

Developing an Authentic Assessment Instrument of Exposition Text Based on Higher Order Thinking Skills (HOTS) in Class X Students of Senior High School

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Abstract—The learning process and assessment instruments provided had not been oriented to develop students' high-level thinking skills. This study aimed to describe the process of developing the authentic assessment instrument of HOTS-based exposition text in class X State Senior High School 1 of Bandar Bener Meriah; describe how the feasibility of authentic assessment instrument on HOTS-based exposition text, and describe students' learning outcomes by using the authentic assessment instrument on HOTS-based exposition text. This research referred to the development model of Borg & Gall. The findings of the study showed that: (1) developing the authentic assessment instrument on HOTS-based exposition text was based on research and preliminary information collection, planning, developing initial product, design validation and evaluation, product revisions, assessment and suggestions from language teachers and students, revisions, individual trials, revisions, small group trials, revisions, limited field trials, revisions until the product was valid and feasible to use; (2) The average percentage of all sub-components from the validation of design experts was 81% with the criteria "very good". The average percentage of all indicators from the experts' evaluation validation for the instrument in the form of description was 95.7%, for multiple choice instruments was 94%, and for psychomotor instruments was 86, 83%. All assessments from evaluation experts were in the criteria of "very good". The teachers' responses to the assessment instrument had a total percentage of an average of 88% with the criteria "very good". The students' responses were declared feasible and met the needs with overall criteria "very good"; and (3) The effectiveness of the authentic assessment instrument of HOTS-based exposition texts obtained an average of 81.2 %. It could be concluded that students' abilities rose significantly and reached the Minimum Completion Criteria as expected.

Keywords— *authentic assessment, exposition text, higher order thinking skills*

I. INTRODUCTION

Teachers generally only use tests to measure students' cognitive or knowledge aspects, so that students' affective and psychomotor aspects are ignored. This problem was revealed from the results of a preliminary study on the assessment system conducted by teachers on Indonesian subjects. Preliminary studies were conducted in two stages, namely field surveys and literature surveys.

The field survey was conducted on the assessment carried out by the teacher in the exposition text material of class X students at State Senior High School 1 of Bandar Bener Meriah on February 28, 2018. The survey conducted through interviews with Ms. Dra. Arnima as one of the Indonesian language subject teachers in class X State Senior High School 1 of Bandar Bener Meriah revealed that the assessment used by the teacher only referred to cognitive aspects, while the affective and psychomotor aspects had not been implemented. She said that teachers tended to use assessment on cognitive aspects because there were still many teachers who had difficulties in making and compiling assessment instruments of affective and psychomotor aspects. Assessment instruments that were in accordance with the 2013 curriculum were not available so that the teacher had difficulty in implementing the attitude and skill dimension assessment. Therefore, authentic assessments in the 2013 curriculum were considered to be more complicated than the assessment of the previous curriculum.

Exposition text has a text structure consisting of theses, arguments, and reassertions/ conclusion. However, in reality, students have not been able to identify well between theses and arguments, because students find it difficult to understand and distinguish between these theses and arguments. According to Priyanti (2014) that exposition text is a text that is used to convince readers of opinions

expressed in a number of supporting arguments [1]. Exposition text usually contains an issue or problem.

HOTS is part of the revised Bloom's taxonomy. According to revised Bloom taxonomy, thinking skills in the cognitive domain are divided into six levels, namely: remembering (C1), understanding (C2), applying (C3), analyzing (C4), evaluating (C5), and creating (C6) (Retno, 2011) [2]. The first three (lowest) levels, namely C1, C2 and C3 are lower order thinking skills (LOTS), while the next three levels namely C4, C5, and C6 are types of higher order thinking skills (HOTS). Bloom's taxonomy is grouped into two levels of thinking, namely low order thinking skills and higher order thinking (King, et al. 2011) [3].

So far, teachers' assessment of exposition text learning has only centered on cognitive abilities, which are only focused on the assessment of students' knowledge, without assessing students' attitudes and skills. This causes the students' learning outcomes on writing exposition text are still relatively low. Because of the neglect of affective and psychomotor abilities, students' analysis in interpreting, developing content, analyzing structure and language, and composing exposition texts tends to be weak. This is evidenced by the recapitulation of learning outcomes obtained by class X students at State Senior High School 1 of Bandar Bener Meriah during the daily test on exposition text material. Class X students who completed the daily test were only 47% or 11 students from 24 students, while those who did not complete reached 53% or 13 students from 24 students. Based on speculative data, it was concluded that the process and student learning outcomes were still relatively low.

Based on the literature survey of exposition text material, there are four different basic competencies, namely: analyzing the structure of the contents of the exposition text, developing the contents of the exposition text, examining the structure and language of the exposition text, and constructing exposition texts. The purpose of these four competencies is different which requires students to be able to achieve the expected goals. However, not all objectives of this competency have been achieved in learning.

