Developing "Entrepreneurship Module Based Project Learning" in College

Nur Hidayah[1], Mahfudh Al Kautsar Abadi[2]
nur.hidayah@pgsd.uad.ac.id[1]; mahfudhalkautsar@gmail.com[2]

Faculty of Teacher Training and Education, Universitas Ahmad Dahlan. Yogyakarta. Indonesia[1,2]

Abstract. This research was conducted due to the students' difficulties in comprehend the concept of doing business and think creatively even the learning model based on project was already implemented by the lecturer. The aim of this research are: 1) describing the steps in Developing Entrepreneurship Module Based On Project Based Learning, 2) Testing the quality of Entrepreneurship Module Based On Project Based Learning that are developed. This research is the development of the ADDIE model that have 5 steps; The developed module validated by the media, material and learning experts. The research subjects are 50 college students PGSD (Elementary School Teacher Study Program) in UAD. The technique in collecting the data was expert rating, observation, and interview. Descriptive qualitative was used to analyze the data. The research shows that 1) in quality perspective; Kewirausahaan Berbasis Project Based Learning module categorized as "very good". This is presented by the module quality in media and material aspects categorized as very good, while learning aspect categorized as good, 2) in eligibility perspective.

Keywords: creative thinking, entrepreneurship module, project based learning, PGSD

1   Introduction

Act of the Republic of Indonesia Number 20, Year 2003 on National Education System: article 1 section 1 explains that education means conscious and well-planned effort in creating learning environment and learning process so that learners will be able to develop their full potential for acquiring spiritual and religious strengths, develop self-control, personality, intelligence, morals, and noble character and skills that one needs for him/herself, for the community, for the nation, and for the State. One of the skills needed is the ability in entrepreneurship. According to the article 1 section 1 aforementioned explained that in order to develop students' potential can be implemented through a well-planned learning environment and

learning process. Student's self-potential can be developed accordingly with the necessity in the future. One of the potentials is entrepreneurship that is beneficial to make a living. Entrepreneurship potential can be developed through learning process [1].

The learning process is continuity process as long as living. Satisfaction result in learning process surely needs maximum process. In order to gain maximum process, a lecturer must create a learning design that covers three students' learning model. The learning model divided into visual, auditory, and kinesthetic. The learning can be applied universally starting from early childhood for life and it can be done through in or out of the class. The lecture is one of the learnings in the class.

Entrepreneurship is the ability to create new and different thing through creative thinking and innovative step to create opportunity [2]. Also stated that entrepreneurship is a creative and innovative ability which become tactic, basic, resource, process, and effort to create value-added goods and service through the braveness in facing risks [3].

Entrepreneurship is important to be learned because it is one of the provisions needed for the future. As a result, entrepreneurship is made as a course in every faculty at Ahmad Dahlan University including in Elementary School Teacher Study Program, Faculty of Teacher Training and Education. Entrepreneurship courses have 2 credits which held in the 6th semester and offered as an elective course in the 4th semester.

The purpose of learning entrepreneurship course is preparing the students in the future to trigger their spirit in doing entrepreneurship. The students are supposed to build awareness in doing business and aware of the economic shifts from industrial-economic to creative economic. Thus, the students must understand the importance of creativity for entrepreneur, the ability to identify potential local economic sectors to be developed, freshly creative ideas that have economic value, and the ability in investigating resources needed.

Based on the interview with lecturer in entrepreneurship course, there are several problems such as the material is delivered theoretically which is not triggered maximally the students' entrepreneurial spirit, the learning material is not yet project based and the resource as the basic reference is not yet set for the students in entrepreneurship course, the lecturer is already applied project based learning but in delivering the material is not yet using media, limited time for project based learning in the entrepreneurship course because the material is delivered in speech, and the students are still hard to understand the concept in entrepreneurship.

The module is an individual learning packet arranged systematically to facilitate students' learning experience in order to achieve learning purpose. Individuals with various characters can be reached by using a decent module [4]. Module is learning material with brief and specific content arranged to achieve learning purpose. Those statements aforementioned, it can be concluded that the module is a stand-alone learning material arranged systematically and specifically to achieve learning purpose [5].

Module is a whole unit consists of learning activity series that has been giving effective learning result in achieving clear and specific formulated learning purpose. Module becomes media that makes the students can learn independently [6]. Stated that the benefit of the module was focused on individual capability because basically, they have the ability to work independently. There were also controls on the learning result through the use of competency standards in every module that must be achieved, and then there was also curriculum relevance

presented by the purpose and the way to deliver the curriculum. Learning module arrangement surely has a purpose [7]. Presented the purpose of creating a module, as follows:

1. Clarifying and making the message easier to be presented and not too verbally,
2. Resolving student or lecturer's space, time, and capacity.
3. Making students learning effectively such as increasing students' learning motivation and developing students' ability in interacting directly with other learning environment and resource [8].

