

Development of Vocabulary Assessment Instrument Based on Information on Writing Materials for Explanatory Texts of 11th Grade Students Senior High School

Siti Hazizah Siregar¹, Abdurahman Adisaputera², Daulat Saragi³

^{1,2,3}Universitas Negeri Medan, Indonesia

sshazizah@gmail.com

Abstract

This study aims to analyze the development of information-based vocabulary assessment instruments on writing explanatory text material for grade XI high school students. This research will be conducted in 11th grade of Senior High School Panai Tengah. This research was conducted in the 2019/2020 academic year for 3 months from August 2019 to October 2019. The 6-month research activity began from field observations to determine the needs analysis to the thesis examination. The results of the trial of the information-based vocabulary assessment instrument on the explanatory text material were captured through the teacher's response questionnaire about the practicality of the developed assessment instruments. The practicality gained was captured through a questionnaire distributed to two teachers who studied Indonesian. The teacher's response questionnaire to find out the practicality of the assessment instruments developed included three sub-components of the assessment, namely aspects of attractiveness, aspects of ease, and aspects of readability. The attractiveness aspect gets a percentage value of 96% in the "excellent" category. Linguistic aspects get a percentage value of 100% with the category "excellent." And the last aspect is the aspect of convenience which gets a percentage value of 85% with the category "excellent."

Keywords

assessment instruments;
vocabulary; explanatory text;
Senior High school



I. Introduction

Development of vocabulary assessment instruments in the education field is very much needed. Because with the development of vocabulary assessment instruments in learning, it will help the assessment process in learning in schools. Language acquisition requires a lot of vocabulary and an adequate form of grammar. A lot of vocabulary without being based on strong grammar, it is impossible for us to understand well a reading and vice versa, good grammar without having a lot of vocabulary then an article cannot be read perfectly. Vocabulary mastery will affect sentence making, content suitability and expected explanation in Indonesian.

The vocabulary assessment instruments that will be developed in this study are specific to the problem of cohesion and coherence in explanatory texts. This is encouraged because there is still a lack of mastery of student vocabulary, making it difficult to express ideas to be written down. In the teaching and learning process in

Panai 1 Public High School, problems were found in students writing a text. In producing explanatory texts, the results of student writing are still unsatisfactory. In producing explanatory texts, students still only write the words without realizing the important thing that is cohesion and coherence of each paragraph written. Cohesion and coherence in a text will reflect the writing that will be read by the reader. Cohesion and coherence can make a meaningful writing by presenting ideas or information that can be easily understood by the reader.

The low learning outcomes of Indonesian students are caused by many factors. The main factor is students cannot understand texts consisting of several paragraphs so well that they cannot answer questions related to reading when facing an exam. Another factor that causes students to get low grades is that students lack vocabulary. Student vocabulary is very minimal so students don't grasp the meaning of paragraphs. Indonesian vocabulary knowledge influences each test tested by the teacher. The student will not be able to answer properly. Finally, student learning outcomes are low, do not reach the benchmark of student success, namely grades. The value obtained must be above the KKM (Minimum Completeness Criteria) determined by each school.

This study begins by examining in more depth the process of developing information-based vocabulary assessment instruments which will then be used as a foundation for the development of information-based vocabulary assessment instruments on explanatory text teaching materials. For this reason, researchers are interested in conducting research under the title "Development of Information-Based Vocabulary Assessment Instruments on the Explanatory Text Material of 11th grade Students Senior High School

II. Review of Literature

2.1 Vocabulary Assessment Instruments

Sani (2014: 201), assessment and evaluation is an effort to collect data which is then processed for policy making in an educational program. In teaching and learning activities, the teacher conducts an assessment by collecting facts and student learning documents to improve learning planning. Therefore, the process of evaluating the process and learning outcomes requires varying information from each student or group of students

Nursa'aban (2010: 256) states that the principles of assessment in learning are authentic, objective, fair, integrated, open, thorough, systematic, criteria-oriented, and accountable. Learning outcomes assessment techniques referred to in the provisions of the Ministry of Education in the form of tests, observations, assignments of individuals or groups, and other forms in accordance with the characteristics of competence and the level of development of students. Assessment instruments include indicators of substance, construction, and language. General principles in the assessment of learning outcomes by educators are as follows.

- a. Sahih, means the assessment is based on data that reflects the ability to be measured.
- b. Objective means that the assessment is based on clear procedures and criteria, not influenced by the subjectivity of the assessor.

