

DEVELOPMENT OF PROBLEM BASED WRITING LEARNING MODULE

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Abstract

This study aims to explain the validity and effectiveness of the module in writing the text of the observation report that was developed based on PBL principles for grade VII students of junior high school. This study follows the 4D model starting from define, design, develop, and disseminate. The validation of the learning module was carried out by four experts (material, presentation, language, and graphics) using validation sheets and trials carried out in class VII 22 Kerinci Junior High School (22 students) using the learning outcomes test and questionnaire. The results of this study indicate that the instructional material developed is declared valid in terms of the feasibility of content, presentation, linguistics, and graphics that are very valid and effective as indicated by student learning outcomes. Based on the results of the analysis and discussion, it can be concluded that the learning module writing the text of the observation report is suitable for use in learning writing skills. It is expected that this writing learning module can overcome the limited sources of learning to write in junior high school.

Keywords: Learning module, writing skills, text of observation report, PBL

Introduction

writing activity trains students to be more careful in writing, familiarize students to write according to applicable spelling and punctuation, sharpen students' language skills, hone cognitive skills, affective, and psychomotor, hone students' talents, familiarize students to always write and apply them in their daily lives. Writing activities make students active in learning activities and stimulate students' skills in stringing words. Writing teaches students to communicate their ideas and perspectives in written form and apply grammar rules (Kamal & Faraj, 2015).

Writing skills are indeed very necessary for students, but judging from various studies, there are still many students who have not been able to develop their writing such as the research conducted by Moqimipour & Shahrokhi (2015) that said that, the difficulty of students in writing due to interference from Persian, considered the first language, in three writing genres, namely narration, description, and comparison / contrast with Iranian students.

In Indonesia, teaching writing in schools is based on text in accordance with the demands of the 2013 curriculum. One of the many texts learned in the 2013 curriculum is the text of the observation report. The text of the observation report is to present the facts obtained through observation. Through the text, the reader gains some knowledge or insight, not the result of imagination (Kosasih, 2013: 6). Information in the text in the observatory report contains something as it is as a result of systematic observations and analysis (Priyatni, 2014: 76). Learning to write observational report texts on Indonesian Curriculum 2013 subjects for seventh grade junior high schools exposed to Core Competencies (KI) 4. Trying, processing, and presenting in the concrete domain (using, decomposing, assembling, modifying, and making) and the abstract domain (writing, reading, counting, drawing, and composing) according to what is learned in school and other sources in the same perspective / theory. Meanwhile, Basic Competency (KD) for learning to read the text of the observation report is found in KD 4.8 Presenting a summary of the text of the observation report in the form of a knowledge book orally and in writing with regard to language rules or oral aspects. Based on what has been described in the curriculum, it appears that writing the text of the observation report is one of the main material that students must learn and master so that they are able to report an observation activity in the form of text observation reports.

Based on previous observation, the learning sources used are limited to student books. The book contains material that does not meet the needs of students, in terms of presenting material and tasks difficult to understand and less attractive to students. Examples of texts contained in textbooks are not so close to

students' lives. So that it is difficult for students to understand the text and students are less motivated to learn.

The lack of availability of learning resources in schools is one factor that weakens students' ability to write. Responding to these problems, a new innovation is needed in classroom learning. Teachers can use interesting and innovative modules to improve student learning outcomes. Like the research conducted by Yanikoglu, B., Gogus, A., & Inal, E. (2017) revealed that module learning can help students participate effectively in classroom learning activities and provide flexibility in the learning process. In addition, the module can be used to study independently or individually because the module contains goals, instructions, reading material, answer keys, and evaluation tools (Ruffi, 2015: 19). This is reinforced from the results of the research by To-Im, J., & Klunklueng, A. (2012) showing students' perspectives on the learning modules developed revealed that most students were happy with several educational activities and multi-task modules.

The learning module to write the text of the observation report was developed based on *problem based learning* (PBL). The PBL concept is in line with scientific approaches and text-based learning. Problem-based learning is a learning model that provides an authentic experience that encourages students to actively learn, construct knowledge, integrate learning contexts in school and learn in real life naturally (Abidin, 2014: 160).