In terms of language competence, in high-level thinking skills or higher order thinking skills, cognitive abilities have such a large influence on psychomotor skills in writing exposition texts. Writing activities emphasize linguistic elements that require the ability to process, reason, and understand which are included in the cognitive realm. Both cognitive and psychomotor elements should be given the same emphasis so that the balance of cognitive and psychomotor abilities is aligned, so that teachers' assessment toward students' ability to do high-level thinking can be measured by clear and appropriate assessment instruments.

Sani (2016) states that authentic assessment is a type of assessment that directs students to demonstrate the skills and competencies needed to overcome problems and situations encountered in the real world [4]. The development of an

authentic assessment instrument of exposition text using the HOTS base is expected to be a solution to the problems described above. Therefore, researcher was interested in conducting a study entitled "Developing Authentic Assessment Instruments of Exposition Text Based on Higher Order Thinking Skills (HOTS) for Class X Students of State Senior High School 1 of Bandar Bener Meriah." The research product was a HOTS-based authentic exposition text guide book which was expected to help teachers to use the assessment in 3 realms of authentic assessment in order to achieve learning objectives in the 2013 curriculum as expected.

II. METHOD

The type of this research was Research and Development, using the Borg and Gall research model. According to Tegeh et al. (2014), development research is a research method that is powerful enough to improve learning practices, with the aim of developing new products or improving existing products to be accountable [5]. The research was conducted at State Senior High School 1 of Bandar Bener Meriah, Jalan Redelong Pondok Baru, Simpang Utama Village, Bandar District, Bener Meriah Regency. This research was conducted in the odd semester of the 2018/2019 academic year. The subjects in this study were students of class X at State Senior High School 1 of Bandar Bener Meriah with 33 students, validators of authentic assessment instruments of HOTS-based exposition text, and Indonesian language subject teachers. The object in this study was an authentic assessment instrument of exposition text based on higher order thinking skills (HOTS). The main instrument used to collect data in this assessment is questionnaire and test. The process of data analysis was done by examining all data that had been collected from various sources, namely data from the validator, authentic assessment instruments, teachers, and students. The data obtained in this study were quantitative descriptive data, data validity analysis and authentic assessment instruments from material experts and evaluation experts were analyzed using the formula from Sugiyono (2013) [6]. To see the effectiveness of the book of authentic assessment instruments, the formula for calculating effectiveness was used (Trianto, 2010) [7].

III. FINDINGS

A. *The Process of Developing HOTS Based Assessment Instrument*

The first step carried out in this study was conducting a preliminary study which was started by conducting a needs analysis. The analysis of teacher and student needs for HOTS-based assessment instruments showed that all teachers (100%) stated that they needed assessment instruments in accordance with the 2013 curriculum and 85% of students stated that they needed assessment

instruments developed in the learning process. The second stage, planning and designing assessment instruments that would be developed based on data that had been obtained from the initial stage. The third stage was validating the assessment instruments that had been developed to design experts and evaluation experts to obtain validity assessment instruments.

The fourth stage, the assessment instruments that had been validated were then revised based on the results obtained from the design experts and evaluation experts. Furthermore, validation from Indonesian language teachers was conducted to obtain Indonesian teachers' responses to HOTS-based assessment instruments that had been developed. The fifth stage was conducting individual trials on assessment instruments for students to find out students' responses to assessment instruments that had been developed. The assessment instrument developed was a product for the teachers, while its application was to students. Therefore, what is tested on students is the test instrument that is on the assessment scale, not the overall assessment instrument. The sixth stage, after getting the results of individual trials, the assessment instrument was revised back in accordance with the results obtained, if it had received a good response, the next stage could have been carried out. The seventh stage was conducting limited group trials with a total of 9 students. At this stage, because there are no suggestions for improvement from students, then proceed to the next stage. The eighth stage was conducting a limited group trial with 33 students.

B. Feasibility of HOTS-Based Assessment Instrument

The assessment result from the expert design on the indicators of the assessment instrument presentation technique with seven statements obtained a total score of 48 with a percentage of 86% and was in very good criteria. Language and writing aspects of instruments with three statements obtained a total score of 20 with a percentage of 83% or in very good criteria. The aspect of activity in the assessment instrument with two statements obtained a score of 12 with a score percentage of 75% or in good criteria. The completeness aspect with two statements obtained a score of 13 with a score percentage of 81% or in very good criteria. The average number of overall indicators obtained a score of 92 with a score percentage of 81% or in very good criteria, meaning that HOTS-based assessment instruments did not need to be revised anymore.