- c. Fair, means the assessment is not beneficial or detrimental to students because of special needs and differences in religious backgrounds, ethnicity, culture, customs, socioeconomic status, and gender.
- d. Integrated, means that assessment by educators is one component that is inseparable from learning activities.
- e. Open, means that the assessment procedures, assessment criteria, and basis for decision making can be known by interested parties.
- f. Holistic and continuous, means that assessment by educators covers all aspects of competence and by using a variety of assessment techniques that are in accordance with the competencies that students must master.
- g. Systematic, means that the assessment is carried out in a planned and gradual manner by following standard steps.
- h. Accountable, means that the assessment can be accounted for, both in terms of techniques, procedures, and results.
- i. Educative, means that the assessment is done for the interests and progress of students in learning.

Arifin (2009: 69) put forward the characteristics of good assessment instruments are valid, reliable, relevant, representative, practical, discriminatory, specific, and proportional. In line with Haryati's research (2017: 3), it is stated that to know the extent of students' mastery of certain competencies, assessment instruments are needed that are able to measure the level of achievement of students' competencies in a valid and objective manner.

2.2 Vocabulary Assessment

Keraf (2007: 13) states that the purpose of language learning is for students to be skilled in language namely: skilled in listening, skilled in speaking, skilled in reading, and skilled in writing. The quantity of a person's language skills is very dependent on the quantity and quality of the vocabulary they have. The higher the quality and quantity of vocabulary possessed, the greater the likelihood that students are skilled in language. The quality of the vocabulary is the value of the placement of words in a sentence, while the quantity is the amount of vocabulary that someone controls.

The Ministry of National Education in Taufina (2009: 113-114) argues that language has a central role in the intellectual, social and emotional development of students and is a key determinant of success and learning in all fields of study. Language is expected to help students get to know themselves, their culture, and the culture of others, express ideas and feelings, participate in communities that use the language, make responsible decisions at personal and social levels, discover and use analytical and imaginative abilities that are in him.

Seeing students' vocabulary understanding requires assessment. So that the results of the assessment truly illustrate what will be assessed the appropriate method is needed. Tarigan (1989: 36) methods that can be used in vocabulary testing: (1) asking students to examine words that are already known to be in easy order to difficult, (2) using tests of matching of words, roots, prefixes, and suffixes, (3) students are told to classify words under a certain topic, (4) students are told to write word definitions, (5) students are tested with country names, city names and main results in the form of multiple choice, (6) present words words analyzed by students become prefixes, root words, suffixes and certain words, (7) asking students to

determine the meaning of words from external word instructions, (8) asking students to determine the meaning of words from internal context clues, (9) having students perfect the comparison analogy, (10) asking students to correct the spelling of the underlined words. Many ways that can be used to test vocabulary.

We may choose one or several ways according to the part to be tested.

2.3 Explanation Text

Writing is the ability to express ideas, opinions, and feelings to other parties through written language. While explanatory text is a text that explains the process of the occurrence or formation of natural or social phenomena. Explanatory text in the student book published by the Ministry of Education and Culture (2014: 1), "contains an explanation of the condition of something as a result of something else that has happened before and causes something else to happen later." Explanatory text has a social function to explain the process of something happening according to the principle of causation. Explanatory texts are closely related to natural events and social events. Dirgeyasa in Saragih (2019), the explanation of the genre is to explain the processes involved in the formation or working of natural or socio-cultural phenomena.

Understanding explanatory texts according to Isnatun and Farida, Kosasih, and Knapp and Watkins. Explanation texts are texts that describe the process of the occurrence or formation of a natural or social phenomenon (Isnatun and Farida, 2013: 80). Agreeing with Isnatun and Farida, Kosasih (2013: 85) said that explanatory texts are texts that explain or explain natural or social processes or phenomena.

Kosasih (2013: 85-86) states that the explanatory text is structured with the following structure.

- a. General statements about phenomena, both natural phenomena and social phenomena will be discussed.
- b. Explanation. Contains further arguments regarding the phenomenon.
- c. The explanation here can be in order of why the phenomenon can occur.
- a. Conclusion. A summary of the points previously explained.

III. Research Method

This type of research is research and development or Research and Development (R&D). This research is called R&D, by adopting eight steps of R&D research according to Sugiyono (2009). The steps are: (1) The stage of seeing potential and problems, (2) The stage of gathering information and literature studies, (3) The stage of designing a product, (4) The stage of validating the design, (5) The stage of revising the design, (6) Stage of product trials, (7) Stage of revising products that have been tested (8) Stage of testing the use of products that have been revised. The development of this product will be used to determine the results of trials and the effectiveness of research products using guideline information-based vocabulary assessment instruments.

This research will be conducted in 11th grade Senior High School of Panai Tengah. This research was conducted in the 2019/2020 school year for 3 months

from August 2019 to October 2019. The 6-month research activity began from field observations to determine the needs analysis to the thesis examination.

