

Development of Project Assessment Materials based on Scientific Approach for Editing Newspaper Skill of X Grades at 1st State High School of *Stabat* City

Sahri Nova Yoga, Rita, Deliani, Nila Safina

Indonesian Literature and Language Educational Department, Faculty of Teaching and Education, UISU, Medan

Keywords: Assessment Materials, Project, Scientific Approach

Abstract: This study determines the pattern of Project Assessment Materials based on the Scientific Approach to edit newspaper skills. The samples in this study were 30 students of class X in Public High School 1 in Stabat. This research model was proposed by the Borg and Gall models. The subjects of the study consisted of experts, design experts, Indonesian teachers, and students of State High School 1 in Stabat. This study used 9 students for individual testing in a small trial group, while for the test group in a large group, this study used 30 students. This study uses a questionnaire for its data collection. The results showed that: for material expert validation, the results showed that 78% of them were in the good category; design expert validation shows 80% in very good category; individual validation shows 85% in the excellent category; small group trials shows 86% with very good categories; the large test group shows 84% with a very good category; and the effectiveness of the assessment material shows 84% in the effective category. Thus, the Project-Based Scientific Approach Material for editing newspaper skills that have been developed is an appropriate approach to be used in the learning process as an assessment material.

1 INTRODUCTION

Teaching and learning process is one of the things that are very complex, because one of the things that you want to achieve in the teaching and learning process is to give an assessment. Assessment should be able to describe students' knowledge, which is from the material taught specifically in editing material. In the scientific approach, the teacher will certainly adjust the characteristics of the materials in the learning device, especially in the evaluation aspect by adjusting the assessment instrument. This research conducted by Ni Luh Gede Riwan Putri Bintari, I Nyoman Sudiana, Ida Bagus Putrayasa. Their research title is "The Use of the Scientific Approach in Planning Learning Among Primary School Students in Ambarawa District and Banyubiru Sub-District, Semarang District.". They try to describe the form of scientific-based assessment. They described the assessments with a scientific approach including: (a) Observing (character assessments such as curiosity, cooperation, activity, and observations), (b) Asking questions (activeness of asking questions and

activeness), (c) Trying (character assessments such as curiosity, cooperation, activeness, independence, and mutual respect) (d) Reasoning (character assessments such as cooperation, activity, and the results of conclusions obtained) (e) Communicate (cooperation, ways of communicating, activeness, and report results).

Recalling that editing skills are part of writing skills, it requires a more accurate and objective form of assessment in measuring and describing students' competencies and understanding. One form of assessment that has strong similarities with the scientific approach is authentic assessment. This authentic assessment has several types of assessment in it which includes performance assessment, project appraisal, portfolio assessment, and written assessment. This is supported by research conducted by Zulkifli and Dhillia Fithriya entitled "Authentic Evaluation of Assessment of Traditional Literature Learning in Indonesian Language Learning in Schools". They described that the assessment technique that has strong relevance to scientific approaches such as in literary learning traditional is authentic assessment. In language learning, authentic

assessment does not merely ask the knowledge of the language that students already have, but it will also ask students to show their actual performance in harmony with the knowledge of the language they already have. Authentic assessment has several types as performance appraisal, project appraisal, portfolio assessment, and written assessment. Instruments that can be used in authentic assessments are checklists, rating scales, educator notes, question sheets, and projects that students must work on, both individually and in groups.

Based on the description above, the formulation of the problems in this research are: (a) How is the pattern of scientific-based project assessment instruments developed to assess the skills of newspaper editing for students of class X, Senior High School 1 Stabat?; (b) What is the level of validity of material experts and design experts for the format of scientific-based project appraisal instruments on the material for editing newspapers for students; and (c) How is the effective format of a scientific project-based assessment instrument that was applied to the material for editing newspaper skills for students.

