

CONTENT VALIDITY AND HOTS ELEMENTS OF READING TEST ITEMS
DEVELOPED BY MGMP TEACHER IN MALANG

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Abstract

This research presents the content validity and HOTS elements of reading comprehension test developed by MGMP teacher in Malang. The purpose of this study is to describe about the content validity based on basic competences and the HOTS usage of English reading comprehension test on semester assessment and final year assessment of 2018/2019 academic year. The total number of test items were 50 multiple choice items of semester assessment and 50 multiple choice items of final year assessment on seven grade. The method of this research used descriptive qualitative approach in which the researcher collecting the data by asking all assessments paper and syllabus to the school then the researcher analyzed the test items to find out the content validity and the use of HOTS elements. This research also categorized as descriptive analysis which also describes to what extent do the basic competences of Islamic Junior High School with its syllabus and the use of HOTS elements on these assessments. The finding of this research revealed that the test items of English reading comprehension test both on semester assessment and final year assessment had good content validity since it reached 0.94 of semester assessment and 0.96 of final year assessment, it can be concluded that the test items were covered basic competence then it had very high content validity according to Gregory, since it reached more than 0.80. Meanwhile the use of HOTS reached none elements of semester assessment and 15 elements of final year assessment. It can be concluded that there were 15 HOTS items out of 100 question items analyzed. It means that the use of HOTS both on English reading

comprehension test both semester assessment and final year assessment were limited, since at Islamic Junior High School's students should train in critical thinking.

Keyword: Basic competences, test items, HOTS

INTRODUCTION

Assessment is essential to evaluate the student's competence during teaching and learning process. This assessment is conducted in form of examination, and it is used to test the student's comprehension of what they have learned during the lesson (Ramadhana & Rozimela, 2018). *Permendikbud* number 66 the year 2013 states that assessment in school involves Portfolio, daily assessment, *Penilaian tengah semester* (PTS) or Middle test assessment, *Penilaian akhir semester* (PAS) or semester assessment, *Penilaian akhir tahun* (PAT) or final year assessment, *Ujian nasional* (UN) or national examination and *Ujian sekolah* (US) or school examination. Those assessments are called as performance assessment, it purposes to give feedback for students in learning process as well as assisting the teacher to build student's knowledge (Serevina & Mulyati, 2018).

While in conducting a assessment, the teacher needs test items as tool to measure the students ability. Among several types of tests, the reading comprehension test is the most common used and it aims to grasp the concept of the text rather than its meaning (Pourhosein Gilakjani & Sabouri, 2016). The most general used test item is multiple choice test. Multiple-choice test appears with question and usually more than one answer or choice. Additionally, basic competence is the foundation of creating a learning outcome as well as the test items for assessment. The appropriateness between test items and basic competence is important because it relates to the validity of the test. Validity is the appropriateness of the test item with what should be measured (Abdo Rajhy, 2014). Since the use of basic competence on test items are important, therefore this research also aims to know the content validity of the test based on basic competences. Content validity deals with what students have to learn then the materials given must be related to test items (Kristiana, 2014)

Besides, it is important to entangle test items with HOTS (High order thinking skill) items which are relevant with basic competence. HOTS is the ability to be critical thinking through three parts of cognitive dimensions; analyzing, evaluating and creating (Anderson & Krathwohl, 2001). HOTS encourages the students to think critically and solve a problem then implicate all information in making a decision. Those cognitive levels are categorized as

LOTS (Low order thinking) and HOTS. LOTS is knowing (C1), understanding (C2) and applying (C3). Meanwhile HOTS is analyzing (C4), evaluating (C5) and creating (C6). HOTS in the cognitive level demands the ability of students to specify aspects / elements, describe, organize, compare, and find implied meaning as well as encourage the students to construct and find the idea (Setiawati et al., 2018). Therefore, the use of HOTS items immensely has an impact on students, it encourages student to be high order thinker to create the ability of critical thinking.

The previous study of content validity presented by (Sa'adah, 2017) and (Nuryanto, 2018) indicated that Mid-test of English and English reading test of English national standard school final examination (NSFEE) were good in content validity, since it reached 88 % or 22 items that matched with basic competence of mid-test and English reading test of English national standard school final examination (NSFEE) indicated that this test was good, since the test match to the materials in syllabus reached 90 %. In addition, another study of HOTS items on English reading test presented by (Putra & Abdullah, 2019) and (Ramadhana & Rozimela, 2018) indicated that there were less than 27 percent of HOTS question items in national examination of 2013 until 2018, In addition there were only 33 percent of HOTS items on Middle test (PTS) and semester assessment (PAS) in Senior High school of Padang city. It assumed that only a few numbers of test items provide HOTS. As we know the importance of HOTS can create the student to think critically to achieve the triumph of cognitive skill (Abdo Rajhy, 2014). The previous studies analyze the use of HOTS items on reading test in the level of High school. However, The HOTS items of English reading comprehension test at Islamic junior high school (MTs) have never been done yet. As the implementation of The Decision of the director general Islamic education number 5163 year 2018. In addition the use of HOTS item in Islamic school is not implemented in all assessment subjects, but the common HOTS items present in Islamic subject assessment (Ahmad & Sukiman, 2019). Therefore, the researcher conducts a study to discover what extent do the test items in the reading comprehension test match with basic competence and the quality of HOTS in English reading comprehension test of Islamic Junior High School.

