

DEVELOPING ENGLISH SUMMATIVE TEST BASED ON HIGH ORDER THINKING SKILL (HOTS) FOR SENIOR HIGH SCHOOL STUDENTS

Elinvita U. Nasaru,

Moon Hidayati Otoluwa,

Rahman Taufiqrianto Dako

ABSTRACT

This study aimed to develop the English summative test based on high order thinking skill (HOTS) for tenth grade senior high school students. This study concerned with how to provide a product that can be an additional media for students to be easier to do an English test in final examination at school with HOTS. The development process used model proposed by Borg and Gall (1983). This study involved 30 students of X grade of math and science program at SMA N 1 Dulupi. The instruments for collecting the data were questionnaires, interview, and document analysis. The product developed has validated by the lecture of English postgraduate in Gorontalo State University, the English teacher and the students. The findings of this study are (1) The students need to get an additional media to get practice of English test with HOTS. (2) The product named "SMART (Strategy Mastery English Test)" is a product contained of questions for final examination which is appropriate based on the result of validation.

Keywords: English summative test, High order thinking skill.

BACKGROUND

Nowadays English holds the significance part in several situations. English has its own interest in certain people. Besides, it becomes the International language communication, English also turns out to be a standard of measuring people's qualification. By mastering English, people assume getting their different level in particular community. English has successfully persuaded people fight to mastery the English starting from early level until the advance level. Therefore, English grows to be one of the important language communications which is taught in all school level.

There are four skills which are run in English teaching and learning at school. They are speaking, listening, writing and reading skills. So that, in all particular school level require their students to be able to mastery those four skills. Those four skills becomes the standard of measuring students' English proficiency. It is because each skill to another is connected each other, so that, the students are demand to be able to mastery those skills. As the result at the end of the learning, it comes to be a must for teachers to plan the evaluation of those skills regularly.

School holds the important part for the students' successfulness. Therefore at the end of the learning, it needs a tool to evaluate regularly the learning success called learning evaluation as a report to parents regarding the progress of student learning outcomes. The evaluation demands teacher's ability to be able to organize the learning evaluation. Learning evaluation is one of the competences which must be owned by the teacher. It is because the teacher's evaluation competency included in four teachers' competency. Based on Pasal 10 ayat 1 UU number 14 year 2015 about teacher and lecture, it instructs the teacher to must have pedagogy competency, personality competency, social competency and

professional competency. Moreover the professional competency requires teacher's ability to evaluate the learning process.

Learning evaluation commonly conducted to measure students' learning result. Thus, in evaluation the assessment and the measurement are done toward the students' competence. To measure and assess students' competence can be done by giving a test. According to Buchari (2008) a test aims to investigate to identify result of the learning process to the students. Moreover, there are two kinds of test such as formative test and assesment test. This study focusses on summative test where the way to measure the competence accomplishment which given at the last teaching activity, it is called last semester measurement or Penilaian Akhir Semester (PAS). The function of summative evaluation is to determine the result of students learning and to give rapports for the students parents as the decision of student's graduation (Zunairin,1981, p.65). However, there are several tests that can be done by the teacher. It is according to National education minister number 23 in 2016 they are oral test, written test, and assignment test. Moreover, there are two kinds of test. They are objective test and non-objective test. Objective test consists of multiple choice, short answer, true-false, and matching test while non-objective test is an essay which requires a long answer. Finally, it is a choice for the teacher to choose the suitable test which can maximally measure students' English proficiency.

Generally kind of test which used to measure English proficiency is objective test. One of the kinds of objective test is multiple choices. According to Mulyadi (2010, p.78-79) multiple choice tests consists of description and one correct answer in several possible answers as the distractor. In fact, most teachers choose the multiple choices. This kind of objective test is chosen because giving score to the students' work can be done fast and consistent without any consideration. It is because the answer of each item is clear, easy, and certain. As the result, the objectivity of the teacher can be controlled in correcting the answer and also giving score to the students' answer. The objectivity can be controlled because the score is measurable for each item of the multiple choice test. Moreover, it avoids the subjectivity to give score because every question only has one certain answer. Therefore, each item of the question in test can draw the students' cognitive toward the material learned.

All material learned can be evaluated through multiple choice tests. It is because the test doesn't require the long answer and a long time. Therefore, many materials can be covered at the time in one test only. However, a multiple choices test demands teacher to be able to formulate the alternative options so that they are able to distract the students. As the result their cognitive to not be distracted becomes the measurement of learning result. Moreover, a multiple choice test requires teacher to construct the question which not only measures low thinking skill (LOTS) but also high order thinking skill (HOTS). A test with Low Order Thinking Skill (LOTS) is the test type which rely on memorization skill. This test only measures how able the students to understand and recognize the particular case. Generally a test with LOTS tends to be easier, it is because the test formulated simply. According to Maryadi (2017, p.191) Lower order thinking skill is a thinking competence related to the receptive ability. For example "Where does Benjamin live?". While a test with High Order Thinking Skill (HOTS) requires students to be able to analyze the case and think critically. Regarding to Pratama & Pramesti (2018) a test with high order thinking skill makes students to be able to solve the problem. For example " We know from the second paragraph that.....". Thus, from these statements, a HOTS test can hone students' cognitive ability at a more complex stage than LOTS test.

