

Developing Assessment Instrument on Writing on Descriptive Paragraph Based on Picture of Junior High School Students

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Abstract

This research is motivated by the absence of writing assessment instruments on descriptive material based on picture, especially students of class VIII. The writing assessment instruments on paragraph descriptive material based on the picture used are still holistic. This study aims to develop Writing assessment instruments on Descriptive Material Based on Middle School Class VIII Students. The method used is instrument development research with 9 development steps. Content validation by experts was analyzed using the Aiken formula, the reliability of the experts was analyzed using Two way ANOVA and analyzed using the Hoyt formula. The construct validity was analyzed using Exploratory Factor Analysis (EFA) analysis. The results of the development research show that the validity of writing appraisal content instruments on descriptive material based on picture specially students of class VIII through Expert Judgment produces a reliability coefficient of > 0.3 , meaning that it can be said that writing appraisal on descriptive material has high validity. Also, the reliability results of the instrument using interrater with the Hoyt formula showed that 0.89. Analysis of the data in the field trials can be seen in the KMO which shows a KMO value > 0.5 which means that the instrument indicators can be further analyzed. In writing assessment produces component factors that are formed and can represent all indicators. The factors are the main ideas, organization, and mechanic. While the reliability obtained a coefficient > 0.5 which means that the writing assessment has good reliability. Based on the results of the study, it is recommended that all lecturers, teachers and other educators use valid and reliable instruments. Thank you to all the teams especially the lecturers who have given good direction and participation so that this journal can give best contributes in theory and practice.

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INTRODUCTION

Evaluation of learning outcomes by educators must be done carefully because it has a broad impact, both the impact that is on the mentality of students and the practical impact on the implementation of the learning program so that good assessment guideline is needed. Good assessment guidelines can be used to find out how successful students are in terms of mastering competencies or materials that have been taught by educators. Assessment can also be used as a reference to see the level of success or effectiveness of educators in learning. This assessment aims to measure the success of learning carried out by educators and all at once measuring the success of students in mastering competencies that have been determined. Education through the learning process in junior high schools is expected to produce graduates who can apply their knowledge to solve problems in everyday life (National Education Standards Agency, 2006, p. 443). Based on this reference, learning activities can be designed by giving assignments as a form of exercise to solve problems. Three components in the assessment of student learning outcomes. The three components include attitudes, knowledge, and skills found in (Permendikbud, No. 23 of 2016). In the curriculum, educators must not only assess aspects of knowledge, but educators must assess aspects of attitudes and skills because they are known as authentic assessments. An authentic assessment is one of the emphases in the 2013 Curriculum (K13) (Sumaryatun, Rusilowati, Ani & Nugroho, S. E, 2016: 67).

Assessment needs to be supported by tests that fit the characteristics of the objectives (including competency standards and basic competencies) and are carried out regularly and continuously to find out the achievement of learning objectives. Also, the assessment must be carried out as a whole which includes the process and learning outcomes and includes insight into

the knowledge, attitudes, and social skills achieved by students. Therefore, assessment is an overall part of the learning process so that the results of the assessment can describe the ability or learning achievement of students as a whole and truly (Khofina Ulfa & Khumaedi, 2018, p. 2).

Research by Anggarkusuma & Khumaedi (2018, p. 175) shows that the development of assessment instruments is an activity to develop existing assessment instruments to be of higher quality. The instrument has a very important role in determining the quality of information for assessment. The function of the instrument is to reveal facts into the data so that if the quality of the instrument is used correctly, the data obtained follows the facts of the results of this area's development research.

The next preliminary study obtained data that the implementation of tennis talent search for elementary school students was still limited by non-standard assessment instruments. The instrument used must produce accurate data, so the decisions taken are accurate. For this reason, the instruments used must be of high quality. The quality of the instrument is seen from two main things namely validity and reliability. The type of validity is important for educational instruments are construct validity and content validity (Mardapi, 2017, p. 149). English is a tool to communicate verbally and in writing to understand and express information, thoughts and ideas, feel and develop science, technology, and culture that is manifested in four language skills namely speaking, reading and writing. (Writing) listening (listening). All of these components must be taught integrated to achieve the goal of English language skills. Writing ability is the most complex linguistic ability because it involves cognitive and linguistic abilities (Marhaeni, 2005, p. 3).

Teaching English as a foreign language must develop through several innovations. Such innovative teaching can encourage many English teachers to be creative in developing their

teaching strategies. One strategy is the planning and design of teaching materials by considering the possibility of contextual factors for student backgrounds written in the Indonesian National Education system which act that the planning and design of students' cultural backgrounds have been noted previously. This research has an orientation on ideas and by described two ideas expressed in local culture based material and teaching writing descriptive texts. This is consistent with research conducted by Mustika Purwandari (2017, p. 134) in the Journal of English Language Teaching which says that in reality, there are many problems in writing, especially in writing descriptive texts. Students face difficulties in finding the object to be explained.

