The Development of Learning Model with Active Learning Approach through PBI Method Using “Point Card” As Active and Creative Media at Senior High School

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Abstract: Problem Based Introduction as a learning method has functions to help students develop thinking and problem solving skills. Whereas POINT CARD is an assessment media developed in the PBI method, so that the value obtained by students is open. The purpose of this research is to obtain description of (1) Product development in the form of PBI method using "POINT CARD" in SMA 1 Porong. (2) The feasibility of the PBI method using "POINT CARD" based on expert validation is viewed from the feasibility, instructional quality and technical quality. (3) Response of students to the PBI method using “POINT CARD” at SMAN 1 Porong. The study used Thiagarajan's 4D development model, limited to the development stage which was tested on 30 students of class XI IPS 2 SMA Negeri 1 Porong. Assessment instruments used in this study was a review and validation questionnaire by experts, as well as an online questionnaire regarding students' responses. Results: Development research based on validation is stated to be very feasible with a percentage of 96%. Research result based on the response of students by 93.6% with a category very feasible to use in learning activities. It can be concluded that Problem Based Introduction using "POINT CARD" can be used as an interesting learning method and improve thinking skills and problem solving by students.

Keywords: learning model, Problem based Introduction, Creative Media

I. Introduction

In meeting the demands of an increasingly advanced era, aspects of education are required. To guide and direct students to be more active and creative. One component of education, the basis given at school is Social Sciences (IPS) where success is achieved when learning occurs. The learning process occurs when students actively learn. Students can develop his potential through discovering the cause of an event around him, interacting between facts and life or his environment, so that students will not be familiar with all the phenomena that exist in their environment. To realize the achievement of success, the important role of the teacher is needed in developing strategies or learning methods. Inner activity in the learning process is not only done by students, but the teacher must also organize conditions that can activate students (Hamalik, 2005: 172). The teacher has the main role as a facilitator of student learning, understanding the material and measuring learners' learning through formal and informal forms of assessment. So the teacher is no longer an authority figure in learning to passplay an equally active role with students in the learning process.

Based on the results of observations on the conditions of the learning room and the learning process activities at the high school, teachers have used various media and modern supporting facilities such as projectors, sound, laptops and viewers in the learning process. But students often feel bored and less enthusiastic following the learning delivered by the teacher. Therefore, understanding and learning outcomes obtained by students are not maximal and there are still many values of students who have not met the KKM standards of school. In addition, the lack of motivation of students towards economic subjects can be a barrier for teacher to carry out the learning process. The lack of motivation can be seen from the inactivity of students in the learning process in the classroom. Based on the results of interviews with several students in class XI IPS 2 at SMAN 1 Porong, there are several things that cause students not to be active in the classroom. Namely, lack of reading material before learning takes place, lack of confidence and low learning concentration.

In line with the development of current learning innovations, one of the efforts that can be done by the teacher or educator is creating learning conditions that are able to increase enthusiasm and activity of students. Active in this case intended so that students are able to construct their own knowledge. Consciously active students build an understanding of the problems faced in the learning process. Rousseau stressed the importance of enthusiastic students in the learning process. According to him, every person who learns must be self-active or enthusiastic, because without any activity or enthusiasm the students will not have...
a good learning process (Sardiman, 1986: 95). The statement was confirmed by Usman that the best way to increase student participation is by helping less active students to be involved in asking and answering a question that arises in the process learning (Usman, 2009: 26).

With the existence of several explanations about enthusiastic students, conclusions can be drawn that to overcome the saturation of students so they can be enthusiastic and actively involved in activity learning is by planning learning methods that can improve competitiveness students through an active learning approach. The application of active learning to date has only become a discourse and in practice there are still many teachers who experience obstacles and explain more with the model conventional (Kumara, 2004: 64). So that active learning activities cannot be implemented optimally.

PBI learning method (problem based introduction) can function to help students in developing the ability to think, solve problems and find solutions to problems that arise and involve science in the real world (Riyadi, 2013: 82). The following are three characteristics of using the PBI (problem based introduction) method in the classroom: (1) lessons that take place focusing on problem solving, (2) problem solving responsibilities depend on students and (3) teachers as educators support the process of students working on problem (Thamrin, 2017: 58).

In connection with the findings presented, the researcher developed and tested a learning model with an active learning approach through the PBI method using “POINT CARD” as an active and creative media. By realizing the aforementioned reality, the researchers are interested in developing learning methods with the title Development of Learning Models with Approaches to Active Learning Through PBI Methods Using” POINT CARD “as an Active and Creative Media at SMAN 1 Porong.

Starting from the background above, the authors formulate the problem as follows: (1) How is the development of the PBI method using "POINT CARD"? (2) How is the feasibility of the PBI method using "POINT CARD" based on expert validation in terms of the feasibility of instructional quality and technical quality? And (3) How do students respond to the development of the PBI method using "POINT CARD" in SMAN 1 Porong?

Based on the background and formulation of the problem, it can be stated that the objectives to be achieved from this study are as follows: (1) Developing products in the form of PBI methods using "POINT CARD" in SMAN 1 Porong, (2) Describing the feasibility of the PBI method using "POINT CARD" based on expert validation in terms of feasibility, instructional quality and technical quality, (3) describing students' responses to the PBI method using "POINT CARD" in SMAN 1 Porong.

With the PBI (Problem Based Introduction) method developed, it is expected that the world of education will be more advanced and become a solution for schools that have not applied active learning in the learning process in class according to the current curriculum in 2013 and to increase students' enthusiasm in learning activities so can help teachers in creating fun, active and creative classes.