The assessment result from the evaluation expert on the items of the multiple choice form obtained a total score of 142 with a percentage of 94% and was in very good criteria, this means that multiple choice questions did not need to be corrected. The test instrument in the form of descriptions obtained a score of 107 with a percentage of 95.7% or in very good criteria; this means that the test in the form of description did not need to be corrected. Psychomotor assessment instruments obtained a score of 90

with a percentage of 86.83% or in very good criteria, meaning that HOTS-based assessment instruments did not need to be revised anymore.

The results of the teacher's assessment of the assessment instrument obtained a score of 109 with a percentage of 88% or in very good criteria; this means that the assessment instrument did not need to be improved.

The average percentage of assessment in individual trials on HOTS-based assessment instruments was 73%. The average percentage of assessment in small group trials on HOTS-based assessment instruments was 78.86%. Based on the results of the assessment on the exposition text material, individual trials and small group tests were in good criteria with little revision.

Products had been revised then a limited field trial was carried out. Field trials involving 33 students obtained a percentage of 92.2%, which was included in the excellent category. Therefore, the assessment instruments developed were classified as very good because there were no revisions. Obtaining graphical data empirically could be seen in the following figure.

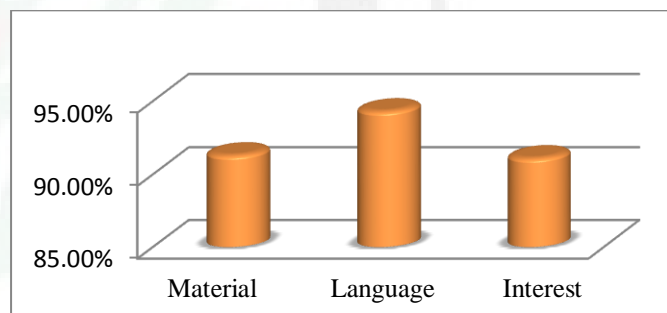


Fig. 1. Students' Assessment of HOTS-based Assessment instruments

C. Effectiveness of HOTS Based Assessment Instrument

Data analysis to measure students' high-order thinking skills was known from 33 students as subjects of the assessment instrument trial. The effectiveness of authentic assessment instrument of HOTS-based exposition text obtained a score of 2679 with an ideal score of 3300, meaning that the score obtained was 81.2%. The effectiveness of textbooks in the learning process obtained a score of 2302 with an ideal score of 3300, meaning that the score obtained was 69.76%. Therefore, the authentic assessment instrument of HOTS-based exposition text that had been developed was more effective than without any assessment instrument. The effectiveness of the assessment instrument developed was 81.2% and the effectiveness without the assessment instrument was 69.76%.

IV. CONCLUSION

Based on the objectives and the results of the research on developing an authentic assessment instrument of HOTS-based exposition texts in class X State Senior High

School 1 of Bandar Bener Meriah described earlier could be summarized as follows:

- The process of developing authentic assessment instrument of HOTS-based exposition texts in class X high school students was done through 9 stages, namely; (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
- The feasibility of authentic assessment tools for HOTS-based exposition texts developed for class X State Senior High School 1 of Bandar Bener Meriah was eligible and suitable for learning based on the assessment of design experts, evaluation experts, Indonesian teachers, and student responses. The product was known to be feasible to use after using the validity analysis of the product using the Sugiyono formula, and then the classification of scores in the form of percentages was interpreted in qualitative sentences. The product was said to be feasible to use when it reached a score of $61\% \leq X < 80\%$ with the criteria of "good" and a score of $81\% \leq X < 100\%$ with the criteria "very good". The product would be feasible to use if it was in the criteria of "good" and "very good" with notes "without any revisions". The average percentage of all sub-components from the validation of design experts I and II was 81% with the criteria "very good". The average percentage of all indicators from the experts' evaluation validation I and II for the instrument in the form of description was 95.7% with the criteria "very good". The average percentage of all indicators from experts' evaluation validation I and II for multiple choice instruments was 94% with the criteria "very good". The average percentage of all indicators from the experts'

evaluation validation I and II for psychomotor instruments was 86.83% with the criteria "very good". The teachers' responses to the assessment instrument had a total percentage of an average of 88% with the criteria "very good". The response of State Senior High School 1 of Bandar Bener Meriah students to the instruments of authentic assessment instruments of HOTS-based exposition text that had been developed was declared feasible and met the needs with overall criteria "very good".

- The effectiveness of the authentic assessment instrument of HOTS-based exposition texts obtained an average of 81.2. Students' lowest score was 75 and the highest was 85. This showed that student learning outcomes were better with authentic assessment instrument of HOTS-based exposition texts. Based on the average score of students' posttest, it could be concluded that students' abilities rose significantly and reached the Minimum Completion Criteria (75) as expected. It was concluded that the authentic assessment instrument of HOTS-based exposition text developed was effective to be used in learning.

V. REFERENCES

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