RESEARCH METHOD

The research design in this study was descriptive qualitative research since it purposed to investigate the content validity of the test on semester assessment and final year assessment as well as the use of HOTS items. This study involved English reading comprehension test items of PAS (Semester Assessment) and PAT (final year assessment) in

seven grade of Islamic junior high school on 2018/2019 academic year. To collect the data, the researcher collected the test items by asking to English teacher of MTs Nor Rochmat since it is part of MGMP member of Kabupaten Malang. Meanwhile, the thematic analysis was used to analyze the data then to find out the content validity the researcher used the formula developed by by (Gregory, 2015) as follow;

$$V_i = \frac{D}{A+B+C+D}$$

Content validity criteria;

0.8-1 = very high validity

0.6-0.79 = high validity

0.40-0.59 = medium validity

0.20-0.39 = low validity

0.00-0.19 = very low validity

The researcher involves 2 interaters to find out the content validity then classified into table of crosswise tabulation below;

Table 1 Rater's table

		Rater 1			
		Less score 1-2	Relevant	Very score 3-4	relevant
Rater 2	Less score 1-2	A		B	
	Very score 3-4	C		D	

Information;

V_i = content validity

A = both raters agree

B = rater 1 agrees, rater 2 disagree

C= Rater 1 disagree rater 2 disagree

D = both rater 1 and 2 disagree

FINDING AND DISCUSSION

The finding of this study showed that there are 0.94 of content validity on semester assessment, as the calculation below where the crosswise tabulation can be found on Appendix;

$$V_i = \frac{D}{A+B+C+D}$$

$$V_i = \frac{47}{0+2+1+47}$$

$$V_i = 0.94$$

It indicates that the use of basic competence on test items developed by MGMP teacher on semester assessment was very high since it reached 0.94. it is believed that test items were very good content validity since it reached more than 0.79 (Gregory, 2015). As the implementation of basic competence can be seen on test samples below;

Table 2 Sample of test item on semester assessment

NO	Question	Basic competence
Semester assessment		
1	Grade VII	3.1
	No 1	mengidentifikasi fungsi sosial, struktur
	Rosy : Hi, Steven. Good Morning	teks, dan unsur kebahasaan teks
	Steven : Hi Rosy, Good evening. How are you?	interaksi interpersonal lisan dan tulis yang melibatkan tindakan menyapa,
	Rosy :..... and what about you?	berpamitan, mengucapkan terimakasih,
	Steven : I am great, thanks	dan meminta maaf, serta menanggapi, sesuai dengan konteks penggunaannya
	A. I am greeting you	
	B. I am sleeping well	
	C. I am feeling well	
	D. I am thanking	

According to table 2 showed that the test item number 1 measured the ability of student related to greeting, leave taking or thanking which learned by students in odd semester. Therefore, the test must developed based on student's materials on odd semester.

The use of basic competence on test items is crucial since it deals with validity of the test, because the test should developed based on what student have learned (Abdo Rajhy, 2014). Meanwhile the content validity of test items also found on final year assessment as we can see on calculation below where the crosswise tabulation can be found on Appendix;

$$V_i = \frac{D}{A+B+C+D}$$

$$V_i = \frac{48}{0+1+1+0+48}$$

$$V_i = 0.96$$

Based on the calculation above that test items of final year assessment had very high content validity since it reached 0.96. Thus, the use of test items on final year assessment is good to measure the student's ability related to English subject. In addition, good content validity has subject matter topics and learning outcome, set of speciation that aims to define the sample of the test and construct the test that closely fits to the specifications. The sample of test item on final year assessment can be seen on table below;

Table 3 Sample of test item on final year assessment

NO	Question	Basic competence
Final year assessment		
1	Grade VII No 5 Rabit is a mamals. It eats grass and vegetables. It jumps. Where do rabbits usually build their home? A. ground B. river C. tree D. bush	3.6 mengidentifikasi fungsi sosial, struktur teks, dan unsurkebahasaan teks interaksi transaksional lisan dan tulis yang melibatkan tindakan memberi dan meminta informasi terkait dengan tingkah laku/tindakan/fungsi orang, binatang, benda, sesuai dengan konteks penggunaannya (Perhatikan unsur kebahasaan kalimat <i>declarative, interrogative, simple present tense</i>)