The advantages and disadvantages of the module are:

1. The advantages of the module: giving feedback, the learning purpose is clear, the module is designed interestingly, easy to be understood, and it can fulfill their need, the module is flexible, creating teamwork, the remedy can be done through the module.
2. The disadvantages of module : reducing students interaction, a single approach is monotone and causes boredom, the students can learn independently, the plan must explicit and it needs teamwork, facilities, etc., material preparation needs a big fund [5].

Stated that compiling a learning module is a compiling learning material process systematically and ready to be learned by the students to achieve competence or sub competence. In compiling and developing module, it needs to be suited with the needs and condition to make the module used maximally by the students, thus the students can understand the module easily. The language used must be suited with the students need in order to make it user-friendly and the students can comprehend the material easily [9].

There are several characteristics needed, as follows:

1. *Self Instruction.* The students can learn independently through the module without depends on others.
2. *Self Contained.* The module includes all of the learning material needed to help the students learn the material thoroughly.
3. *Stand Alone.* The module is not depending on other media, the students can learn and work on the assignment inside the module.
4. *Adaptive.* The module is supposed to have highly adaptation capacity on science and technology development and flexible. The module is categorized as adaptive if the learning material can be used for a particular period.
5. *User Friendly.* Every direction and information presented on the module is helpful and easy for the user in responding to the material [9].

Project Based Learning (PjBL) is a learning model that already developed in several developed countries such as the United States of America. In this learning model, the students are asked to work on a project [10]. Nanang and Suhana also stated that Project Based Learning is learning approach that allows the students to work independently in constructing their learning and culminate it into the real project [11].

Project based learning is an approach, strategy or method in the learning process which is students as the center of the learning activity and it is a long term interdisciplinary science [12]. Project Based Learning is a learning strategy which is involving students to create a beneficial project. The advantages of this method are increasing learning motivation, triggering the students to do important work, and increasing the students' ability to solve problems.

Project based learning has several stages. The first stage is initiation, it is important because categorized as the first motivation. The next stage is exploration which allows the students to get

their ideas. The third stage is exploration to be implemented, the students are supposed to develop their ideas in this stage. Realization is becoming the fourth stage. In the fourth stage, the students are supposed to complete their ideas and write the result into a worksheet. The fifth stage is a presentation which allows the students to present their product from the developed ideas. The last stage is the reflection. In the reflection stage, the students are evaluating the product presented. Helm and Kart believed that project based learning can be used to develop students' academic ability, their social-emotional, and their thinking skills that needed in real life [13].

Presented learning steps in project based learning, as follows: 1. Preparing questions or assignments regarding the project. This is the beginning stage in order to make the students observe thoroughly toward questions from the phenomenon happened; 2. Designing the project, this is a real step to answer the questions that can be done through experiment; 3. Arranging schedule to create a project, it is important to make sure the project is on track with a particular period of time; 4. Monitoring project activity and development, the lecturer monitors the project development and execution while the students evaluate the running project; 5. Testing the result. In this step, the data and experiment fact or research are related to other data from several resources; 6. Evaluating the activity. This step is needed in order to evaluate the activity as the improvement reference for the project assignment in the same course or another course [14].

2   Method

This is educational research and development to develop an entrepreneurship module with project based learning model in the entrepreneurship course. The module development aims to increase Elementary School Teacher Study Program (PGSD) students' creativity at UAD Yogyakarta. Research and development is a research method used to produce a particular product and test the product effectivity [15]. This research uses the development of the ADDIE model. The data in this research are qualitative and quantitative collected by interview and questionnaire. The subject of this research is students on Elementary School Teacher Study Program (PGSD) Faculty of Teacher Training and Education in the 6th semester at UAD. The research was conducted in Campus 5 Universitas Ahmad Dahlan during Juli-August 2019.

3   Results and Discussion

The development media of "Entrepreneurship Module *Based Project Learning*" has been tested to the students in the 6th semester on PGSD (Elementary School Teacher Study Program), Faculty of Teacher Training and Education at UAD Yogyakarta. The development stages in this research were using the development of ADDIE model but only reach the third stage named Development. The result data were qualitative and quantitative from the whole research process. The qualitative data formed as suggestion and comment from the media expert. The qualitative data collected from the validation result by the media expert, material expert, learning expert, and

questionnaire response from the students. Questionnaire and validator used as the instruments, strengthen by suggestion and comment from the expert.