2 METHODOLOGY

2.1 Research Design

The design of this research is a developmental research. The research findings relates to the product developed. The development of the product is based on findings, testing in the area of regulation where it is used and revising it to correct the deficiencies found in the stage of submitting the test. The developmental research design refers to the Research and Development (R & D) research of the Borg and Gall models. The product of the appraisal device is developed with newspaper editing material. General development research can be grouped into three procedures, namely product development models, product development procedures, and product trials. The steps for developing project appraisal instruments from the above description on scientific-based learning in newspaper editing material can be seen in the following figure(I Made Tegeh, I Nyoman Jampel, dan Ketut Pudjawan, 2014, p. 7)

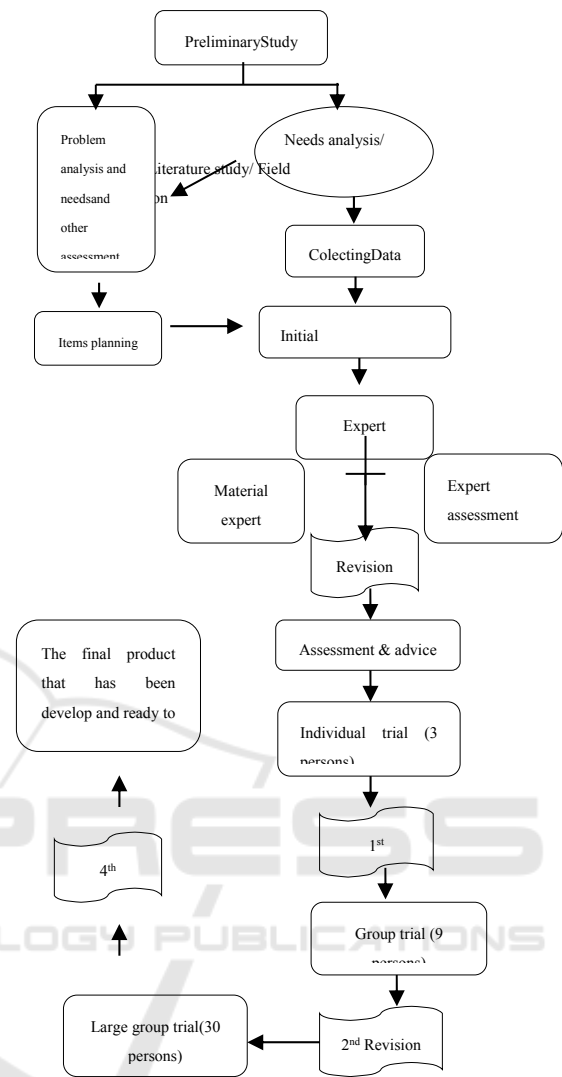


Figure 1: Roadmap Design of Research and Development (R & D).

2.2 Sample

To see the effectiveness of the product being developed, the researcher only takes samples using random sampling techniques, or random samples, or mixed samples. Researchers take sample of 30 students.

2.3 Instrument

The data collection technique in this study is an assessment instrument. To assess products that have been developed, the main instruments used to collect data in this study include:

1. Questionnaire

The questionnaire needed is as follows:

- a) Questionnaire assessment or response from material experts to edit the newspaper;
- b) Assessment questionnaire or response from expert appraisal design tools; and
- c) Questionnaire assessment or response from students.

The questionnaire instrument used was a combination of closed ended questionnaires. Closed ended questionnaires were questionnaires that had been provided with answers so that respondents only had to vote.

Assessment uses the rating scale format for the product being developed. The content of the questionnaire can be in the form of statements relating to the condition or state of the appraisal device. The packet uses a score range of 1-5. Each selection of answers is given a weighted score as follows: a. 1 = not very good; b. 2 = not good; c. 3 = medium; d. 4 = good; and e. 5 = very good. While the questionnaire sheet consists of:

- a. The expert team's validation questionnaire sheet which is used to obtain assessment data from the instrument valuator, there are two forms of scientifically based assessment instrument questionnaire evaluators in the paper editing material, which consists of:
 - 1) Validation sheet for the material expert team to edit the newspaper; and
 - 2) Validation sheet is from the project assessment instrument design team.
- b. The questionnaire sheet assesses students on the appearance and presentation of project appraisal instruments were obtained from individual trials, small group tests, and large group trials.

