



IMPLEMENTATION OF PROJECT-BASED LEARNING IN THE PSYCHOMOTORIC DEVELOPMENT OF PRIMARY SCHOOL AGE STUDENTS

Ulfa Zahro Br Sembiring¹, Rahel Nazwa Sidadolog²

^{1,2}Elementary School Teacher Education, Faculty of Teacher Training and Education, Universitas
Muhammadiyah Sumatera Utara

Email: ¹ ulfazahro366@gmail.com, ² rahelnzw287@gmail.com

Abstract

The project-based learning model is a variation of learning that involves project work with teacher management carried out by students. This learning requires deeper thinking because the student's task is to create a work. Psychomotor is related to actions and skills. This study aims to describe the application of project-based learning which is adapted to activities that hone students' skills according to the age of elementary school development. In this learning method, the teacher acts as a guide. Project-based learning aims to find solutions to problems. Apart from that, students also learn the concept of problem solving and develop critical thinking skills. Learning critical thinking concepts and skills, students work together in groups to consider real-world problems. It is hoped that learning by applying this learning method can help students be more active and creative, learning from what they see in their environment.

Keywords : Psychomotor Development for Elementary Age, Project Based Learning; Implementation of Project Based Learning

Introduction

Education is a forum that has a role in educating the life of the nation and state, bringing about change for the better. With education one can reduce the poverty of knowledge, reduce ignorance, and solve the problems of the nation and state. (Tarigan: 2022). Meanwhile, according to Ki Hajar Dewantara (Father of Indonesian National Education) explains the meaning of education, namely: Education is the demands in the life of children's growth, as for the meaning, education is guiding all the natural forces that exist. Education in Indonesia has experienced rapid development as a form of change. towards modern learning. In the national curriculum, teachers are free to choose different learning models with the characteristics of different areas of teaching material. A teacher's ability to select and manage learning to improve the quality of teaching must be carefully designed to achieve effective learning. This design includes selection, approaches, strategies, methods and techniques which are arranged into a learning model that is suitable for teaching and learning activities. The learning model is a description of the learning process delivered by the teacher from start to finish. The teacher chooses a learning model that must be appropriate to the characteristics of the subject to achieve certain goals. The Project Based Learning Model or PjBL is one of the learning models used in the 2013 curriculum. According to Wahyu, R. (2012) in PjBL, students are encouraged to be more active in learning, in this case the teacher is only a facilitator and the teacher evaluates the performance product. students include the outcomes that can be displayed from the results of the projects carried out. Elementary school age students can be defined as students who are in the age range of 6-12 years, where students begin to have an environment other than family (Suprptini, 2004 in Nur, 2016). The characteristics of students in the high class period (9-12 years) in elementary school are that they have an interest in concrete, practical daily life, are very realistic, curious and want to learn, towards the end of this period there is an interest in things or special subjects, students need teacher guidance and students view grades as a measure of school achievement. In the Big

Indonesian Dictionary (2008), the project-based learning model is a variation of learning method that includes project work with teacher management carried out by students. Learning requires deeper thinking because the student's task is to create a work of art. Psychomotor Development of Elementary School Students Psychomotor development is defined as physical activity related to mental and psychological processes. Psychomotor skills are related to actions and skills. Psychomotor activity is physical activity related to mental and psychological processes. The psychomotor field is related to physical activity and practical learning skills, for example running, jumping, painting, dancing, writing, etc. In the cognitive aspect, the theory of knowledge is more emphasized and the affective aspect is found in both aspects. Teachers prioritize students' cognitive and affective aspects and pay little attention to psychomotor aspects only during the actual learning process. Although students must develop according to their physical, psychological, social and spiritual needs.