Analysis stage was used to get the information related to the need and problem that cause the development of "Pengembangan Modul Kewirausahaan Berbasis *Project Based Learning* bagi Mahasiswa PGSD". The analysis result has been done in the class 6C PGSD (Elementary School Teacher Study Program), Faculty of Teacher Training and Education at UAD Yogyakarta through interview and observation. The result can be described, as follows: 1. Curriculum Analysis. Based on the interview on February 25, 2019, with entrepreneurship lecturer, the curriculum used was curriculum 2013 which used thematic learning. 2. Students Analysis. The students needed handbook and media to be used in learning. The module is a media that can be developed and make the students learn independently.

Design stage. Design stage consists of several steps, as follows: 1. Compiling the material. The steps in creating a material framework for "Modul Kewirausahaan Berbasis *Project Based Learning*" were arranging basic competence, indicators achievement, and learning purpose. After arranging the material as the steps mentioned, the next step was compiling the material using simple sentences in order to make the students understand easily. 2. Creating a module cover. Corel X7 was used as the application in creating the cover with white and light blue as the background. 3. Collecting the material. In this stage, the material in the form of existed material and module cover file combined into PDF file. The module was printed using paper HVS 100 for the material and paper Ivory 210 for the cover with size A5 (148 mm x 210 mm).

Development stage. Response from the validator and product testing was in this stage. The stage was beginning from validation from the expert and then test product, the result would be accumulated.

According to the validation from three experts, the result can be seen in **Table 1** below:

Table 1. Validation result (media expert, material expert, and learning expert)

No	Expert	Percentage	Category
1	Media Expert	93.75%	Very Good
2	Material Expert	80.55%	Very Good
3	Learning Expert	75%	Good
Total		249.3%	
Average		83.1%	
Category			Very Good

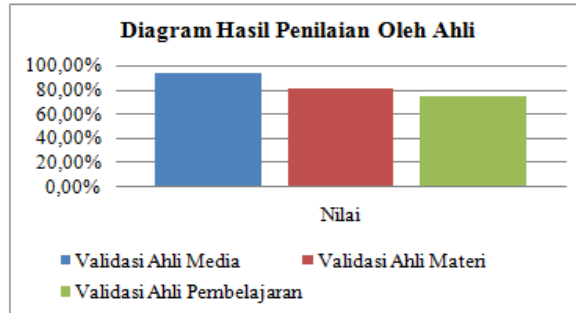The table can be presented into the chart as below:

Fig.1. Results diagram assessment by experts

From the data aforementioned, the percentage can be calculated with the following formula:

$$\text{Percentage} = \frac{93.75\% + 80.55\% + 75\%}{3}$$

Percentage = 83.1%

The average result shows the number of 83.1% which is converted in quantitative data to be categorized as "Very Good".

The result of the implementation stage consists of limited test and field test. The result test can be presented in **Table 2**:

Table 2. Test result

No	Expert	Percentage	Category
1	Limited Test	80%	Very Good
2	Field Test	89.1%	Very Good
Total		169.1%	
Average		84.55%	
Category			Very Good

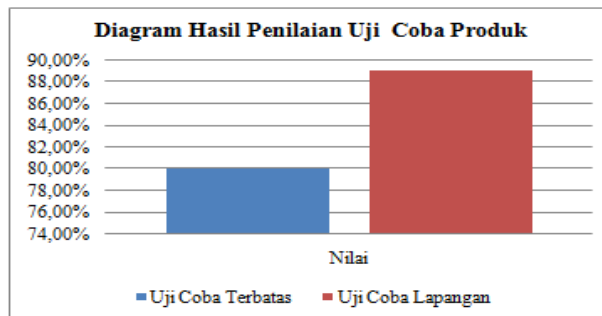The chart from Table 2 can be presented as follows:

Fig.2. Diagram product test assessment results

From the data aforementioned, the percentage can be calculated with the following formula:

$$\text{Percentage} = \frac{80\% + 89.1\%}{2}$$
$$\text{Percentage} = 84.55\%$$

The average result shows the number of 84.55% which is converted in quantitative data to be categorized as "Very Good".

Evaluation stage. This analysis is used to process qualitative data obtained from the result of three experts' response, suggestion, comment, criticism, and students' response. There are criticism and suggestions from the research result toward "Modul Kewirausahaan Berbasis Project Based Learning" as follows: 1. Media expert analysis. The media expert is not only giving score but also giving criticism and suggestion to support the module development to be better. 2. The material expert analysis. The material expert is giving suggestion to create "Modul Kewirausahaan Berbasis Project Based Learning" more effectively. The suggestions given by material expert are: to make the purpose and indicator clearer, to add more theories, to give picture explanation and color variation in the "Modul Kewirausahaan Berbasis Project Based Learning" in order to make it a better module. 3. Learning expert analysis. The learning expert suggests adding more activity based on Project Based Learning because the module is still not showing the activity based on Project Based Learning.

