

Optimizing the Implementation of Project-Based Learning 21st Century Learning Models for Elementary School Teachers

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ABSTRACT

The purpose of this Community Service activity is to conduct training on the implementation of the 21st Century learning model, namely the Project Based Learning model. This service was carried out at the Wahidin Sudiro Husodo Group, Jumapolo District, Karanganyar, Central Java with 30 participants who were representatives of 8 Elementary School Teachers. The method of implementing this community service activity is the Participatory Action Research method. This Participatory Action Research method consists of the stages of planning (plan), action (action), observation (observe), and reflection (reflection). The results of this community service activity were in making Project Based Learning Implementation Plans (RPP) as many as 88% of participants stated that the training provided was beneficial and those who had not previously implemented the Project Based Learning learning model understood its implementation in learning.

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INTRODUCTION

Education is the key to success in changing the nation, one of the efforts to improve the quality of education in the 21st Century learning era, the government always perfects the curriculum. The current curriculum is a combination of the merdeka curriculum and the 2013 curriculum. The independent curriculum is an emergency due to the Covid-19 pandemic which has lasted for about two years in Indonesia. 2013. In the 2013 curriculum, the method applied is a science-based approach or commonly known as a science-based approach, where in the core learning activities, when using this method students can carry out five activity steps. (Mertasari et al., 2022). The five main learning activities with a scientific approach are observation, asking questions, gathering information, reasoning, and communication. (Izzuddin, 2021). However, teachers still find it difficult to combine the five steps of the scientific method with the existing learning model syntax. The scientific approach is carried out with direct and indirect learning models. This scientific approach is considered a golden gate for the formation and development of students' attitudes, skills, and knowledge. (Supriyadi & Riyadi, 2018). In the 2013 curriculum in the 21st-century era as the application of a scientific approach, there are several alternative learning models that teachers can choose to adapt to the subject matter (Pahrudin, Agus, and Pratiwi, 2019). This program's learning model is an operational and conceptual learning framework that has names, characteristics, sequences, logic, parameters, and culture. Learning models for the 21st-century Curriculum 2013 include discovery learning, project-based learning, problem-based learning, and question-based learning. (Mayasari et al., 2016).

The learning model is a model that is used as a guide in planning learning in the classroom. The learning model can be defined as a conceptual framework that describes a systematic process of organizing learning experiences to achieve learning goals in schools. (Farias et al., 2019). To be able to adapt learning models to the demands of curriculum changes, teachers must have adequate knowledge of approaches and learning models that are by the current curriculum. Learning models are very important for proactively managing the learning process in class. (Baderiah, 2018). Active learning is the most popular strategy in the world of learning today and that is the mission of the 21st century 2013 curriculum. (Nurdyansyah & Fahyuni, 2016). The assumption used in active learning is that students become the master body of learning, while the teacher positions himself as a companion, director, or facilitator. Almost all educators believe that active learning produces results and that students are creative and able to respond to problems they face in the real world, especially in the 21st century. (Kurniawati et al., 2019). Exploratory learning, project-based learning, problem-based learning, and question-based learning are examples of models that require active students. Meanwhile, the four models must be mastered and applied by the teacher in learning, applying the 21st century 2013 curriculum. (Hotimah, 2020). However, there are still teachers who do not fully understand the above model. Based on interviews with school supervisors, school principals, and several teachers at SD Gugus Sudiro Husodo, Jumapolo District, Karanganyar, most admitted that they did not understand exploratory learning models, problem-based learning and question-based learning, especially project-based learning. They know that these four models are suitable for a scientific approach, but they admit that they have not been able to apply all four. Furthermore, the teacher does not yet know how to combine the five stages of the scientific method (5M) with the syntax of the four models. Most teachers admit that they have not been able to develop lesson plans using this model, especially the project-based learning model.

IMPLEMENTATION METHOD

This Community Service activity was carried out in the Wahidin Sudiro Husodo Group, Jumapolo District, Karanganyar Regency, Central Java Province which consisted of 8 elementary schools with 30 participants. The method used in this activity is the PAR (Participatory Action Research) method which consists of the stages of Planning, Action, Observation, and Reflection. (Grace & Mirnawati, 2020). The stages of implementing the service are as follows:

a. Planning (Plan)

Activities carried out in the planning stage include:

1. Field observations and discussions with school principals and supervisors in the Wahidin Sudiro Husodo Cluster, Jumapolo District. This activity aims to provide information related to the implementation of community service programs and to record the problems faced by elementary school teachers in the Wahidin Sudiro Husodo Cluster, Jumapolo District.
2. Prepare training presentations.

The training is structured by displaying PowerPoint material on an educational game-based LCD screen, and participants carry out hands-on practice in preparing learning implementation plans.

b. Action (Action)

At this stage of action, the activities carried out are:

1. Socialization of activities and giving invitations to training participants.
2. Explanation of the material to the training participants regarding the implementation of the 21st Century learning model, namely Project Based Learning.
3. The practice of preparing RPP based on Project Based Learning.

c. Observation (Observe)

The activities carried out at this stage are analyzing the level of success of the level of understanding and preparation of RPP based on Project Based Learning.

d. Reflection

Activities carried out at the reflection stage are providing assistance and discussion with training participants about the obstacles experienced during the preparation of Project Based Learning-based RPP.

