

# Effect of Pedagogic Teacher Competencies and Learning Outcomes Infrastructure Against Physical Education Sport and Health in High School (SMA) Meranti Pedamaran

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## ***Abstract***

*The purpose of this study was to determine the effect of teachers pedagogical abilities against the learning outcomes of physical education in high school sports and health Pedamaran Meranti, to determine the effect of infrastructure on learning outcomes of physical education in high school sports and health Pedamaran Meranti, to determine the effect of teachers pedagogical capabilities and infrastructure the learning outcomes of physical education in high school sports and health Pedamaran Meranti. Data collection techniques in this study using a questionnaire instrument and learning outcomes with a total sample of 124 students. The data analysis using Microsoft Excel and SPSS. From the analysis of the data shows that there is a positive effect of pedagogical competence of teachers and infrastructure together with the learning outcomes of physical exercise and health education students. In other words, the higher the pedagogical competence of teachers and infrastructure facilities together will be higher student learning outcomes.*

**Keywords :** *Competence Pedagogy, Infrastructure, Learning Outcomes*

## **1 INTRODUCTION**

Factors that affect learning outcomes can be classified into two, namely internal factors and external factors. Internal factors are factors that originate from within the students, such as intelligence, motivation, interests, talents, physical condition, attitude, habits of students, student activities (including understanding, practice, discussion) and so forth. External factors are factors that originate from outside the student, including socio-economic circumstances, environment, infrastructure, teachers and teaching methods, educational interaction, curriculum, and so forth (Slameto, 2010:54).

Based on the observation that researchers do in high school Pedamaran Meranti obtained that learning health and physical education teacher and sports teacher sticking to dominate

learning in which students receive what the teachers. In addition, the learning process, before teaching the teachers do not make teaching and learning plans directly given without preparation plan has been prepared. Next, the compilers of assessment and evaluation instruments are not well planned and administered direct practice. Lessons are conducted an average practice without theory behind the practice course. In addition, the facilities and infrastructure that are in high school are also less complete Pedamaran Meranti. Such facilities include football, futsal ball, volleyball, basketball, takraw, meters, stop watch, shot size 4 kg and 7 kg, 2 pieces javelin, discus weighing 2 kg and 1 kg, and baseball. Furthermore, infrastructure owned a volleyball court, basketball court, futsal field, field takraw. Other Observations obtained at the high school Meranti Pedamaran that learning outcomes, especially in the subjects of sports and physical education health is still low. Average student learning outcomes anyone encountered completeness and there are also students who have not experienced mastery learning with KKM predetermined value by 75.

Pedagogical competence of teachers and infrastructure is one important element in education, especially on the subjects of health physical education and sport. In concrete terms this research problem can be identified as follows.

1. Less than optimal pedagogical competence of health and physical education teacher at the high school sports Pedamaran Meranti.
2. Less complete infrastructure owned in high school Pedamaran Meranti.
3. Results of high school students learning Meranti Pedamaran still low.

Problem definition is needed in order to study more effective, focused and can be studied in more depth. Based on the above background, the problem is still very wide-ranging. To simplify manage the data, the problem in this study is limited to two variables that are suspected of ties. As for the things which are limited in this study are: (1) pedagogical competence of teachers, (2) infrastructure, (3) physical education learning outcomes of sports and high school health class X Meranti Pedamaran 1st half.

Based on the background and limitation issues, the main problems in this study are as follows.

1. Whether there are significant pedagogical competence of teachers on learning outcomes of physical education and health in high school sports Meranti Pedamaran?
2. Are there infrastructure influence the learning outcomes of physical education and health in high school sports Meranti Pedamaran?
3. Whether there are significant pedagogical competence of teachers and infrastructure facilities to the learning outcomes of physical education and health in high school sports Meranti Pedamaran?

The purpose of this research is as follows.

1. To determine the effect of teachers' pedagogical competence against the learning outcomes of physical education in high school sports and health Pedamaran Meranti.
2. To determine the effect of infrastructure on learning outcomes of physical education in high school sports and health Pedamaran Meranti.

3. To determine the effect of pedagogical competence of teachers and infrastructure facilities to the learning outcomes of physical education in high school sports and health Pedamaran Meranti.

This research is theoretically expected to contribute ideas in pedagogical competence of teachers and infrastructure. In addition, the results of this study may be useful to increase the vocabulary assessment of the effort to improve the conditions of learning and improve learning outcomes, especially in health physical education and sport.