IV. Discussion

4.1. The Process of Developing Information-Based Vocabulary Assessment Instruments on Explanatory Text Material

a. Product Validation by Material Expert

Material experts assess the vocabulary assessment instrument based on explanatory text material information in 11th grade Senior High School of Panai Tengah that was developed already has content worthiness with an average percentage score of 86% with "excellent" criteria. Said to be feasible because it meets a score or percentage above an average of 61%. The results of the average percentage of aspects of the feasibility of the contents of the sub-component assessment of the suitability of the material with SK and KD, the accuracy of the material, updated material, and encouraging curiosity can be seen in table 1 below.

Table 1. Expert Material Assessment of Information-based Vocabulary Assessment Instruments on the Aspect of Content Feasibility

No	Assessment Component Sub	Percentage	Criteria
1	Material compatibility with KD	92%	Excellent
2	Material accuracy	83%	Excellent
3	Material updates	94%	Excellent
4	Encourage curiosity	81%	Excellent
Average		86%	Excellent

Based on the results of the percentage of material experts on the feasibility of the contents above, it was found that the sub-component assessment of the suitability of the material with SK and KD has an average percentage of 92%, the accuracy of the material with an average of 83%, the materiality of the material with an average of 94%, and encourage curiosity by an average of 81%. The average percentage results of all sub-components of the assessment of the feasibility of the contents are 86% with the criteria "excellent."

b. Product Validation by Design Experts

Design experts assess the vocabulary assessment instrument based on information on the explanatory text material developed has a feasibility with an average percentage score of 89%. The average percentage results are obtained based on sub-component assessment in the form of module size, module cover design, and module content design this can be seen in table 2 below.

Table 2. Average Percentages of each Sub Component According to Design Experts

No	Assessment Component Sub	Percentage	Criteria
1	Module Size	100%	Excellent
2	Module Cover Design (Cover)	83%	Excellent
3	Module Content Design	91%	Excellent
Average		89%	Excellent

Based on the results of the average percentage shown in the above table, it is obtained that the sub-component of the assessment of the design of the paper size of the valuation instrument has an average percentage of 100%, the cover design of the valuation instrument has an average percentage of 83%, and the content design of the assessment instrument has a percentage an average of 91%. The average percentage of all sub-components of product design appraisal assessment appraisal is 89% with "excellent" criteria. This means that the information-based vocabulary assessment instrument on explanatory text material that has been developed has been appropriate to be used and can meet the needs of explanatory text assessment needs.

c. Product Validation by Evaluation Experts

Learning evaluation experts validate the assessment instrument products on aspects of affective assessment, aspects of cognitive assessment, and aspects of psychomotor assessment. The evaluation of learning evaluation was carried out by Dr. Evi Eviyanti, M, Pd., Who is a lecturer at Medan State University. Evaluation on the evaluation aspect is carried out to improve the quality of the developed assessment instruments. The results of the evaluation of the evaluation of assessment instruments by learning evaluation experts concluded that the assessment instruments developed were in the "excellent" criteria in the affective assessment aspects with an average total percentage of 85%. Can be seen in table 3 below.

Table 3 Average Percentages of each Affective Assessment Aspect According to the Evaluation Expert

No	Rating Description	Percentage	Criteria
1	Theory	85%	Excellent
2	Construct	94%	Excellent
3	Language	75%	Good
Average		85%	Excellent

Based on the results of the average percentage shown in the table above, it is found that the sub-component in the affective assessment aspect gets an average of 85% with an average rating for material description getting a percentage of 85% with the category of "excellent", for the description of construction material gets percentage value of 94% with the category "excellent", and the description of language material gets a percentage of 75% with the category "good." This means that the information-based vocabulary assessment instrument on explanatory text material that has been developed has been appropriate to be used and can meet the needs of explanatory text assessment needs from the affective evaluation aspects.

4.2 Effectiveness of Information-based Vocabulary Assessment Instruments

a. Pretest Data Description Learning Outcomes before using Information-based Vocabulary Assessment Instruments on the Explanatory Text Material

Based on data analysis conducted on learning outcomes before using information-based vocabulary assessment instruments obtained an average score of 63.43 with the assessment criteria in the "good enough" category meaning that the scores achieved by students in explanatory text material had reached expectations but

needed to be increased again. The frequency distribution of the pretest values of the explanatory text learning outcomes before using the module can be seen from the following table 4.

