SNAP TO READ

SUMMATIVE ASSESSMENT OF TENTH-GRADE ENGLISH TEACHERS FROM HOTS PERSPECTIVE

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Abstract:
This research intends to analyze how Higher Order Thinking Skills are reflected in summative assessment used by Tenth-grade English teachers from HOTS perspective based on Revised Bloom's Taxonomy. This research used qualitative research with a content analysis method to know the extent of HOTS items that are reflected in the teacher-made test. To collect the data, document analysis and interviews were applied. From the data that have been obtained, it was found out that the HOTS-based item used by the teachers was still relatively low. There were only 6 out of 125 items that can be categorized as HOTS-based items with a percentage of 4.8%. HOTS-based items that have been found were also limited to the Analyze category (C4). In the C4 level, three indicators or sub-skills were included such as differentiating, organizing, and attributing. Among six HOTS-based items, 2 items were categorized as differentiating indicators, 1 item belonged to the organizing indicator, and 3 items were attributing indicator. Furthermore, the result of the interview indicated that the teachers need to learn more about HOTS to get a better understanding in constructing HOTS-based items.

Keywords: *Summative Assessment, HOTS, Revised Bloom's Taxonomy*

The improvement of Education is important to fulfill the demand of 21st-century competitiveness. In this 21st century, life skills such as learning and innovation skills, life and career skills, and also information, media, and technical skill are needed by everyone especially students. (Scott, 2017 in Retnawati, Djidu, Kartianom, Apino, & Anazifa, 2018) . Those skills are useful to face a complex and challenging problem in the 21st century. Therefore, students have to enhance their life skills by improving their Higher Order Thinking Skills.

Higher Order Thinking Skills (HOTS) are skills which include critical thinking skills, problem-solving, and decision making (Miri, David, & Uri, 2007). This skill leads the student to apply their higher capabilities in thinking which is not only remembering but also challenges the students to interpret, analyze, and manipulate information (Abosalem, 2016; Tanujaya, Mumu, & Margono, 2017). In revised Bloom's taxonomy, HOTS include analyzing, evaluating, or creating information (Ahmad, 2018). Thus, it is a very useful skill that students need along with the demand for 21st-century learning.

In the teaching and learning process, HOTS plays an important role. Students' abilities to think will influence the speed and effectiveness of learning (Tanujaya et al., 2017). Developing Higher Order Thinking skills make the students can learn, improve their performance, reduce their weaknesses, and also make them think in a better way (Abosalem, 2016; Tanujaya et al., 2017). It also can help the students to adjust to their environment and make a decision in a particular problem (Retnawati et al., 2018). It means making the students familiar with HOTS activity is important to make them solve an unfamiliar problem, question, or dilemmas (Retnawati et al., 2018).

Therefore, in Curriculum 2013, refinement of assessment standard has been done to accustom students to practice using their Higher Order Thinking Skills (Kemendikbud, 2017). It means all of the assessments in

Curriculum 2013 should include HOTS items in it. It also applies in the summative assessment which is one of the assessments used in Curriculum 2013 (Taras, 2005; Boston, 2002 in Arifin, 2017). Summative assessment is the assessment that is conducted at the end of the teaching period and used to evaluate the students' learning achievement (Qu & Zhang, 2013). Moreover, in evaluating students' achievement, the use of the test is needed as a tool to measure the students' abilities.

Test that is arranged by the teacher called the teacher-made test (Arikunto,2005 in Razali & Jannah, 2015). This kind of test is prepared by the teacher to measure the learning outcome of the students in the school. Then, it is different from a standardized test in which the test is constructed by one or more constructors (Razali & Jannah, 2015). The example of a standardized test is the National Examination.

Furthermore, both the teacher-made test and a standardized test should include items used to measure students' higher-order thinking skills. In the National Examination academic year of 2015/2016, the HOTS-based item has been included with percentage reaching 20% out of the total items (Kemendikbud, 2017). By including HOTS-based items in the National Examination, the government subtly demands each school to train the students on how to think critically. Thus, the teacher in every school should concern with the items that were used to assess the students' abilities. The assessment made by the teacher is expected to include enough HOTS-based items to train the students using their HOTS.

