Kinestetik : Jurnal Ilmiah Pendidikan Jasmani 5 (2) (2021)
Kinestetik : Jurnal Ilmiah Pendidikan Jasmani
https://ejournal.unib.ac.id/index.php/kinestetik/index
DOI : 10.33369/jk.v5i2.14542

PROJECT-BASED BLENDED LEARNING TO IMPROVE STUDENTS CREATIVITY IN SEPAK TAKRAW

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Article Info

Article History :

Received : February 2021
Revised : April 2021
Accepted : June 2021
Available online : June 2021

Keywords:

Project, Learning, Creativity, Sepak Takraw

Abstract

Creativity is a demand in 21st-century learning but is often ignored by lectures in the learning process of Sepak Takraw. So that we need a way to improve creativity in students through appropriate learning models. The purpose of this research is to improve the creativity of physical education students in developing Sepak Takraw learning materials. The research method used was classroom action with two cycles. The subjects in this study were students in the seventh-semester physical education, totaling 33 students. Data collection techniques and instruments used observation sheets to assess the product of the resulting project, namely the Sepak Takraw learning video. The results showed that in cycle 1 the classical completeness of the students was 70%, and in cycle 2 the classical completeness of the students was 90%. The conclusion in this study is that the application of project-based blended learning can increase creativity for students making Sepak Takraw learning videos.

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ISSN 2685-6514 (Online)
ISSN 2477-331X (Print)

INTRODUCTION

The development of information and communication technology today is growing very rapidly in all aspects of human life without exception in the world of education. At this time, the students faced by lecturers in higher education are students who were born and developed in the technological era. For this reason, lecturers have technological literacy and are able to use technology in every learning process. Physical education study programs as a place to educate prospective physical education teachers must be able to equip prospective Physical Education teachers to be skilled in using technology because future teacher challenges are related to information and communication technology. As stated by (Sole & Anggraeni, 2018) the education standards of this century are related to the application of technology in learning ". Based on this, lecturers must be able to prepare their students to live in the digital era. One of the ways that lecturers must take is by presenting technology-based learning or commonly known as project-based blended learning (PjB2L) to facilitate student experience, creativity, innovation in face-to-face and virtual situations.

The PjB2L learning model is a combination of project-based learning and blended learning models that are integrated into the form of various information and communication technology learning media and emphasize the product as the end of learning activities (Putri & Hendawati, 2018). This learning model can be applied to both theoretical and practical courses. One of the practical courses taken by physical education students at the University of Bengkulu is Sepak Takraw. The Sepak Takraw course is a course taken by seventh-semester students at University of Bengkulu. After participating in learning in this subject, students are expected to have the attitudes, knowledge, and skills in developing football learning materials and be able to teach the students. Learning in this course is practical with an allocation of 2 x 50 minutes or the equivalent of 2 SKS (credit units semester). However, in practice, lecturers and students have limited time to deliver the entire content of the learning material.

Based on the results of observations and interviews with lecturers who teach subjects, it is known that some of the obstacles experienced by students during their Sepak Takraw are: (1) As many as 65% of students have difficulty understanding the theoretical learning material regarding the basic techniques and rules of the game Sepak Takraw which is presented by the lecturer. It is known that the cause is the lack of time that the lecturers have in delivering material and doing practice in class. (2) Students are less interested in taking Sepak Takraw lectures. It is known that the reason is that lecturers still use conventional learning methods so they are considered unattractive to students. (3) There are still 55% of students who have not completed their learning outcomes. This is due to the lack of time students have to understand learning materials and the difficulty of accessing learning resources. (4) The lack of student creativity in developing Sepak Takraw materials. It is known that the cause is because the lecturers still use conventional learning media so that they are considered unattractive to students.

Problems that occur in Sepak Takraw must be immediately evaluated and solutions found by the lecturer who teaches the course. Because doing an evaluation will improve the lecture

program (Raibowo & Nopiyanto, 2020). One way to solve this problem is by implementing a technology-based learning model that can be accessed by students anytime and anywhere, namely PjB2L. Based on the research results, it can be seen that the PjB2L learning model can effectively improve independent learning abilities, practical application, student innovation and can improve student learning outcomes (Tong & Wei, 2020). Similar research also states that PjB2L makes the learning process become more attractive and increases students' creativity and interest in learning (Nguyen, 2017).

