



Analysis of Teachers-Constructed Reading Comprehension Test

Meli Aulia Utami¹⁾, Riska Rahman²⁾, Albiansyah³⁾

^{1),2),3)}Universitas Islam Negeri Syarif Hidayatullah, Jakarta, Indonesia

¹⁾auiameli09@gmail.com, ²⁾riska_rahman19@mhs.uinjkt.ac.id, ³⁾albiaansyah@gmail.com

ABSTRACT

Constructing tests as part of assessments is the teacher's part in the teaching and learning process. Assessments have a role to evaluate student's comprehension and measure the extent of studying stages' success. Despite its significant value, teachers frequently construct tests without considering the main purpose of the test. This research concerns the way teachers construct their tests. To narrow the research scope, this research focuses on the reading comprehension test since reading comprehension is one of the main language skills for predicting learners' academic and professional development skills. The purpose of this study is to reveal the teacher stages in the construction of a reading comprehension test and the appropriateness of the test according to the test eligibility. To answer research questions, we adopt the qualitative research method. To collect data, we interview English language teachers from different schools who are teaching at different grades from Junior High Schools. Documentation is also be given since the teachers will need some of their final constructed test forms. To analyze the data, researchers calculate the number of HOTS and LOTS questions in the test, as the test eligibility standard. The study found that they are required to create their test indicators based on official general school/regulation indicators. It is also found that even though teachers are not obliged to provide dominant HOTS test items, HOTS test items are frequently discovered.

Keywords: Reading comprehension, HOTS, LOTS

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INTRODUCTION

Reading comprehension is regarded as a necessary skill for language proficiency. This is a crucial skill for academic and professional purposes when studying a language. They are the most accurate predictors of improved academic success and career development. Reading is a complex

method since it requires the comprehension of the text (Lems et al., 2010). Readers must also fully understand a text to grasp what the author is trying to convey. Furthermore, readers can interpret their experience, relate new information to what they already know, and find answers to cognitive questions in the text through

reading comprehension (Tarigan, 2015). Furthermore, the emphasis of today's reading theory has moved from solely cognitive to contextual theory (Izzah & Hadi, 2018). Science can also be learned through reading (Jauhari, 2013). It becomes a valuable skill for EFL (English as a Foreign Language) students who want to learn more about their subject (McDonough et al., 2012).

Reading comprehension is a language skill that is taught and practiced in Indonesia's national curriculum. Since the 2013-2014 academic year, the curriculum has shifted, with a new perspective known as the 2013 curriculum (K13). According to Nofrion & Wijayanto (2018), critical thinking, communication skills, creativity and innovation, and collaboration are the four basic terms in the 2013 curriculum. It allows students to become more active in comprehending a text to broaden their knowledge. In the implementation of this program, students are required to think critically following the four terms.

Furthermore, this new curriculum is designed to prepare students for the globalization era. Character building, literacy, 4C (creative, critical thinking, communicative, and collaborative), and higher-order thinking skills (HOTS) are all mentioned in the recent curriculum. The assessment of learning outcomes was reshaped in the 2013 curriculum. Bloom's taxonomy was considered to be one of the ways to help students confront the globalization era by enhancing their learning activities with HOTS. This is why Bloom's taxonomy has become a major concern in educational research in recent years. Both students and teachers are expected to higher-order thinking skills.

According to revised Bloom's taxonomy theory, as cited in Anderson et al (2001), HOTS is divided into three parts they are analyzing, evaluating, and creating. Students are expected to be able to not only create and produce something but also to think critically by analyzing and evaluating things they come across in their daily lives. Due to this expectation towards students, teaching and learning activities must adapt too. Teachers are expected to create HOTS assessments that will enable students' critical thinking. As testing is one of the crucial parts of the teaching and learning process, HOTS questions are now a recent issue in so many subjects and contexts.

Assessment is a component of the teaching and learning process that helps to evaluate how well students learn. Assessment is a teacher-led activity that involves gathering data on the learning process. The instrument that is used to assess the students is determined by the teacher. Furthermore, the data retrieved provides a guideline for the teacher when making a decision. A test is one of the instruments used to examine the effectiveness of the teaching and learning process. Reading comprehension is measured using a variety of tests, including reading aloud, written response, and multiple-choice (Brown & Abeywickrama, 2003).

