Effort to Improve Student Fundamental Locomotor and Manipulative Skills through the Application of Movement Education

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Abstract: This research was motivated by several problems, student fundamental locomotor and manipulative skills in elementary school is still not perfect and good enough, that need to be guided and rehearsed by the physical education teacher, that the essence of the motion is well developed. This research is aimed to know the effort to improve student fundamental locomotor and manipulative skills through the application of movement education research of grade V/A Merdeka 5 elementary school student. In this research, have a problem formulations is, How to improve student fundamental locomotor and manipulative skills by applying a movement education in grade V elementary school student?. This research used a classroom action research method of grade V Merdeka 5 elementary school student. The data are collected by observation, documentation and field notes that further data analysis. The results of this study is movement education method suitable applied to grade V elementary school student, because the learning material of the movement education method itself is a game, match with the characteristics of the grade V students who have the desire to play more. By using movement education method, student fundamental locomotor and manipulative skills can be guided and clearly visible to improve their skills be better than before. The increase is seen from the increase of percentage of each action research conducted by researchers until the last research action has a fairly high percentage, the average percentage of student skills among 80% -90%, the percentages include good skill groups.

1 INTRODUCTION

We already know physical education is a subject in elementary school that is as important as other lessons. Physical education in elementary school aims to train the physical freshness of each learners, physical education also provides movement learning that can develop the skills of coarse motion and smooth motion skills of students. Teaches motion is “The process that is attached to the exercise or experience that leads to changes that are relatively permanent in a person’s ability to display skilled movements” (Mahendra and Ma’mun 1998, p.122). There is also a need for guidance and training by the teacher of physical education itself.

According to (Cliff, Okely, Smith and McKeen, 2009; Fisher et al., 2005; Williams Et al., 2008) “adequate physical activity may be Viewed as providing a basis for developing the motor skills” (Iivonen and Sääkslahti, 2013) so the students’ rough motor skills really need to be developed.

Gross motor development, including the essential components for pre-schoolers and elementary school. Physical education, usually divided into discrete phases. “Fundamentals of motor skills are significant because (1) they form the basis for success in specialized or sport skills during adolescence and adulthood. (2) young children enjoy learning them, and (3) once learned, are retained for a lifetime” (Derri, dkk. 2006)

“If children fail to develop Reviews These crucial skills during the preschool and elementary school years, they Often experience failure in the domain” motors during childhood and adolescence”(Rickard, 1996; Hands, 2003) (Derri, dkk. 2006) Children will feel embarrassed when the motion is not good and he will have a feeling of fear of being ridiculed.
by his peer tEman that contribute to the difficulty in learning skills later in life. By developing a motor ink skills children will fulfill their desire to move, and floating their bodies. A good outcome must start with a good fundamental too, then the role of primary school teacher in helping to guide students in developing students' crude motor skills is essential.

Teaching physical education involves physical activity that is capable of inducing ability, physical fitness and at the same time is the formation of the mastery of movement skills itself as such these quotations we can know that the learning process physical education is very influential in assisting the development of skills child's basic motion (Mahendra, 2009; Frostig and Maslow, 1970).

Most primary school teachers do simple learning, so it is enough to get the children to go to the field, then provide the ball for students and teachers to stay on the side-lines. This is what causes the low quality of learning outcomes and the low level of physical fitness of elementary school students. Physical education teacher is responsible for all this, physical education teachers have to figure out how to deliver teaching physical education in schools to inculcate and develop basic forms of motion that has been held every student, in order to do better and right.

Many learning model used by teachers physical education in schools such as the model of learning cooperative model, tactical approach, teaching model of inquiry and learning models more, there are still a few teachers physical education implementing educational model motion (movement education), whereas, the educational model of motion is one educational models that are able to help develop basic movement movements for elementary school students. In accordance with Mahendra's opinion (2015, p. 6): “The motion education model is a learning stage that is adapted to all stages of age and child development. This model provides an intact tangle of motion experiences that run through all types of movement in all situations”.

Based on the experience of researchers who had conducted observation in class V students in some schools, when teaching physical education lasts some kids motor skills basic locomotor running and jumping, as well as basic motion manipulative kicking, and throwing is still not perfect and still needed guidance again for the ability basic motion develops well. What should the teacher do to solve the above problem?

