

## **IMPROVING STUDENT CREATIVITY IN PHASE F BY USING THE PROJECT BASED LEARNING (PjBL) LEARNING MODEL AT SMAN 2 PADANG PANJANG**

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### **ABSTRACT**

In 21st-century education, students are required to have global competencies. Therefore, they are expected to be able to combine their knowledge and skills. One learning effort that can overcome this problem is implementing the Project Based Learning (PjBL) model, assisted by the use of learning media, namely dioramas. In project-based learning, students are encouraged to be more active, independent, and creative in solving a problem. With this in mind, in school learning, educators should be able to select and use models, strategies, approaches, methods, and media that involve students in learning, both mentally, physically, and socially, so that active, creative, and independent learning can be created. This devotion is motivated by the presence of students who are seen when educators explain and explain, there are still students who do not pay attention. There are still students who talk to their neighbors, lack enthusiasm in participating in learning, students feel bored, sleepy, lazy to learn, and many students play with their mobile phones during the learning process. This can have an impact on declining grades from learning outcomes. The existence of the Project Based Learning (PjBL) learning model can increase students' creativity in absorbing information in learning activities, so that learning objectives can be achieved.

Keywords : Creativity, Models, Project Based Learning

### **ABSTRAK**

Pada pendidikan abad ke-21, peserta didik dituntut untuk memiliki kompetensi global. Oleh karena itu, mereka diharapkan mampu memadukan pengetahuan dengan keterampilan yang dimiliki. Salah satu upaya pembelajaran yang dapat mengatasi permasalahan tersebut adalah melalui penerapan model Project Based Learning (PjBL) berbantuan media pembelajaran, yakni diorama. Dalam pembelajaran berbasis proyek, peserta didik didorong untuk lebih aktif, mandiri, dan kreatif dalam memecahkan suatu permasalahan. Menyikapi hal tersebut, dalam pembelajaran di sekolah, pendidik hendaknya mampu memilih dan menggunakan model, strategi, pendekatan, metode, dan media yang melibatkan peserta didik dalam pembelajaran, baik secara mental, fisik, maupun sosial, sehingga dapat tercipta pembelajaran yang aktif, kreatif, dan mandiri. Pengabdian ini dilatarbelakangi oleh adanya fenomena di mana saat pendidik menyampaikan penjelasan, masih terdapat peserta didik yang tidak memperhatikan. Masih ditemukan peserta didik yang berbicara dengan teman sebangku, kurang antusias dalam mengikuti pembelajaran, merasa bosan, mengantuk, malas belajar, dan banyak yang memainkan gawai selama proses pembelajaran berlangsung. Kondisi ini dapat berdampak pada menurunnya nilai hasil belajar. Kehadiran model pembelajaran Project Based Learning (PjBL) dapat meningkatkan kreativitas peserta didik dalam menyerap informasi pada kegiatan pembelajaran, sehingga tujuan pembelajaran dapat tercapai.

Kata Kunci: Kreativitas, Model, Project Based Learning

### **INTRODUCTION**

Education is a learning process in the form of teaching and learning activities, where interactions occur between students and educators. In the field of education, educators play a role as educators who guide students to be able to develop knowledge and can change the condition of students from ignorance to knowledge (Taula, 2018). Education is seen as one of the main factors determining economic growth, namely through increasing the productivity of the educated

workforce, and education is also seen as having a vital role in ensuring the development and sustainability of the nation (Sari, 2016). Education is a conscious and planned effort to create a productive atmosphere and learning process to actively develop one's potential in having religious, spiritual abilities, self-control, personality, intelligence, morals, and skills needed by themselves and society (Zulherman, 2021). Currently, a new curriculum is present, namely the independent curriculum. Where the independent curriculum is interpreted as a learning design that provides opportunities for students to learn calmly, relaxed, fun, stress-free and pressure-free, to demonstrate their natural talents. An educator in delivering material needs to choose a model that is appropriate to the class situation or students so that they feel interested in participating in the lesson. In the current independent curriculum, educators are expected to choose innovative learning models, one of which is the Project Based Learning model (Nurhadiyati, 2021).

The Project Based Learning (PjBL) model is an application of active learning. Simply put, project-based learning is defined as a teaching method that attempts to link technology with everyday life problems familiar to students, or with school projects. The project-based learning model has enormous potential to create a more engaging and beneficial learning experience for students. Educators only act as facilitators, evaluating the products of students' work displayed in the results of the projects they have worked on, resulting in tangible products that can encourage students' creativity so they are able to think critically in analyzing factors in problem concepts (Titu, 2015). One of the learning processes in question is geography. Geography is one of the subjects in a group of materials that require memorization. Geography learning only emphasizes abstract concepts. Students are not yet able to apply them even though they are able to memorize all geographic concepts well. Where facts show that geography learning in schools tends to be rote and in the cognitive aspect of geography learning is still low, seen from the practice questions given in the form of theoretical explanations, so it does not connect with the real conditions that exist in the lives and environments around students. In 21st-century education, students are required to possess global competencies. Therefore, they are expected to be able to combine their knowledge and skills (Harizah, 2022).