The purpose of a reading comprehension test is to assess a person's ability to read and comprehend written information effectively. Constructing a reading comprehension test, on the other hand, is not an easy task because there are several factors to consider to guarantee its validity and reliability. Teachers are

provided with indicators to guide the teaching process.

Teachers need to understand the test's purpose, which is based on indicators of standard competency (SK) and basic competency (KD). Furthermore, teachers must develop a test that is reliable and follows the structure of questions. They can easily make an effective test to achieve the learning objectives if they meet the criteria. Unfortunately, they frequently construct a test without considering the standard eligibility criteria. Besides that, teachers frequently construct tests that don't measure what they want to measure or expose what they want to know. A test cannot significantly measure what should be measured and cannot consistently measure students' achievement without the standard eligibility test; in other words, the test is neither valid nor reliable (Hanafi, 2016).

Assessment is a part of the teaching and learning process that has a significant impact on the outcome of the long and complex evaluation process. Regardless of how teachers perceive the importance of a test to assess a student's comprehension, there are still cases where teachers do not construct the test following the test's purpose (Hanafi, 2016). It's difficult to measure what students have learned throughout a long learning and teaching activity, and even teachers are not sure what the test will measure at this point. There is no way to determine whether or not their constructed test was performed following what they wanted to measure. The goal of our research is to determine the validity of a teacher's constructed test when compared to a standard eligibility test.

Bloom's taxonomy involvement is a standard eligibility test in the recent curriculum. Analysis of HOTS questions seems to be the most recent interesting issue, according to HOTS curriculum 2013 expectations. The quantity of HOTS and LOTS in textbooks is being examined. Studies showed that recent textbooks provided by some publishers are enhancing students with dominantly HOTS questions (Assaly & Smadi, 2015; Damanik & Zainil, 2019; Febrina et al., 2019). Even though HOTS questions are more commonly used in assessment forms, LOTS questions are still being used in textbooks because both levels have a positive impact on students' abilities.

Several types of researches have been conducted on developing comprehension tests for a variety of subjects by using HOTS and LOTS content (Hanafi, 2016; Sagala & Andriani, 2019). Regarding the purpose, HOTS assessments are used in several studies to assess students' knowledge of various subjects. The study then revealed that students' critical thinking skills can be expanded through the use of HOTS questions. Referring to the importance of HOTS questions, it was found that there are modern learning media that can assist students in answering HOTS. One of that learning media is Youtube. This kind of media was believed that it can help students understand their HOTS and LOTS (Hayikaleng, 2018).

However, Hayikaleng et al (2016) stated that traditional Thai teachers prefer to use LOTS questions rather than HOTS questions in their classrooms. It's because HOTS' use of conventional approaches in their teaching and learning process isn't working. Teachers who use

conventional teaching methods often use LOTS rather than HOTS when teaching text comprehension because HOTS may be unsuccessful at the end of the learning process.

Furthermore, studies also examined the amount of HOTS questions in high-stake standardized tests such as the National Examination (UN). Narwianta et al (2019) stated that HOTS in English School Nationally Standardized Examination at State Senior High School 6 Semarang requires more quantity in implementation (Narwianta et al., 2019). This study's findings are following Ahmad (2016), who examined the Barrett taxonomy levels represented in English national examination test items for the academic year 2013/2014, and also the percentages of LOTS and HOTS. The results show that National Examination questions are mostly in LOTS format rather than HOTS.

None of the previous studies have examined the HOTS and LOTS reading comprehension tests provided by teachers. The majority of previous studies have focused on the quantity of HOTS and LOTS, while our research is more concerned with whether the assessments are constructed following curriculum standards that emphasize the availability of HOTS. It is important to note that our research would relate to the appropriateness of reading comprehension tests created by teachers. The study aims to investigate how teachers build students' reading comprehension tests. Furthermore, it is aimed to know whether the reading comprehension questions appropriate to the 2013 curriculum and the standard eligibility test.