## **2 LITERATURE REVIEW**

### **2.1 Teacher Pedagogic Competence**

UU No. 14 of 2005, Article 1, Section 10 states that competence is a set of knowledge, skills and behaviors that must be owned, lived and controlled by the teacher or lecturer in performing professional duties. According to Jojo (2008:17) competence is the power to take action as a result of the nature and exercise. This argument informs the two factors that affect the formation of competencies that innate factors such as talent and training factors such as learning outcomes.

In addition, the Dharma (2008:4) states that pedagogical competence is the ability to be possessed of teachers with respect to student characteristics viewed from various aspects such as moral, emotional, and intellectual. Mulyasa (2007:75) stated that the pedagogic competence is the ability of the teacher in the management of student learning. Furthermore, Febrina (2010) stated pedagogical competence of teachers is the ability of the teacher in the management of student learning. Ministry of Education (2007:7) formulated a definition of competence as knowledge, skills, and values reflected in the basic habits of thinking and acting.

The existence of competencies that should be possessed by every teacher must have a specific purpose which impact on various aspects of education. According Hamalik (2010:35) the importance of competence for education, among others:

1. the competence of the teacher as a selection tool reception teacher
2. teacher competence is important in order to develop teacher
3. teacher competence is important in the context of preparing the curriculum
4. teacher competence is important in relation to the activities and student learning outcomes.

### **2.2 Pedagogic Aspects of Competence**

Pedagogical competence has various aspects. According to Dharma (2008:4) a must-have pedagogical competence of teachers with regard to the aspects observed, is as follows.

1. Mastery of the characteristics of learners from the physical aspect, the moral, social, cultural, emotional and intellectual.
2. Mastery of learning theories and principles of learning that educates.
3. Ability to develop curriculum related to the development of teaching.

4. Conducting educational development.
5. Utilize information technology and communications for the purpose of the development of educational activities.
6. Facilitate the development of potential learners to actualize their potential.
7. Communicate effectively, empathetic, and manner with the students.
8. Conduct assessment and evaluation processes and learning outcomes, utilize the assessment and evaluation for the sake of learning.
9. Take action to improve the quality of reflective learning.

### **2.3 Infrastructure Physical Education Sport and Health**

Means is something that can be used or can be used. Means of physical education is anything that can be used or utilized in the learning of physical education, sport and health. Likewise, the infrastructure facilities are all things that complement the needs of facilities owned or permanent nature can not be moved. Soepartono (2008:5) states that the sports center is something that can be used or utilized in the implementation or utilized in the implementation of a health or physical education activities. While the general infrastructure means everything that is supporting that facilitate or expedite the learning process and have a relatively permanent nature. One of these properties is difficult to be moved. Suryobroto (2011:4) states that the means or instrument is anything that is needed in the teaching of physical education, sport and health, which is easy to carry, and can be moved by the perpetrator or the student. While the infrastructure or facility is something that is required in the learning of physical education, is permanent or can not move, move.

Furthermore, Soepartono (2008:6) states that the means of physical education is a translation of facilities, something that can be used and utilized in the implementation of a health or physical education activities. Sports facilities can be divided into two groups:

1. Equipment (apparatus). Equipment is something that is used, for example: single beam, parallel bars, rings, and others.
2. equipment (device). Consists of: First, something that complements the needs of infrastructure, for example: net, flags to mark, boundary lines. Secondly, something that can be played or manipulated by the hands or feet, for example: ball, racket, bat.

### **2.4 Results of Study**

Learning process has the objective to be achieved and predetermined. The purpose is to learn the result, which is not easily achieved with good if not pay attention to the methods and factors necessary in the learning process. Achievement of learning goals in the form of achievement, is the result of teaching and learning activities. According Dimiyati (2010:250), the results of a case study that can be viewed from two sides. Learning outcomes is the level of mental development better than during the pre - study. In terms of teachers, learning outcomes are the result of a process of individual learning done well is the knowledge and skills to what they have learned. Meanwhile, according to Abdurrahman (2010:37) is the ability of learning outcomes obtained through child after learning activities.

### **3 RESEARCH METHODOLOGY**

#### **3.1 Design Research**

The design used in this study is the method of causation (causal effect).

#### **3.2 Population and Sample**

The study population was all students in the high school class X Meranti Pedamaran academic year 2013/2014 the number of students as many as 124 people.

The samples were all students in grade X.1, X.2, X.3, X.4 in high school and Meranti Pedamaran academic year 2013/2014 the number of students as many as 124 people.

#### **3.3 Method of Data Collection**

In this study, the instrument used to collect the data was a questionnaire and test scores.