The results of this research have been conducted abroad and to the best of the author's knowledge, until now no research has been carried out on the application of the PjB2L learning model to increase creativity student in developing Sepak Takraw material in the Physical Education study program, University of Bengkulu. This study applied PjB2L with a modified Sepak Takraw basic technique learning video product for elementary and middle school children. So in this learning, students are given projects in groups to make simple tools that can be used to play Sepak Takraw, and from these tools, students can develop modified Sepak Takraw. The learning process is combined with the blended learning method, which is learning that combines and utilizes the internet as a learning medium and media so that students can actively seek information via the internet or other learning sources. The PjB2L method in the learning process of Sepak Takraw uses the WhatsApp group, zoom meeting, and YouTube as a medium to simplify the learning process. The purpose of this study was to improve the creativity of Physical Education students in the Sepak Takraw through the PjB2L model.

METHODS

The research method used was classroom action research using two cycles, namely, cycle 1 and cycle 2. The method in this study was carried out by planning, implementing, observing, and reflecting on actions collaboratively to improve the students creativity of Sepak Takraw. The subjects in this study were all seventh-semester students who took part in the Sepak Takraw lecture, totaling 33 students. This research was conducted in the physical education study program, Bengkulu University, which is located at Jalan Raden Fatah No.3, Pagar Dewa, Kec. Selebar, Bengkulu City, Bengkulu 38211. This research was conducted from September 2020 to November 2020.

The research procedures

The research procedures used in this study consisted of planning, actions, observing, and reflecting.

1. Planning

   At this stage, the researcher creating a learning design that contains a Semester Learning Plan (RPS) that has been approved by the Study Program Coordinator.

2. Action

   Learning process is not only carried out in face-to-face classes but also carried out online through the WhatsApp group and zoom meetings as a medium of communication and giving information to one another. The WhatsApp group media is used to send

material, discuss learning materials, and remind students to complete projects given by lecturers.

3. Observation

The stage was carried out by the researcher to observe every event during the implementation of the action using the PjB2L model. Observation activities are carried out in every meeting using observation sheets to determine the improvement in creativity of students.

4. Reflection

At this stage, the researcher carried out several processes in achieving the reflection stage and discussed with peers. Discussions include successes, failures, and obstacles encountered during the action. The data obtained is then selected what is needed and can be used as a reference in compiling research reports. After getting an overview of the problems and obstacles found in cycle 1, the next step was for the researcher to rearrange the activity plan to get good results in the second cycle.

Data collection

Data collection used in this classroom action research used observation guidelines to assess the product of the project in the form of football learning videos.

Data analysis techniques

1. Calculating the average student creativity with the following formula:

$$\overline{X} = \frac{\sum X}{\sum N}$$

$\overline{X}$ = mean

$\sum X$ = total of score

$\sum N$ = total of students

2. Calculating classical completeness with the following formula:

$$\frac{\text{students who completed}}{\text{total of students}} \text{ x } 100\%$$

RESULT

Studies were conducted with two cycles each cycle consisting of five meetings. Cycle 1 was held on September 2-30, 2020, while cycle 2 was held on 7 October - 4 November 2020. The level of student creativity in producing products can be observed through media indicators, the language used by students in delivering material in the learning video, the variation of material presented by students in the learning video, the variation of teaching, the clarity of the video. The results of each indicator in each cycle can be seen in table 1 below.

Table 1. The Result of Research

Indicators	Cycle 1	Cycle 2
Media	72	77
Language	80	87
Material	76	82
Teaching	75	85
Video	77	87
Mean	76	84
Completed	23	30
Not finished	10	3
Classical completeness	70%	90%

Based on table 1 it can be seen that in cycle 1 the media used by students in making learning videos has a score of 72, the language used by students in delivering material in the learning video has a score

of 80, the variation of the material presented by students in the learning video has a score of 76, the teaching variation used by students in teaching the material in the learning video has a score of 75, the clarity of the learning video, namely the quality of the images and sounds in the learning video have a score of 77, and classical completeness is known that in cycle 1, 70% of students completed.