Research Methodology

In writing this article using the literature review method. Literature refers to all written works that can be used as references or references in carrying out various fields of scientific research or writing. In Indonesia, literature is better known as literature. In the Big Indonesian Dictionary (KBBI), literature is reading material used in various activities, both intellectual and recreational. This document is used as a reference because it is considered to contain a lot of valid data. Apart from that, literature is also considered to have many eternal benefits. In other words, literature will never die but will continue to exist and develop. The definition of a review is a summary or review that comes from several sources, such as films, books, news and journals. Apart from that, reviews can also come from several products that we usually do after finishing online shopping. The content of this literature review is in the form of an explanation or theoretical discussion of an exploration or research topic. From the explanation of these theories, it can be used as a theoretical basis for creating scientific work or carrying out research activities. Apart from that, this research can be a development of previous research or it can also be research that is being conducted for the first time. By reviewing the literature, it will be known whether the written work can be used as a reference in research (scientific work). Literary reviews are also very useful for creative writers because they know what needs to be done to improve the quality of their written work.

Result & Discussion

Project Based Learning

Project-based learning is a form of learning that is emphasized in the 2013 curriculum because it is included in the modern learning model. This learning connects technology with the problems students face in everyday life. This learning produces work or products through a combination of procedural knowledge and skills. This learning is implementing student-centered teaching methods. According to the Big Indonesian Dictionary, "A project is a work plan that has a specific goal and a definite completion time." In creating work in a project, what is assessed is the student's ability to handle work, creativity and activities in the learning process in such a way that it has an impact on improving student learning outcomes. Continuous project learning provides various opportunities for children to work together and play with friends. As (Mursid, 2015) said, using the project method can make children accustomed to doing group tasks, working together, playing, and obeying existing rules, so that these habits lead children to be able to act independently without having to be ordered first. According to Sudjana (2013), learning outcomes are student competencies obtained after learning that students have carried out in cognitive, affective and psychomotor aspects. These results can be obtained from assessment activities carried out by teachers to obtain real evidence according to the level of students' ability to absorb learning. Project-based learning has certain standards (Thomas, 2000), namely: (1) Centralized/central. The teacher acts as a facilitator who provides learning facilities and as a mentor in guiding students according to the curriculum and understanding the concepts of material content through projects (2) Controlled questions. Focuses on questions that stimulate students to learn concepts and learning principles (3) Investigation. Students' ability to develop skills in an investigation includes designing, decision making, problem discovery and solution discovery (4) Autonomy. Students' independence in choosing flexible working hours and responsibilities and acting as decision makers and solution seekers (5) Realistic/real. Student activities are focused on actual situations on daily life challenges, focusing on questions and appropriate solutions in the field.

Psychomotor development

Development is an increase in capacity for more complex body structures and functions in a regular and predictable pattern, as maturity increases. The physical or human body is a beautiful and complex organic system. All of these organs are formed prenatally (in the womb). Psychomotor development is the development of the

ability to control body movements through coordinated activity between the central nervous system and muscles. It starts with sudden movements involving most of the body, such as sitting, walking, running, jumping, etc. Then proceed with coordinating fine movements such as reaching, holding, throwing, etc., both of which are necessary in everyday life and are natural. It is considered an automatic ability, so its development has received little attention. The acquisition of these abilities leads to the formation of skills. Motor skills are divided into two types, namely (1) fine motor skills, such as finger dexterity, writing, drawing, catching a ball, etc. (2) Gross motor skills, including muscle activities such as walking, running, going up and down stairs, jumping, etc. The development of motor skills is a very important factor for overall personal development. In student growth and development, physical and motor development plays a very important role because the child's growth and development process will influence the child's life in the future. Apart from that, it also influences other aspects of development, such as cognitive, social and emotional development. Don't we all know the saying "In a healthy body, there is a healthy soul?" For teenage students, optimal physical growth and development can directly affect children's motor skills. Meanwhile, the influence is indirect, in the form of influencing the child's perspective or adaptation towards himself and others.

