THE DEVELOPMENT OF BUSINESS ECONOMICS TEACHING MATERIALS BASED ON PROJECT BASED LEARNING (PJBL) VOCATIONAL SCHOOL STUDENTS

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Abstract: *This study aims to develop teaching materials for business economics based on Project Based Learning (PjBL) for vocational high school students with materials for small and medium business plans. The development of the model uses an R&D approach in the field of Education (Bord and Gall) which has been modified as proposed by Sugiono with 3 (three) steps; 1) preliminary study, 2) model development. And 3) model testing. Based on the results of testing the model related to the feasibility assessment of the validators consisting of material expert validators and linguist validators, the results obtained that the product development was very feasible to be used in the teaching and learning process. Besides that, the results of the effectiveness assessment in the form of responses from teachers and student responses through questionnaires can be obtained that the product developed is very feasible to use. These results indicate that business economics teaching materials developed based on PjBL on small and medium business plan materials are feasible to use in the teaching and learning process.*

Key Words*:* Development of Teaching Materials; Economy; PBL,

Introduction

Student-centered learning strategy (student centered learning) is one way to optimize the learning process so that students are active in the learning process and have meaningful experiences in learning [1]. Business economics subjects depart from facts or real economic phenomena in society. Business economics subjects develop theories to explain facts rationally. Generally, the analysis used in economics is a problem-solving method. In the process of learning business economics, students are given the opportunity to find the truth of a problem or concept from the material they learn through direct activities in the community. This learning process allows students to have the skills to observe, analyze,

Therefore, teachers must be able to create a conducive and fun learning atmosphere for students so that learning objectives can be achieved as planned. Responding to this reality, teachers are required to make improvements and practice learning in the classroom, one of which is by using the Project Based Learning (PjBL) model [3]. PjBL is a "learning process that directly involves students to produce a project. Project Based Learning (PjBL) is a learning model whose teaching and learning activities are project-based. Project activities carried out by students remain with guidance by the teacher [4]. Project based learning learning model will create a challenge and collaboration, students are forced to work together, which will train empathy and the ability to encourage cooperation between them, [5]. The Project Based

Learning (PjBL) model is an active learning that relates technology to everyday life by carrying out project activities and producing a work [6]. Project-based learning model refers to the philosophical constructivism, namely knowledge is the result of cognitive construction through a student activity that includes students' scientific skills and attitudes so that students can construct their own and meaningful knowledge through real experience [7].

Basically this learning model develops more solving skills in working on a project that can produce something [8]. In its implementation, this model provides broad opportunities for students to make decisions in choosing topics, conduct research, and complete a specific project. Learning using PjBL becomes a meaningful experience because it allows students to master a concept, solve a problem through project completion and provide the opportunity to come up with ideas or ideas that are as creative as possible to solve problems [4]. Students work in real, as if there is a real world that can produce products realistically [9]. PjBL is learning that directs students to work in groups in order to create or do a joint project, and present the results of the project in front of other students. PjBL also provides opportunities for students to work on creating authentic projects, building collaboration, presentation, and communication skills [10]. and complete a specific project.

PjBL guides students to take real-life roles and apply tools from the knowledge domain in creating a project. Project-based learning provides a context in which students move toward thinking as experts in knowledge domains such as creative thinking, and can be applied to learning in schools [11]. The underlying principle of PjBL is that the theme or problem to be solved by students gradually explores the problem from different perspectives, adapting their goals and strategies to new insights gathered during the project [12]. Then teaching materials are all forms of materials used to assist teachers in carrying out teaching and learning activities in the classroom, both in the form of written materials such as handouts, books, modules, student worksheets, brochures, leaflets, wallcharts, and unwritten materials such as videos/films. , VCD, radio, cassette, computer-based interactive CD and internet [13].

On the other hand, the selection of textbooks must also be appropriate. For this reason, the teacher needs to determine the appropriate learning method or model so that students can really feel the meaning of the material they are studying. One of them is through the use of Project Based Learning (PjBL) learning models in developing teaching materials [14]. This is because PjBL-based teaching materials are teaching materials that can make students have an interest in the learning process.

The PjBL-based learning model is a learning model that uses project media (activities) as the core of learning [15]. In this activity, students explore, evaluate, explain and synthesize information learning in obtaining a number of learning outcomes (cognitive, emotional, and psychomotor). PjBL orientation is more towards inquiry-based learning opportunities, namely structured experiences based on the belief that learning occurs when individuals are asked to investigate the problem [16]. Project Based Learning is a learning model that uses projects/activities as media.

