



An Analysis of Barrett's Taxonomy's Applications in Teacher Association (MGMP) Published English Workbooks (LKS) for Senior High Schools in Padang

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Abstract

This research aimed to analyse questions included in English Teacher Association (MGMP) Published English Workbooks (LKS) for Senior High School in Padang based on Barrett's Taxonomy in Reading Comprehension. The taxonomy consists of five stages which are "Literal Comprehension," "Reorganization," "Inferential Comprehension," "Evaluation," and "Appreciation." The research design used for this research is descriptive qualitative, and the instruments used to gather necessary data are an observation checklist and interview questions. The analysed questions were classified based on the stages of Barrett's taxonomy. The result of the analysis showed that from all the reading comprehension questions in all the workbooks observed, Inferential Comprehension is the stage that is applied by the questions the most, which is at 48.2%, followed by Literal Comprehension at 42.5%, Reorganization at 8%, Appreciation at 1%, and Evaluation at 0.3% of the total questions observed. Although all the stages of Barrett's taxonomy are present in the workbooks, it does not imply that the taxonomy has been applied in the MGMP Published Workbooks, for the percentages of the questions from each stage do not resemble the recommended rates proposed for each of the stage. In addition to that, by interviewing members of the writing team of the workbooks, it was found that Barrett's taxonomy had never been applied when constructing questions for the workbooks. This backs up the previous idea that Barrett's was not applied in MGMP Published English workbooks.

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INTRODUCTION

Reading comprehension is one of the crucial skills students should master. This is because reading is the very base of literacy, in which meanings of texts are perceived, which trains individuals to be able to share ideas, messages, and expressions to others (Israel & Duffy, 2008). One of the learning tools used that provides reading comprehension questions is workbooks. Workbooks are filled with

exercises and instructions guiding students to complete and understand the exercise (Taringan et al., 2019). They also follow specific approaches on delivering the lesson and exercise, depending on the subjects covered in the workbooks.

Different subjects are supposed to have different approaches. For example, when teaching certain subjects, teachers are recommended to follow the syllabus. In addition, teachers are also expected to use several teaching methods and coursebooks that work best for the specific subject they teach. For example, if a teacher is to teach a reading skill to his students, people will expect him not to ask the students to solve mathematical problems. It is just not relevant, nor is it proper to be implemented in a reading class. However, such a situation is apparently what we find when it comes to designing the syllabus, lesson plans, coursebooks, and workbooks where Bloom's taxonomy is mostly used to construct them all. Operational words used in learning processes are based on the cognitive levels by Bloom's taxonomy (Direktur Jenderal Guru dan Tenaga Kependidikan, 2019).

Perchance the mostly used taxonomy works for most subjects; however, the performance in reading shows otherwise. PISA, Programme for International Student Assessment, which is run by the international organization OECD assesses 15 years old students globally to measure their abilities in reading, mathematics, and science to know if they meet the crucial skill to be involved in economic and social life (OECD, 2019). Its latest result shows that Indonesia scored 371 points in the reading assessment conducted in 2018, 31 points declined compared to the peak score it achieved in 2009 (OECD, 2019). This positions Indonesia at level 1 in reading with a 184 points difference from the country holding the highest score, China, in level 4, and 44 points lower than its neighboring country, Malaysia settling in level 2 (Schleicher, 2019). This situation shows that Indonesia still has homework and changes to do in order to raise its level of reading comprehension performance to compete with other countries.

Barrett's taxonomy is one of the examples where the measuring components only focus on measuring the difficulty level of reading skills. Barrett's taxonomy is a comprehension scale that is used to monitor students' abilities in processing information given through reading exercises (Ruiter & Dang, 2005). Barrett's taxonomy is a study to define the level of students' ability in comprehending reading activity to minimize the confusion emerging among teachers who have found problems regarding prior taxonomies that resulted in students' skill that were fractious and unorganized (Göçer, 2014). Barrett's taxonomy has guided teachers into creating the questions which include five stages of reading comprehension which are first, literal comprehension; second, reorganization; third, inferential comprehension; fourth, evaluation followed by fifth, appreciation (Amalya et al. 2020).

Several studies researching how Barrett's taxonomy was implemented in reading classes have been conducted; however, only a handful of studies have done research on Barrett's taxonomy's applications to English workbooks. A study conducted by Amalya et al. (2020) thoroughly does research on the implementation of Barrett's taxonomy in one of the English coursebooks available in the market. The result shows that though questions utilizing Barrett's taxonomy exist in the textbooks, the utilizations are not completely balanced, that is there are a lot of

questions utilizing the literal comprehension category, and fewer to no questions implementing the other categories (Amalya et al., 2020). Another study by Nurdeani (2014) also analyses the use of an English Textbook and compares it with the standard structure of English Textbooks; though, the study focuses on a textbook for third grade elementary school students.