The present study aimed to fill a research gap in the field of reading comprehension test eligibility. The researchers want to know sequence steps on how teachers construct their students' comprehension tests, especially in terms of reading ability. As the test is an important part of the evaluation, this research aims to examine the teacher's constructed-test eligibility concerning the curriculum 2013 and its standard eligibility test. This study will be based on the following research questions:

1. How do teachers construct students' reading comprehension tests?
2. What HOTS and LOTS composition found in the test items?

It is necessary to enable teachers to know that their measurement instruments, also defined as tests, cannot be constructed carelessly. Hanafi (2016) stated that teachers often construct tests without considering what the teachers want to know from the test takers. This is why the test was administered with no clear purpose. It ends up as a formalization to complete the teacher's report. This problematic issue is our concern to conduct this research. It is important to investigate teacher's ability to construct tests as the evaluation is just as important as any other aspect of the teaching and learning process.

RESEARCH METHODOLOGY

The data in this study were analyzed using a descriptive study. Content analysis is also used to identify the data. Content analysis is an approach that can be used on a wide range of text sources (Rose et al., 2014). The primary data is a document that contains a teacher-constructed reading test that the

teachers voluntarily accomplished. It was collected from four different teachers at a private junior high school. Interview triangulation was used to study the initial limitations of the tests, the broader reasons for the percentage result, and to improve the reliability. To analyze the tests, we used a content analysis checklist adapted from Bloom's revised taxonomy (Febriyani et al., 2020). Every test is presented as a percentage to show how many LOTS and HOTS are visible. We use the following formula to calculate the percentage:

$$P = n/N \times 100$$

P= Percentage

n= Number of questions classified as HOTS or LOTS

N= Total overall items

FINDING AND DISCUSSION

Out of four teachers, three of them stated that schools regulated the number of items they should distribute to the students. A different amount of test items is determined between 30 and 50 items in each school. However, not all of the items are constructed to test reading comprehension. In Indonesian Junior High School, the English language test is not only testing one linguistic skill. Therefore, from the total of 50 items, teachers might include 50% for reading comprehension tests or even maybe less depending on their indicators. Learning objectives will impact the test item material so it is likely to happen that teachers perform different amounts of each skill learned in the classroom including reading comprehension.

Test items have indicators. The government has provided official indicators, so the test material will most

likely be similar. Even though there are suggestions for what should be included on the test, the teachers' creativity will not be limited. Every test item may use similar materials, but the instruments used will vary depending on the facility's availability. Cultural references will also vary because Indonesia has so many cultures that it would be difficult to understand if they were all the same for every student in Indonesia, and it would be an offense to the country's diversity.

For each of the test items, teachers create detailed indicators. The official indicators were listed in broad categories. Teachers create all references and materials based on the overall indicators. This allows teachers to choose how the test items are delivered, ensuring that students remain on topic in the classroom. Teachers are the only ones who are aware of every detail of their students' progress in the classroom. It's critical to allow teachers to create their test items so that they can be tested on what they've learned and following the learning objective.

Only one teacher stated that the amount of HOTS and LOTS in the test items is regulated. HOTS items should account for 30% of total test items, while LOTS items should account for 70%. The other three did not provide instructions on how to construct a test item with a limited number of HOTS and LOTS. It's because the regulation does not apply to every school. Some regulations are specific to certain locations or areas. That one teacher received this kind of regulation for the number of HOTS and LOTS, but the other three teachers, whose schools are in different areas, did not.

Table 1: Reading Comprehension Test Frequencies and Percentages in the Six Levels of Cognitive Dimensions

Teacher	Level of Cognitive Dimensions						Total
	C1	C2	C3	C4	C5	C6	
1	-	4	-	-	-	7	11
2	4	11	1	5	1	9	31
3	3	6	2	8	5	3	27
4	6	2	1	1	2	2	14
Total	13	23	4	14	8	21	83
P	15,7%	27,7%	4,8%	18,6%	9,6%	25,4%	