Method

This study was adapted and modified from the Bord and Gall model which was adapted to the characteristics of the learners, the characteristics of the objectives and teaching materials, and the learning setting [17]. The stages of development carried out are: 1) Preliminary studies, by conducting initial observations and interviews with business economics teachers from 5 vocational schools; 2) Model development, there are two activities carried out, namely first formulating product designs and secondly developing products, the products developed are project-based learning models consisting of syllabus, lesson plans, teaching materials, student worksheets, and learning assessment sheets; 3) Testing the model, there are three activities carried out, namely first, validation from material and language experts, secondly revision based on expert judgment, Accounting Program SMK PGRI Pakisaji Malang, the effectiveness of the project-based learning model (PjBL) to improve higher order thinking skills (HOTs).

Results and Discussion

Learning Model Development

The development of the project-based learning model (PjBL) was modified and developed based on the analysis of the study of various literature sources, the results of discussions with business economics teachers from 5 vocational schools in Malang Regency, and input from the validator who is also an education expert as well as an expert in the field of economic studies. The development of this project-based learning model is complemented by the development of several elements of learning implementation in the form of learning tools consisting of a syllabus, lesson plans (RPP), teaching materials, student worksheets (LKPD), and learning assessment sheets.

The development of the syllabus and lesson plans refers to the decision of the Directorate General of Vocational Education Number 27 of 2020 concerning Core Competencies and Basic Competencies of the 2013 Curriculum in Vocational High Schools for special conditions. The development of a set of tools related to handouts with small and medium business plan materials which includes the development of student worksheets and learning assessment sheets which are validated by material experts and linguists before being tested.

The instrument to measure the feasibility of the content and the appropriateness of the language used in the development of the learning model was developed by the researcher based on the indicators in the study. The assessment instrument to measure the effectiveness of the learning model was developed by researchers based on basic competencies, namely 3.9 Analyzing small and medium business plans and 4.9 Making small/medium business designs according to their environmental potential. This is in accordance with the demands of schools and business economics teachers in vocational schools where the research is conducted that learning materials must be in accordance with the basic competencies

contained in the regulations. After conducting a feasibility test from material experts and linguists, the researchers conducted field trials through experiments at SMK PGRI Pakisaji.

Expert Assessment Results

The assessment of the feasibility of the learning model was carried out by two experts, namely material experts and linguists. The material expert assessment is carried out by an expert lecturer in economics and management with doctoral qualifications. The foreign language assessment is also carried out by linguists with doctoral qualifications. The material expert's assessment was obtained by 90.4% so that the score from the linguist was 85.6%. Both of these values are more than 80% so that the resulting product is very feasible to use.

The assessment of the effectiveness of the learning model is carried out by teachers in the field of business economics as well as practitioners and students. The assessment conducted by the teacher in the field of business economics obtained a value of 89.33%, this value is greater than 80% so that the resulting product is effective to use. The assessment of the students is done by comparing the pre-test and post-test scores.

Based on the results of comparing the average pre-test and post-test scores, it was concluded that the post-test mean scores were higher than the pre-test averages. This shows that learning using the PjBL model is more effective. Meanwhile, the development of tools and learning helps students to explore more information that comes from many sources. The development of the PjBL learning model results in a very optimal learning process. PjBL development carried out in the classroom to achieve problem-solving abilities has a tendency to be stronger than conventional learning that has been done previously. Based on the results of comparing the posttest average value, it can be concluded that the average value is 81, 76 has an average value of completeness that is higher than the average value of pretest completeness of 76.52. Learning using the PjBL model can improve student learning outcomes. [18]. This shows that PjBL-based business economics learning makes learning more effective, because students can learn independently both at school and outside school according to their speed in learning [1]. This is in line with the standard of primary and secondary education which states that the learning process should be carried out interactively, inspiring, fun, challenging, and motivating students.

Conclusion

Based on the results of data analysis and discussion in this development research, the following conclusions can be drawn: 1) The design process for developing project-based teaching materials is adjusted to the development stages with the Bord and Gall model which is adapted to the characteristics of students, characteristics of objectives and teaching materials. , and a learning setting consisting of three stages, namely a) preliminary study, b) model development, and c) model testing. 2) The results of reviews from material experts and linguists stated that project-based teaching materials were in the very feasible category with a percentage level by 90.4% and 85.6%. 3) Results The results of the review of business

economics subject teachers on project-based teaching materials are 89.33% and are in a very decent qualification, so that the results of the product development are suitable for use in the learning process, the comparison between the pretest and posttest scores given to the students, the average posttest score was 81.76, and the average score for the pretest was 76.52. This shows that PjBL-based business economics learning makes learning more effective.

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