Based on the results of interviews with School English teacher grade VIII said that currently in school needed a valid and reliable instrument to measure student skills, especially in English subjects related to skills. This does not yet reflect the educational goals set by BSNP which require students to be able to apply their knowledge to solve problems in everyday life.

METHOD

This study uses an instrument development method that follows the design by Djemari Mardapi (2016: 132). Ten steps must be followed in developing the instrument. The development steps are taken areas following: (1) the determine of instrument specifications, (2) write instruments, (3) determine instrument scales, (4) determine assessment systems, (5) review instruments, (6) Conduct product trials, (7) analyze trial results, (8) revision, (9) instrument assembly and refinement, (10) evaluation of all instrument.

The subjects of this study were eighth grade students of SMPN 40 Semarang semester, focusing on developing a writing assessment on descriptive material. While the test subjects were

students of SMP Muhammadiyah 5 Semarang. The collect the data sources, techniques, data collectors, validity and reliability of the instruments used in the study were carried out by interview and observation techniques. The data of this study was carried out with a quantitative approach and analysis carried out namely factor analysis. While qualitative is done by analysing the average results of the assessment and one way ANOVA, conducted to give meaning to the description of the data relating to the contents of the writing assessment instrument. Factor analysis is used to determine the results of construct validity based on empiricism. The construct validity is fulfilled when contributing a minimum factor load of 0.3. Reliability is calculated by Cronbach's alpha coefficient and reliable instrument criteria shown by the reliability coefficient greater than 0.6.

RESULT AND DISCUSSION

Result

At the stage of preparing the instrument specifications carried out with the intention that in the preparation of writing assessment instruments on paragraph descriptive material has a foundation by the needs of the field. Then the instrument grating and writing appraisal instrument were developed.

This study produces several important aspects that need to be indicators in the Writing assessment which from competency standards and basic competencies, as well as indicators of achieving the desired writing scores. As for some writing assessment indicators, namely: 1) Main Idea; 2) organization; 3) Vocabulary; 4) Grammar; 5) Mechanical. From the writing assessment indicators which were observed as later developed rubric/writing evaluation criteria and scoring techniques that product writing assessment instruments on descriptive paragraphs based on picture that are realized in the form of module.

Analysing and validating the contents of the instrument is carried out towards the validity of the contents. Content validity involves experts (expert judgment), intended to assess the instrument writing assessment on descriptive material based on images that have been made at the stage of preparing the instrument specifications, whether each item in the assessed aspect has illustrated indicators or not based on theory. In the Aiken V formula, if the validity coefficient is less than 0.30, it means that the item is said to be inadequate (invalid), conversely, if the validity coefficient is more than 0.30 then the item can be declared adequate (valid). The results of expert validation on the assessment instruments writing on descriptive material based on picture students of class VIII analysed using Aiken V shows that all aspects assessed have the Aiken coefficient (> 0.30), which means that the initial instrument meets the desired validity number and can be used in test products try in the field. While the reliability results of two way ANOVA test results using SPSS 16.0, showed that the magnitude of the variance between assessors stated by Mean Square Rater was $S2r = 0.93$ while the Error variance was said by Mean Square Rater * Subject $S2s = 0.93$. Then calculated again through the reliability of Hoyt (1941) produces a reliability coefficient of 0.89, which means that between the appraisers agreed in giving an assessment. After testing the content validity and reliability, the construct validity test by using the Exploratory Factor Analysis (EFA) approach, the resulting data is said to be feasible or can be continued for validity testing if it meets the KMO MSA Requirements ≥ 0.5 , and the value of the correlation factor has a correlation coefficient equal to > 0.3 . The following are the results of the instrument feasibility test in the field which can be seen in table 1

Table 1. the Result Construct Validity

KMO and Bartlett's Test	
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.754
Bartlett's Test of Sphericity	Approx. 212.126 Chi-Square
	Df 45
	Sig. .000