However, the teacher still has difficulties in preparing the assessment to measure students' Higher Order Thinking Skills. The previous research that was conducted by Retnawati et al (2018) found out that teacher's knowledge of HOTS was still low. It has an impact on the teacher's performance in developing the assessment for the students. Moreover, in this research, this case was also found during conducting the pre-interview in three Senior High Schools in Singaraja. Generally, the result of the-pre interview indicates that the teachers need to learn more about HOTS. The teacher seemed to have

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a misconception about HOTS itself. However, the three teachers stated that they already included HOTS items in their assessment. Then, regarding them still having a problem in understanding HOTS, the item that they believed as HOTS items are still in questioned.

Thus, this research was conducted to analyze the teacher-made test as a summative assessment that is used by English teachers from HOTS perspective using Revised Bloom's Taxonomy. In detail, this research aimed to know how Higher Order Thinking Skills are reflected in the assessment used by the tenth-grade English teachers.

Summative assessment

Taras (2005), Boston (2002) as cited in Arifin (2017) stated that one of the assessments that are commonly used by the teacher in Curriculum 2013 is summative assessment. According to Looney (2011), summative assessment refers to the summary assessment of students' performances. It aims to measure or summarize what students already learned (Brown, 2003). This kind of assessment, typically conducted at the end of the course or unit instruction to measure the outcome of students' learning (Brown, 2003; Kibble, 2017). The summative assessment has clear evaluation criteria and is used to evaluate the student learning a teacher teaching at the end of the teaching period (Anthony & Susan , 2005 as cited in Qu & Zhang, 2013). The teacher can sum up what students have learned and make a judgment by using this assessment (Houston & Thompson, 2017; Luo Shaoqian, 2003 in Qu & Zhang, 2013).

Brown (2003) stated that final exams in a course and general proficiency exam are the example of summative assessment. Besides, tests, examinations, and also end-of-year marks are also included in the summative assessment. Usually, summative assessment causes anxiety to the students, because the results of the assessment are final and can affect the students' prospects (Surgenor, 2010). The result of the summative assessment used by the teacher to determine whether students have fulfilled the specified learning outcome or not.

To sum up, summative assessment is one type of assessment that is conducted at the end of the teaching period. This kind of assessment has clear criteria to evaluate the students' abilities because it is used to determine whether students can pass or failed in a certain learning material that has been taught. Moreover, to make an effective assessment, some suggested criteria can be used as mentioned above.

Higher Order Thinking Skills (HOTS)

According to Tanujaya et al. (2017), Higher Order Thinking Skills are the abilities that require higher capabilities to think, not only remembering. It is an important aspect because thinking skills are fundamental in the teaching and learning process (Tanujaya et al., 2017). Ahmad (2018) stated that Higher Order Thinking Skill is a schema that constructing students' critical thinking. Critical thinking students can be improved by giving HOTS through the learning activities.

In the teaching and learning process, HOTS play an important role. Tanujaya et al. (2017) stated that HOTS are related to the learning process. The students who are trained HOTS items show a positive impact on the development of education. Students can be able to learn, reduce their weaknesses, and have an improvement in their learning. HOTS are also viewed as the mental ability to solve a challenging situation (Chinedu, Kamin, & Olabiya, 2015). According to Thomas & Thorne (2009), as cited in (Retnawati et al., 2018), HOTS also play an important role in solving a new problem by applying, connecting, or manipulating prior knowledge.

Revised bloom's taxonomy

In revised Bloom's Taxonomy, especially in the cognitive process dimension, HOTS are defined as the top three levels of ability in cognitive dimension which include analyzing, evaluating, and creating (Ahmad, 2018; Retnawati et al., 2018; Tanujaya et al., 2017). It is different from the top three levels of taxonomy which is developed by Bloom that include analysis, synthesis, and evaluation.

In Revised Bloom's Taxonomy, evaluation is no longer the highest

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level of the cognitive process but the current highest level is "create". Anderson modified the original terminology from nouns into verbs. This is done because Bloom's Taxonomy is a description of the thinking process, after that, a shift was made in Bloom's taxonomy which explained low-level thinking to high-level thinking (Darwazeh & Branch, 2015).