One learning effort that can overcome these problems is implementing the Project Based Learning (PjBL) model assisted by the use of learning media, namely dioramas. In project-based learning, students are encouraged to be more active, independent, and creative in solving a problem (Safitri, 2018). With this in mind, in geography learning in schools, educators should be able to select and use strategies, approaches, methods and media that involve students in learning, both mentally, physically and socially, so that active, creative and independent geography learning is created (Astuti, 2016). The use of information and communication technology in the learning process is still lacking, sometimes only using learning media such as textbooks and notebooks to record the material that has been explained, and educators often use the lecture method in teaching, which results in students feeling bored in learning geography. The learning implemented is not appropriate to the characteristics of students. Educators tend to take lots of notes while students do not like to take lots of notes. Students tend to prefer learning that uses media during the teaching and learning process. Therefore, in this problem, educators should be able to carry out evaluations to improve learning models and strategies that can foster learning creativity in students so that in the learning process, students' learning creativity increases.

The problem that arises is the importance of creativity for students, but in fact this skill is actually ignored by most educators, this is supported by Lestari et al. (2021) creative thinking is something that is less noticed in learning, because educators are more dominant in paying attention to cognitive and computational abilities of students. In fact, with the creativity that exists in students, students will easily solve problems in everyday life, in addition, according to Riyadi (2019) students

who have high creativity tend to have a high curiosity, and usually will not be satisfied with just the educator's explanation and will ask a lot of questions and try other solutions and try new things, this can improve other skills such as students indirectly become more critical and critical students tend to have an impact on cognitive. Educators must optimize 21st century skills, especially creativity, by using models that suit the personality of students. Students who have just entered grade X have a kinesthetic learning style, so there needs to be activities that provide direct experience, not just lectures. Students with a dominant kinesthetic learning style will tend to develop in learning, the use of the Project-based learning (PjBL) model is a solution to the problems encountered by educators. To increase creativity, it is deemed necessary to implement learning that encourages students to be more creative. One such learning model is the project-based learning model. The project-based learning model is a learning model that involves focusing on questions and problems, problem solving, decision making, the process of searching for various sources, closing with a presentation of real products. The project-based learning model focuses on the core concepts and principles of a discipline, facilitating students to investigate, problem solve, and other meaningful tasks, centered on students (students centered) and producing real products.

Project-based learning requires students to complete a project that must be completed. The active role and participation of students will be carried out gradually in achieving academic achievement by using a project-based learning model by carrying out preparation and planning activities, exploring topics more deeply and generating ideas that can be used to create a project or product depending on the learning topic that will be presented, results and assessment. Aninda et al. (2019) explained, the project-based learning model as learning that will produce work in the form of products developed through activities carried out by students in groups by organizing learning, carrying out research or learning activities, solving problems and therefore, the application of the PjBL learning model was chosen in this study because it can facilitate students with a dominant learning style is kinesthetic and does not rule out the possibility of students with an audio-visual learning style can also express themselves directly so as to improve students' creativity skills.

## **METHOD**

The target of this community service activity is the Teachers of SMAN 2 Padang Panjang. The community service activity method used is Lecture Plus Demonstration and Practice (CPDL). This method is a combination of lecture, demonstration and practice methods. Learning methods that use more than one Information Technology method are lecture methods, demonstration methods accompanied by practice. The implementation of activities in this community service is in the form of stages of Information Technology distribution of Information Technology products, Development of Efforts to Increase Student Learning Creativity Phase F Using Project Based Learning (PjBL) Project Based Learning Model, technical guidance with lecture methods regarding the delivery of material about the Project Based Learning (PjBL) learning model based on Information Technology and demonstrations of designing Information Technology-based learning models.

## **RESULTS AND DISCUSSION**

The transition from the 2013 Curriculum to the Kurikulum Merdeka (Merdeka Curriculum) is underpinned by advancements in knowledge and pedagogy, particularly in the fields of Neurology, Psychology, Observation-Based Learning, and Collaborative Learning. This curricular shift directly impacts the instructional models employed in school teaching activities.

One of the highly recommended instructional models is Project-Based Learning (PjBL). Through this model, students actively investigate and learn by engaging with real-world contexts. In

this learning approach, students work both collaboratively in teams and individually, fostering a transition from fact-based thinking to higher-level critical thinking.

The Project-Based Learning model utilizes projects as the core of the instructional process, wherein students engage in exploration, evaluation, interpretation, and synthesis of information to achieve comprehensive learning outcomes in knowledge, skills, and attitudes. Furthermore, learning through this model allows students to practice and develop their inductive reasoning skills. Consequently, the PjBL model is highly aligned with pedagogies aimed at fostering Higher-Order Thinking Skills (HOTS).

