How to Develop a Project-Based Learning (PBL) Model on the Batobo Tradition in Elementary School

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Abstract

Learning models appearing in the classroom are psychologically far from students' daily lives, despite the fact that there are numerous traditions available to students that might form the basis for the development of a learning model. This study was intended to produce a model of Project Based Learning (PBL) based on Batobo. The Batobo tradition performed by Kuantan Singingi people in Riau is a tradition of working together on an agricultural land. This study used research and development (R&D) proposed by Borg and Gall stages to develop the tradition based learning model. The data collection technique started from conducting a literature review, interviewing groups or community leaders and designing models. The results of the research revealed that Batobo based Project Based Learning model was conducted in five stages in learning included the initiation (*manyamulo*), followed by project planning (*mancangkul/manugal*), project implementation (*mananam*), discussion (*manuai*) and the last stage was evaluation (closing). The Batobo based Project Based Learning model described the learning activities carried out by referring to the Batobo tradition. Based on the results of the study, it can be concluded that the PBL model based on the batobo tradition which consists of five stages of learning developed is suitable for use in elementary schools.

Keywords: *Batobo tradition; elementary school; Project Based Learning*

1. INTRODUCTION

Constructive learning is a learning instruction that prioritizes student activity during the learning. The learning emphasizing students' active participation and learning in the class must be interesting, effective and meaningful. Moreover, students in recent decades have been required to become autonomous, active, creative, critical and motivated. Furthermore, learning that provides opportunities to develop their potential (Hakam, 2012). In addition, the learning carried out should be more contextual, namely the one closest to the student's environment so that it will support the project-based learning process. So that learning activities emphasize more on active students. The

project-based model used is the Project-Based Learning (PBL) model.

The Project-Based Learning (PBL) model is a student-centered form of teaching characterized by student autonomy, constructive inquiry, goal setting, collaboration, communication and reflection in real-world practice (Kokotsaki et al., 2016). Project-Based Learning (PBL) model can make learning more effective, interesting and meaningful (Hasani et al., 2017; Kingston, 2018; Sirisrimangkorn, 2018; Siswono et al., 2018). It provides a good social relationship both inside and outside the classroom, good social rapport between teachers and students which creates better character development (Bates, 2019). PBL is also contextual learning, contextual learning is meaningful, integrated, value-based, challenging and activating learning (Budimansyah, 2019).

Therefore, the PBL model can be developed by combining it with the traditions found in the student environment so that learning becomes more contextual. One of the traditions that can be used is the *Batobo* tradition found in the Kuantan Singingi community.

Batobo is a group of farmer that has a mutual cooperation system called *tobo*. *Tobo* means a person of the same age, then the prefix *ba* is added which means an invitation, *mari* and *ayok.* This traditional farmer organization called *tobo* us ually consists of friends of the same age. Thus, *tobo* is a traditional farmer group consisting of people in the same age, especially house wives, young people of the same age and combination of adults with other young groups. They work the member's fields in turns (Alfindo & Basri, 2016; UU Hamidy, 2014). There are several steps of the *batobo* tradition, namely *manyamulo, mancangkul, mananam, manuai,* and closing (*penutupan).*

Based on the results of the researcher's observations and interviews with several elementary school teachers, information was obtained that in the learning process it was rare to use the traditions that became the local wisdom of the local area as learning materials. In addition, learning is still teacher-centered so that students are less active. In addition, this condition has an impact on students' lack of understanding of the traditions found in their area. Therefore, there is a need for a learning model that can facilitate active student learning while at the same time based on local traditions or wisdom. One of them is by developing PBL model based on the batobo tradition.

The PBL model based on the batobo tradition is a learning model developed by combining the activities contained in the batobo tradition as learning activities in completing projects designed by the teacher. This model aims to facilitate learning activities in the completion of contextual projects that are based on the batobo tradition in elementary schools. This is in line with the contextual concept of learning in elementary schools.

2. METHODOLOGY

This study employed Research and Development (R&D) design as the objective of the study was to produce a

model. According to Borg & Gall (Gall et al., 2010; Nurzayyana, Putra, & Hermita, 2021), R&D is a systemic process for developing, improving, and evaluating programs and materials in education which resulted on products. Borg & Gall proposed the stages of development research, namely: 1) needs analysis, which was aimed to identify the purpose of the product to be developed, 2) instructional analysis, which was identifying specific skills, procedures, and learning tasks, 3) students and context analysis that identify students' behaviour in doing tasks, and students' characters that may affect their learning, 4) writing down performance goals describing students' desired behaviour, 5) assessment instrument development, 6) teaching strategies formulation and development, 7) teaching materials selection and development, 8) designing and conducting formative evaluation, 9) revision, and 10) designing and conducting summative evaluations.

Referring to the ten stages of R&D design, this study was conducted through learning model designing stage, namely 1) preliminary study, and 2) model designing. The first stage was preliminary study which consisted of needs analysis, curriculum analysis, and field study in the school or research site. The second stage was designing which started by describing the stages or syntax of Batobo based PBL model.

3. RESULTS AND DUSCUSSION

This study was conducted based on R&D research design with only two stages of implementation, namely preliminary study and model designing.