The educational model of motion or movement education, curriculum emphasizes the mastery of the concept of motion. In the United States, motion education programs began to develop since the 1960s, whose implementation is based on the work of Rudolph Laban. The framework of this program includes the concept of body awareness (what the body does), the concept of effort (how the body moves), the concept of space (where the body moves), and the concept of connectedness (what relationship happens). Each of these concepts is a guide to be used when the child has to move, so that the child’s movement is meaningful in the whole concept.

From each aspect of the motion above, the objectives and learning activities are designed by utilizing the problem-solving style teaching approach, guided discovery, and exploratory. In the development of a motion education curriculum, the whole concept is utilized and elaborated, as well as a vehicle for children to explore their motion abilities. Including, if into the curriculum is included some orientation sports such as gymnastics or games, even dance though. Below we will describe the scope of educational curriculum oriented through educational games and educational gymnastics. Jewet and Bain stated that:

The motion education program has been criticized in the absence of claims about the transfer of learning and also resulted in a decrease in active mobile time due to excessive emphasis on the teaching of the concept of motion. Other critics have proposed weak empirical evidence to support the practice of using discovery teaching styles to teach sports skills (Pangrazi and Dauer, 1992; Siedentop, 1980).

The learning in the motion education model is more to the form of the game. The learning fits with the character of elementary school children who always want to play. Through play activities, it is appropriate to develop basic motion skills of children in elementary school, because on the basis of children's world is playing.

Physical activity that children do either individually or in groups in the form of play done by children because they are happy and driven by the desire to move. Healthy children are constantly on the move or doing things and are almost never silent. Physical game-game presented in accordance with the child's development so that will provide many opportunities for children to channel the impulse.

With us, the gamelan teacher who channelled the child's wishes to a learning activity in game play will
help the development of locomotor and child manipulative motion without them knowing it. This laid a solid and strong foundation for their future. Childhood is a period of infinite physical-motor activity, the drive to move and the desire to play overwhelmingly. An education expert said that "education will be managed through movement and through movement education realization". From the description of the background and observations from the author decided to do some research efforts to improve the basic locomotor movement skills to run and jump as well as basic motion throwing and kicking manipulative grade IV in Primary School.

2 METHODS

Research conducted by researchers in this thesis is a class action research (PTK). The research design used is the design proposed by Arikunto, Suhardjono, and Supardi, 2015; Mertler, 2008 that the PTK is characterized by the action. The action is not only done once. However, repeatedly until the goal of PTK is achieved. Each action consists of a series of four activities as follows.

- Planning (planning) is a detailed designing activities about what and how the action will be done. PTK for professional development of teachers, this activity in the form of preparing teaching materials, preparing a teaching plan, planning materials for learning, and prepare other things necessary in the learning process.

- Implementation of action (action) is this activity in PTK. For teachers, this action is a new teaching / modeling. In the PTK for teacher professional development, action is performed at least in two cycles, and each cycle consists of 3 meetings.

- Observation (observation) is an action to collect information that will be cursed to find out whether the action has been done as planned. Observations can be data collection through observation, tests, questionnaires, and others.

- Further reflection is based on the results of the reflection evaluation, to find out what is lacking in the implementation of the action that has been done. The reflection results are used to make improvements to the planning in the next stage (cycle).

2.1 Sample

Student grade V SD N 001 MERDEKA, Bandung City. Number of students 33 children, 14 boys and 19 female students in the academic year 2016/2017. The consideration of the researcher taking the subject of this research is because at the time of implementing the PPL and teaching in the school, so the researcher know the condition of the student.

2.2 Instrumen

2.2.1 Observation Sheet

The observation sheet is an instrument of data collection used to record observations made by collaborators on several aspects. Assessment of the psychomotor abilities of children is performed by performance tests or demonstrations, which include observation of the prefix movement, the main movements, and the final motion of the assessed skill. Each test test has its own weight according to its diversity. Assessment of practice using a scale of 1 - 5, with details as follows:

1 = Movement made is not in accordance with the concept
2 = Movements made in small part according to the concept
3 = Movements made partly in accordance with the concept
4 = Movements performed largely according to the concept
5 = Movement made in accordance with the concept

2.2.2 Documentation

This documentation contains a list of documents to be studied, it is expected that this document will complement and strengthen the data obtained from observations, and field notes. The list of documents required in this study is the image images during the process of learning process takes place for fourth graders in SD N 001 Merdeka, Bandung.