Project Based Learning Results in Psychomotor Development of Elementary School Age Students

Project-based learning has advantages, including (1) improving student learning outcomes and motivation, (2) encouraging students to be creative and independent in producing products, (3) providing students with experience to build their own knowledge, (4) increasing students' ability to communicate products (Baidowi: 2015). The project learning model can improve problem solving abilities and emotional intelligence (Karina: 2014). Therefore, it is hoped that project-based learning can be a solution to the problem of how students not only understand and utilize learning media, but can design creative and innovative learning media to increase learning motivation, especially in elementary schools. Project-based learning has great potential to provide a more interesting and enjoyable learning experience for students. According to the Buck institute for education as quoted by Wena, project-based learning has the following characteristics: (a) Students make decisions and create (b) framework (c) There are problems whose solutions are not predetermined (d) Students design processes to achieve results (e) Students are responsible for obtaining and managing the information collected (f) Students carry out continuous evaluation. f. Students regularly look back at what they have done (g) The final result is a product and quality evaluation (h) The classroom atmosphere tolerates mistakes and change. Based on the characteristics above, project-based learning is a learning model that can build student independence and creativity. Apart from that, through project-based learning students are trained to get used to being responsible for realizing what is planned according to their interests and abilities. According to the Ministry of Education and Culture (2013: 212), the operational steps or implementation of project-based learning in the 2013 curriculum are described as follows.

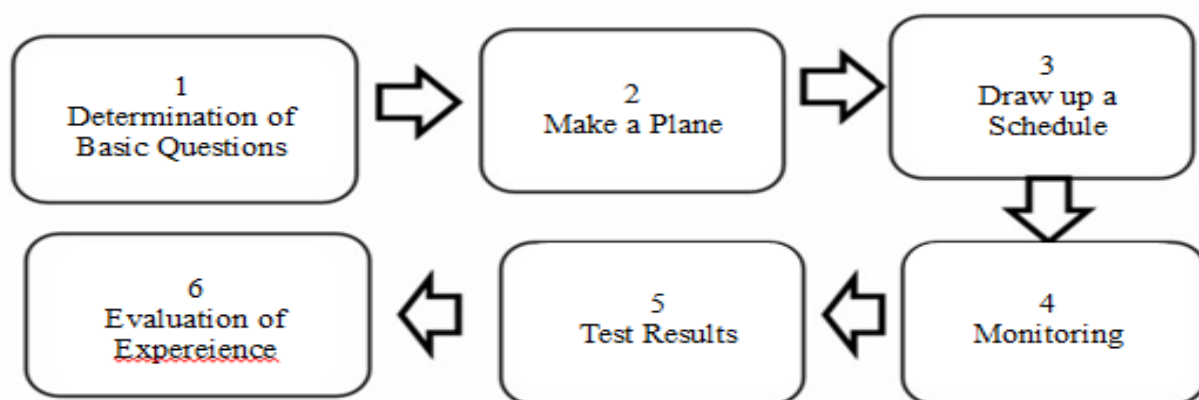


Figure 1. Steps for Impelmenting Project-Based Learning

Educational success is mainly determined by the teaching and learning process experienced by students. Students who study will experience changes in knowledge, understanding, reasoning, skills, values and attitudes. The attitudes that are expected to emerge in the learning process are skill attitudes. Skills in the narrow sense are ease, speed and accuracy in motor behavior which are also called normal skills. Meanwhile, in a broad sense, skills include aspects of normal skills, intellectual skills, and social skills (Vembriarto, 1981:52). Skills are patterns of purposeful activity, which require manipulation and coordination of learned information (Sudjana, 1996:17). This Project Based Learning method increasingly provides opportunities for students to be actively involved in learning even though the teacher is still the main control. Train students to dare to express or ask something that they think is not/is not clear and allows students to be more skilled in the learning process. Considering the importance of

learning Engineering Mechanics and Machine Elements, the effectiveness of learning and learning outcomes must be improved by implementing varied learning models such as project-based learning models. The learning model in question is the project based learning (PjBL) model, hereinafter called project-based learning. As quoted by Isriani and Dewi (2012: 127). Isriani and Dewi (2012: 128) say that "this learning model has great potential to provide a more interesting learning experience and the application of the Project Based Learning Model is meaningful for students. The research results of Setiono et al., (2020) show that planning, organizing, implementing, evaluating and learning about biological outcomes includes using the T-PACK approach to character education through the PBL model. It is hoped that the results of this research can become a source and learning material to increase knowledge of biology learning management through character education through the PBL model with the help of TPACK.