2.4 Data Collection and Analysis

- a) Validation of Material Expert

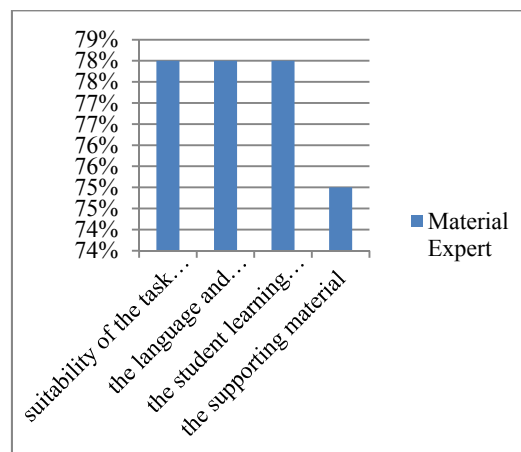


Figure 2: The Percentage of the Average Score of the Material Expert in the Project Assessment Instrument on the Newspaper Material.

Validation of material experts was carried out by Prof. Amrin Saragih, M.A., Ph.D and Agustina. Validation is done to obtain information that will be used to improve the quality of project assessment instruments developed in accordance with the editing material.

The assessment results show that the percentage of suitability of the task material with KI and KD is 78% in the good category; the language and writing instruments are 78% in the good category; the student learning activities have a percentage of 78% in the good category; and the supporting material has a percentage of 75% in good category. With an overall average of 78% in the good category, it can be concluded that the project appraisal instrument can already be used for assessment of newspaper editing material, but there are still many improvements, especially for indicators, supporting material in order to assess ability, and the level of students' understanding of learning to edit newspapers, so they can find out the achievement of the learning objectives of each student.

b) Designation Validation Expert

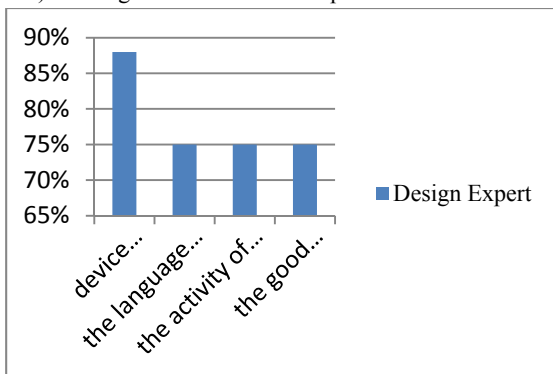


Figure 3: The Percentage of Design Expert Score on Project Appraisal Instrument on Newspaper Editing Materials.

This design expert validation was carried out by Prof. Dr. PaningkatSiburian, M.Pd. Validation is carried out to obtain information that will be used to improve the quality of project assessment instruments developed in accordance with the aspects that exist in the assessment of learning in the form of presentation feasibility. Validation results are in the form of assessment scores from several aspects of assessment indicators that exist on the instrument developed.

The assessment results show that the percentage of device presentation techniques is 88% in the very good category, the language and writing instruments are 75% in the good category, the activity of assessment tools has a percentage of 75% in the good category and completeness has a percentage of 75% with good category. With an overall average, 80% is in the very good category. It can be concluded that the scientific-based project assessment instrument can be used for assessment of newspaper editing material.

c) Analysis of Individual Trial Results Data

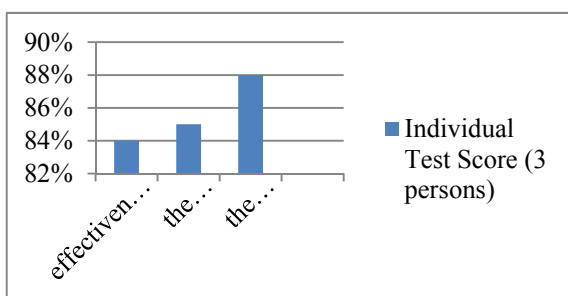


Figure 4: The Percentage of Individual TestScore (3 Persons).

The results of individual trials, namely students' perceptions of project appraisal instruments that were compiled / developed showed "very good" criteria. So, the implementation of individual trials aimed to find out the initial opinions of students as users before small group trials of project assessment instruments in student class X at SMA Negeri Stabat 1 Medan. Student perception consists of several categories, namely: (a) Used as a measurement of various aspects; (b) Instruments in accordance with the objectives; (c) Contents of instruments in accordance with the material; (d) The contents of the instrument are easy to understand; (e) There is feedback; (f) Systematic of the order and structure of the organization; (g) Can access scientific understanding and reasoning; (h) Using distance and space; (i) Use of paper and margins; (j) Students can study independently; (k) Improving student performance.

