An Analysis of Reading Comprehension Questions in the Final English Test Given by English Teachers Based on Barret's Taxonomy at SMAN in Kota Padang

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Abstract

This research aims to analyse the reading comprehension questions given by English Teachers at SMAN Kota Padang based on Barrett's Taxonomy. This taxonomy has five levels, namely: Literal Comprehension, reorganization, Inferential Comprehension, Evaluation, and Appreciation. This study is being done using a descriptive qualitative research design. To gather the necessary data and information, the observation checklist and interview questions are used as instrumentation. The stages of Barrett's taxonomy were used to categorize the questions that were analysed. The results of this study

indicate that from all the reading questions gathered and observed at six schools and three grades, Inferential Comprehension level has the most questions with 40,07% of the total reading comprehension found in grade X, XI, and XII. It is followed by reorganization level at 35,91%, literal comprehension level at 23,01%, evaluation level at 0,39%, and appreciation level at 0,19%. While the conclusive English assessment at SMAN Kota Padang encompasses all facets of Barrett's taxonomy, its implementation is not necessarily reflected in the formulation of reading inquiries. This discrepancy arises from the dissimilarity between the question distribution across taxonomy stages and the advised proportional distribution. Correspondingly, insights gathered from discussions with the teachers indicated that Barrett's taxonomy had not been integrated into the question development process for the final English test. This affirmation further reinforces the notion that the reading comprehension questions given by English teachers have remained detached from the application of Barrett's taxonomy.

INTRODUCTION

One of the most crucial abilities taught in English is reading comprehension. Students learn to grasp reading by answering questions from the teacher, which might take a written test, an assignment, an oral presentation, or a coursebook. Reading tests include texts followed by comprehension questions, crucial for assessing understanding. A significant portion of English learning performance relies on

answering questions, with reading comprehension constituting about 70% (Muslih, 2009). Effective question design is important, emphasizing the role of reading assessment in teaching.

The are many uses for reading assessments. Reading assessments seek to offer feedback on the techniques, procedures, and body of knowledge that represent reading abilities. To use reading assessments properly, one must first comprehend the reading construct, be aware of how reading skills develop, and make an effort to have the assessment tasks reflect the construct. Reading assessment involves a variety of goals that reflect various assessment contexts, including standardized proficiency assessment, classroom-based formative and achievement testing, placement and diagnostic testing, and assessment for reading research (Grabe, 2009)

Teachers are advised to create exam questions using the instructional taxonomy. Teachers are also required to pose a range of questions that evaluate their students' competency in the topic they are teaching. In terms of reading skills, reading comprehension questions should be classified according to taxonomy to create relevant questions. When it comes to taxonomy, Bloom's is a taxonomy that is mainly used for instructional reasons. However, Bloom's taxonomy can be used for a variety of subjects and skills, not just reading comprehension, making it somewhat too general. Because of this, using Bloom's taxonomy as a standard for reading ability leaves out some important and detailed details. Most written exam questions are constructed using Bloom's taxonomy as the determining factor, ranging from C1, or Low Order Thinking Skill (LOTS), to C6, which requires the students to use their High Order Thinking Skill (HOTS).

Most educational institutions rely on Bloom with his taxonomy to consider the level of difficulty that should be imposed (Tulasi, 2010). Most of the questions posed by the teacher using Bloom's as the guideline are on a literal level. Research done by Ramadhani & Zainil (2019) found that most types of questions asked by teachers in EFL classroom activity in SMAN Kota Padang applying Bloom's Taxonomy are in the remembering (C1) category, which is the lowest level of thinking in the cognitive domain.

Only a small number of studies have investigated the applications of Barrett's taxonomy to reading comprehension questions on written examination, despite numerous studies looking into how the taxonomy was used in reading classes. A study conducted by GÖÇER (2014) analyzed written examination questions based on the text in accordance with Barrett's taxonomy, though the research was done in Turkey, not Indonesia. Another study by Kusumawardani (2016) with the title "An Analysis of Reading Comprehension Questions in the textbook entitled "Bahasa dan Sastra (Peminatan Bahasa dan Budaya)" for SMA/MA grade X Based on Barrett's Taxonomy" aims to assess the reading question in the passage, and the conclusion is that literal comprehension predominates over evaluation. Additionally, since the reading comprehension question was taken from an English textbook, there is no need for the involvement of the teacher. Furthermore, Rahma (2019) thoroughly did research on the implementation of Barrett's Taxonomy in a reading comprehension question made by an English teacher at SMAN Sidoarjo. The result shows that there were literal and inferential levels dominant to be presented on the final English test if it was viewed as Barrett's. In conclusion, only a small number of studies have

examined the use of Barrett's taxonomy in relation to the topics covered by the reading comprehension tests that Indonesian high school teachers provided.