Besides, based on the definition of the expert above, it can be concluded that Higher Order Thinking Skills are the skill that needs to be practiced by everyone so that they can enhance their ability to think. By improving the ability to think, everyone, especially students can use their abilities to analyze, evaluate and create something. Furthermore, practicing more to improve the higher thinking abilities will have a positive impact on learning improvement.

METHOD

Qualitative study with content analysis has been used in conducting this research. Content analysis is one of the analysis methods that can be used in qualitative research (Burnard, 1995 as cited in Bengtsson, 2016) for making valid inferences from the text to describe and quantify specific phenomena (Krippendorff 2004, Downe-Wambolt, 1992 as cited in Bengtsson, 2016). The use of this method was under the purpose of this research in which the data were quantified and described to know the extent of HOTS items are reflected in the teachers-made test as a summative assessment.

The summative assessments that have been analyzed were obtained from three Senior High Schools in Singaraja namely SMAN 2 Singaraja, SMAN 3 Singaraja, and SMAN 4 Singaraja. In each school, one English teacher who teaches students in class X was involved. The number of teachers involved in this research was three teachers. Furthermore, some procedures have been applied in conducting this research. It started with planning, developing instruments, validation, collecting the data, analyzing the data, conducting expert judgment, revising, developing interview guides, conducting an interview, transcribing the interview, analyzing the interview, and the last was presenting the result.

In collecting the data, this research used document analysis and interviews. Document analysis was used to collect the data from the summative assessment. In this method, the blueprint was used during classifying the items made by the teacher based on Revised Bloom's Taxonomy theory. To classify the data, firstly, the item was categorized into some cognitive level such as Remember (C1), Understand (C2), etc. The item that has been classified then re-categorized based on indicators in that cognitive level. Then, to record the result of analysis, the analysis form was also applied to make it easier to see the data that have been analyzed.

The other method in collecting the data was an interview. The three teachers were interviewed to get more data that were related to the result of the document analysis. At least, 10 questions were used during the interview with the teachers. Moreover, the data from the document analysis were presented in the form of percentage. Two formulas were applied to get the numerical data. Meanwhile, the result of the interview was analyzed using qualitative methods such as data reduction, data display, and conclusion. Then the data were presented in the form of description to support the numerical data.

FINDINGS AND DISCUSSION

Finding

Using Revised Bloom's Taxonomy, 125 items which consist of 110 multiple-choice items and 15 short answer items from three Senior High Schools have been analysed. Moreover, the interview was also applied to get additional information from the teachers related to the summative assessment that they made. Below are the tables that show the results of data analysis per each school.

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Table 1 The Distribution of Cognitive Process of Item in SMAN 2 Singaraja

	Cognitive Process	Multiple Choice	Short Answer	Total Cognitive Process	Total HOTS/ LOTS	%
LOTS	C1	11	3	14	34	97%
	C2	18	0	18		
	C3	0	2	2		
HOTS	C4	1	0	1	1	3%
	C5	0	0	0		
	C6	0	0	0		

From the table, it can be seen that among six cognitive processes, only Remember (C1), Understand (C2), Apply (C3), and Analyze (C4) appeared in the summative assessment. Whereas Evaluate (C5) and Create (C6) category were not found. The percentage of LOTS item was 97% out of the whole items. Meanwhile, the percentage of HOTS-based item was 3% out of 35 items.

In addition, in the interview that has been conducted, teacher stated that she did not really know about HOTS. She mentioned that HOTS was started from C3. Moreover she described C1 level as an easy item such as find the topic or main idea.

Table 2 The Distribution of Cognitive Process of Item in SMAN 3 Singaraja

	Cognitive Process	Multiple Choice	Short Answer	Total Cognitive Process	Total HOTS/ LOTS	%
LOTS	C1	14	1	15	40	89%
	C2	18	0	18		
	C3	6	1	7		
HOTS	C4	2	3	5	5	11%
	C5	0	0	0		
	C6	0	0	0		

In SMAN 3 Singaraja already involved four cognitive processes dimension in the summative assessment that teacher used. The cognitive processes that appeared were Remember (C1), Understand (C2), Apply

(C3), and Analyze (C4). Then, the table points out that the teacher mostly including LOTS items in his test. There were 40 items that were classified as LOTS items with the percentage 89% out of the whole items.