Problem based learning (PBL) is a learning model by approaching student learning to problems. The aim is that students focus on active learning, finding problems, thinking skills, and problem solving processes (Chang, C., Chen, J., & Chen, F. 2015). The PBL method helps students acquire skills and study scientific procedures such as observation, measurement, communication, estimation, data acquisition, trace variables, hypotheses, experimental planning and student responsibilities in the classroom. (Üce, M., & Ateş, İ. 2016). PBL learning cycle is through a tutorial process that begins with the presentation of the problem and ends with student reflection (Ansarian, L., & Shafiei, E. 2016).

Based on the background stated, this study aimed to describe the process of developing Indonesian language learning modules based on *problem based learning* (PBL) in the material of writing observation report text to improve student learning outcomes that are valid (in terms of content, presentation, linguistic, and graphics), practical (seen in terms of ease of use and timeliness), and effective (seen from student learning outcomes and activities) for students of class VII junior high school.

Method

research uses a 4D model. The development process is done with four stages, namely (a) the definition phase (*define*), (b) the design phase (*design*), (c) the stage of development (*develop*), and (d) the deployment phase (*disseminate*). In this study, products were developed in the form of learning modules that were beneficial for the learning process in schools. This product was developed based on *Problem Based Learning* (PBL).

The type of data in this study are qualitative and quantitative data. Qualitative data were obtained from classroom observations and opinions of teachers and students about the material through interviews while quantitative data was obtained from filling out validity questionnaires, knowledge tests and student writing skills tests. The subjects of the trial in this study were the seventh grade students of Kerinci Senior High School 22, totaling 22 people, one teacher, four Padang State University lecturers who were experts in their respective fields. Data analysis techniques used are descriptive data analysis techniques. Descriptive analysis techniques were carried out using descriptive statistics.

Results and Discussion

This development research resulted in a product in the form of a learning- *based learning system* (PBL) for students of class VII SMP / MTs. This module is given the title *Skilled Writing Report Text Results of observation*. Module design is developed in accordance with the structure of the module making which is integrated with the problem based approach (PBL).

This learning module is expected to be able to help skilled students write the text of the observation report according to the structure, linguistic characteristics, and social functions contained in a text of the observation report both independently and in groups. Thus, learning does not only make the teacher the center of learning but students who play an active role in the teaching and learning process.

This exposition text writing skill module was developed using a 4-D (development model *Four-D*), which consists of four stages: *define*, *design*, *develop* and *disseminate*.

Phase Pendefinisian (Define)

This study began with the phase *define* or stage of definition. The definition phase is the initial stage in the development of the module. The definition phase aims to establish and define the requirements needed

to develop a product that will be developed (Thiagarajan, 1974, p. 6). At this stage the terms of the determination carried out by analyzing the basic competencies of learning and teaching materials based on the curriculum of 2013.

The results for the stage *define* (definition) is described as follows. *First*, the final preliminary analysis. This analysis data was obtained from the results of interviews conducted with Indonesian language teachers at Kerinci Senior High School 22. The results of the initial analysis can be seen as follows.

Table 1. The results of the initial analysis

| No | Item Question | Answer |
|----|--|---|
| 1 | What is the initial condition of students' knowledge in learning to write the text of the observation report? | Students experience difficulties in understanding the material writing text of the observation report contained in the 2013 curriculum both in terms of structure and language. |
| 2 | What is the initial condition of students' attitudes in learning Indonesian language specifically in learning to write the text of the observation report? | The attitude of students is still passive, students are less active in learning to write text reports the results of observation and learning are still dominated by teachers. |
| 3 | What is the initial condition of students' skills in learning to write the text of the observation report? | Students are less able to write down general definitions, section descriptions, benefit descriptions. |
| 4 | Does the library provide textbooks on text-based learning? | In the library only provides student textbooks distributed by the government. |

Based on the initial analysis, it can be concluded that teachers need additional learning resources to support the main learning resources in learning to write the text of the observation report.