The table above showed the test items measured the ability of student's deals with animal's habit. it can be concluded that the test above measure what should be measure. The use of basic competences while constructing a test item is important, then the development of material must be relevant with basic competence, so the use of basic competence plays

crucial part in 2013 curriculum (Medriati et al., 2018). When the test presents the material given during the lesson, it can be concluded that the test has good content validity (Gronlund, 1982)

Besides, the use of basic competences on test items is important, additionally the use of HOTS also takes the role since HOTS aims to create the student to be critical thinker and problem solver (Putra & Abdullah, 2019). However, the use of HOTS items were not found on semester assessment, since at odd semester the students learn and mastered the implementation of basic competences (3.1-3.4) which only focused on the implementation and the use of English (Kemendikbud, 2013). Meanwhile the use of HOTS items appeared on final year assessment, as we can see on table below where another sample of HOTS items can be found on appendix;

Table 4 Sample of HOTS items

No	Question	Cognitive level
1	12. Mr. Mahmud is my uncle. He builds the people house, arranges the bricks. He is a A. bricklayer B. carpenter C. fisherman D. businessman	Analyzing (C4)
2	14. Where does the conversation probably take place? A. In the mall B. In the library C. In the school D. In the canteen	Creating (C6)

As we can see on table 4 above question number 12 of seven grade test item was categorized into analyzing (C4). This test items deals with specifying an aspect which to find out the proper job based on given text, thus the question number 12 can be categorized as HOTS. Meanwhile the use of HOTS items also appear on number 14, it categorized as creating since it aims to construct an idea based on given text, which asked the students to create the idea or guess an appropriate place, therefore this items was categorized as HOTS. These two questions classified as HOTS since it carries operational verb (*Kata kerja operasional*) to conclude an idea and to specifying an elements. At this cognitive level

students are assume to create an idea based on given text then concluded the idea of the text, thus question number 14 was categorized as creating (C6) (Anderson & Krathwohl, 2001).

It was found that English reading comprehension test of final year assessment were had high number of HOTS items than semester assessment was none of HOTS items. There were 15 question items that indicated as HOTS items in total. Unfortunately it happens on Islamic junior high school level since at their age is able to think independently to solve new problem as well as to cope with globalization. Righteously, students are encouraged to sharpen their mind through critical thinking in order to compete in era of globalization. In addition, critical thinking and problem solving, having good communication as well as collaboration are the crucial skills that must be mastered by students in 21st century (Trilling & Fadel, 2009).

CONCLUSION

To sum up all findings and discussion above, it can be concluded that there were 0.94 and 0.96 question items of English reading test on semester assessment and final year assessment were match with basic competence. Therefore these assessments has very content validity. Based on the finding above showed that the use of basic competence on the test items cover the content validity. Moreover, the use of HOTS items is also found on the tests. There are 15 question items cover high order thinking skills out of 100 question items, both on semester assessment and final year assessment. At these assessments involved the use of cognitive levels on high order thinking skill items, they were evaluating (C4) and creating (C6). Since the portion of HOTS items only cover less than 50 percent of questions in total, it indicated that the portion of HOTS items were deficient, since at their age, students must be train and familiar with HOTS in order to achieve the ability of critical thinking. In addition, all question items were good in measuring the student's comprehension of English based on content validity. Lastly, that the use of HOTS items were good enough to measure high order thinking skill which aims to make them think critically and creative.

SUGGESTION

Some suggestions are given to the teacher, curriculum or stakeholder (Director General Islamic Education) who takes responsibility in constructing the students' critical thinking. The test items is designed to test the student in higher order thinking skill then the classroom atmosphere should implement HOTS itself in order to enhance these skills. In other words, the teacher's training or seminar related to the implementation of HOTS is

important. Finally, the portion of HOTS items on English reading comprehension test should improve to emphasize the students' higher thinking skills. In addition, since the limited study of content validity in this study, thus it is important to conduct the study to measure the validity of logical, since it is used to measure to what extend do the test items really represent what should be measured.