II. Methods

The aim of this study was to develop the PBI method using "POINT CARD" in Porong 1 Public High School. The development of the PBI method using "POINT CARD" is a series of processes carried out to develop a new product innovation in learning activities based on pre-existing theories.

The procedure for developing the PBI method using "POINT CARD" used a 4-D research and development model adapted to 4-P by Thiagarajan and Semmel (1974). The 4-D model is a general model used to develop and solve problems in the field of education. The research conducted by researchers is limited to the limited trial phase or 3-D, namely defining, designing, and developing.

Limited trial is conducted once in 30 students of class XI IPS 2 in SMA 1 Porong to measure the feasibility of learning models based on the responses of students. Sampling is done by cluster random sampling to determine the class. Because the sample in this study does not consist of individuals but classes (clusters)

The instruments of data collection used consisted of: (1) interview, (2) expert review sheet (3) expert validation sheet, (4) student response questionnaire. While the technical analysis of the data used in this study uses descriptive quantitative and qualitative descriptive data analysis. The technical analysis of the data used for validating the PBI method using "POINT CARD" is obtained through calculations using a Likert scale:

<table>
<thead>
<tr>
<th>Table 1 Likert Rating Scale</th>
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<tbody>
<tr>
<td>Criteria</td>
</tr>
<tr>
<td>Very good</td>
</tr>
<tr>
<td>Well</td>
</tr>
<tr>
<td>Is being</td>
</tr>
<tr>
<td>Not good</td>
</tr>
<tr>
<td>Not very good</td>
</tr>
</tbody>
</table>
The technical analysis of the data used to find out the responses of students is based on calculations using the Guttman scale. Because the Guttman scale only has 2 answer options that can make it easier for students to answer:

<table>
<thead>
<tr>
<th>The answer</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>1</td>
</tr>
<tr>
<td>No</td>
<td>0</td>
</tr>
</tbody>
</table>

To get a result or percentage of both scales, then use the formula:

\[
P(\%) = \frac{\sum \text{total score}}{\text{Maksimum score}} \times 100\%
\]

Information:
Total Total Score : Total total score obtained from all respondents
Maximum score : The highest score of the questionnaire multiplied by the number of respondents.

From the results of the analysis above, conclusions will be obtained about the feasibility of using the following criteria:

<table>
<thead>
<tr>
<th>Presentase (%)</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-20</td>
<td>very unworthy</td>
</tr>
<tr>
<td>21-40</td>
<td>not feasible</td>
</tr>
<tr>
<td>41-60</td>
<td>quite decent</td>
</tr>
<tr>
<td>61-80</td>
<td>decent</td>
</tr>
<tr>
<td>81-100</td>
<td>very decent</td>
</tr>
</tbody>
</table>

Learning methods can be said to be feasible if the results of the study are in the range of 61-80%, namely in the category of feasible or very feasible.

**III. Results And Discussion**

In developing the PBI method using "POINT CARD" starting from the defining phase consisting of 5 steps, namely: (1) front end analysis, based on the front end analysis it is known that in 201 Porong 1 Public High School was one of the schools that used the 2013 curriculum in the curriculum requires learning that focuses on the activeness of students in the learning process (2) analysis of students, this analysis aims to determine the characteristics and conditions of students before the PBI method is used using "POINT CARD" which has been developed by researchers. based on the analysis of students, the results showed that on average students of class XI IPS 2 were over 16 years old. according to Pieget the age entered into the formal stage where students can think concretely and abstractly [8]. The number XI IPS 2 students are 30 with different characteristics and levels of ability

The planning stage is a stage to start designing the learning method that will be developed. The design phase includes:

(1) selection of learning methods, at this stage researchers design PBI learning methods (Problem Based Introduction) using "POINT CARD" because it is in accordance with the 2013 curriculum concept used by SMAN 1 Porong. Where in the curriculum emphasizes the activeness of students as the implementation of student centered learning. (2) determine the design of the "POINT CARD" or additional Point Card which functions as a media for assessment and supporting the PBI method. the field of cards is printed using a 10x10CM square paper art and there are small boxes of two rows in it measuring 3x3 cm. the size is adjusted to learning activities. The card is used as a medium of assessment with a value sticker.

The development phase, this stage aims to realize the design into a tangible form and produce learning methods using "POINT CARD" as an active and creative learning media and worthy of use. Feasibility is measured by the results of expert review. The revised review results will then be validated by experts. So that the learning method using "POINT CARD" produced is feasible to use.

The results of the validation by the expert stated that, the PBI method Using "POINT CARD" was declared to be suitable for use with a percentage of 96% for the validation of the feasibility of the method. Based on the results of the validation of the PBI Method using the POINT CARD it is known that the method is stated to be very feasible and ready to be tested.

Limited trials were conducted on 30 students of class XI IPS 2 in SMA 1 Porong. After the PBI method using "POINT CARD" was tested, students were given a questionnaire to measure the feasibility of the method developed based on students. The following are the results of the questionnaire obtained,
Based on the responses of the students, the learning method developed was declared very feasible with a percentage of 93.6%. Based on the percentage obtained it can be said that the use of media gets a good response and Problem Based Learning Introduction using "POINT CARD" can be accepted by students. In this study students feel that the development of learning methods can increase student enthusiasm, so it can be concluded that the method developed can be used to overcome the passivity of students in learning activities.

IV. Conclusion

Based on the results of research on the PBI method through "POINT CARD" which was developed, it was concluded that the method was very feasible to use as a learning method. The development of the PBI method using "POINT CARD" gets a good response and can be accepted by teachers and students. The results of the PBI method development research using "CARPONTA", should limit the scope of the problem so that classroom conditions are directed and do not raise questions outside the learning context. The teacher must reaffirm the correct answer, so as not to cause new problems or misconceptions.

References