Basically, in composing a test with HOTS-based, it should rely on taxonomy bloom. It is because taxonomy bloom is a level cognitive that used by the teacher to identify the target of learning that the student will achieve. Taxonomy bloom consists of six cognitive level such as remembering,

understanding, applying, analyzing, evaluating and creating (Anderson and Kartwohl, 2001). Regarding to the taxonomy bloom, in composing a test based HOTS it will measure students' cognitive in analyzing, evaluating and creating. Therefore HOTS is an approach to compose a test which is covered by taxonomy bloom.

In fact, it is not rare to discover the realities that there are several teachers are not skilled composing HOTS test. Most of their test doesn't stimulate the ability to think high level or only require students to be able to remember, and understanding not to analyze. It can be seen from the way teacher formulate the stimulus of the test. This case occurs in SMA Negeri 1 Dulupi that will be an object of research. This school was chosen because the researcher is the teacher at this school. So, the researcher knows for sure this condition. More information also gained from the other English teacher in that school if they always use multiple choices test as a test given at summative test. However they were rare to pay attention to the level of the test. In fact, most of their test only categorized in lower order thinking level, it happened because of some reasons. First, they didn't have enough coaching or workshop of composing HOTS test, so that their knowledge about how composing a question which stimulate students' critical and analysis is really lack. Second, they do not understand to find out the suitable operational word called Kata Kerja Operasional (KKO) which can lead students to think critically, it is because they do not recognize well of the taxonomy bloom. Three, the limited time of composing a HOTS test, it is because many assignments of the teacher to do at school. As the result many teacher doesn't know how HOTS test is. This is also added by the headmaster of SMA Negeri 1 Dulupi in observation activity on March 15, 2021, she claimed that generally her teachers face difficulties in composing HOTS test because of lack guidance to compose HOTS test.

Those lack of composing HOTS test also impact to the students' English learning result. In this case, the students' competence in English is low. It is because the instrument given by the teacher to the students only examine the students' remembering, understanding which categorize in Lower Order Thinking Skill (LOTS). The teacher does not develop the test instrument which is HOTS-based test. As the result, the students' ability to criticize and to analyze a case is low. Therefore, those issues among the education require any examples of the instrument HOTS-based that can be used by the teacher as a guide and description of HOTS-based test.

Finally, all the concerns above the teacher are needed to be able to recognize and modify the test with HOTS-based test. It aims to sharpen the students' English not only in the way to remember and understanding but also in the way to analyze and apply their English. Therefore, this research will develop a test with HOTS-based test as the final product at the end of the research process. The product will be a questions bank that consists of several questions for summative test. As the result, this issue finally drives the research title "Developing English Summative Test Based on High Order Thinking Skill (HOTS) at X grade of Senior High School"

LITERATURE REVIEW

The test is a measuring tool used to measure the achievement of the expected competence. According to Anne (2007) a test is a measuring tool that has objective standards so that it can be used widely, and can actually be used and compares the psychological state or behavior of individuals.

The higher order thinking skill (HOTS) is three upper cognitive process of Bloom's taxonomy (Anderson and Krathwohl, 2001). According to Anderson and Krathwohl's statement, if high order thinking skill is at the top level of taxonomy bloom, then this means that it is at the cognitive level of analyzing,

evaluating, and creating. The ability to think at this stage can certainly hone the critical and creative abilities of students.

This research will use the model which relies on using Borg and Gall (1983, p.775) in developing the English summative test based HOTS. This model covers several stage, they are (1) research and information collecting, (2) planning, (3) develop preliminary form of product, (4) preliminary field testing, (5) main product revision, (6) main field testing, (7) operational product revision, (8) operational field testing, (9) final product revision, (10) dissemination and implementation.

METHODOLOGY OF RESEARCH

This research was conducted at SMA N 1 Dulupi which located in Boalemo regency. The participant chosen in this research is X grade of math and science program in academic year 2021-2022. The numbers of students are 30 students. This part investigates the tools or ways used in collecting the data such as interview, document analysis, and questionnaire. Moreover, analyzing the data adopts the theory from Creswell (2009, p.185). In his theory the analyzing of the data consists of six steps. They are organizing and preparing the data, reading the data, coding, describing, narrative approach and interpreting the data.

FINDINGS

There are five materials that was distributed to the English summative test. They were introducing self, congratulation and complimenting, descriptive text, recount text and narrative text.