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Appendix

Semester Assessment on Seven grade

No	Rater 1	Rater 2	Category
	<i>Ghuzainu</i>	<i>Mawariska</i>	
1	3	4	D
2	3	4	D
3	3	4	D
4	3	3	D
5	3	3	D
6	4	3	D
7	4	4	D
8	4	4	D
9	3	4	D
10	3	4	D
11	3	4	D
12	4	4	D
13	3	4	D
14	3	3	D
15	3	3	D
16	3	4	D
17	3	4	D
18	3	3	D
19	4	4	D
20	4	4	D
21	4	4	D
22	3	3	D
23	3	4	D
24	3	2	B
25	3	4	D
26	3	4	D
27	3	4	D
28	3	4	D
29	3	4	D
30	3	4	D
31	3	4	D
32	3	2	B
33	3	4	D
34	3	4	D
35	4	4	D
36	3	4	D
37	3	4	D

38	3	3	D
39	3	4	D
40	3	4	D
41	3	3	D
42	4	4	D
43	3	3	D
44	3	3	D
45	3	3	D
46	3	3	D
47	3	4	D
48	3	3	D
49	2	3	C
50	4	3	D

Final year assessment on grade seven

No	Rater 1	Rater 2	Category
	<i>Ghuzainu</i>	<i>Mawariska</i>	
1	4	4	D
2	4	3	D
3	4	3	D
4	4	4	D
5	4	4	D
6	4	4	D
7	4	4	D
8	3	3	D
9	3	3	D
10	3	4	D
11	4	3	D
12	3	3	D
13	3	4	D
14	3	3	D
15	4	3	D
16	4	2	B
17	4	3	D
18	3	3	D
19	3	3	D
20	3	2	D
21	3	3	D
22	3	3	D
23	3	4	D
24	4	3	D
25	4	4	D
26	3	3	D

27	3	4	D
28	3	4	D
29	3	4	D
30	4	4	D
31	4	3	D
32	4	3	D
33	3	2	D
34	3	4	D
35	4	4	D
36	4	4	D
37	3	4	D
38	3	3	D
39	3	4	D
40	4	4	D
41	4	3	D
42	2	3	C
43	3	4	D
44	3	4	D
45	3	4	D
46	4	4	D
47	4	4	D
48	4	4	D
49	3	4	D
50	3	4	D

HOTS items on final year assessment

N o	Question	Cognitive level	Question number	Grade
1	4. Nonny has a pet. It gives birth its babies. It has no fur at first, it reaches eight babies. It eats vegetable especially carrot. It's a A. dove B. raven C. rabbit D. hamster	C6	4	
2	5. Rabbit is a mammals. It eats grass and vegetables. It jumps. Where do rabbits usually build their home? A. Ground B. River C. Tree D. Bush	C6	5	

3	11. Anas always forgets about his homework. He never does his worksheet at all. And his teacher always gives him punishment because of late. Anas is a ... boy. A. diligent B. happy C. angry D. lazy <i>malas</i>	C6	11	7
4	12. Mr. Mahmud is my uncle. He builds the people house, arranges the bricks. He is a A. bricklayer B. carpenter <i>tukang kayu</i> C. fisherman <i>pelautan</i> D. businessman <i>bisnis</i>	C4	12	
5	13. What does Namira's mother do? A. A manager B. A bellboy <i>orang di hotel</i> C. A servant <i>pelatikan</i> D. A cook <i>membuat makanan</i>	C4	13	
6	14. Where does the conversation probably take place? A. In the mall B. In the library C. In the school D. In the canteen	C6	14	
7	15. It has beautiful feathers. It is from Papua. It can show its beautiful tail every time. It's a A. peacock B. love bird C. ostrich D. parrot	C4	15	
8	16. It eats bamboo. It has black and white fur. It has big body. It's from china. What animal is it? A. Rhinoceros B. Panda C. Cat D. Dog	C4	16	
9	17. In the future I want to be a <u>veterinarian</u>. The underlined word means someone that is responsible to care about A. patients B. animals <i>hewan</i> C. plants <i>tanaman</i> D. teeth <i>gigi</i>	C4	17	
10	27. What is the aim of the text above? A. To amuse the readers B. To describe the beach festival C. To describe Modangan beach D. To mention the facilities of the beach	C4	27	

11	28. Adel : Ainun, your room is very wide, designed with modern style Ainun : Yes, that's right. I want to make it spacy because I can study, do my task here. Adel : It's enough for placing sofa and table, too. Ainun : Yes, you're right. We can conclude that Ainun's room is A. narrow C. broad B. huge D. giant	C6	28	
12	34. Ninis is such a ... girl. She is always happy and smiles to everyone. A. strict B. crafty C. mean D. cheerful	C4	34	
13	36. These are the positive characters you can find in the song, except A. silly C. cool B. sweet D. pure	C6	36	
14	37. How is the character of the song? A. sorrowful C. confused B. romantic D. greedy	C6	37	
15	38. We know from the song that the writer A. has many wishes B. tries to be everything C. owns many characters D. wants to change at once	C6	38	