The researcher intends to classify the reading comprehension questions given by English teachers in SMA Kota Padang based on Barrett's taxonomy. The researcher would like to identify if Barrett's taxonomy has been implemented in constructing the reading questions.

METHOD

The research design used in this research is a descriptive qualitative research design in which the researcher used content analysis and semi-structured interviews. The first method is qualitative content analysis where the researcher got several relevant documents, in this case, reading comprehension questions, to observe and collect information from. Qualitative content analysis allows researchers to analyze observed contents that provide categories, interpretive descriptions, and themes as the outcome (Lindgren, Lundman, & Graneheim, 2020)

The researchers interviewed a few English teachers from high schools in Padang using the second method, a semi-structured interview, to find out about their understanding of Barrett's taxonomy and their thoughts on using Barrett's taxonomy to create reading comprehension questions. According to (Aung, Razak, & Nazry, 2021), semi-structured interviews are a way to gather qualitative contextual data without limiting the interviewer's ability to ask additional questions in relation to the interviewees' responses.

The source of data in this study is the English test obtained from the English teachers who gave the final English test used in several senior high schools in Padang. There are 16 SMA Negeri in Kota Padang. Thus, researchers randomly choose 6 schools to represent all SMA Negeri in Kota Padang. The schools are namely SMAN A Padang, SMAN B Padang, SMAN C Padang, SMAN D Padang, SMAN E Padang and SMAN F Padang. From the six schools above, there are some schools that already implemented Merdeka curriculum (SMA A for grade X, SMA B for grade X and XI, SMA C for grades X and XI, SMA F for grades X) which the final English test questions were given by the teachers individually. Some schools still use 2013 curriculum (SMA A for grade XI and XII, SMA B for grades XII, SMA C for grade XII, SMA D for all grades, SMA E for all grades, SMA F for grades XI and XII) and the final examination questions were given by English teachers from SMAN Kota Padang that were appointed by teacher association (MGMP). In conclusion, analysis was being done on 18 sets of final English tests for both the questions that were individually given by teachers and given by teacher association (MGMP).

The instrument utilized in this research is an observation checklist where the researcher observes the reading comprehension questions found in the final test and runs a series of checklists to determine the level of the questions when they are viewed by using Barrett's taxonomy. In research from Sholkamy et al., an observation checklist is utilized to screen data through direct observation (2003). Another research instrument that the researcher used was an interview guideline. The interview guideline informs the researcher on what questions should be asked of the interviewees to get relevant data.

The researcher used a semi-structured interviews, where the interviewer showed the result from the observation checklist or the findings.The data were analyzed using an instrument designed to assess how Barrett's taxonomy is applied to each question that teachers provide.

The number of reading comprehension questions included in the written exams was counted by the researcher as she analyzed the data. The researcher observed the questions posed by teachers and categorized them according to Barrett's taxonomy's stages once all the questions had been counted (refer to Chapter 2). Additionally, the researcher used the following formula to determine the percentage of questions at each stage after classifying the reading comprehension questions:

$$P = \frac{FQS1/2/3/4/5}{N} \cdot 100$$

P   : Percentage (%)
FQS1/2/3/4/5   : Frequency of Stage 1/2/3/4/5
N   : Numbers of reading comprehension questions

When it comes to the interview results, the researcher made a transcript of the interview. After that, the answers were compiled to create an interpretive result that reflects teachers' perspectives on the use of Barrett's taxonomy in the reading comprehension questions on the written examination.

