

The Influence of Project-Based Learning Learning Model and Educability Motor Level of Fundamental Motor Skill Students in Class III Elementary School Students

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Abstract. Model Learner's Project-Based learning and level Motor Educability can upgrade Motion elementary students (Fundamental Motor Skill). The purpose of this study is to get the implications of the Project-based learning model of learning so that students are not focused on the teacher, but can choose their projects facilitated by the teacher. This study uses a random control group pretest and post-test design experimental method. The population in the study was 86 people, with the number of samples until treatment group I was 24 people given PjBL learning models with high motor educability, treatment group II was 24 people given with low motor education. The test used is a fundamental motor skill test to measure students' basic movements. This study concludes that the Project-Based Learning Model with the level of motor educability has a significant effect on the basic movements of students (Fundamental Motor Skill).

Key words: learning model project based learning; motor educability; motor skill fundamentals.

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INTRODUCTION

Physical Education, Sports, and Health (PJOK) provided in primary schools one of which aims to help students in mastering more complex motor skills (Permendikbud No. 67 of 2013). According to Sudrajat et al, (2017, p. 3) "Learning Physical Education, Sports and Health is a learning process through movement activities designed to improve physical fitness, develop movement skills, knowledge and behavior of healthy and active lives, active sportsmanship, and intelligence emotion. aspects of a healthy lifestyle and the introduction of a clean environment through physical, sports and health activities that are planned systematically to achieve national education goals. "Fundamental motion skills is an ability that needs to be mastered by every student, and one of the goals of a physical education program given to students in the process of teaching and learning is that students are skilled in physical activity both in a game or in the form of movement skills. (Morgan et al., 2013). These skills consist of locomotor skills, which are skills possessed by a person in making movements that make his body move from one point to another (such as running, walking, crawling) and object control skills, namely a person's ability to control objects outside of himself (throwing, hit, kicked, etc.).

According to (Bakhtiar Syahrial 2015: 8) Basic motion is the basis for learning and

developing various technical skills in sports and physical activity for life. Thus, if a child's basic motion competency is not developed, they fail to use a variety of sports and play skills in their childhood and adolescence. "Mastery of complex motor skills can be obtained by mastering gross motor skills" (Sultoni, 2013, p. 51). (Gloria et al. 2011) Grade 3 students have better creative skills than grade 1 students, as a result of the creative formative processes carried out during the formation of the fundamental motions of motor skills.

Basic motion according to (Ahreum Han et al. 2018) Enhancement of basic movement skills must be focused on motor movements that are often done by students. Life Skills fundamental movement that is focused on the activity of motor coordination for skill development of students. According to (Goodway et al. 2010) Gender differences do not affect the basic movements of fundamental motor skills, but there are significant differences between men and women where the difference lies in the skill of using tools.

Kids' Athletics is an alternative learning at an early age (ages 8-14 years) as a form of modification of athletic learning that has a heavy impression and requires extra energy and is boring. Basic athletic movements are the basic movements in school learning, where children can participate in a playful atmosphere (Rumini 2014).

Project-based learning model (project-based learning) is a learning model that uses projects (activities) as the core of learning" (Kemdikbud, 2013 p.12). In problem-solving there must be a contributing factor to one problem with creative learning. In this learning, students do exploration, assessment, interpretation, and synthesis of information to obtain various learning outcomes (knowledge, skills, and attitudes). The steps are; (a) determine the basic questions; (b) making project designs; (c) scheduling; (d) monitor project progress; (e) assessment of results; (f) evaluation of the experience.

Project-based learning (Project Based Learning) is a learning model that uses projects as the core of learning (Permendikbud, 2014: 20). model Learning Project-Based Learning is an instructional strategy in which students must build

their content knowledge and demonstrate new understanding through various forms of representation. (NYC Department of Education 2009: 8).

Model Project Based Learning is a systematic teaching method that engages students in learning knowledge and skills through a structured process, real experience and meticulous design to produce a product (Sutirman, 2013). Project-Based Learning is a way of learning that gives students freedom of thought related to the content or material of teaching and planned goals.