The researcher intends to classify in what stages the questions regarding reading comprehension in English Teacher Association (MGMP) Published English workbooks for Senior High Schools in Padang belong to if they are categorized based on Barrett's taxonomy, and to identify if Barrett's taxonomy has been implemented in the workbooks.

METHOD

The research design used in this research is going to be a descriptive quantitative research design in which the researcher is going to use content analysis and semi-structured interview. Content analysis allows the researcher to get several relevant documents, in this case, English workbooks, to observe and collect information from. Content analysis serves as a research method for researchers who seek to create organized and credible inferences from data obtained from conversations, observations, or readings to describe and specify a certain element related to their research (Downe-Wamboldt, 1992).

Furthermore, the second method is a semi-structured interview. Semi-structured interview is a method to collect qualitative contextual data which does not limit the interviewer from adding additional questions regarding the interviewees' answers (Aung et al., 2021).

The data analyzed in this research are reading comprehensions questions and information regarding the construction of the workbook, whereas the sources of the data are the MGMP Published English Workbooks for Senior High Schools in Padang, and members of the writing team of the workbooks respectively. A total of 1021 reading comprehension questions were analyzed from five workbooks, two grade X, two grade XI, and one grade XII, and three teachers who are also the members of the writing team of the workbooks were interviewed.

The instrument utilized in this research is an observation checklist where the researcher observes the study-related documents, English workbooks, and the reading comprehension related questions contained in them, and run a series of checklist to determine if the observed workbooks indeed follow the taxonomy composed by Thomas C. Barrett. Another research instrument that the researcher used is a list of interview questions. When it is used, the answers to the questions are recorded and analyzed to match what the respondents intend to convey (Wilkinson & Birmingham, 2003).

The researcher analysed the data obtained by finding out how many reading comprehension questions exist in each of the workbooks. After all the questions have been listed, the researcher starts observing the questions in the workbooks and classifying the questions into Barrett's taxonomy's stages (refer to Chapter 2). In addition, after classifying the reading comprehension questions, the researcher will determine the percentage of questions in each of the stages by utilizing the following formula:

$$P = \frac{FQS_{1/2/3/4/5}}{N} \cdot 100$$

- P* : Percentage (%)
- FQS*_{1/2/3/4/5} : Frequency of Stage 1/2/3/4/5
- N* : Numbers of reading comprehension questions

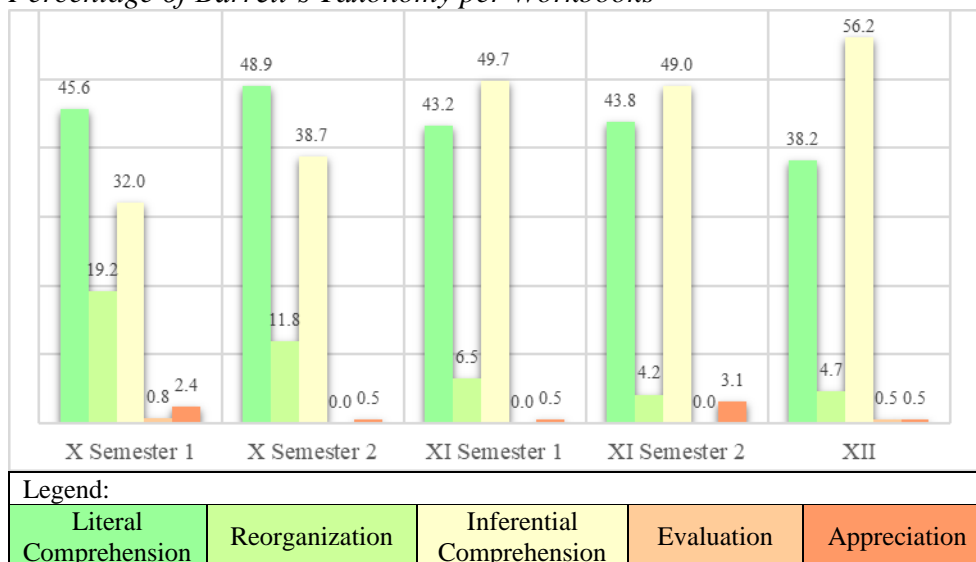
As for the interview results, they were collected as an addition to the findings to know if Barrett’s taxonomy is utilized when constructing the MGMP Published workbooks.