2.2.3 Field Notes

Field notes are some notes obtained by researchers on observations at the time of the research to get data as detailed as possible, so that the research process can run effectively and efficiently in every action during the learning process takes place. Thus, field notes in this study are used to summarize changes in basic student movement by observers in the learning process that are not contained in the
observation sheet guidelines, so the field notes are only a complement to the data.

Research procedure:
- Planning phase of action, including:
  - Determination of school for research
  - Work with other teachers to become observers
  - Mengobservasi characteristics of children
  - Prepare the RPP in accordance with predetermined indicators
  - Formulate a learning model that will be done when research takes place
  - Preparing learning media to be used when the learning process takes place
  - Develop an evaluation tool and provide a wide field record for the observer.
- Implementation phase of action
  In the implementation stage, the researcher uses two cycles, namely in February. In the first cycle on the date of X February 2017, and the second cycle on the date of X February 2017. At this stage the researchers do penlitian on each cycle by mengadakan observation, evaluation and reflection of activities to be improved in cycle II.
- Stage of observation
  Observation is one of the data collection tools used in this study. Observations are used by researchers to assess the development of students' basic movements during the course of action. Observation activities carried out simultaneously with the implementation of action in research. Can be known through observation activities researchers can find out the basic locomotor motion movement and student manipulative when the learning process takes place.
- Stages of data analysis and reflection
  The data analysis and reflection stage is the stage where the researcher examines all the information that has been collected at the observation stage and field notes. The collected information should then be parsed, tested, and compared with previous experience, then linked to a particular theory or relevant research result. Through a deep reflection process can be drawn in-depth conclusions.
  Stages of data analysis and reflection in classroom action research conducted by researchers do this is an important part because through reflection researchers can understand and get a clear picture of the process and results that occur as a result of actions that have been done on the subject development of basic locomotor motion and Manipulative education students through the application of motion education models (Hopkins, Joyce, and Calhoun, 2002). The results of reflection activities are a source for the implementation of subsequent actions.

2.2.4 Data Analysis
- Data reduction
  Sugiyono (2016, pp. 92) points out that: The data obtained from the field amount is quite a lot, for that it should be noted carefully and detailed. Reducing data means summarizing, choosing the essentials, focusing on the things that matter, looking for the theme and pattern. Thus the reduced data will give a clearer picture, and make it easier for the author to do further data collection, and look for it when necessary. Data reduction can be assisted with electronic equipment such as a mini computer, by providing code to certain aspects.
  Data reduction is the process of selection, focusing on simplification and transformation of 'rough' data arising from written records in the field. Data reduction continues throughout the qualitative-oriented project.
- Presentation of data
  Presentation is a set of organized information that gives the possibility of drawing conclusions and taking action. By looking at the presentations we will be able to understand what is going on and what to do.
- Withdrawal of data
  The analysis activity is the conclusion and verification. From data collection, an analyzer starts searching for meanings, patterns, causal paths, propositions and so on. The conclusion is part of a complete configuration. Conclusions were also verified during the study. The verification may be as short as the thought back to the mind.
- Conclusion and verification
  Researchers began searching for the meaning of games and socialization, taking notes of regularity, patterns, explanations, possible configurations, causal paths and proportions. The researcher will deal with the conclusions openly, skeptically, but the conclusions are prepared and the results become more detailed and clear. The final results of the conclusions depend on the researcher's ability, data storage, retrieval method and dependent on the amount
of data records in the field and the result of processing the observation sheet of basic motion practice values with the following formula:

\[(\text{NP}_1 + \text{NP}_2 + \text{NP}_4 + \text{NP} \ldots \ldots \ldots \text{NP}_{15}) / 15 = 4\]  
(eg)

So the final value of practice (NAP) = NP * 100 = 4 * 100 = 805

5 Category Achievement Level:
90% - 100% = Very good
80% - 90% = Good
70% - 80% = Medium
70% - 70% = Less

In the final stages of this study can make a tentative conclusion through the results that have been or has not been satisfactory, to proceed on the next action.