Preliminary Study

In the preliminary study, some activities such as literature review, interviews and documentation were carried out. The literature review was conducted by studying some books, articles and documents from various media. Moreover, the interviews were conducted with several community leaders who had the capacity or involved in the Batobo tradition. The documentation was obtained from the available photos of Batobo activities.

The results of a preliminary study that begins with analyzing needs. Refers to one of the foundations of Indonesian education, namely the cultural foundation. This foundation is related to culture. Education and culture have a reciprocal relationship, through cultural education inherited and preserved in the younger generation. Therefore, synergizing learning with local traditions or wisdom in the area where education is carried out is needed. Based on the results of the curriculum analysis that the Education curriculum contains elements of local content. This condition provides an opportunity for teachers to develop materials based on regional characteristics including culture. For example, for a fourth grade elementary school, there is material about the culture in the local area. While in reality it is still rare for teachers to use local wisdom for learning. Therefore, the development of the PBL model based on the batobo

tradition is in accordance with the need to answer the challenges of education.

The Batobo tradition had been carried out for a long time by following the principle of mutual cooperation and kinship to cultivate the land during the rice planting. Its purpose was to cultivate the environment to be agricultural land, both in general groups or in tribal groups. The benefit of Batobo tradition which was carried out in cooperation/mutual cooperation with kinship principle was that farming, considered as a hardworking job, would be easier and completely finished if it was done together.

Some of Batobo activities are presented below.

1. *Manyamulo*, the activity to determine the time, preparation, equipment, and the systems of Batobo.
2. *Mancangkul*, the activity to cultivate the land by using a hoe.   *Mancangkul* activity is shown in figure 1.

Figure   1.   Cultivate   the   Land (Riauin.com, 2019)

3. *Mananam*, the activity to plant the rice seed in the prepared land. Plant Plant The Rice *(Menanam)* in the fields is showing in figure 2.

Figure 2. Plant The Rice

4. *Manuai*, the activity to harvest the rice. *Manuai* activity is described in figure 3.

Figure 3. Harvest the Rice *(Manuai)*

5. Closing, the activity to close the farming activity to mark the end of Batobo.

Project Based Learning (PBL) is a learning model in which students finish a project. The stages of PBL according to Alves (Alves et al., 2015) are preparation, project theme specification, start up, execution, and conclusion.

Model Design
Batobo based Project Based Learning model was developed using the following

construction design. Batobo based PBL construction design described in table 1.

Table 1. Batobo based PBL Construction Design

No	PBL Stages (Alves et al., 2015)	Activities in Batobo Tradition	Syntax of Batobo Based PBL Model
1.	First phase; Preparation	1. First activity *Manyamulo*	Stage 1 Initiation *(Manyamulo)*
2.	Second phase; Project theme specification	2. Second activity; *Mancangkul/manugal*	Stage 2 Project planning (*Mencangkul/Manugal*)
3.	Third phase; *Start up*	3. Third activity; *Mananam*	Stage 3 Project implementation *(Mananam)*
4.	Fourth phase; Execution	4. Fourth activity; *Manuai*	Stage 4 Discussion (*Manuai*)
5.	Fifth phase; Conclusion	5. Fifth activity; *Closing*	Stage 5 Evaluation *(Closing)*

Table 1 describes the construction of *Batobo* based PBL model by referring to the activities in the Batobo tradition. The PBL model had several stages such as preparation, project theme specification, start up, execution, and conclusion. These stages were developed by adopting the stages of traditional Batobo activities into Batobo based PBL model, namely (1) initiation (*manyamulo*); (2) project planning (mancangkul/*manugal*); (3) project implementation (*mananam*); (4) discussion (*manuai*); and (5) evaluation (closing). In essence, the learning design model is an alternative model that can be chosen by the teacher that can be applied in the teaching and learning process (Sapriya, 2015).

The PBL model based on the batobo tradition that was developed aims to take advantage of the batobo tradition found in the students' environment in learning activities. The batobo tradition is used as a learning process and content activity. Thus, the PBL model based on the batobo tradition in learning activities is more contextual in completing the projects being worked on. In addition, through the PBL model based on the batobo tradition, it also increases students' understanding of the tradition which contains many virtues or character values.

The PBL model based on the batobo tradition that was developed has advantages including; (1) can develop the characters contained in the batobo tradition in everyday life, (2) can be used in other different traditions as local wisdom, (3) increase learning motivation, (4) improve quality and learning outcomes.

The PBL model based on the batobo tradition that was developed is implemented in elementary schools

according to the age development of the students. This means that in its application the PBL model based on the batobo tradition is based on the characteristics of students.

Therefore, the PBL model based on the batobo tradition can be used as an effort to pass on and preserve culture through the learning process in education so that it can understand the culture and values contained in it so that it is implemented in everyday life. This is in line with Rarasaning's opinion that it is very important to transform cultural values in society so that they are known, accepted and internalized by the community (Satianingsih et al., 2021).

4. CONCLUSION

The development of Batobo based PBL model which explored the environment for learning referred to the activities of Batobo tradition which then adaped to be the stages of Batobo based PBL model. The stages were (1) initiation (*manyamulo*), (2) project planning (mancangkul/*manugal*), (3) project implementation (*mananam*), (4) discussion (*manuai*), and (5) evaluation (closing). The developed Batobo based PBL model can be implemented in an instruction that emphasizes students' activities.

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