RESULTS AND DISCUSSION

Research Finding

After the reading comprehension related questions present in the workbooks were classified by using the observation checklist, the following results were obtained:

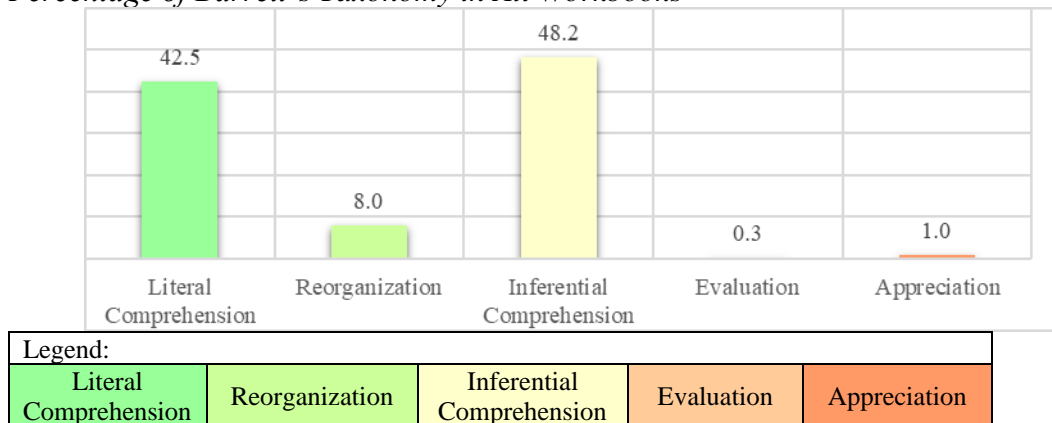
Percentage of Barrett’s Taxonomy per Workbooks



In the chart above, all Barrett’s taxonomy classified questions are combined per workbook to find their percentages in each of the workbooks. The chart shows that the Literal Comprehension stage undergoes subtle changes throughout the workbooks, with the average around 44% and the lowest at 38.2%. Moreover, the Organization stage goes through a downward trajectory throughout the workbooks with a slight increase in the last workbook for 0.5% from the previous workbook at 4.2%. The Inferential Comprehension stage has an upward trajectory from the grade X semester 1 until grade XI semester 1. Then, it decreases for 0.7% on the next semester, followed by an increase for 7.2% in grade XII workbook. The Evaluation stage is only present in grade X semester 1 and grade XII. The difference between them is 0.2% with the highest percentage held by grade X semester 1 at 0.8%. Furthermore, the Appreciation stage of Barrett’s taxonomy exists in all the

workbooks, workbook 2,3 and 5 share the same percentage which is at 0.5%, while the highest is at 3.1% in the fourth workbook..

Percentage of Barrett’s Taxonomy in All Workbooks



The chart above shows the percentages of questions classified in each of Barrett’s taxonomy’s stages if all the reading comprehension questions from each workbook are combine. The result shows that among all the stages, Inferential Comprehension is the stage which have the most questions. It is followed by the Literal Comprehension, Reorganization, Appreciation, and Evaluation sequentially.

Interviews

From the interview with MIN, it was found that prior to the interview, she had never heard about Barrett’s taxonomy. She also confirmed that the questions in the workbooks were not designed after Barrett’s taxonomy, for she did not have enough knowing about the taxonomy. However, she agrees with the idea that Barrett’s taxonomy is good to be implemented in the workbooks. She said that the taxonomy is complete. When asked about what taxonomy was used when designing the workbooks, she stated that Bloom’s taxonomy was used when designing them. That was because from all trainings she had joined, Bloom’s Taxonomy was the one explained. She hoped when the opportunities come, Barrett’s taxonomy can be applied. She also stated that around 60% of the texts and questions in the workbook were composed by the writing team.

The interview with MDW uncovered that she had recognized Barrett’s taxonomy previously from her supervisors. However, though it was brought up, it was not fully explained by her supervisors. She also stated that Bloom’s taxonomy was used when constructing the workbooks. Moreover, she also explained that in the past; reading, speaking, writing, and listening were apart; however, since nowadays they are integrated, the use of Bloom’s taxonomy feels more suitable. If different skills used different taxonomies, it would not be focused. For instance, reading skill used Barrett’s while the others stuck with the other taxonomy. Furthermore, she also delivered her views that Barrett’s taxonomy has been used in the workbooks all along, since some of the stages are quite similar with Bloom’s taxonomy. In addition, she mentioned that when constructing the workbooks, there have never been texts that were composed by the writers themselves. However, the questions were made by

the writers, or sometimes were from existing questions from other sources that have been modified by the writing team to meet specific learning targets.