Based on table 1, it can be seen that in cycle 2 there was an increase in each indicator. The media used by students in making learning videos has a score of 77, the language used by students in delivering material in the learning video has a score of 87, the variation of material presented by students in the learning video has a score of 82, the teaching variations used by students in teaching material in The learning video has a score of 85, the clarity of the learning video, namely the quality of the images and sounds in the learning video, has a score of 87, and classical completeness is known that in cycle 1 there are 90% of students who complete.

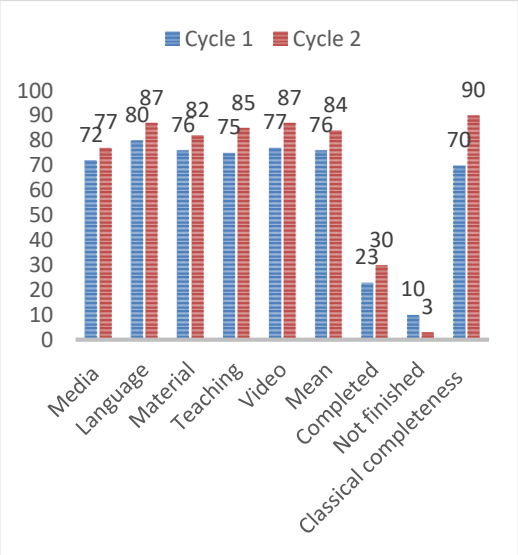

Fig 1. Graphic

DISCUSSION

Creativity is the ability to imagine, interpret, and put forward ideas and efforts that have been created for new combinations of existing elements so that quality improvements in self-development can be obtained (Tirtiana, 2013). This is in line with (Saefudin, 2012) that creativity is a product of the ability to produce a new way or something in dealing with a problem or situation. The product referred to in this research is the Sepak Takraw learning video for elementary and middle school. The PjB2L learning model is a combination of project-based learning and blended learning models which are integrated with the form of various information and communication technology learning media and emphasize the product as the end of learning activities (Putri & Hendawati, 2018).

The PjB2L learning process is carried out with a percentage of 50% face-to-face and 50% online. The steps of the PjB2L learning process in this study consisted of five steps. In the first step, namely dividing the groups and determining projects that are carried out online by lecturers and students using the zoom meeting media. In this step, students in groups are required to compile an observation instrument to find data about problems that occur in learning Sepak Takraw. This is done to support students' creative thinking skills in developing ideas to produce more detailed projects (elaboration). This step is done online by looking for various references on the internet such as articles and learning videos on YouTube. This process is very helpful for students in determining the theme of the project to be worked on.

In the second step, plan, design, and schedule the implementation of a modified football technique learning video project. The process in the second step is still carried out online using the WhatsApp group and zoom meeting. Each group presents the plan, design, and schedule set to complete the project that has been determined. At this stage, the lecturer provides feedback on presentations made by students, provides suggestions on project designs so that they will produce good products.

In the third step, it is still carried out online, namely completing the project with facilities and teacher monitoring. In this step, students personally begin to make videos of learning basic techniques of Sepak Takraw based on problems found in various sources or references, this activity supports the ability to think creatively, namely the ability to generate many ideas, because of the various problems that occur in schools students are trained to find various solutions. the solution. Besides, the activity of making learning videos will train students' ability to generate various ideas and even new ideas that have never been done by people before. Making videos is carried out during lecture hours and is continued after the lecture so that students have a long time to complete the project.

The fourth step is carried out face-to-face, namely the presentation and demonstration of the project results. Students in groups present and demonstrate the results of the project in the form of a video learning the basic technique of Sepak Takraw which is modified so that it can be implemented by students at the primary and secondary school level. Presentations and demonstrations provide an opportunity for each group to get assessments and suggestions from other groups as well as from lecturers who teach courses so that they can correct deficiencies in the resulting project.

The final step is an evaluation of the project process and results. At this stage, it is done face to face. Students at the end of the lesson evaluate the activities and results of project assignments. The evaluation process on project assignments can be done individually or in groups. In the evaluation stage, students are allowed to share their experiences while completing developing project assignments with discussions to improve performance during the complete project. At this stage, feedback is also carried out on the processes and products that have been produced.