A learning process that aligns with the criteria of the Kurikulum Merdeka must incorporate the 5M scientific approach: mengamati (observing), menanya (questioning), mengumpulkan informasi (gathering information), mengasosiasi (associating/reasoning), and mengkomunikasikan (communicating).

#### 1. Steps in the Project-Based Learning Model

##### a. Problem Presentation

The problem is presented in the form of a question. The initial question is an essential (important) question that can motivate students to engage in learning. The assignment topic is based on a real-world context relevant to the students and begins with an in-depth investigation.

##### b. Planning

Planning is carried out individually between the teacher and students. This is expected to give students a sense of ownership over the project. The planning includes the rules of the game, the selection of activities that can support answering the essential question, by integrating various possible subjects, and identifying accessible tools and materials to assist in project completion.

##### c. Scheduling

The teacher and students jointly develop a schedule of activities to complete the project. Activities undertaken at this stage include: a) Creating a timeline (time allocation) for completing the project; b) Creating a deadline (final deadline) for project completion; c) Leading students to plan new approaches; d) Guiding students when they create methods unrelated to the project; and e) Asking students to explain (reason for) the choice of a method.

##### d. Monitoring Project Creation

Students' work must be monitored and facilitated throughout the process, at least at two stages (checkpoints). Facilitation also needs to be provided by providing opportunities for students to work in the classroom or other facilities, if needed. Teachers need to monitor the implementation of the process and provide rubrics and instructions on what to do for each learning content.

##### 1) Conducting Assessment

Assessment is conducted authentically, and teachers need to vary the types of assessments used. Project assessment is an activity that assesses a task that must be completed within a specific time period. The task takes the form of an investigation, starting from planning, data collection, organizing, processing, and presenting data. Project assessment can be used to determine understanding, application skills, investigative skills, and the ability to apply skills in creating products or works.

##### 2) Evaluation

Evaluation is intended to provide students with the opportunity to reflect on their learning, both individually and in groups. Students need to share feelings and

experiences, discuss what worked, discuss what needs to be changed, and share ideas that lead to new inquiries.

## 2. Advantages and Disadvantages of the Project-Based Learning Model

### Advantages of Project-Based Learning:

- 1) Increases students' motivation to learn, fosters their ability to perform important tasks, and fosters their need to be recognized.
- 2) Improves problem-solving skills.
- 3) Enables students to become more active and successful in solving complex problems.
- 4) Encourages students to develop and practice communication skills.
- 5) Improves students' resource management skills. Provides students with learning and practice experiences in organizing projects, allocating time and other resources, such as equipment, to complete assignments.
- 6) Provides complex learning experiences that engage students and are designed to evolve in the real world.
- 7) Creates a fun learning environment, so that both students and educators enjoy the learning process.

### 3. Disadvantages of Project-Based Learning:

- 1) Requires a lot of time to solve problems.
- 2) Requires considerable costs.
- 3) Many instructors feel comfortable in classes where the instructor plays a central role.
- 4) The large amount of equipment required.
- 5) Students with weaknesses in experimentation and information gathering will experience difficulties.
- 6) There is a possibility that students are less active in group or individual work.
- 7) When topics are assigned individually, there is a concern that students will not fully understand the topic.

To address the weaknesses of project-based learning mentioned above, educators must be able to facilitate students in addressing problems, limit the time students spend completing projects, minimize and provide simple equipment available locally, select research locations that are easily accessible to minimize time and expense, and create a pleasant learning environment so that instructors and students feel comfortable in the learning process. This community service program aims to increase the creativity of Phase F students using the Project-Based Learning (PjBL) model. Based on the results of the community service program provided to teachers who have received material on the Project-Based Learning (PjBL) model, it is hoped that this will increase the creativity of Phase F students using the Project-Based Learning (PjBL) model at SMAN 2 Padang Panjang.





Figure 1. After Providing Material to Teachers at SMAN 2 Padang Panjang



Figure 2. Discussion between the Principal, Deputy Curriculum Manager and Lecturers



Figure 3. Lecturers, Subject Teachers, Students and Pupils

## RESULTS AND DISCUSSION

Based on the results of community service at SMAN 2 Padang Panjang entitled "Increasing the Creativity of Phase F Students by Using the Project Based Learning (PjBL) Learning Model at SMAN 2 Padang Panjang. Educators are required to be able to carry out learning through various learning models and media. Educators still need to improve their competence, especially in terms of using information technology-based media and learning models in learning activities. This can be done by honing their talents through exercises. The use of the project based learning model makes learning activities more interesting and makes it easier for teachers and students to access them. Student interest in learning can increase thanks to this project based learning model. Teachers can also share content using these learning resources, so that learning outcomes and objectives are still achieved.

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