From the result of the interview with MRT, it was discovered that she had previously heard about Barrett's taxonomy when she was in college. However, since she usually deals with Bloom's taxonomy, she is starting to forget about Barrett's. Moreover, she mentioned that when questions for the workbooks were being constructed, there were no clear decisions on what taxonomies were used. The writers typically receive themes and topics, and start constructing questions by using their personal experience to decide the level of difficulty of the questions. Regardless, she believed that they mostly relied on the revised Bloom's taxonomy. When asked about her opinion on the use of Barrett's taxonomy in MGMP English workbooks, she agrees about the idea. She expressed that the state of Barrett's taxonomy being well organized could help assist teachers when making more organized reading comprehension questions. Furthermore, she admitted that for her, she was the one who wrote the questions and the texts for the workbooks; she was not sure about the other writers.

Discussion

Firstly, the percentages of reading comprehension questions in MGMP Published English Workbooks that are classified in Barrett's taxonomy's stages could not be considered satisfactory. Although each of the stages is occupied with at least a question from the workbooks, they are still not enough, for they have not met the desirable standard. According to a recent report, in order for the use of Barrett's taxonomy to be considered reaching its recommended state, the Literal Comprehension and Reorganization stages combined should have a percentage of 40%, the Inferential stage should be at 40%, while the other 20% belongs to the Evaluation, and Appreciation stages (Reeves, 2012). Looking back to the previous charts of the observation checklist results, it is quite clear that the recommendation is not yet satisfied.

Secondly, the interviews have provided information that Barrett's taxonomy was not used in the construction of the workbooks, but the writers are willing to give the taxonomy a go, for it is well constructed.

Thirdly, the charts of the observation checklist result show that in spite the percentages of questions not matching the recommendation, there are some questions present in each stage of Barrett's taxonomy; therefore, assumptions that some of the knowledge to construct questions based on Barrett's Taxonomy has been mastered by the writers could be made. However, referring to the interviews with the writers of the workbook, it turns out that not all the questions were made by the writers. Some of them were obtained from other sources directly or after undergoing several modifications. This does not imply that if the questions applying Barrett's taxonomy are from other sources, then the writers must not have knowing about the taxonomy. They could possibly obtain the questions from other sources by having Barrett's taxonomy's stages as their consideration when selecting the questions. However, judging by the conditions where the writers did not have adequate knowing of Barrett's taxonomy, it is also not safe to assume that they have mastered Barrett's taxonomy to construct the questions.

By comparing this research's finding with the finding from (Amalya et al., 2020), it is found that there are both similarities and differences. Both findings have the percentage of Literal Comprehension stage that is high. However, the percentage of the Literal Comprehension stage in this research is not the highest, unlike in (Amalya et al., 2020). The stage which has the highest percentage among the other stages of Barrett's taxonomy in the finding of this research is the Inferential Comprehension Stage, although the gap between the percentages of the Literal Comprehension and Inferential Comprehension stages is very subtle, which is 5.7%.

CONCLUSION

Conclusion

In conclusion, the questions contained in English Teacher Association (MGMP) Published English Workbooks include all stages of Barrett's Taxonomy with the highest percentage belongs to the Inferential Comprehension stage followed by the Literal Comprehension, Organization, Appreciation, and Evaluation stages sequentially. However, the percentages of questions for each stage do not fulfill the recommendation that suggests the suitable rates for each of the stages.

Moreover, although all stages of Barrett's taxonomy are included in the workbooks, the taxonomy has not been fully implemented to measure the level of reading comprehension questions. This is further backed up by the fact that the workbooks do not satisfy the Barrett's taxonomy recommendation as stated in the first conclusion, and by the statements from the writing team of the workbooks that provide information that Barrett's Taxonomy was not harnessed in the construction of each of the workbooks.

Suggestion

When conducting the research, the researcher is fully aware that it is not perfect. The researcher had to faced various obstacles. One of the significant problems that was encountered is the difference in curriculum used among the observed workbooks. At the time this research was being conducted, there was only one MGMP Published workbook implementing the latest curriculum in Indonesia, the Merdeka curriculum, while the rest were still in the 2013 curriculum. Therefore, a suggestion for future researchers interested in similar topics is to carry out the study with all workbooks implementing the same curriculum.

The researcher would also like to leave a suggestion for teacher trainers, and supervisors to provide teachers with knowledge regarding Barrett's taxonomy, seeing how enthusiastic the teachers were about the taxonomy.

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