Then, during the interview, the teacher argued that he already tucked HOTS-based items in the test. His statement is in accordance with the result of summative assessment analysis that was shown in the table. However, surprisingly, the teacher also stated that he did not exactly know what HOTS are. He only knew that HOTS was needed nowadays so that students need to improve their' HOTS.

Table 3 The Distribution of Cognitive Process of Item in SMAN 4 Singaraja

	Cognitive Process	Multiple Choice	Short Answer	Total Cognitive Process	Total HOTS/ LOTS	%
LOTS	C1	3	1	4	45	100%
	C2	28	4	32		
	C3	9	0	9		
HOTS	C4	0	0	0	0	0%
	C5	0	0	0		
	C6	0	0	0		

Then, in SMAN 4 Singaraja only three cognitive processes that are included in the summative assessment used by the teacher such as Remember (C1), Understand (C2), and Apply (C3). Then, all of the cognitive processes belonged to the LOTS item. Furthermore, there were no items that could be categorized as HOTS-based items.

However, the result of the analysis above contrasted with the result of the interview in which the teacher's answer showed that she knew about HOTS although the answer was still doubtful. During the interview, the teacher stated that she already included HOTS-based items in the test she made.

Furthermore, by compiling the result of the analysis in each school, the total of HOTS and LOTS items from three Senior High Schools in Singaraja can be seen in below.

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Table 4 The Total Percentage of LOTS and HOTS items in Three Senior High Schools

	Cognitive Process	Frequencies	Total HOTS/ LOTS	Percentage (%t)
LOTS	C1	33	119	95.2%
	C2	68		
	C3	18		
HOTS	C4	6	6	4.8%
	C5	0		
	C6	0		
Total			125	100%

Table above shows 6 items of 125 items that can be categorized as HOTS-based items. It represented 4.8% out of the whole items used by the English teacher. Then, among the top three level abilities in the cognitive process, all of the items that belong to HOTS appeared in the Analyze level (C4) only. Then, in the Analyze level, three indicators or sub-skills are included. The distribution of the indicators in the C4 level was presented in the table below.

Table 5 The Distribution of Indicators of Analyze (C4) Cognitive Process

Cognitive Process	Definition	Indicators/ Sub Skills	Frequency of Item
Analyze (C4)	Break material into its constituent parts and determine how the parts relate to one another and an overall structure or purpose.	Differentiating	2
		Organizing	1
		Attributing	3

Table 2 shows among six HOTS-based items, 2 items were categorized as differentiating indicator, 1 item belonged to the organizing indicator, and 3 items were classified as attributing indicators. Besides, the item that was categorized as a HOTS item in every indicator was presented below.

Table 6 The Example of HOTS-based Item in Every Indicator

Indicators/ Sub Skills	Definition	Example
Differentiating	Distinguishing relevant from irrelevant parts or important from unimportant parts of the presented material.	I had a lot to tell my friends that day at school … . (paragraph4). This part of the text is called …. Description Event Reorientation Resolution Orientation (Item from SMAN 2 Singaraja academic year 2018/2019)