Quantitative data analysis. This analysis is used to process quantitative data obtained from the questionnaire sheets from media expert, material expert, learning expert, and students' response. The data is presented in **Table 3** below:

Table 3. Quantitative data result

No	Expert	Percentage	Category
1	Media Expert	93.75%	Very Good
2	Material Expert	80.55%	Very Good
3	Learning Expert	75%	Good
4	Limited Test	80%	Very Good
5	Field Test	89.1%	Very Good
Total		418.4%	
Average		83.68%	
Category			Very Good

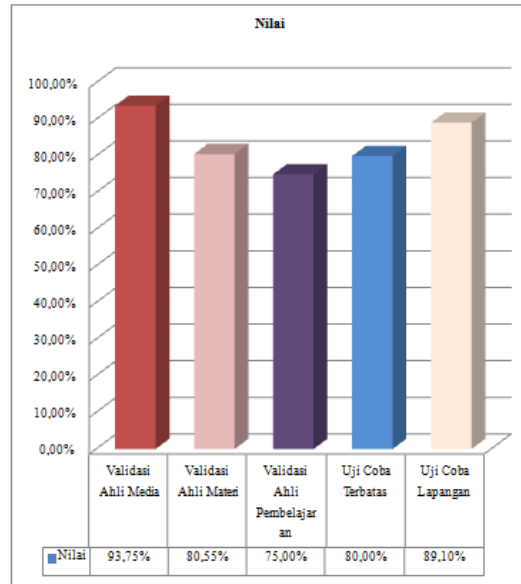Table 3 is presented into the chart as follows:

Fig.3. Diagram value

The data aforementioned obtained from the formula below:

$$\text{Percentage} = \frac{93.75\% + 80.55\% + 75\% + 80\% + 89.1\%}{5}$$

Percentage = 83.68%

Based on the calculation of the average score, the percentage number is 83.68%. The number is converted into qualitative data and categorized as "Very Good".

The development of "Modul Kewirausahaan Berbasis *Project Based Learning*" for PGSD (Elementary School Teacher Study Program) students has been done. The development process was done by several stages that produced media in the form of proper Modul Kewirausahaan Berbasis *Project Based Learning* to be used. The module development has been through several validation stages such as validation from media expert, material expert, and learning expert that continued with limited test and field test. The validation result was used to revise Modul Kewirausahaan Berbasis *Project Based Learning* to be a final product.

After testing the product and field, it can be concluded that Modul Kewirausahaan Berbasis *Project Based Learning* is a proper module to be used particularly in the entrepreneurship course. The data obtained from the validation of media expert, material expert and learning expert that continued with limited test and field test was used to get the assessment conclusion of Modul Kewirausahaan Berbasis *Project Based Learning*. The data from the assessment can be presented as follows:

1. The total score of media validation stage is 60 with percentage of 93.75% and categorized as Very Good.

2. The total score of material validation stage is 29 with percentage of 80.55% and categorized as Very Good.
3. The total score of learning validation stage is 30 with percentage 75% and categorized as Good.
4. The total score of the limited test stage is 224 with percentage of 80% and categorized as Very Good.
5. The total score of the field test stage is 748 with percentage 89.1% and categorized as Very Good.

4 Conclusion

Based on the research of the development of Modul Kewirausahaan Berbasis *Project Based Learning* for PGSD (Elementary School Teacher Study Program) students, it can be concluded that:

a. The development of Modul Kewirausahaan Berbasis *Project Based Learning* for PGSD (Elementary School Teacher Study Program) students uses coherent steps by doing preliminary study, initial planning, developing an initial product, validation, initial product revision, limited test, second product revision, field test, and final product revision.

b. The properness in using Modul Kewirausahaan Berbasis *Project Based Learning* in Entrepreneurship course acquired several assessment aspects such as the media aspect with total score 60 and percentage 93.75% categorized as very good. The material aspect with total score 29 and percentage 80.55% categorized as very good. The learning aspect with total score 30 and percentage 75% categorized as good. The total score for the limited test result is 224 and percentage 80% categorized as very good. The total score for field test is 748 and percentage 89.1% categorized as very good. In conclusion, this research result and development got assessment and evaluation and categorized as very good. The Modul Kewirausahaan Berbasis *Project Based Learning* used for Entrepreneurship course of students PGSD (Elementary School Teacher Study Program) in the 6th semester, Faculty of Teacher Training and Education at Universitas Ahmad Dahlan has been categorized as a proper module to be used as learning media in Entrepreneurship course for the students and lecturers.

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