Regarding to the result of need analysis there were 77% most students preferred to get English test based HOTS to measure the understanding in complex level. Then, 70% students preferred to get practicing in doing English HOTS test. 60% claimed that their problem related to the unable to understand the point of the question. 83% students needed to get practice of HOTS test.

In relation to the students need toward the learning process, there were 72% need the availability of the question bank as the media to achieve their goal of measuring the level of analytical thinking using the HOTS based test. 43% students wanted the number of words available in the text as a stimulus question is around 150 - 250 words. 72% students needed the type of test is multiple choices. Then, 80% students tend to like practicing a test based HOTS. There were 44% students feel comfortable in a paired environment. 54% students feel interesting in making notes from the presentation of information obtained from the question bank. The last, there were 72% students intended teacher's role to always actively control them and provided input on what they are doing all times.

DISCUSSION

Summative test is a form of assessment to assess students' competence. In general, the summative test is provided in the form of multiple choices. This research is a development research (R and D) which aims to develop an English summative test based on high order thinking skills (HOTS).

To begin the developing of the material, it was started by collecting the information. The information collecting was done through the document analysis. This aims to identify the syllabus used by the teacher in carrying out the teaching and learning process, then analyze the summative test used by the teacher whether they meet the HOTS standard or not. Moreover, the information was also obtained through the interview process to the teacher to find out the extent of the teacher's knowledge of HOTS-based test, what cognitive indicators were tested by the teacher on the students.

The second activity in developing a test is planning. At this stage the preparation of a plan for the material to be tested, in which there were five materials that used as materials in the development of a summative test based on HOTS. They are introduction self, congratulation and complimenting, descriptive text, recount text and narrative text. In addition, there were several question indicators that served as a guide in preparing questions. The question indicators included find a fact, imply meaning, make a conclusion, make a complementary paragraph in the text, create the continuation story, analyze the detail information etc. Additionally, at this stage the stimulus questions in the test had also been designed. At the end, it was obtained that there were several stimuli in the form of dialogue, short text, long text, and letters.

The third process of product developed was developing preliminary form of product. In this step, capitalize on what has been planned or designed in the previous stage, it began to be developed. So that at this stage a question card was arranged in advance that functioned to create systematically structured questions that meet the demands of basic competencies, question indicators, and teaching materials. Moreover, the question cards contained several aspects, such as basic competencies, question indicators, material, and question items. Finally, there were 100 questions that had been developed using the HOTS standard. Then, they were tested on students to measure the validity of the questions. As the result, there are 78 valid questions and 22 invalid questions. Finally, those invalid questions were removed and 78 questions became the questions that existed in question bank of the English summative test based HOTS.

The fourth stage of this research is expert judgment validation. In this case, an expert validated the product that had been produced. The expert who capable in validating this product is a lecturer from the postgraduate English department. It validated the product in terms of material, construction, language, and HOTS-based criteria. As the result of this expert validation, it can be concluded that the product was feasible to be tested on students. However, there were only a few expert inputs in terms of the use of images for each stimulus, and the size of the images that had been revised. In addition, the expert input in terms of the availability of question instructions on each question that has a different stimulus.

The fifth stage of this research was preliminary field testing. In this step, the product that had been produced was tested on a limited class, it means it only used one class of the three available classes. After that, a questionnaire was distributed to assess the readability and practicality of the product.

CONCLUSION

Developing English summative test based HOTS in its development process used the development model by Borg and Gall (1983). In this case, there were several stages carried out, namely (1) Research and information collecting, at this stage it was finally found that the questions used so far in the final assessment of English cognitive abilities (summative tests) were only questions that were categorized as LOTS. (2) Planning, at this stage a draft is prepared which is a guideline in developing HOTS-based questions, starting from basic competence, material, and question indicators. (3) Developing preliminary research, in this stage a product was developed in the form of a question bank containing a number of English summative test questions based HOTS. (4) Expert judgment validation, at this step the product was validated by an expert in this case an English lecturer at the postgraduate level of Gorontalo State University. The result proved that the product is suitable for use by correcting some inputs. (5) Preliminary field testing, at this stage the product was tested to students at SMA N 1 Dulupi, where from students' responses to products recorded through questionnaires it was found that

students showed satisfaction with the product. This is because the students can practice to work on HOTS-based questions and were helped by explanations in the available answer keys. However, it was not enough measuring the readability of this product from the student's perspective, so that the measuring of the product also gained from the teacher's response. Finally it was found that the teacher also the same response where she showed satisfaction and was ready to use the product resulting from this research. This is because the teacher felt that she has a basic and guide in preparing HOTS-based questions later.

In the end the availability of development products in the form of a question bank was well received by teachers and students who were the targets of developing this product. As the result, it can be concluded that fulfilling the needs of students and teachers who were right on target needed to consider the needs analysis so that the product results meet the needs of students and teachers.