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Organizing	Determining how elements fit or function within a structure	Rearrange the following paragraphs into a good story. In 1905, Wright brothers offered the airplane to the US War Department, but it was declined. Nevertheless, they obtained a patent for the airplane in 1906. In 1900, they constructed a glider that could carry a pilot. In the following year, they constructed a wind tunnel and tested about 200 wing designs. After struggling for a long time to make his and many people's dream of flying come true, Orville Wright finally achieved success. On 30th January 1948, he died peacefully. On 17 December 1903, Orville became the first person to fly a powered aircraft. He stayed in the air for 12 seconds at Kill Devil Hill near Kitty Hawk, North Carolina. This experiment cost a lot of money, but he never gave up. He designed and sold bicycles for living. Orville Wright was a co-worker of the airplane and the first person to fly a powered machine. Born on 19 August 1871 in Dayton, Ohio, Orville and his brother, Wilbur, were very interested in flying. In 1908, Orville and Wilbur completed the first airplane for the US Army, but it crashed. A year later, however, an identical craft was tested and accepted. In the same year, the Wright brothers established Wrights Company to manufacture airplanes. The correct arrangement is…….(just write down the number, e.g. 1,2,3,4,5 & 6) (Item from SMAN 3 Singaraja academic year 2018/2019)
Attributing	Determine a point of view, bias, values, or intent underlying presented material .	What moral value do you get from the story? We should not disturb any animals We should stand by our friends' side We should be able to climb trees quickly We should always keep promises we have made We should love our friends as we love ourselves (Item from SMAN 3 Singaraja academic year 2018/2019)

DISCUSSION

Based on the data above, it seems several factors caused the number of HOTS item to be low. One of them was because of the teacher's knowledge. During the interviewed teacher 1 stated that she just knows about HOTS on the surface. Teacher 2 also stated he knew that HOTS is needed nowadays but he did not really know about HOTS. Whereas, teacher 3 was correct when said that HOTS started from C4, analyze, but she was also still somewhat doubtful about the answer. It means, generally, they still need to learn more about HOTS. This finding is in line with the research that has been conducted by Driana & Ernawati (2019) and also Seman et al (2017) who found out that teacher's knowledge of HOTS was the biggest challenge to teachers.

Another factor, the teachers have a misconception about HOTS itself (Driana & Ernawati, 2019). In this research, the teacher 1 mentioned in the interview that the example of HOTS item is the question used to find out the detail information implicitly. Meanwhile in Revised Bloom's Taxonomy, implicit information such as find the topic or main idea belongs to Understanding (C2) category. This category has seven indicators which include summarizing and inferring in it. It means for the item that requires the students to summarize and conclude something most likely indicates the C2 category.

Then, it is interesting to discuss when the teacher described HOTS as difficult questions (teacher 3). 'Difficulty is not the same as Higher Order Thinking', it is stated clearly in the module that was published by the Minister of Education and Culture in 2017 entitled "Modul Penyusunan Soal Higher Order Thinking Skills (HOTS)". Brookhart (2010) in Driana & Ernawati (2019) also says that the principle to assess higher-order thinking is by differentiating the difficulty level and complexity level. Difficult item does not mean that the item automatically can be used to measure HOTS students. Including difficult questions does not mean the teacher automatically includes HOTS items. For example, giving the uncommon word may be difficult for students, but it is not a HOTS item (Kemendikbud, 2017). HOTS items are

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more complex because students need to use their thinking skills not only in remembering.

Furthermore, Retnawati et al. (2018) state that the teacher's knowledge about HOTS was still lacking. The lack of understanding makes the teacher unable to develop HOTS items well (Retnawati et al., 2018). Therefore, the assessment used by the teacher is more dominant to measure LOTS rather than HOTS. It is in accordance with the finding of this research in which the percentage of LOTS items reaches 95.2% of the total items. Meanwhile, the total percentage of HOTS items is 4.8% only.

Considering this case, teachers' knowledge really influences the performance of the assessment that was made. The success of developing HOTS items can be determined by the learning outcome to be achieved and implemented assessment (FitzPatrick & Schulz, 2015 in Driana & Ernawati, 2019). Then, because teachers do not really understand about HOTS, so that assessments that they made do not have enough HOTS items to train students using their higher-order thinking. Therefore, it is important to conduct training for teachers especially in developing HOTS items so that the teacher can have a better understanding of HOTS.

However, the teacher's knowledge of HOTS is not the only factor that caused the HOTS item that was included in the assessment was low. There is also the possibility that the teacher does not fully understand how to conduct a valid assessment, especially the authentic assessment. The abilities of teachers in conducting the valid assessment is called teacher assessment literacy (Stiggins, 1994 as cited in Marhaeni et al., 2018). The research that has been conducted by Marhaeni et al (2018) shows that the implementation of authentic assessment in the EFL classroom was not satisfying. There was a discrepancy in the assessment that was implemented by the teacher. Considering this case, it means that teachers still have a problem in conducting the assessment, especially authentic assessment.