RESULTS AND DISCUSSION

The Wahidin Sudiro Husodo Cluster is one of the three clusters in the Jumapolo District, Karanganyar Regency, Central Java Province. The Wahidin Sudiro Husodo Cluster consists of 8 elementary schools. In service activities, the description of the results of activities in the Wahidin Sudiro Husodo Cluster is adjusted to the Participatory Action Research (PAR) method which consists of 4 cycles of Observation, Planning, Action, and Reflection.

1. Planning Stage

The implementing team carried out initial observations to collect data on the understanding and ability of teachers in preparing Project Based Learning-based lesson plans. The results obtained show that almost 95% of teachers in elementary schools have never applied the Project Based Learning learning model, they usually only use the learning model that was commonly used before, and most of them are still teacher-centered. Activities carried out by the implementing team included holding a meeting with the supervisor of Gugus Wahidin Sudiro Husodo about the training implementation plan. The results of this meeting showed that the Wahidin Gugus Superintendent Sudiro Husodo welcomed the planned implementation of this training activity. Furthermore, the implementing team made presentations for presentations in the training session and designed a training scheme for implementing the 21st Century learning model, namely the Project Based Learning learning model to improve the pedagogic competence of primary school teachers in the 21st Century. The training scheme contains resource persons who will provide material, the material to be delivered. resource persons and rundown or schedule of training activities. Next, the implementation team reviewed various references on the preparation of the Project Based Learning model lesson plans to be as attractive as possible. Furthermore, the implementation team determined the participants who would take part in the training, namely 30 elementary school teachers in the Wahidin Sudiro Husodo Cluster.

2. Action Stage

The activity carried out is training on the implementation of the 21st Century learning model with the Project Based Learning model. Furthermore, 2 sessions of activities were given, the first session was the introduction of learning models in the 21st Century.



Figure 1. The Service Team provides training session 1.

The material content of this training is related to 21st Century Learning and accompanied by examples of learning models that are by the demands of the 21st Century. The next activity in session 2 is an introduction accompanied by the preparation of lesson plans for Project Based Learning learning models.



Figure 2. The Service Team provides training material for session 2.

The next activity is the practice of preparing Project Based Learning lesson plans.

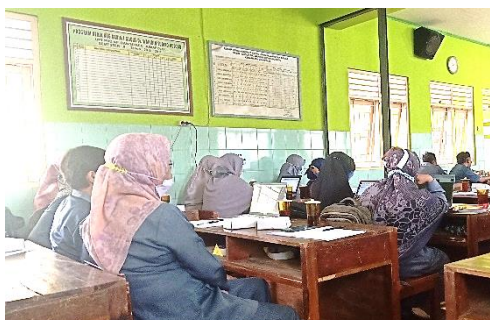


Figure 3. The practice of preparing lesson plans for the Project Based Learning model.

3. Observation Stage

The activity carried out at this stage is to analyze the level of understanding of the Project Based Learning learning model material and the success in preparing the Project Based Learning model lesson plan. From the observations, it was found that 5% of teachers answered difficulty, 7% of teachers answered moderately, and 88% of those answered easy. Thus, the majority of teachers answered that it was easy to understand and prepare lesson plans related to the implementation of the Project Based Learning learning model.

The teachers when compiling the Project Based Learning model lesson plan can develop a syntax that is by the syntax and principles of the Project Based Learning model. The results of the preparation of the RPP are then uploaded to Google Drive.

4. Reflection

Activities carried out at the reflection stage are providing assistance and discussions with training participants in the preparation of the Project Based Learning model lesson plans. Some of the results of the preparation of participants include the following:

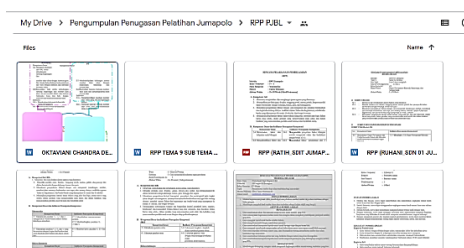


Figure 4. The results of the practice of preparing the RPP for the Project Based Learning model.

Training on the implementation of the Project Based Learning learning model in the 21st Century is very useful, this is evidenced by the results of the questionnaires distributed by the teachers as many as 88% feel the benefits and experience an increase in pedagogic competence in terms of implementing learning models that are by the needs of the 21st Century. Most of the teachers who initially did not understand the importance of teachers understanding the needs of the 21st Century and adjusting their learning models became understanding and more stable in pursuing learning for their students at school. So it is hoped that the learning outcomes achieved can be optimal and by the demands of the 21st Century.

CONCLUSION

Community service activities in the form of training in the application of the 21st-century learning model with a project-based learning model. This service was carried out in the Wahidin Sudiro Husodo Group, Jumapolo District, Karanganyar Regency, Central Java Province with 30 participants. The method of implementing this community service activity is the Participatory Action Research method. The PAR method includes planning, action, observation, and feedback phases. The results of this service activity are manifested in the preparation of a Learning Implementation Plan (RPP) with a project-based learning model that is relevant

to 21st-century learning. As many as 88% of teachers stated that this training was useful and those who had not implemented the project-based learning model understood and understood its implementation in learning.

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