The frequency of understanding was found in 23 of the 83 questions, with a percentage of 27.7 percent. The second level was creating (C6). The frequency of creating occurred 21 of 83 times, or 25.4 percent. The third rank was analyzing (C4), with a frequency of 14 out of 83, or 16.8 percent. The fourth level was remembering (C1) and the frequency of remembering level was 13 out of 72 or 18 percent. The fifth level was evaluating (C5) which its frequency 8 out of 83, or 9.6 percent. The last rank was applying (C3) with a frequency of 4 out of 83 or 4.8 percent. Based on the cognitive domain frequencies listed above, it can be concluded that teachers provide enough HOTS questions for students. The following is a description of the HOTS percentages:

Table 2: The Percentages of Cognitive Dimension Distribution in English Reading Comprehension Test

No	Cognitive Dimension Level	Frequencies	Percentage
1	LOTS Remembering	13	15,7% (48,2%)
2	Understanding	23	27,7%
3	Applying	4	4,8%
4	HOTS Analyzing	14	16,8% (51,8%)

5	Evaluating	8	9,6%
6	Creating	21	25,6%
	Total	72	100%

The table above shows that the reading comprehension test consists of a high frequency of HOTS questions. it was 43 of 83 questions. The highest level applied was creating level (C6) with 25.4 percent, then followed by analyzing (C4) with 16.8%, and evaluating (C5) which was 9 percent.

HOTS items were found to be more dominant than LOTS items in the data analysis, with a total of 51,8 percent higher 3,6 percent than LOTS. Although only 83 items testing reading comprehension were found in the four tests, it was determined that three teachers provided the majority of HOTS when it came to testing reading ability. Out of the 83 items, 43 are designed to test students' higher-order thinking skills. Even so, there are only three differences between HOTS and LOTS items. It is a matter of fact that a large number of items are still applicable.

The findings of this study are similar to Febrina et al (2019), who found that HOTS items were found more frequently in the Bahasa Inggris SMA/MA/SMK/MAK grade 11th. Out of the three HOTS cognitive domains, evaluating is the most frequently discovered in the textbook. Unlike the textbook, we analyzed that creating is the most dominant among the other two HOTS cognitive domains. 26,4 percent of the whole items are categorized as creating. On the other hand, evaluation is the least one employed by teachers with a total of 9,6 percent. Another study found that analyzing is the most commonly used test item, even though the total number of

HOTS needs to be increased (Damanik & Zainil, 2019).

From the interview, we were informed that only one of them regulated using HOTS in their test items. Even though the other three teachers are not obligated to employ HOTS in their test items, the tests have fewer LOTS questions. It might be impacted by testing reading comprehension itself. Constructing test items from a text can trigger much more HOTS-type questions rather than LOTS. Although research stated that their research object has more LOTS items (Damanik & Zainil, 2019), creating as the highest level of HOTS is the most commonly used in this case. Also, among the other LOTS, the understanding of the LOTS domain was found to be the highest. It corresponds to the reason because the test is designed to assess reading comprehension, which requires a high level of understanding.

Teachers frequently ask questions about understanding and memorization based on the percentage of LOTS in the test items. Even though HOTS has the highest percentage after overall accretion, understanding is the most dominant taxonomic domain among all others. This supports the hypothesis that reading comprehension will trigger the test maker to ask more questions about interpreting, summarizing, classifying, or inferring from something, in this case, a text. This is why, even though HOTS is the most dominant, understanding is the most important factor.

Moreover, teachers must write detailed indicators for their test items. Teachers are given official general indicators so that they do not break away from the objective. It's fair to say that

these teachers constructed their tests with a set of objectives. Since HOTS items are more pervasive, they also assisted K13's critical thinking, communication skills, creativity and innovation, and collaboration objectives (Nofrion & Wijayanto, 2018).

CONCLUSION

Based on the findings, we found that the percentages of HOTS questions are more dominant than LOTS questions. It accounts for 51.8 percent of the total number of questions. Besides, 48.2 percent of the questions in the LOTS category. The majority of the reading comprehension questions, which were created by four different teachers, require students to think critically. The questions include analyzing, evaluating, and creating in addition to remembering, understanding, and applying. Even though most teachers are not required to include HOTS in their tests, HOTS items are frequently found. We recommend analyzing teachers-constructed-tests in a rural area for future research. Teachers in our study may have the greatest awareness of recent test model concerns, which could explain this finding.

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