RESULT AND DISCUSSION
Research Finding

After classifying the reading comprehension questions present in the final English test by using the observation checklist, the following results were obtained:
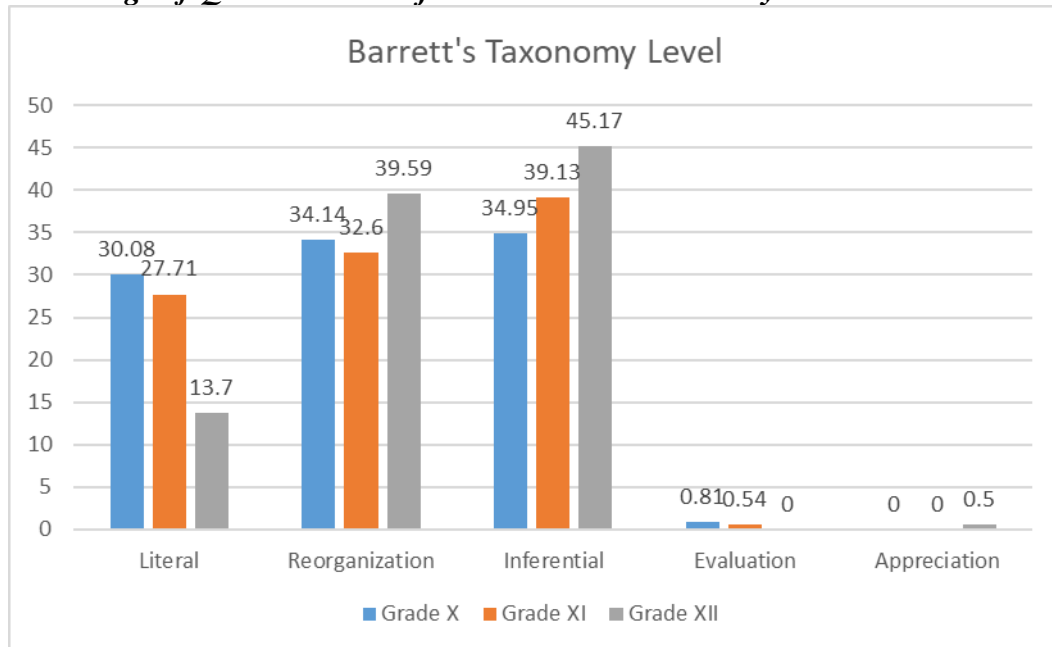
Percentage of Questions Classified in Barrett's Taxonomy in All Grades
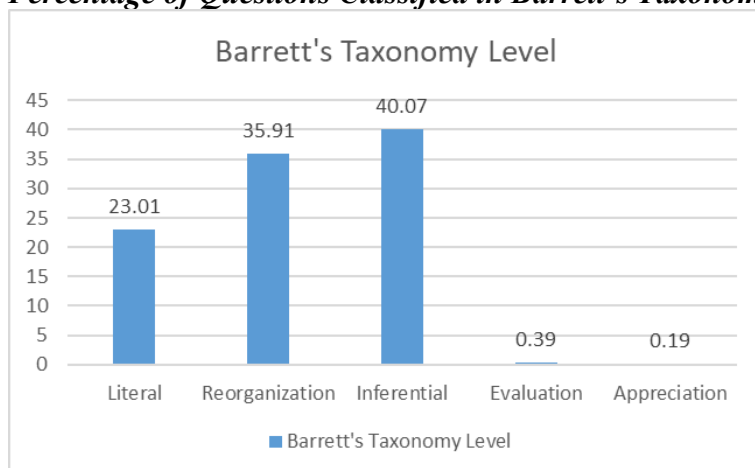
The chart above shows the percentage of reading comprehension questions classified in each of Barrett's taxonomy levels from all grades (X, XI, and XII) combined. The result shows that among all the levels, the Inferential Comprehension level has the most questions with 40,07% of the total reading comprehension found in grades X, XI, and XII. It is followed by reorganization level at 35,91%, literal

comprehension level at 23,01%, evaluation level at 0,39%, and appreciation level at 0,19%.

Percentage of Questions Classified in Barrett's Taxonomy Per Grades

The Chart above shows the percentage of reading comprehension questions classified in each of Barrett's taxonomy's levels for grades X, XI, and XII from six schools at SMAN in Padang. The chart shows that the percentage of Literal Comprehension level decreased when the grade is higher. At grade X, the percentage is 30,08%, grade XI is 27,71%, and grade XII is 13,7%. Moreover, the Reorganization level decreased in grade XI with a 1,54% difference from grade X. But it shows a major increase in grade XII with a percentage of 39,59%, which is 5,45% higher than grade X. The Inferential Comprehension level shows an upward trajectory from grade X until grade XI. The Evaluation level is only present in grades X and XI. The highest percentage held by grade X with 0,81% which is 0,27% higher than grade XI. Furthermore, the Appreciation level is only present in grade XII with a percentage of 0,5%.

The reading comprehension sections of the final English exams for all grades were ultimately dominated by inferential comprehension, which has the most questions applied to it. Additionally, the Reorganization and Literal Comprehension stages are frequently encountered in every grade. The Evaluation and Appreciation stages, in contrast, have fewer questions than the other two stages.