The Project-Based Learning model was initially developed by The George Lucas Education Foundation and Doppler, with the following learning steps based on the following phases:

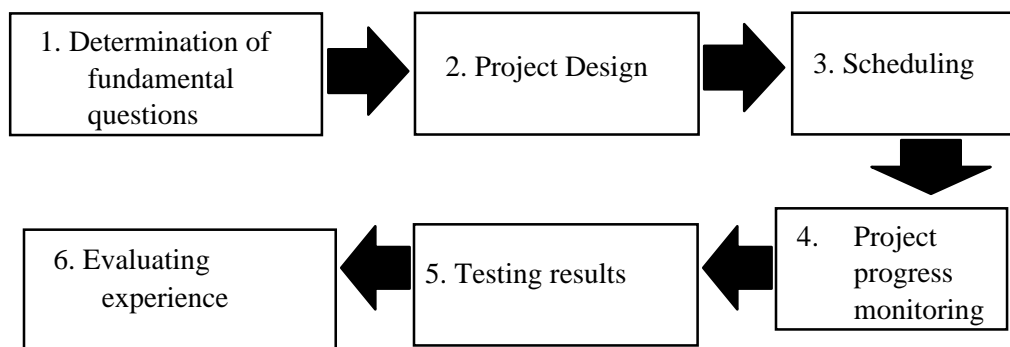


Figure 1. Model of Project-Based Learning

According to Wina (in Al-Thabany, 2015, p. 42) defines project-based learning as a learning model that provides an opportunity for teachers to manage to learn in the classroom by involving project work. Project work is a form of work that contains complex tasks based on very challenging questions and problems, and requires students to design, solve problems, make decisions, investigate and provide opportunities for students to work independently (Wena, in Al-Thabany, 2015, p. 42).

Motor educability owned by a person illustrates the level of a person's ability to receive and respond to new skills they have acquired. The higher the potential level of educability, it means the degree of mastery of new movements is easier. As Widiastuti (2016: 116) explains that, "The potential quality of motor educability will

give an idea of one's ability to learn new movements more easily". In the process of learning motion, motor educability a person also supports the achievement of the objectives of the learning process to be learned.

Based on the description above, researchers interested in researching role Project Based Learning Model Learnings and the level of Motor Educability Against Fundamental Motor Skill Grade III Elementary School.

METHODS

Based on the purpose and the research problem, namely how much influence the model learning distance Project- based learning and motor educability against the fundamentals of motor skills. The research method used is experimental, using the Randomized Controlled Group Design pretest-posttest.

Table 1. Randomized Controlled group Pretest-posttest Design

Group	Initial Test	Treatment	Final Test
Group 1 (one)	T1 Group 1	X1	T2 Group 1
Group 2 (two)	T1 Group 2	X2	T2 Group 2
Group 3 (three)	T1 Group 3	-	T2 Group 3

Q1: Pre-test Fundamental Motor Skills

Q2: Final test (Post-test) Fundamental Motor Skill

X1: Group training 1: PjBL Motor Educability is high

X2: Group Training 2: PjBL Motor Educability is low

The population used in this study was Elementary School Class III students at SD Negeri 12 Purwodadi in Kec. Purwodadi, totaling 86 students. To determine the number of samples suitable for the treatment group, the sampling technique is required. In this study the sampling technique used was random sampling. The sample will be divided into 3 groups. The placement of samples in each group is done by randomly drawn. Each group contains 24 students. Study in one semester during school hours takes place with a frequency of 8 times the meetings are conducted once a week. The instrument was used in the measurement of basic Motion using the Test of High Education motor and low motor educability. This hypothesis and type of research uses statistical analysis to determine the effect of audiovisual PjBL Models and student worksheets and the level of motor educability on Fundamental Motor Skills. The data obtained were then analyzed using the Anova rejection hypothesis of $\alpha = 0.05$. With a significance level of 5%.