The assessment results show that the percentage of effectiveness of the assessment instrument is 84% in the very good category, the language and writing of the instrument are 85% in the very good category, and the learning activities of students have a percentage of 88% in the very good category. With an overall average, 85% is in the very good category. It can be concluded that the scientific-based project assessment instrument can be used for assessment of newspaper editing material.

d) Analysis of Small Group Test Results Data

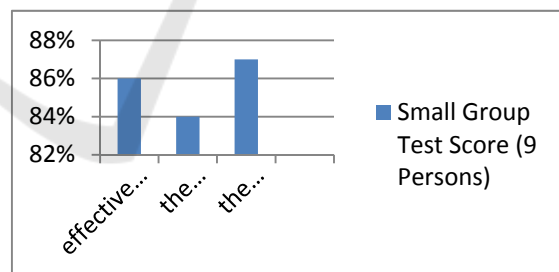


Figure 5: The Percentage of Small Group (9 Persons).

The assessment results show that the percentage of effectiveness of the assessment instrument is 86% in the very good category, the language and writing of the instrument are 84% in the very good category, and the learning activities of students have a percentage of 87% in the very good category. With an overall average of 86% in the very good category it can be concluded that the scientific-based project assessment instrument can be used for assessment of newspaper editing material.

e) Analysis of Large Group Trial Results Data

Large group trials were conducted on 30 students of class X at SMA Negeri 1 Stabat. In this trial the results of students' perceptions of the project appraisal instruments that have been developed have the criteria of "very good" with a percentage of 84%. The trial evaluation of this large group became the final stage of the trial of an assessment instrument product in the form of a scientific-based project appraisal instrument on student editing material. The results of the trial at this stage get very good responses from students as media users. The results of large group trials can be described in the following diagram.

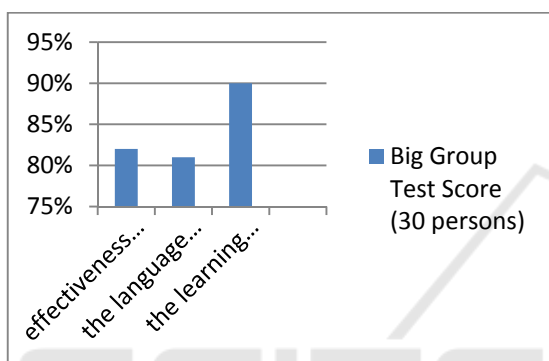


Figure 6: The Percentage of Big Group Trial Score (30 Persons).

The assessment results show that the percentage of effectiveness of the assessment instrument is 82% in the very good category, the language and writing of the instrument have a percentage 81%percentage in the very good category, and the learning activities of students have a percentage of 90% in the very good category. With an overall average, 84% is in the very good category. It can be concluded that the scientific-based project assessment instrument can be used for assessment of newspaper editing material.

f) Feasibility and Effectiveness of Products

Based on the results of the trial the feasibility and effectiveness of the product, it can be seen that the results of the feasibility test were obtained 84% with the criteria "very feasible" and "very effective." This shows that the product developed has a good level of feasibility and is suitable for use as an assessment instrument on newspaper editing material.

g) Product Revision

Based on the responses from the material and product design experts, this assessment instrument is feasible to be carried out in the next stage. Some inputs for improvement are as follows: (a) Some words need to be revised to link the opening statement with the next statement; and (b) Indicators and descriptors are made based on the nature of the research variable.

3 ANALYSIS

The results of the validation of the material experts on the feasibility of the content project appraisal instrument on the newspaper editing material developed showed that: (1) the suitability of the task material with KI and KD was considered good with a percentage of 78%; (2) language and writing of assessment instruments are considered good with a percentage of 78%; (3) student learning activities are considered good with a percentage of 78%; and (4) supporting material is considered good with a percentage of 75%. And the overall average has a percentage of 77% with a good category. Thus, the project assessment instruments developed based on the results of the material content as a whole are included in "feasible." Therefore, the feasibility of the contents of the scientific-based project assessment instrument in the material to edit newspapers the developed can be used as the contents of the instrument in the assessment that will be used by students.