Advantages and Disadvantages of Project Based Learning

Project based learning is a comprehensive approach that provides instructions for students, working individually or in groups, and relates to real-world topics. Good implementation of project based learning can provide useful abilities for students. The success of project based learning occurs when students gain high motivation, feel active in their learning, and produce high quality work results. The following are some of the advantages of the project based learning approach (Purnawan, 2007): (1) Motivate students by involving them in their learning, allowing them to suit their interests, answering questions and making decisions in the learning process (2) Provide learning opportunities for various disciplines (3) Helps connect with life outside of school, pay attention to the real world, and develop real skills (4) Provides unique opportunities as educators build relationships with students, as coaches, facilitators and co-learners (5) Provide opportunities to build relationships with a large community (6) Make students more active and successful in solving complex problems (7) Encourage students to develop and practice communication skills (8) Provide students with learning and practice experience in organizing projects, and making allocations of time and other resources such as equipment to complete tasks (9) Provide learning experiences that involve students in a complex manner and are designed to develop according to the real world (10) Create a fun learning atmosphere, so that students and educators enjoy the learning process. Project based learning does have many advantages, but on the other hand, project based learning like this also has weaknesses. Weaknesses in project based learning include: it requires a lot of time to solve problems, requires quite a lot of money, many educators feel comfortable with traditional classes, where educators play the main role in the class, a lot of equipment must be provided, students who have Weaknesses in experimenting and gathering information will experience difficulties, there is a possibility that some students will be less active in group work, when the topics given to each group are different, and it is feared that students will not be able to understand the topic as a whole.

Conclusion

According to Ki Hajar Dewantara (Father of Indonesian National Education) explains the meaning of education, namely the demands in the life of children's growth, as for what it means, education is guiding all the natural forces that exist. Education in Indonesia has experienced rapid development as a form of change towards modern learning. Psychomotor development is the development of controlling body movements through coordinated activities between the central nervous system and muscles. Starting with rough movements involving large parts of the body, such as sitting, walking, running, jumping, etc. Then proceed with the coordination of fine movements, such as reaching, holding, throwing, and so on, both of which are necessary in everyday life as a natural thing. This is considered an automatic ability, so its development is given little attention. Achieving these abilities leads to the formation of skills. The Project Based Learning Model or PjBL is one of the learning models used in the 2013 curriculum. According to Wahyu, R. (2012) in PjBL, students are encouraged to be more active in learning, in this case the teacher is only a facilitator and the teacher evaluates the performance product. students include the outcomes that can be displayed from the results of the projects carried out.

References

- Ain. SQ, Putra, ED, & Mulyani, EA (2021). Project Based Learning in Instructional Media Course for the Design of Learning Media at Elementary Schools. Primary: Journal of Elementary School Teacher Education, 10 (1), 43-50 DOI:<http://dx.doi.org/10.33578/jpfkip.v10i1.8119>
- Jufri, Hasrijal. (2023). Implementation of Character Education Through Project Based Learning (Literature Review). Journal on Education, Vol 05, no (04), pp 16523-16528

- Khoiruddin. A., Suwito. D. (2021). Application of the Project Based Learning (Pjbl) Learning Model to Improve Student Activities and Learning Outcomes in the Basic Competencies of Action and Reaction Style at SMK Negeri 7 Surabaya. JPTM, Vol 11, no (01), pp. 38-43
- Pure meaning. E. Application of Project Based Learning Methods in Learning
- Ratu Ayuning Suci, Kartika Nur Fathiyah. (2023). Implementation of Project Based Learning to Increase the Independence of Early Childhood. Journal of Obsession: Journal of Early Childhood Education, Vol 7, no (4), pp. 3917-3924
- Siti Uswatun Khasanah, Darsinah. (2022). Implementation of Project Based Learning in the Psychomotor Development of Elementary School Age Students. Journal of Basic Education Flobamorata, Vol 3 (1), pp. 281-287