Second, student analysis. Student analysis aims to determine the behavior and characteristics of students who are the subject of research. Based on the analysis of students who have done, there are two aspects that are analyzed namely the analysis of student characteristics and skills. Analysis of student characteristics was carried out to identify the level of maturity of class VII students of Kerinci 22 Junior High School. Analysis of student skills is done to find out students' understanding and writing skills.

Table 2. Student Analysis

| No | Variable Analysis | Score | Value(%) | Category |
|----|-----------------------------|-------|----------|-----------|
| 1. | Characteristics of students | 625 | 88.78% | Very High |
| 2. | Student skills | 586 | 83.24% | Very High |

Third, curriculum analysis. Based on the analysis carried out, the curriculum used is the 2013 curriculum that has been revised in 2016. For writing learning, the core competencies contained in the curriculum are Core 4 Competency, while Basic Competency in learning to write observational report texts is found in KD 4.8.

Fourth, concept analysis. Based on concept analysis, there are three aspects found. (1) The main concept of learning material to write the text of the observation report is in accordance with the applicable curriculum. This is due to the learning resources used by students are books published by the Ministry of Education and Culture. (2) Details of the concept of learning material to write the text of the observation report. The details of the concept of learning material on the text of the observation report are in accordance with the demands of the curriculum, developed based on text-based learning. The concept of learning to write text on the observation report is the understanding of the text of the observation report, the text structure of the observation report, the characteristics of the text of the observation report, the function of the text of the observation report, and the steps to write the text of the observation report. (3) Presentation of learning material in learning resources. For the understanding of exposition texts in the learning resources students are displayed in abstract. The elements of the observation report text and the exposition text building structure are not explained theoretically, but are explained through examples and tasks. While an explanation of the social functions of the text of the observation report in the textbook does not exist. Likewise with the steps to write the text of the observation report that is not described in the textbook.

Stage Design (Design)

Module structure design is developed in accordance with the opinions expressed by Daryanto and Aris (2014: 293), which consists of three main parts, namely introduction, learning and evaluation. However, before this section, there is a cover page, preface, table of contents, module position map. Then, at the end of the module there is a list of references and author notes.

The module structure designed in this study is as follows. The introductory section contains KI and KD (formulated based on Curriculum 2013), prerequisites, orientation, time, and instructions for using modules. Prerequisites contain knowledge or initial abilities that students must possess to study modules. Then, the module usage instructions contain guidelines or procedures for using modules, which include instructions for using modules for teachers and students, as well as instructions for using the time to study modules.

Next, the learning activities section includes indicators of competency achievement, objectives of learning activities, material descriptions, summaries, assignments, tests, and practical worksheets. The learning activities section is divided into two, namely learning activities 1 for aspects of knowledge and learning activities 2 for aspects of skills. Learning activities in the module are integrated with the approach *problem based learning*. Students are faced with problems that are close to the world of students and problems that are becoming public discussion. Students learn to overcome the problems given, so that students are skilled in arguing in the text of the observation report and are skilled at writing the text of the observation report. This is what distinguishes this learning module from other modules.

Development stage (Develop) and Phase Deployment (Desseminate)

The development stage is a stage that is done after the design and development phase is completed. This stage is done to test the draft module that has been designed. Based on the draft that is designed can be known three things, namely validity, practicality, and effectiveness. Validity is a module feasibility level test. Practicality is a test of the practicality of using modules. This test is obtained through a distributed questionnaire which contains the ease and efficiency of the time obtained when using the module. Effectiveness is a test of the effectiveness of the module designed. This test is obtained based on cognitive tests, and psychomotor tests after students use the designed module. In addition, effectiveness can also be seen based on the attitude assessment while using the module.

Before conducting a trial of the designed module, especially the expert validation. This is done to get modules that are of high quality and suitable for use in learning. Validation is important to get an assessment of the draft module that has been compiled. This is in accordance with Emzir's opinion (2010: 273) which states that validation is a product design assessment process carried out by giving an assessment based on rational thinking. The results of the validity can be seen in the following table.