3 RESULTS AND DISCUSSION

3.1 Result

3.1.1 Comparison of Motion Student Lokomotor Skills in Each Action

From the results of research using observation there is preliminary data pre-observation of 60% then the result of action 1 has increased to 67%. So also on the next action is the result of the action 2 data obtained from observations keterampilan basic motion locomotor students through the application of motion education model has increased to 75% it dikarnakan students begin to understand and accustomed to the material given. In the next action is the action of 3 observations of observation of the basic motion of students locomotor through the application of motion education model of 84%, in each action the researchers improve and renew the learning materials so that the comparison of the results of each action gradually rise, Actions that have been done by students more understanding and understand about learning materials when the learning process takes place.

Here the authors include a graph about the comparison of basic locomotor motion skills students in each action as below:

![Comparison of Motion Student Lokomotor Skills](image)

Figure 1: Comparison of observation result of motion student locomotor skills.

Based on the result of observer data, it is concluded that the basic movement skill of class grade V / A in SDN 001 Merdeka is said to be low, because the percentage of average result obtained by students is 60% and included into low skill group because less than 70% Learning physical education by applying the movement education model as a tool to improve basic locomotor and student manipulative skills.

In cycle 1 the researcher performs 2 actions, in the first action the researcher gives the material obstacle, in the second action the material still give material obstacle but movement of each post developed again. In the second cycle, the researcher performs one action by giving the material another obstacle that the movement of each post has been changed and modified again become more interesting and challenging.

In the pre-observation result it was seen that the students' locomotor basic movement skills were 60% and in the last action that the students' locomotor base motion skills had increased quite high to 84%. These results have reached the expectations of researchers, namely to improve basic locomotor skills of students who entered the group with good skill percentage among 80% - 90%. It shows that the learning given is quite enjoyable and effectively given to the students so that the students' basic locomotor base skills are improved.

3.1.2 Comparison of Motion Student Manipulative Skills in Each Action

From the results of research using observation there is preliminary data pre-observation of 61% and the result of action 1 has increased to 67%. So also in the next action is the result of action 2 results
obtained from the observation of manipulative basic manipulation motion of students through the application of motion education model increased to 74%. It dikarnakan students began to understand and accustomed material given. In the next action that is action 3 observation observation of manipulative basic motion motion of students through the application of motion education model of 83%, in each action the researchers improve and renew the learning materials so that the comparison of the results of each action gradually rise, Actions that have been done by students more understand and understand about learning materials when the learning process takes place.

Here the authors include a graph about the comparison of basic manipulative motion skills of students in each action as below:

![Graph of Comparison of Motion Student Manipulative Skills](image)

**Figure 2**: Comparison of observation result of motion student manipulative skills.

Based on the result of observer data, it is concluded that the basic movement skill of class grade V / A in SDN 001 Merdeka is said to be low, because the percentage of average result obtained by students is 61% and included into low skill group because less than 70% Learning physical education by applying the movement education model as a tool to improve basic locomotor and student manipulative skills.

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In the pre-observation result it was seen that the students’ basic manipulative basic skills were 61% and in the last act that the basic manipulative student motion skills had increased significantly to 83%. These results have reached the expectations of researchers, namely to improve basic locomotor skills of students who entered the group with good skill percentage among 80% - 90%. This shows that the learning given is quite enjoyable and effective given to the students so that the students’ basic manipulative skills are improved.

### 3.2 Discussion

From the observations in pre-observation until the first and second cycles, researchers found some things that need to be reviewed in relation to the application of motion education model, among others, as follows:

- **Excess of research results each cycle**
  - There are several advantages of the results of the implementation of motion education model (movement education) on the actions that have been done by researchers, namely:
    - The learning material of the motion education model is suitable for elementary students because the material form of the motion education model is the game, and the game is a new game for the students so the students look enthusiastic in learning what they have just learned.
    - Provision of learning materials by applying the game of the educational model in learning pemas is good enough, this is evident from the increased percentage of basic locomotor and student manipulative skills, from pre-observation to cycle II.
    - The motion education materials or models provided are generally easy games and less attached to the rules of the game, so students continue to move actively during the learning process. Although there are still some students who are less active also at the time of learning takes place.
    - In learning activities, students are given the opportunity to convey their ideas or opinions about the movements they are performing. An interesting input from students about the material can be carried out in the learning directly.
  - Of the several advantages that have been mentioned above, researchers still find some problems that need to be considered by the teacher associated with deficiencies or weaknesses in the learning process.
The shortcomings of the implementation of the action of each cycle as described below:

- The material of the implementation of the motion education model is a new game that is known by the students so that the delivery of material about obstacle course must be clearly explained and fundamentally so that it is enough to spend time studying.
- There are several movements in the obstacle game activity that students judge too easily so that students look easy and bored in playing the game.
- The ability of teachers to identify problems must be followed by the ability to explain them, so that problems are easy to solve or find solutions by students.
- Researchers only pay attention to students who are active when the learning process takes place, sedangkan teachers pay less attention to students who are waiting, so the class atmosphere is less controlled.
- There are some students who are still annoying other friends who cause a little rowdy atmosphere.

Discussion of Discovery

Based on the findings of research and reflection on cycles I and II, it is necessary to improve some of the deficiencies in the application of motion education model, so that the next implementation is better. Repairs to be done are as follows:

- At the beginning of the lesson, the teacher should be able to attract students' attention to arise students' curiosity and arise question and answer between the student and the teacher, and begin the learning more readily.
- During the lesson, teachers will try to build a democratic classroom situation by giving the students the opportunity to ask questions and express their opinions.
- The teacher will provide a complete explanation of the compulsory movements in the game of obstacles in the implementation of learning, so that students understand learning by applying a motion education model that uses the game obstacle course.
- The use of media and props in the game is further enhanced and by utilizing the existing media around the school as well, especially the preparation of backup tools when tools that should be used suddenly can not be used.
- Students have started to speak up, give opinions and propose their opinions.
- The given material has been mastered by researchers and arranged in such a way according to the needs of research.
- Students move actively as instructed by the teacher and also freely make other movements. This is seen with the learning that goes very interesting and the child moves unrestricted by the teacher.
- Teachers should be able to identify problems quickly while learning takes place so that learning can be conducive again.
- The teacher has done a good job as a facilitator, the teacher has been able to build a democratic classroom atmosphere and create an active classroom atmosphere.

Based on the results of research on cycles I and II, the researchers consider that the implementation of Classroom Action Research (PTK) in class V / A SD N 001 Merdeka Bandung, has achieved results in accordance with the expected goals. This is evident from the increase in student skill groups that had been included in the less-prone group because the percentage that was less than 70% in the 3rd percentage action rose to a well-skilled group whose percentage was between 80% -90% increasing from previous action so that Researchers assume no longer necessary to cycle and the next action.

4 CONCLUSIONS

The conclusions of this study are "Efforts to Improve Motivation Skills of Lokomotor and Student Manipulative Grounds through the Application of Movement Education Model (classroom action research on students of grade V SD N 001 Merdeka)". As for some conclusions that writers can convey is as follows:

- Motion education model is suitable applied by physical education teacher in learning process in elementary, because learning material from motion education model in the form of game. Basically elementary school children still have the desire to play very high, by applying the motion education model students can learn with pleasure and active as they want.
- Successful implementation of efforts to improve basic locomotor and student
manipulative skills through the implementation of motion education model in elementary school is evident with improved locomotor base and student manipulative skills. The increase is evident from the increased percentage of each research action conducted by the researcher until the last research action has a high enough percentage, the percentage of student skill to be between 80% - 90%, the percentage is good skill group.

- The obstacles faced by the application of the motion education model in elementary school is the knowledge of the children about the learning materials given when the learning process takes place, the students are happy and active when doing the game but they are less understood by what they do because the game material in motion education model is a game. New done students who make teachers must explain the material with a long time.

Solutions undertaken by teachers in an effort to cope with obstacles when the learning process takes place when applying the motion education model, among others by: 1) Teachers should create a democratic class possible so that students dare to argue and ask about the material they will learn; 2) Teachers should create classroom situations as interesting as possible so that when the students' learning process is vibrant and active; 3) Teachers should provide a complete explanation of the material so that they understand what they are doing during the learning process; 4) And the teacher should be able to identify the problem quickly during the lesson so that the learning can run conducive again.

REFERENCES

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