REFERENCES

1. Airasian, Peter W. (2012). Classroom Assesment; Concepts and Applications. New York: McGraw-Hills companies.
2. Alma, Buchari. (2008). Guru Profesional Menguasai Metode dan Terampil Mengajar. Bandung: Alfabeta.
3. Anthony J.Nitko, Susan M.Brookhart.(2005). Education Assessment of Students. New Jersey: Person Education Ltd.
4. Anderson, L.W., & Krathwohl, D.R. (2001). A Taxonomy for Learning, Teaching, and Assesing ; A revision of Bloom's Taxonomy of Education Objectives. New York: Addison Wesley Lonman Inc.
5. Anne, Anastasi. (2007). Tes Psikologi Edisi Ketujuh (terjemah). Jakarta: PT. Indeks, Arends, Richard. (2012). Learning to teach. New York: McGraw Hills.
6. Arifin, Zainal. (2006). Evaluasi Pembelajaran. Bandung: PT. Remaja Rosdakarya.
7. Arikunto, S. (2015). Dasar-Dasar Evaluasi Pendidikan. Jakarta: Bumi Aksara. (2010). Prosedur Penelitian: Suatu Pendekatan Praktik. Jakarta: Rineka Cipta.
8. Ahmad, S, Kiswanto K,A & Masniladevi. (2018). Instrumen HOTS Matematika Bagi Mahasiswa PGSD. Jurnal PAJAR(Pendidikan dan Pengajaran). 2 (6), 909.
9. Basuki, Ismet dan Hariyanto. (2015). Asesmen Pembelajaran. Bandung: PT. Pemaja Rosdakarya.
10. Brookhart, S. M. (2010). How to Assess Higher Order Thinking Skills in Your Classroom. Alexandria: ASCD.
11. Brown, H. Douglas (2004). Language assessment: Principles and classroom practices. New York : Longman. (2003). Language assessment principles and classroom. California: Longman University Press.
12. Bukhari, Muchtar. (2008). Evaluasi Pendidikan. Jakarta: Rineka Cipta Cahyo, A.N. (2013). Panduan Aplikasi Teori-teori Belajar Mengajar (Teraktual dan Terpopuler). Jogjakarta: PN. Diva Press.
13. Creswell, John W. (2009). Research Design : Qualitative, Quantitative, and Mixed Methods Approaches. Newbury Park: Sage Publications.
14. Dinni, Husna Nur. (2018). HOTS (High Order Thinking Skills) dan Kaitannya dengan Kemampuan Literasi Matematika. Prosiding Seminar Nasional Matematika (PRISMA). 1: 170-176.
15. Hughes, Arthur. (2003). Testing for Language Teacher. Cambridge: Cambridge University Press.
16. Shaoqian, Luo. (2003). The Research of English Classroom Teaching. Beijing: Foreign Language Teaching and Research Press.

17. Mulyadi. (2010). *Evaluasi Pendidikan: Pengembangan Model Evaluasi Pendidikan Agama di Sekolah*. Malang: UIN Maliki Press.
18. Pratama, R. R., & Pramesti, R. A. (2018). THE IMPORTANCE OF STIM-HOTS AND CRITICAL THINKING SKILL IN DISRUPTION ERA. *Social, Humanities, and Educational Studies (SHES): Conference Series*. <https://doi.org/10.20961/shes.v1i1.24304>
19. Saputra, Hatta. 2016. *Pengembangan Mutu Pendidikan Menuju Era Global: Penguatan Mutu Pembelajaran dengan Penerapan HOTS (High Order Thinking Skills)*. Bandung: SMILE's Publishing.
20. Sudjono, Anas. (2015). *Pengantar Evaluasi Pendidikan*. Jakarta: PT Raja Grafindo Persada. (2005). *Pengantar Evaluasi Pendidikan*. Jakarta: PT Raja Grafindo Persada. (2006). *Pengantar Evaluasi Pendidikan*. Jakarta: PT Raja Grafindo Persada. Sugiyono. (2012). *Metode Penelitian kuantitatif Kualitatif dan R&D*. Bandung: Alfabeta 2019). *Statistika untuk Penelitian*. Bandung : CV Alfabeta.
21. Widoyoko, Eko. (2009). *Evaluasi Program Pembelajaran*. Yogyakarta: PustakaBelajar.
22. Yokri, Veggi & Poni, Saltifa. (2020). LKPD Matematika Berbasis Inquiry Untuk Meningkatkan Kemampuan Pemecahan Masalah Peserta Didik SMK SMAK Padang Kelas X. *Jurnal Equation*. 3 (1). 81
23. Zainul, Asmawi & Nasoetion, Noehi. (2005). *Penilaian Hasil Belajar*. Jakarta : UT