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# Development of Teaching Material Based Environment on Report Text Grade X Pelayaran Buana Bahari Medan Vocational High School

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#### Abstract

The aim of this research is to determine: (1) the contruction of teaching material based environment on report text; (2) validating teaching material; and (3) the effectiveness of teaching material based environment on report text grade X Pelayaran Buana Bahari Medan Vocational High School. This research use model of the reseach and development Borg and Gall which adapted from Sanjaya. Data collection techniques in this research include observation, questionnaires, and essay test report text. The result of this research shows that: (1) material validation include content feasibility, the feasibility of presentation, and the feasibility of languange with the average percentation 92,89 % on very good criteria; (2) design expert validation with the average percentation 86,31% on very good criteria; (3) the effectiveness of teaching material shows that posttest percentation 85,50% higher than the pretest percentation 76,17%.

Keywords: development, teaching material, environment, report text

#### 1. INTRODUCTION

The authors find that in Pelayaran Buana Bahari Medan Vocational High School in the Indonesian language teaching material specifically Text reports the results of an observation is the lack of utilization of the environment as a learning resource. Materials act as device supplier information that can be used in understanding the subject matter and adds to knowledge as well as creativity in learning. Indonesian Language lesson materials emphasize the importance of the balance of competencies, attitudes, knowledge, and skills based on the text. Based on the explanation above, the authors feel interested in doing research and development of materials with composing and developing the materials shaped modules environment-based cruise.

#### 2. LITERATURE SURVEY

Prastowo (2015:17) argued: "teaching materials is any material (whether information, tools, as well as text) that are arranged systematically, which shows the figure intact competencies will be controlled by the learners and are used in the process of learning with the purpose of the planning and review of the implementation of learning. National Centre for Vocational Education Research Ltd (2014:138) suggests that teaching materials are any materials used to help teachers or trainers in carrying out the learning process in the classroom. Borg and Gall (2013:129) was also suggested: research and development of education is a process used to develop and validate product education. The resulting "product" is not limited to teaching materials text books, educational films and so on, but can also be shaped process procedures or methods of teaching or organizing the learning methods.

The development of teaching materials is based on the concept of instructional design based on a competence or to achieve the learning objectives. Development of teaching materials is a series of processes undertaken to produce more interesting teaching materials, can provide interesting examples, provide feedback, motivate through research and development activities.

Learning with modules allows learners to more quickly complete the competencies learned. Therefore, the module should be able to describe basic competencies clearly, presented with good language, interesting, and illustrated, so that learners can learn more independently without or with the educator.

Step making learning modules are compiled based on the principles of the development of a module. According to Prastowo (2105:118-119) in compiling the module, there are four stages that must be undertaken, namely: 1) Analysis of the curriculum; 2) Determine the module title; 3) Administering the code modules; 4) The writing module.



Figure 2.1. Module Making Steps According Prastowo (2015: 118-119)

The utilization of the environment as a learning resources directly or indirectly will make students feel happy in learning and developing skills, such as observing (with all the senses), noted, formulate questions, hypothesize, clarify, or create a piece of writing.

Winaputra (2011:145) explains that the utilization of the environment based on the opinions of more worth learning, because the students are confronted with events and circumstances should be. The rise of intrinsic learning motivation of students strongly influenced by extrinsic motivation, i.e. behavior (environment). In line with the opinion, Hamzah (2013:51) States that the learning environment is implemented should be able to (1) bridges the gap between understanding and awareness on the issue of learner environment; (2) make the learners "environmental literacy"; (3) have a responsible concern for the environment; and (4) the existence of a willingness to do in order to create a livable environment, both locally and globally.

Teaching materials based or contextual environment created to answer the needs of students learning. Contextual learning more provides opportunities to learners to discover capabilities (life skills) of what to learn and solve problems existing and experienced, so as to enable more meaningful learning activities. Rusman (2012:191) which posited through contextual learning, learning will be more meaningful, the school closer to the environment of the Community (not from physically), but functionally what happens at school always get in touch with the situation and problems of life that occur in their environment (family and society).

## 3. METHOD AND RESULT DISCUSSION

## 3.1. Method

The research was conducted at Vocational High School of Pelayaran Buana Bahari Medan which is located at Bilal Ujung Komplek Bilal Central Blok B-9 Medan, in the class of X class at Semester of the academic year 2017/2018. The type of this research is research and development which refers to development theory proposed by Borg and Gall (2013: 129) with research and development procedure consists of ten stages, namely: 1) Research and information gathering including literature study and classroom observation; 2) Planning which includes formulating objectives, establishing lesson sequences and testing on a limited scale; 3) Preliminary form of product including preparing lesson materials, handbooks and assessment tools; 4) Initial product field trials involving one to three schools involving 6 to 12 subjects and using interview, observation, and questionnaire techniques and the results were analyzed to find the weaknesses. These field trials emphasize more processes in addition to learning outcomes; 5) Based on the results of the analysis, the initial product is revised so that it becomes a better product; 6) Field trials of improved products on a wider scale. In addition to qualitative data to assess the process, also collected quantitative data of pre / post test results; 7) Product revisions based on product test results; 8) Wider scale field test using interview technique, observation, and questionnaire, then the data is analyzed; 9) The final revision of the product based on the results of data analysis in the last field test; and 10) Dissemination and reporting on the final product of research and development results.