Regarding the teacher's problem in implementing the authentic assessment, it seems to influence the teacher to prefer using the traditional

assessment in assessing students' HOTS. In the summative assessment used by the teachers who participate in this study, the instrument used multiple-choice items and a short answer. Multiple-choice and short-answer items belong to the traditional assessment. Meanwhile, HOTS items were the assessment that is based on the contextual or real situation (Kemendikbud, 2017) so that it belongs to the authentic assessment. Therefore, the effectiveness of using multiple-choice items and the short answer was still questioned especially to measure students' HOTS.

Goodson & Soul (1998) in Mohamed & Lebar (2017) state that a variety of items including multiple-choice items, matching, and essay can be used to measure HOTS. However, teachers should concern whether the multiple-choice question can maximize students' ability to think in a higher way or not. To make students' higher-order thinking improves, the appropriate assessment method is really needed. Using multiple-choice items let the students answer the question by guessing it without thinking. Then, it is supported by Coombs, Milholland, & Womer (1956) as cited in Mohamed & Lebar (2017) that multiple-choice items do not encourage students to think when the students can guess the answer. Thus, it is better if the use of a multiple-choice item is reduced and teachers try to find out another technique to train students in using their higher-order thinking.

But this will be a problem considering the teachers' knowledge about HOTS is still inadequate. The lack of knowledge about HOTS causes the teachers to experience obstacles in developing HOTS-based items. It might be one of the reasons why teachers prefer to use traditional assessment. It is like the 'Domino Effect' when teachers' knowledge about HOTS influences how they develop HOTS-based items and also influences the form of the assessment used.

In addition, the result of the analysis research which shows the low number of HOTS cannot be used to generalize in all populations. It is because the data that were obtained and the participants who were involved only from three senior high schools were limited. This research was also restricted in

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Singaraja only. Moreover, this research has a weakness in which it does not consider the factor from the student that might influence the teacher in preparing the summative assessment.

CONCLUSION

The result of the data analysis shows that the number of HOTS-based items that was included in the teacher-made test as a summative assessment was still low. 6 items can be categorized as HOTS items out of the 125 items. This research found out that the items in the instrument mostly use LOTS items. The percentage of LOTS items was 95.2% out of the all items, whereas the percentage of HOTS items was 4.8%. This percentage can be considered as low if it is compared with the percentage of the HOTS item that was included in the National Examination in 2015/2016 that reached 20% out of the whole items. Then, considering this case, several factors might cause a low number of HOTS items. One of the biggest obstacles was the teachers' knowledge. The result of the interview indicates that the three teachers still need to learn more in understanding HOTS. Teachers' knowledge of HOTS influenced the teachers' performance in constructing HOTS-based items. If teachers do not understand about HOTS, how they can develop HOTS items well. Therefore it is important especially for the teachers to join the workshop or seminar to get a better understanding of HOTS so that they can construct enough HOTS-based items to train the students using their HOTS.

Besides, this study has an impact on stakeholders such as teachers, students, and further research. The teacher who is directly involved in the teaching process can be more aware of their abilities in developing the assessment based on the demand of the curriculum. Then, considering the finding of this research in which HOTS item in the assessment was still low, it has an impact on the students. The short term impact, students practice themselves more in the level C1, C2, C3 only. If the students only use their knowledge in that level of cognitive process, it might cause long term impact in which the students have a problem to think critically and students'

knowledge only in the level C1, C2, and C3. On the other hand, the results of this study also have an impact on another study. It opens the opportunity for another researcher to conduct the study and use this study as a reference.

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REFERENCES

Abosalem, Y. (2016). Assessment techniques and students' higher-order thinking skills. International Journal of Secondary Education, 4(1), 1. https://doi.org/10.11648/j.ijsedu.20160401.11

Ahmad, K. (2018). The implementation of teaching LOTS and HOTS in English teaching-learning process in senior high school. RETAIN, 6(1), 121–128.