Based on the results of observations in cycle 1, it is known that the creativity of students in making instructional videos is not fully following the predetermined success indicators. The reason is that they have difficulty in developing the basic techniques of learning materials for Sepak Takraw. The deficiencies that occurred in cycle 1 were found that students still use drill techniques in presenting learning material, the lack of competitive game elements for students, the learning media used are still very simple and less interesting, variations in learning are still monotonous, the language used by students in delivering material is still difficult to understand. These students turned out to be students who tended to be passive and kept quiet during the learning process.

Some of the deficiencies in cycle 1 were caused by several factors, including the unstable internet signal which caused the lecturers' explanation through zoom

meetings to be unclear, the lack of learning resources owned by students in making learning videos. The results of this study are also supported by previous research which states that internet signals are an inhibiting factor in the online learning process using the zoom meeting application (Haqien & Rahman, 2020; Anugrahana, 2020; Nopiyanto, 2020). Similar research also states that learning resources have a positive significant relationship with learning outcomes (Prasetyo, 2018) other than that learning resources owned by students determine the success of the learning method applied by lecturers (Warsita, 2018). The deficiencies that occur in cycle 1 become a reference improvement in cycle 2.Therefore, in the next cycle, the lecturer will involve students more in the learning process, provide learning resources that can be accessed by students, provide input for improvements regarding learning videos that are considered not showing creativity the expected.

In cycle 2, student creativity increased which was marked by increasingly varied learning methods, lots of game and competitive elements, varied learning media, and the language used by students was easy to understand. Increasing student creativity in cycle 2 cannot be separated from the role of the lecturer who guides students intensively in completing projects. The process mentoring can be done online through the application WhatsApp group and zoom meeting. This application facilitates the process of discussion, guidance, and becomes an effective in the online learning process (Pustikayasa, 2019; Langi, 2021). Besides that, with online learning, students can access various learning resources on the internet so that it helps students in completing projects making of Sepak Takraw videos (Gikas & Grant, 2013). With online learning, study time becomes more flexible and longer so provides ample opportunities for students to complete projects on time (Firman & Rahayu, 2020).

Increased student creativity in developing teaching materials through video learning basic techniques of Sepak Takraw cannot be separated from the model PjB2L that is applied by lecturers. The learning process using PjB2L directly involves students producing a project. This learning model further develops solving skills in working on a project that can produce something. In its implementation, this model provides broad opportunities for students to make decisions in choosing topics, conducting research, and completing a particular project. Students work in real terms and produce products realistically to solve existing problems (Sari & Angreni, 2018).

Through the PjB2L students develop problems in groups, so that they will automatically develop their research abilities. With groups that have varied members and one person who is an expert in the group, it will make it easier for students to carry out discussions and solve problems so that they can produce the desired product (Nopiyanto & Raibowo, 2020). PjB2L has a very important and beneficial advantage for students. The process in this model accustoms students to collaborating scientifically according to other cooperative models (Purbowo, Boy & Budiarti, 2018). By learning in groups, students can also practice the language used in delivering learning materials so that it is very effective in correcting language deficiencies in cycle 1. Also, by learning groups students can provide input

to improve the deficiencies of the projects produced in cycle 1 so that in cycle 2 for the better.

PjB2L learning combined with blended learning designs and implements learning both in terms of content and delivery, which is done online. In this case, students do not only rely on the material provided by the lecturer, but can search for material in various ways, including searching the library, asking classmates or friends online, opening websites, looking for learning materials through search engines, portals, or blogs, or it could be with other media in the form of learning software and learning tutorials. Various innovations in the use of learning technology can very easily be searched for and used, making the combination of classical learning with online-based learning a very appropriate choice in the current technological era (Widiara, 2018). Based on the results of previous research, it was known that the application of PjB2L was able to increase student creativity in producing products that had been determined in learning (Lou et al, 2012; Siregar & Manurung, 2020).

CONCLUSION

The conclusion in this study is that the application of project-based blended learning can increase creativity for students making Sepak Takraw learning videos. The product in this research is in the form of a learning video that is still simple. It is hoped that for further research can develop Android-based Sepak Takraw learning materials.

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