The results of the validation of the design experts on the feasibility of the contents of the design of the project appraisal instrument on the newspaper editing material developed showed that: (1) the device presentation technique was considered very good with a percentage of 88%; (2) the language and writing of assessment instruments are considered good with a percentage of 75%; (3) the activity of the device is considered good with a percentage of 75%; and (4) completeness is considered good with a percentage of 75%. And the overall average has a percentage of 80% very well. Thus the project assessment instrument developed based on the content of the overall device design assessment indicator is included in "very feasible." Therefore, the feasibility of the design of the scientific-based project assessment instrument on the material for editing a newspaper developed can be used as a design pattern of the instrument in the assessment that will be used by students.

The results of the assessment of students class X at SMA Negeri 1 Stabat in the product trial stated that the scientific-based project assessment instrument on newspaper editing material developed was categorized as "very good." The indicators of the assessment were in the form of: (1) Can be used as a measurement of student ability from various aspects are considered very good with a percentage of 92%, (2) Instruments that are made in accordance with the learning objectives are considered very good with a percentage of 92%, (3) The contents of the instrument are in accordance with the material studied is considered very good with a percentage of 83%, (4) The contents of the instrument are easy to understand and are understood to be good with a percentage of 77%, (5) Can provide feedback to students rated as good with a percentage of 75%, (6) This assessment instrument can collect all student assessment data on newspaper editing material rated very well with percentage of 86%, (7) Systematic of tasks according to the order and organizational structure of learning materials at Very good value with a percentage of 94%, (8) The instrument can access scientific understanding and reasoning is considered very good with a percentage of 86%, (9) Using language that matches EYD and is easily understood is considered very good with a percentage of 86%, (10) Consistent Font use (letters) is considered very good with a percentage of 94%, (11) The use of line spacing and spacing is considered good with a percentage of 75%, (12) The use of paper formats and typing layouts is considered very good with a percentage of 81%, (13) Making students can learn independently is considered to be very good with a percentage of 83%, (14) Can increase student participation in practicum on newspaper editing material is considered very good with a percentage of 94%, (15) Can know the strengths and weaknesses of students in learning is considered very good with a percentage 86%, and (16) Can improve student performance in the application of newspaper editing in daily life is considered very good with a percentage of 83%. With an overall average number of 86% with the category "very decent." So that this product can be used as an assessment tool for the learning process of editing newspapers in class X SMA 1 Stabat.

The use of project assessment instruments as an evaluation of student learning outcomes in schools is a solution that can be offered to see the extent to which learning is carried out effectively. On both sides this is something that benefits both students and teachers or schools. The benefit for students is

being able to express both their understanding of academic material, express and strengthen their mastery of competencies, such as gathering information, using resources, handling technology and thinking systematically, connecting learning with their own experiences, their world and the wider community, sharpening their skills think at a higher level. While the benefits for the teacher, project appraisal can be a comprehensive benchmark of students' abilities. Some methods given to students can be carried out. Therefore, the application of project assessment instruments as learning evaluation tools in schools are important because the students just not being learners, but in the end can mix and match achievement with the abilities they have into the real world.

4 CONCLUSION

Based on the research above, Some elements can be concluded: (a) The pattern of scientific-based project appraisal get very good score by using the assessment of newspaper editing skills with percentage of 84% with a very good category; (b) The level of validity of material experts on the content of scientific-based project appraisal materials has an average percentage of 78% with good categories; (c) The level of validity of the design experts of the instrument against the scientific assessment instrument based on the project has an average percentage of 80% with very good categories; and the effectiveness of scientific-based project appraisal instruments has a percentage of 84% with a very good category.

RECOMMENDATION

- a) Teachers should use these learning tools that can support the application of assessment instruments developed in this study.
- b) The teacher must convey aspects that are the focus of the assessment in editing newspapers produced by students. Thus, students will try to maximize aspects that become the focus of assessment in learning.

REFERENCES

- Purwanto, N. 2009. *Prinsip-prinsip dan Teknik Evaluasi Pengajaran*. Bandung: Resda.

- Sudjana, N. 2005. *Media Pengajaran*. Bandung: Sinar Baru.
- Sugiyono, A. 2012. *Metode Penelitian Pendidikan Pendekatan Kuantitatif, Kualitatif dan R & D*. Bandung: Alfabeta.
- Tegeh I Made, I Nyoman Jampel, Ketut Pedjawan. 2014. *Model Penelitian Pengembangan*. Yogyakarta: Graha Ilmu.