Table 3. Learning Module Validity Value Results

| No. | Aspects Assessed | Validity (%) | Value |
|----------------------------|-----------------------------|--------------|------------|
| 1. | Feasibility of Content | 93.05 | Very Valid |
| 2. | Feasibility of Language | 87.5 | Very Valid |
| 3. | Feasibility of Presentation | 92.5 | Very Valid |
| 4. | Weaknesses of Integrity | 94.44 | Very Valid |
| Overall Validation Results | | 92.45 | Very Valid |

After validity testing and the designed module are valid, the module is tested to get practicality and effectiveness. The intended trial was to try out the validated teaching materials for a number of sample people. Practicality tests are carried out after the module is used by students. Practical results were obtained from practical questionnaires filled by teachers, practical questionnaires filled by students, and learning activities. The practicality value is explained as follows.

First, the practicality of the teacher. this practicality value is obtained through filling out a questionnaire by the teacher. The results of the teacher's practicality can be seen in the following table.

Table 4. Results of Practicality Value by Teacher

| No. | Aspects Assessed | Practicality Value (%) | Value |
|----------------------------|------------------|------------------------|----------------|
| 1. | Ease of use | 82.14 | Very Practical |
| 2. | Time used | 75 | Very Practical |
| Results by Teacher Overall | | 81 | Very Practical |

Second, student practicality. this practicality value is obtained through filling out questionnaires by students. The results of the student's practicality can be seen in the following table.

Table 5. Results of Practical Value by Students

| No. | Aspects Assessed | Practicality Value (%) | Value |
|---|------------------|------------------------|----------------|
| 1. | Ease of use | 87.32 | Very Practical |
| 2. | Time used | 88.63 | Very Practical |
| Results of Practicality by Students Overall | | 87.57 | Very Practical |

Effectiveness of learning modules can be seen from the value of attitude (affective), the value of knowledge (cognitive), and the value of skills (psychomotor). The value of effectiveness can be seen in the following table.

Table 6. Results of Learning Effectiveness Values

| No. | Assessment of | Value | Predicate |
|-----|-----------------------|-------|-----------|
| 1. | Attitude (Affective) | 93.18 | Very Good |
| 2. | Knowledge (Cognitive) | 3.50 | A- |
| 3. | Skills (Psychomotor) | 3.7 | A- |

Next, disseminate . A valid, practical and effective learning module is distributed to Indonesian language subject teachers in research schools, libraries in research schools, and distributed to Indonesian language subject teachers.

Conclusion

Based on the results of the development that has been carried out, it can be concluded the following points. *First*, the module development process that has been carried out includes four stages, namely *define, design, develop*, and *disseminate*. This development process results in a product in the form of text-based observation report based on *problem based learning* a valid, practical, and effective (PBL).

Second, the module development process at the stage *define*. At this stage it was concluded that there were several problems that hampered the achievement of the learning objectives of writing observational report texts, namely the limitations of teaching materials used. This has an impact on the learning outcomes of students who still have an average of below the Minimum Passing Criteria (KKM). Therefore, it was designed a teaching material in the form of learning modules for writing text-based exposition of *problem based learning* (PBL) as one of the solutions to resolve the issue.

Third, the process module development at the design stage (*design*). At this stage the module framework is designed and drafting the module. The planning framework of the learning module consists of at least learning instructions, competencies to be achieved, content, exercises, and worksheets. These components are arranged in three parts, namely the introduction, learning activities and evaluation. At the stage of drafting the module, a module of learning is made based on the module framework.

Fourth, the process module development at this stage of development (*develop*). At this stage, the modules that have been created are then validated to see the module validity. The learning module for writing exposition text based on *problem learning* (PBL) developed is very valid. The validity of the module is illustrated by the results of validation by experts on the four aspects of module validation, namely aspects of content feasibility, language, presentation, and graphics.

Fifth, the process module development in the deployment phase (*disseminate*) module deployment .tahap three stages. (1) Dissemination to other teachers in addition to teacher collaborator research at Kerinci Senior High School 22. The teacher is an Indonesian teacher who teaches class VII. (2) Dissemination to students by submitting a learning module to the school library, namely the Kerinci 22nd Junior High School library.

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Hopefully this research can motivate other researchers to develop it with different material. In addition, it can also be used as a reference and reference for readers.

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