The next step is to see how many factors might be formed in the analysis of this factor with a sample size of 100. Grouping items and loading factor sizes from one factor can be seen from the loading factor value which has a value > 0.3 . Grouping items into factors can be seen in the Rotation Component Matrix, for the components formed in factor 1 are named writing ability and are declared constructs with construct validity values of 0, 589, instrument items consisting of items 1,2,3, 7,8 and 6 with the editorial points

as follows (1) main idea of the paragraph (2) described characteristic based on picture (3) Write paragraphs with good cohesiveness (7) Write paragraphs with Object + Predicate + subject, (8) Write descriptive paragraphs, (6) Write vocabulary correctly. While the second factor with a construct validity value of 0.571, with the following sentence (4) writing paragraphs with conclusions, (5) Writing paragraphs using good vocabulary so that the sentence becomes interesting. The third factor has a construct validity value of 0.618, which is given the dimension of the rule of writing with the following sentence editorials (9) Using capital letters at the beginning of each sentence and paying attention to punctuation, (10) Writing in neat writing (writing layout). After making the results of the contract validity is known, the next step is to conduct a reliability test. The reliability test of the writing assessment instrument on descriptive material paragraph based on picture in this study was carried out using the Alpha

Cronbach reliability test through the SPSS 16.0 program. In the following table 2:

Tabel 2. Result of Reliability Test

Reliability Statistics	
Cronbach's Alpha	N of Items
.766	10

The results get the value from the reliability test is 0.766 which means writing assessment instruments on descriptive material based picture that are used consistently in making judgments. Comparison of research results also carried out by Silvia Lutasari & Badrun Kartowagiran (2019, p. 109) namely reliability is instruments using Cronbach Alpha is $0.849 > 0.7$. Thus, it can be said that the variable is reliable. Based on the initial product trial analysis and consultation with supervisors, the initial instrument that the researchers formulated was declared valid and reliable.

Discussion

The need for development workers in all fields and dimensions of life, who expect workers who are ready to use and ready to adapt to the environment as an insight into community development. One thing that has been done by the government in this case the Ministry of National Education related to education is to replace Law Number 2 of 1989 concerning the National Education System (UUSPN) with Law Number 20 of 2003 concerning the National Education System (National Education System). This law is expected to provide answers to problems in education in the future, because the law contains national education standards consisting of content standards, processes, graduate competencies, teaching staff and education staff, facilities and infrastructure, management, financing, and assessment education that must be planned and planned on a regular basis.

Government Regulation No. 32 of 2013 includes several important issues related to assessment policies, namely (1) content standards, (2) graduate competency standards, (3) process standards, and (4) assessment standards. These four standards are integral and interrelated. Educational Assessment Standards are criteria regarding the mechanisms, procedures, and instruments of assessing student learning outcomes. This is consistent with the opinion of Syahrul (2010: 246), which states that the results of his research have produced valid development products and are manifested in modules to assess students in improving their writing skills.

Its means that the performance assessment instruments get the valid category. Through expert judgment, it can be known whether each instrument indicator has described aspects assessed in each indicator in theory or not, then obtained instruments that can meet and reflect the overall contents to be measured.

According to Supahar (2015: 107), it was explained that the performance appraisal test kit had fulfilled the content validity with expert judgment and had obtained empirical evidence. Furthermore according to Pinilih (2013: 24), it was explained that the use of product assessment instruments used by teachers has validity with very good criteria and is worth using. This means that the product evaluation instrument meets the valid category, and according to Setiawati (2007: 114), it is explained that the evaluation according to experts in the field of measurement states that the evaluation instrument developed is in accordance with the aspects to be measured and included in the criteria are quite good, in terms of language and scoring.

The results of the assessment using instruments were made to be able to comprehensively inform the performance of students while carrying out English language learning. With assessment instruments can help and facilitate lecturers and teachers in conducting assessments, especially in determining the final

grades after carrying out learning about the achievement of student competencies, so as to fulfil a sense of fairness and satisfaction for students.

CONCLUSIONS

Based on the results of research and discussion that have been carried out, the following conclusions are obtained, the instrument sheet in the form of content validity and construct validity indicators developed through experts (Expert Judgment) states that the writing assessment instrument in descriptive paragraphs based on picture of Eight Grade VIII Junior High School students is valid . Writing assessment instruments prove content validity with a value of more than (> 0.3). Based on results that can be relied upon for use in students in the moderate to high category (1-4). Therefore, writing an assessment instrument in descriptive paragraph material for VII graders is appropriate because it meets the requirements in the aspects of content validity, construct validity, reliability, and field testing. Suggestions for researchers who want to do similar research.

The results of the analysis of the construct validity of the writing assessment instrument on the material descriptive based on picture class VIII students developed through the factor analysis procedure, in this case viewed from KMO and Bartlett's test resulted in 0,754. Then based on the results of the rotation process and the size of the loading factor obtained from the 3 indicators have a correlation coefficient > 0.3 .

Based on these data, it can be it was concluded that the writing assessment instrument indicator on descriptive material based on the image was declared valid. The instrument reliability testing was calculated using the Cronbach Alpha formula which is equal to 0.766. This shows that the performance evaluation instruments are reliable. Thank you to all the teams especially the lecturers who have given

good direction and participation so that this journal contributes in theory and practice.

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