonomy, the researcher concludes that the students of SMA Negeri 1 Lubuk Alung comprehend well in the appreciation level. Students' percentage of accurate answers in the appreciation level is 76.562 percent. It signifies that the majority of pupils were able to answer the question correctly.

Furthermore, the questionnaire results indicated the students' challenges. According to Barrett's taxonomy, the evaluation level is the most difficult. And it is true for the students that students who answered "rarely" and "never" were 26.75 percent and 12 percent, respectively. It has a higher percentage of "rarely" and "never" than the previous levels.

According to the result above, it was proposed that teachers offer students more comprehension questions so that they are used to answering high-level questions for all types of text types in school exercises and exams. The researcher suggested the following researchers perform studies in other text kinds or taxonomies because the researcher believes that if this research is conducted in another location, the outcomes might be different and the results can help teachers in improving their students' reading comprehension.

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