Table 4. Frequency Distribution of Pretest Value of Student Learning Outcomes before Using Vocabulary Assessment Instruments

Interval	Frequency	Percentage
45-49	2	6,25%
50-54	3	9,37%
55-59	3	9,37%
60-64	7	21,87%
65-69	4	12,5%
70-74	8	25,00%
75-79	3	9,37%
80-84	2	6,25%
Σ	32	100%

Based on the picture above it can be seen that students who score 45-49 total 2 people or 6.25%, those who score 50-54 are 3 people or 9.37%, those who score 55-59 are 3 people or equal to 9.37%, who received a score of 60-64 totaling 7 people or amounting to 21.87%, who obtained a value of 65-69 totaling 4 people or amounting to 12.5%, who obtained a value of 70-74 totaling 8 people or amounting to 25, 00%, those who scored 75-79 totaled people or 9.37% and those who scored 80-84 totaled 2 people with an average of 6.25%.

b. Description of Posttest Data Learning Outcomes after using the Information-Based Vocabulary Assessment Instrument on the Explanatory Text Material

Based on data analysis conducted on learning outcomes after using information-based vocabulary assessment instruments on explanatory text material obtained an average score of 81.25 with the assessment criteria in the "good" category meaning the grades achieved by students on the material are good. The frequency distribution of post-test scores of learning outcomes after using an assessment instrument can be seen from the following table 5.

Table 5. Posttest Value Frequency Distribution Learning Outcomes of the Explanation Text after using the Information-based Vocabulary Assessment Instrument

Interval	Frequency	Percentage
70-74	3	9,37%
75-79	7	21,87%
80-84	7	21,87%
85-89	9	28,12%
90-94	6	6,25%
Σ	32	100%

Based on the table above it can be seen that students who score 70-74 totaled 3 people or amounted to 9.37%, those who got 75-79 scores amounted to 7 people or

amounted to 21.87%, who received grades 80-84 totaling 7 people or equal to 21.87%, who received a score of 85-89 amounted to 9 people or amounted to 28.12%, and those who received a value of 90-94 totaled 2 people or 6.25%. So that the total number of students is 32 people.

4.3 Product Trial Results on the Ability to Use Information-Based Vocabulary Assessment Instruments in the Learning Process of Explanatory Texts

The trial of the assessment instrument conducted by two subject teachers in Panai Tengah 1 High School was to collect data on how practical the assessment instrument could be used. The trial of the assessment instrument was carried out by spreading questionnaires in the response of two Indonesian language study teachers. The teacher response questionnaire was distributed to capture data on the ability of teachers to use information-based vocabulary assessment instruments. This questionnaire is also needed to capture data on how practical teachers can implement vocabulary assessment instruments in the learning process in the classroom on explanatory text material. From the teacher's questionnaire responses it was found that the information-based vocabulary assessment instrument on practical explanatory text material was used by the teacher in the learning process in the classroom with an overall average yield of 90% in the "excellent" category. The data is obtained from each sub component which can be seen in table 6 below.

Table 6: Trial Results of Teacher Responses to Information-Based Vocabulary Assessment Instruments

No	Indicator	Percentage	Category
1.	Victory	96%	Excellent
2.	Ease	85%	Excellent
3.	Legibility	100%	Excellent
Total		90%	Excellent

Based on the results of the teacher responses above obtained data from the attractiveness sub-component with a percentage of 96% in the category of "excellent", the convenience sub-component obtained a percentage of results of 85% with the category of "excellent", and the readability sub-component obtained a percentage of 100% results with the category "excellent." From the teacher response data, the practical assessment instrument is used by the teacher.

V. Conclusion

The process of developing information-based vocabulary assessment instruments is carried out through the stages of developing ideas, filtering ideas, analyzing needs, analyzing assessment instruments, formulating instruments, validating instruments and implementing vocabulary assessment instruments. Validation of the assessment instruments by two material experts got 86.5% results in the "excellent" category. Validation of information-based vocabulary assessment instruments from design experts obtained a percentage value of 89% in the "excellent" category. And the validation of the assessment instruments from the evaluation experts obtained a percentage of 81.33% with the category of "good."

Test the effectiveness of the assessment instrument is determined from student learning outcomes. The effectiveness test of the instrument which was carried out before using the instrument based on vocabulary assessment information on explanatory text material got unsatisfactory results, namely the average value of students only reached an average of 63.34. The increase in value after using the information-based vocabulary assessment instrument received an average score of 81.25 with an increase of approximately 20% compared to before using the information-based vocabulary assessment instrument. Before presenting the vocabulary assessment instrument questions, it is first validated by an evaluation expert based on the instrument lines that have been prepared.

The results of the trial of the information-based vocabulary assessment instrument on the explanatory text material were captured through the teacher's response questionnaire about the practicality of the developed assessment instruments. The practicality gained was captured through a questionnaire distributed to two teachers who studied Indonesian. The teacher's response questionnaire to find out the practicality of the assessment instruments developed included three sub-components of the assessment, namely aspects of attractiveness, aspects of ease, and aspects of readability. The attractiveness aspect gets a percentage value of 96% in the "excellent" category. Linguistic aspects get a percentage value of 100% with the category "excellent." And the last aspect is the aspect of convenience which gets a percentage value of 85% with the category "excellent."

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