Interview

From the interview with Respondent 1, it was found that the taxonomy that is used by her in constructing reading comprehension questions is Bloom's taxonomy. She also stated that she had never heard about Barrett's taxonomy before. However, after the interviewer explained about Barrett's taxonomy to Respondent 1, she thought that Barrett's taxonomy was suitable for reading skills. She wants to learn more about Barrett's and wishes to implement it when constructing reading comprehension

questions. She feels motivated to upgrade her knowledge and competency after knowing that all of the questions that she made for the final English Test belonged to only some of Barrett's taxonomy level. Respondent 1 is also hoping that with Barrett's taxonomy she can creates various reading types that can prepare her students to facethe university entrance examination as the reading questions that mostly appear on the test are various and in High Order Thinking Skills Level (HOTS).

Respondent 2 had heard about Barrett's taxonomy before but she does not really know and has no idea what is Barrett's. But, she mentioned that she knows Bloom's and Anderson's. In the interview, she also confirmed that the taxonomy that was used when constructing the final English test was the revised Bloom's taxonomy. However, she showed a great interest in Barrett's and asked the interviewer to give her a copy of the explanation about Barret's taxonomy. She said that she always wanted to make various learning types, but in the previous curriculum which is 2013, all the questions were in multiple choice format. But now, with the new Merdeka curriculum, she is be able to give more than one type of reading question. She was really happy with Barrett's level when she heard about it. She told the interviewer that maybe when she makes short-answer reading questions, she can refer to the Evaluation and Appreciation level in Barret's taxonomy. When she knows that most of the questions that she made belonged to the low and middle levels of Barrett's taxonomy, she wants to improve her competency in constructing the reading questions. Because in Merdeka curriculum, the teacher is responsible for creating a questions for their students, be it for daily test, mid-test, or final test.

From the interview, it was also discovered that Respondent 3 had also never heard about Barret's taxonomy prior to the interview. She also stated that all this time she just used Bloom's because it is the only taxonomy that she knows and the only one being taught in the workshop, seminar, or at the university when she was a student. But, when the interviewer explained to her about Barrett's, she thought that it could help her in making more varied and organized reading comprehension questions. She stated that she is really interested in Barrett's taxonomy and wishes to know more about it and then also implement it when she is making a final English test's questions.

Discussion

The results of the questions from Grades X, XI, and XII demonstrated that the balance of the reading comprehension questions did not correspond to the fifth level of the Barret taxonomy. Inferential, Reorganization, and Literal Comprehension were the three main areas covered in the final English exam. However, only a small number of evaluations, and appreciation can be found. According to (Reeves, 2012), the Literal Comprehension and Reorganization levels should account for 40% of the total time spent using Barrett's taxonomy, the Inferential level should account for 40%, and the remaining 20% should go to the Evaluation and Appreciation levels. Referring to chart 1, we can see that the ideal percentage for Literal Comprehension and Reorganization combined is already achieved with a total of 58,92%. Moreover, the ideal percentage for Inferential Comprehension is already achieved too because the percentage reached 40,07%. Therefore, the ideal percentage for the Evaluation and Appreciation level have not met the desirable standard for it only reached 0,58% from the ideal of 20%.

By comparing this research's findings with the findings from (Rahma, 2019), it is found that there are both similarities and differences. Both findings have a percentage of the Inferential Comprehension stage as the highest. However, the Literal Comprehension level is the second dominant question found (Rahma, 2019), which is different from this research because the second dominant question in this research belongs to the Reorganization Level. In summary, all of Barrett's taxonomy stages are present in all the final English test documents combined, but the percentages still fall short of the ideal level.