RESULTS AND DISCUSSION

The Effect of Project-Based Learning Model and Motor Educability Level on children's motor skill fundamentals, namely:

- calculations using the T-Test Paired Samples Test table, the result of t_{count} is 14.460 with a significance level (P) 0.00. Because the level of significance (P) is smaller than alpha (0.00 < 0.05). It can be concluded that the learning model Based on learning and high educability motor level can improve the fundamental of motor skills.
- calculations using the T-Test Paired Samples Test table, the result of t_{count} is 11.572 with a level of significance (P) 0.00. Because the level of significance (P) is smaller than alpha

(0.00 < 0.05). It can be concluded that the learning model Based on learning and high educability motor level can improve the fundamental of motor skills.

- The difference in the increase in the child's fundamental motor skills through the Project-based Learning model and the level of motor educability is 2.63867 and the significance (P) is 0.00. This means that there are significant differences between the two treatment groups. That difference explains that learning with a project-based learning model with high motor educability is more effective than low motor educability.

The results of hypothesis testing about the effect of the project-based learning model with motor educability on motor skill fundamentals show that the groups that were given high motor educability training showed better results than the low motor educability training group. This can be seen from the average gain score of the results of the basic fundamental movements of motor skills from the high educability motor training group, which is 13.63, the low intensity of the motor educability training group, is 9.70.

Motor educability is a term that shows a person's capacity to learn new skills in a fast time with good quality. Educability motor ability is the ability that underlies the formation of the skills to be performed. Mastery of a movement skill is a process for someone who develops a set of responses into a pattern of movement that is coordinated, organized, and well-integrated (Widiastuti 2015: 209). Educability of motor skills is fundamentally important for learning movement skills. Learning certain motion skills required a certain period which is greatly influenced by the complexity of the movements to be learned and also the motor educability that is owned by students. Educability of motor skills is the basis in the formation of fundamental motor skills in children's motor skills.

According to Widiastuti (2015: 209), the purpose of the motor educability test is to know the motor abilities that emphasize the element of mastery in moving rather than the skills acquired.

The test criteria are as follows: (1) Presentation of successful implementation (rising from year to year as we get older), (2) Each item has a low correlation with strength, strength, maturity, posture, (3) Has a high correlation with athletic numbers and dexterity in sports.

Motivational motor movement sequence: 1) One Foot-Touch Head, 2) Side Learning Rest, 3) Grasvepine, 4) One-Knee Balance, 5) Stork Stand, 6) Double Heel Kick, 7) Cross-Leg Squat, 8) Full Left Turn, 9) One Knee - Head To Floor, 10) Backward Hop, 11) Forward Hand Kick, 12) Full Squat - Arm Circle, 13) Half - Turn Jump - Left, 14) Three Dips, 15) Side Kick, 16) Knee, Jump To Feet, 17) Russian Dance, 18) Full Right Turn, 19) The Top, 20) Single Squat Balance and 21) Jump Foot.

The quality of motor educability will easily give an idea of one's ability to learn new movements. The more someone shows ease when receiving a new movement, then that person can be said to have a high level of motor educability. Thus motor educability has an important role in the process of learning one's movements.

So if someone has a high level of motor educability (ME), it can easily, quickly master the basic movement skills of fundamental motor skills, with good quantity and quality of movement than people who have low levels of motor educability (ME). Also, the ability of motor educability is the basis for the formation of movement skills, so that in learning the basic movement skills of fundamental motor skills will be more quickly mastered if supported by high motor educability.

Whereas students who have low motor educability are more suitable given the method of learning project worksheets for students in learning basic motion skills, this is because students who have low motor educability will certainly be more difficult and slow in learning basic motion skills.

The child's basic movements or fundamental motor skills must be done early because the basic movement of the woman if it is properly accustomed to it will facilitate the child in doing sports activities. Lower class students are the foundation to practice the basic movement skills of children, so that when plunging into sports the child only needs to adjust the basic motion that has been obtained.

CONCLUSION

Based on the results of research and

discussion, this study can be concluded that the Project-Based Learning Model Learning and the level of high and low Motor Educability can increase the basic motion of Fundamental Motor Skill Students. The PjBL model with high educability motor level is better than low motor educability in the basic motion of children. From these conclusions can be suggested to the teacher in training the motor fundamental movement skills could use you right Project learning model-based learning with a motor educability high due to the relatively faster increase in the child's basic motion.

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