#### 3.2. Result discussion

The development of teaching materials products materials Text Report Observations is a product that has been developed in the field of learning, so that generated a decent product is used in accordance with the characteristics and field of study. Product development research undertaken is directed to produce a product in the form of learning Indonesian Language learning for students of class X Pelayaran Buana Bahari Medan Vocational High School, used to enhance the learning process and improve student learning outcomes.

The result of validation of teaching teaching material of Indonesian Language from validator, that is (1) total result for assessment by material expert from display aspect, presentation, and learning media content structure is 87% by "very good" criteria. (2) The total results for the assessment by the instructional design expert on the development of developed materials show that the instructional design quality earns a total percentage score of 84% of the "excellent" criteria. (3) The total results for the assessment by the learning media expert on the development of Indonesian developed teaching materials show that the display, rendering, and

graphs get a percentage of the total score of 83% of "Excellent" criteria.

While the results of the calculation of the student's response is obtained, namely (1) the student response to the development of teaching materials on the Indonesian Language learning media display, commonly expressed very well with the results of the rating of 82%. (2) student response against Indonesian Language teaching materials development presentations commonly expressed both with 80% assessment results (3) Response of students to the development of Indonesian Language teaching materials about the benefits of interactive learning media, generally expressed with very good rating of 81% of the valuation results.





Figure 4.1. Summary Percentage of Expert Student Validation & Response to Development of Resources

The diagram above is a result of a discussion on the feasibility of the development of test materials Indonesian Language. Product development is a product of Indonesian Language teaching materials that have been developed with attention to the aspects of learning, thus producing a viable product is used in accordance with the characteristics of the field of study and student. Product development research is directed to produce a product in the form of teaching materials for students of class X Pelayaran Buana Bahari Medan Vocational High School, which is used to improve the process of learning and improving student learning outcomes.

#### 4.2. Table

Table 4.2. Percentage of Total Score Test Results V	alidation experts and the development of teaching materials

No.	RESPONDENTS	The PERCENTAGE of	CRITERIA
1	Expert Validation Materials	87%	Very Good
2	Validation Of Instructional Design Expert	84%	Very Good
3	Validation Of Media Experts	83%	Very Good
4	Individual Tests	90%	Very Good
5	Small Group Trial	87%	Very Good
6	Field Trial	81%	Very Good
	AVERAGE	85%	Very Good

The validation result of the interactive learning media from the validator, namely (1) The total result for the assessment by the material expert from the aspect of display, presentation, and content of teaching materials content is 87% with the criteria "Very Good". (2) The total results for the assessment by the instructional design expert on the interactive energy conversion energy learning medium developed indicate that the instructional design quality earned a percentage of the total score of 84% under the "Excellent" criteria. (3) The result of total assessment by the learning media expert on the interactive energy conversion machine learning media developed shows that the display, presentation, and graph get the percentage score of 83% with the criteria of "Very Good". While the calculation of student responses obtained, namely (4) Student response to the interactive learning media on the aspects of the display of learning media in the presentation aspect are generally stated well with the result of assessment of 87% (6) Student response to instructional media on the interactive benefits of media, generally very good with 81% assessment.

## 5. CONCLUSION

First, the results of material validation on Indonesian language teaching materials developed show that the display media, presentation materials, and media content, the score of total assessment of materials to the material 87% teaching material Indonesian language and the overall category including "very good".

Second, validation results and instructional design of experts on Indonesian language teaching materials developed showed that the quality of instructional design obtained a percentage of total score of 84% including the category of "Very Good".

Third, According to the responses of students grade X of Pelayaran Buana Bahari Medan Vocational High School about Expectation of individual test stated that the teaching material of Indonesian language is "excellent" category with the average percentage of 90%

Fourth, according to the response of the students grade X Pelayaran Buana Bahari Medan Vocational High School in small group of examination revealed that interactive learning media is including "excellent" category with the average percentage of 87%

Fifth, according to the responses of the students of the nursery grade X Pelayaran Buana Bahari Medan Vocational High School in field trials stated that the category of Indonesian language teaching materials includes: very good "with an average percentage of 81%.

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