Arifin, M. A. (2017). Analysis of the Indonesian high school curriculum focusing upon the English program. IDEAS: Journal on English Language Teaching and Learning, Linguistics and Literature, 134–145.

Bengtsson, M. (2016). How to plan and perform a qualitative study using content analysis. NursingPlus Open, 2, 8–14. https://doi.org/10.1016/j.npls.2016.01.001

Brown, H. D. (2003). Language assessment principles and classroom practices. California: Longman University Press.

Chinedu, C. C., Kamin, Y., & Olabiya, O. S. (2015). Strategies for improving higher order thinking skills in teaching and learning of design and technology education. Journal of Technical Education and Training, 7(2), 35–43.

Darwazeh, A. N., & Branch, R. M. (2015). A Revision to the Revised Bloom ' s Taxonomy. Thannual, (1990), 220–225.

Driana, E., & Ernawati. (2019). Teachers' understanding and practices in assessing higher order thinking skills at primary schools. Acitya: Journal of Teaching & Education, 1(2), 110–115.

Houston, D., & Thompson, J. N. (2017). Blending formative and summative assessment in a Capstone Subject : ' It ' s not your tools , it's how you use them. Journal of University Teaching & Learning Practice, 14(3). Retrieved from http://ro.uow.edu.au/jutlp/vol14/iss3/2

Kemendikbud. (2017). Modul penyusunan soal higher order thinking skill (HOTS). Jakarta.

Kibble, J. D. (2017). Best practices in summative assessment. Advances in Physiology Education, 41(1), 110–119. https://doi.org/10.1152/advan.00116.2016

Looney, J. W. (2011). Integrating formative and summative assessment : Progress toward a seamless system? OECD Education Working Papers, (58). Retrieved from http://ro.uow.edu.au/jutlp/vol14/iss3/2

Marhaeni, A. A. I. N., Dantes, N., & Paramartha, A. A. G. Y. (2018). Teacher assessment literacy : Discrepancies in authentic assessment practice in EFL context. International Conference on Educational Assessmnet and Policy, 2, 18–21.

Miri, B., David, B. C., & Uri, Z. (2007). Purposely teaching for the promotion of higher-order thinking skills: A case of critical thinking. Research in Science Education, 37(4), 353–369. https://doi.org/10.1007/s11165-006-9029-2

Mohamed, R., & Lebar, O. (2017). Authentic assessment in assessing higher order thinking skills. International Journal of Academic Research in Business and Social Sciences, 7(2), 466–476. https://doi.org/10.6007/IJARBSS/v7-i2/2021

Qu, W., & Zhang, C. (2013). The analysis of summative assessment and formative assessment and their roles in college English assessment system. Journal of Language Teaching and Research, 4(2), 335–339. https://doi.org/10.4304/jltr.4.2.335-339

Razali, K., & Jannah, M. (2015). The comparison between national final examination test items and English teacher made-test items of 2010 and 2011. Al-Ta Lim Journal, 22(1), 10–22.

Retnawati, H., Djidu, H., Kartianom, Apino, E., & Anazifa, R. D. (2018). Teachers' knowledge about higher-order thinking skills and its learning strategy. Problem of Education in the 21st Century, 76(2), 215–230. Retrieved from http://oaji.net/articles/2017/457-1524597598.pdf

Seman, C. S., Yusoff, W. M. W., & Embong, R. (2017). Teachers challenges in teaching and learning for higher order thinking skills (HOTS) in primary school. International Journal of Asian Social Science, 7(7), 534–545. https://doi.org/10.18488/journal.1.2017.77.534.545

Surgenor, P. (2010). Teaching toolkit: Summative & formative assessment. Dublin, İrlanda: University College Dublin.

Tanujaya, B., Mumu, J., & Margono, G. (2017). The relationship between higher order thinking skills and academic performance of student in Mathematics instruction. International Education Studies, 10(11), 78. https://doi.org/10.5539/ies.v10n11p78

DOI: dx.doi.org/10.21274/ls.2020.12.2.295-314