When we look at the result of the interview, it can be concluded that Barrett's Taxonomy is not the taxonomy used in constructing the reading questions that are being analyzed in this research. Moreover, two of the three teachers that the researcher interviewed had never known about Barrett's Taxonomy before, let alone use it in constructed reading questions. The teacher so far only refers to Bloom's taxonomy as it is the one that is being recommended by the government and has not seek or being introduced to other taxonomies despite that sometimes they are having difficulties in making various reading questions because lack of guidelines and a detailed explanation about reading stages and example of the reading questions, which cannot be found in Bloom's taxonomy. It is clear from this that there is still a lack of training programs for teachers that cover Barrett's taxonomy in reading comprehension or reading in general. Consequently, as Trilling & Fade, (2009) mention there should be a wide variety of real-time formative assessments or effective methods to assess ongoing learning progress that measures content knowledge, basic and higher-order thinking skills, comprehension and understanding, and applied 21st century skills performance. But, after being explained about Barrett's taxonomy, the teachers seemed very interested in and wanted to know more about Barrett's because they think it is more detailed and very helpful for them to make various reading question types. While the policy of HOTS of all subjects in the national curriculum of Indonesia takes on Bloom's revised taxonomy in terms of the cognitive level, a document of Barrett's taxonomy on Cognitive and Affective Dimensions of Reading Comprehension (Byrne) offers another way to examine the cognitive levels for reading comprehension and this what makes the teachers wanted to learn more about Barrett's. The interviews have revealed that Barrett's taxonomy was not used in the development of the final English test, but the teachers are still open to using it because it is well-constructed.

Page 4 (*Percentage of Questions Classified in Barrett's Taxonomy in All Grades*), shows that the percentage of Barret's taxonomy level found in reading comprehension questions for final English Test at SMAN in Kota Padang is almost reached the ideal percentage despite the teachers not knowing about Barrett's Taxonomy nor they implemented it in constructing reading comprehension questions. So, it is safe to assume that the teachers already mastered constructing the LOTS (Low Order Thinking Skills) questions as it appears ideally. However, it is also risky to assume that they have mastered Barrett's taxonomy to construct the questions based on the circumstances where the teacher lacked sufficient knowledge of it.

In conclusion, based on all the data, it was possible to conclude that grade X, XI, and XII reading comprehension questions did not adequately address the fifth level of the Barret taxonomy. As a result, those questions were classified as "moderate" reading comprehension questions. It was consistent with Barret's assertion that reading

comprehension questions were "moderate" if they were followed by LOTS (literal and inferential) and HOTS (evaluation and appreciation) questions that did not balance the number. The results for each grade demonstrated that LOTS (literal and inferential) was higher than HOTS 9evaluation and appreciation). Although questions from the three grades were given the "moderate" classification, this does not imply that all the questions from each grade did not reflect or cover the Barret taxonomy's five levels. The outcome led to a grade that included all 5 levels of the Barret taxonomy. The grade that the Barret taxonomy's level 5 reflected was grade XII. The Barret taxonomy's other levels were only covered in the lower grades. In conclusion, it can be said that the grade XII reading comprehension question already reflected all of Barrett's taxonomy level despite the un-ideal distributions.

CONCLUSION
Conclusion
Based on the findings and discussion that have been presented in the previous chapter about the level of reading comprehension questions found in the final test at SMAN in Kota Padang, there were all levels of Barrett's taxonomy found. However, most of the questions belong to the inferential, reorganization, and Literal Comprehension level. Moreover, the question that belongs to the appreciation level is only found in grade XII.

In relation to the result, it shows that inferential, reorganization, literal, and levels were dominant in the final English test. There were 202 inferential question types, 181 reorganization question types, 116 literal question types, 2 evaluation level questions, and 1 appreciation level question out of 504 reading comprehension questions found on the final exam from three grades (X, XI, and XII) obtained from six high schools in Padang.

As a result, the reading comprehension questions created by the English teacher for the final exam could be grouped under the category of moderate reading comprehension questions. It indicated that the levels of Barret's taxonomy between HOTS (evaluation and appreciation) and LOTS (literal and appreciation) on the final test were not in balance numerically. It also demonstrated that the final English test's primary focus was on LOTS. Furthermore, it was evident that teachers needed to improve their test design skills because the final English test did not adhere to the fundamental guidelines for creating quality test items. Therefore, it was necessary for the teachers to have a good taxonomy that can help them in designing the reading questions.

Suggestions
The researcher suggests that teachers look for other taxonomies rather than just sticking with one that they are already familiar with. In preparing students to face the university's entrance test, the teacher could help students understand reading passages on the test and have appropriate numbers of reading comprehension questions that cover all levels of questions needed. For this reason, it is advised that English teachers pay attention to all levels of reading comprehension questions on teacher-made tests that are based on Barrett's taxonomy and were literal recognition or recall, inference, evaluation, and appreciation. Additionally, when this research was being conducted,

there were two curricula that were being used by the schools which are the Merdeka curriculum and the 2013 curriculum. Therefore, the researcher suggests future researchers interested in similar topics to develop the research with all questions found in the test with the Merdeka curriculum as it is the newest curriculum that is being implemented and has not been explored in detail in this research.

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