#### **3.4 Data Analysis Techniques**

The data analysis technique used is inferential data analysis techniques. The use of descriptive data analysis techniques in order to obtain a picture of the characteristics of the spread of values for each variable studied. Presentation of data include the mean, median, and mode, as well as variance and standard deviation. While the inferential analysis used to test the hypothesis by using Linear Regression. Statistical calculations done by computer aids. The program used is Microsoft Excel and SPSS.

### **4 RESULTS AND DISCUSSION**

#### **4.1 Pedagogic Competence**

The results showed that the percentage of 85.67 % pedagogic competence. Thus it was found that the average percentage of the value of teachers' pedagogical competence of 84.38 % as very high. The results of this study are supported by research Sarce (2010) which states that the pedagogical competence of teachers affect student achievement. In addition, Hamalik (2010:35) stated that the importance of teachers' pedagogical competence is important in relation to the activities and student learning outcomes. Furthermore, according to Dharma (2008:4) a must-have pedagogical competence of teachers with regard to the aspects observed that mastery of the characteristics of learners, mastery of learning theories and principles of learning that educates, able to develop curriculum related to the field of development of teaching, conducting educational development, assessment and evaluation processes and learning outcomes, utilize the assessment and evaluation of learning needs, and reflective action to improve the quality of learning.

#### **4.2 Infrastructure**

The results showed that the percentage of infrastructure by 82.16 %, meaning the percentage of the average value of 82.16 % of infrastructure is high. The results of this study are supported by research Sitohang (2013) which states that the infrastructure and facilities affect learning on student achievement. Therefore, infrastructure is one important part of the learning process. Infrastructure is also a media that can not be left to help and deliver

messages to students, as well as the smooth learning process.

### **4.3 Results Study of Physical Education Sport and Health**

The results showed that the percentage of the yield learning of physical education and sport at 79.24 % health. This value means that the learning outcomes of health physical education and sport at 78.73 with both categories.

### **4.4 Effect of the Teacher Pedagogic**

Competence Learning Outcomes Physical Education Sport and Health Testing the first hypothesis, which proposed there are significant Pedagogic competence of teachers on learning outcomes of health physical education and sport. The test results indicate that the first hypothesis Pedagogic competence of teachers having relationships and significant impact on the learning outcomes of physical education and sports health, amounting to 11.95 %.

### **4.5 Effect of Infrastructure on Learning Outcomes Physical Education Sport and Health**

Testing the second hypothesis, which proposed there are significant infrastructure on learning outcomes of physical education and health sports. The test results indicate that the first hypothesis infrastructure relationships and significant impact on the learning outcomes of physical education and sports health, amounting to 17.1 %.

### **4.6 Effect of Teacher Pedagogic**

Competence and Facilities infrastructure together with the results of studying Physical Education Sport and Health. Based on the hypothesis there are significant pedagogical competence of teachers and infrastructure together with the learning outcomes of physical education and health sports. The test results indicate that the third hypothesis Pedagogic competence of teachers and infrastructure relationships and significant impact on the learning outcomes of physical education and sports health, amounting to 22.3 %.

## **5 CONCLUSION**

Based on the results of hypothesis testing, obtained the following findings.

1. There is a positive effect of pedagogical learning with student learning outcomes. In other words, the higher the pedagogical competence of teachers, student learning outcomes will be high.
2. There is a positive effect of infrastructure facilities with student learning outcomes. In other words, the higher the infrastructure, the higher will be the students' learning outcomes.
3. There is a positive effect of pedagogical competence of teachers and infrastructure together with sports physical education learning outcomes and student health. In other words, the higher the pedagogical competence of teachers and infrastructure facilities together will be higher student learning outcomes.

## 5.1 Suggestions

Based on the conclusions and implications of the above, there are some suggestions addressed to the various parties who are expected to utilize and follow up the results of this study, teachers, students, other researchers, as well as those involved in teaching sports science education should provide feedback to improve learning outcomes, especially the branch of health physical education and sport.

### 1. Student

Students need to improve understanding and knowledge, and to develop an interest in sports physical education learning outcomes and health so having confidence in the ability of the sport through physical education and health.

### 2. Lecturer (Teacher)

Faculty (teachers) need to improve, especially on pedagogical competence so that the application of learning to walk as desired. In addition, the pedagogical competency is one of the requirements that must be owned and implemented in order to improve the development and student learning outcomes.

### 3. School

Schools in particular to the school should improve school infrastructure in order to improve morale, capabilities, and activities of students both the cognitive, affective and psychomotor.

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