

CHAPTER I INTRODUCTION

1.1 Background

Education is a process of individual self-development of one's personality that made consciously and responsibly to improve the knowledge, skills and attitudes and values so as to adapt to the environment. Quality education is always a reference to student learning outcomes, where the quality of a good education is the purpose of education itself.

The quality of education is still low in the sharp spotlight and a very big problem in Indonesia. According to the survey of Political and Economic Risk Consultant (PERC), the quality of education in Indonesia was ranked 12th out of 12 countries in Asia. The low quality of education in Indonesia was also shown Data Research and Development in 2003 (Al-Jawi, 2006), that of the 146 052 primary schools in Indonesia was only 8 (eight) schools who gained worldwide recognition in the category of The Primary Years Programme (PYP), from 20 918 junior high school in Indonesia was also only eight schools who gained worldwide recognition in the category of The Middle Years Programme (MYP), and of the 8,036 high school was only seven schools who gained worldwide recognition in the category of the Diploma Programme (DP). Furthermore, in terms of achievement, according to records Third Mathematics and Science Study (TIMSSI), which measure the outcomes education institutions in the world reported that the ability of science (science) students in Indonesia are in the order - 32 of 38 countries (Nurhadi and Senduk, 2003) .

General picture above shows that the low quality of education in Indonesia. The low quality and student learning outcomes in subjects including science also happening in SMP Negeri 4 Sei Suka. Poor quality of education and the acquisition of student learning outcomes, especially in science subjects is an indication of the poor performance of students and teachers the ability to manage quality learning.

In practice there are many factors that affect student achievement both internal factors and external factors. This is in line with the opinions

Slameto(2010) which states that "the factors that affect the learning of many kinds, but can be classified into two groups only, ie internal factors and external factors ". External factors that directly affect the students' learning in school is the teaching methods used by teachers in presenting the material and engage students actively in learning. Based on early observations researchers, showed that the teachers are basically trying to engage students actively in learning to use variety of teaching methods. But in practice proses learning that teachers do in the classroom are still dominated by the teacher (teacher centered).

While internal factors that also affect student learning one of them is the psychological factors include: intelligence, attention, interests, talents, motives, attitudes, maturity, readiness, and study habits. This indicates that student success in learning is also influenced by factors derived of the student's own one of them is a learned habit factors including the seriousness or the hard work of students in learning. Results of preliminary observations in SMP Negeri 4 Sei Suka found a low of hard work of students in learning physics. This is evident from: 1) the number of students who cannot do the work teachers are given properly and on time, 2) students tend to be passive and less enthusiastic or less motivated in learning, 3) students also lack focus or concentrate on learning the teachers, 4) students also embarrassed or afraid to ask when having trouble learning material physics, 5) the tasks that the teacher is not done in earnest student, 6) most of the students are also too easy to give up and say not able to resolve the matter when asked to finish her teacher on the blackboard, 7) during the learning process of the students also seem relaxed and do not want to try to strive to understand the subject matter being taught physics teacher.

Overall observation of results which have shown that teachers are basically trying to engage students actively in learning but learning p roses that teachers still dominated by the teacher (teacher centered). Students are also very accustomed to learning in a relaxed way, less seriously or less seriously, and not trying to work hard to understand and solve the physics problem set by the teacher. Conditions and students' learning habits so of course a bad influence for

the development of the student learning including low learning achievement of students of physics.

At the level of Junior High School (SMP), physics is a branch of natural science, and as a basis for studying the physics of materials at the higher education level is high school education or high school equivalent. Physics subjects is one of the subjects science that can develop analytical thinking skills by using a variety of events deductive nature and problem solving both qualitatively and quantitatively using mathematical and can develop the knowledge, skills and attitude of confidence.

Through study of physics, students are expected to gain experience in shaping the ability to reason deductive quantitative mathematical based on qualitative analysis using a variety of physics concepts and principles (Ministry of Education, 2003). Science is the result of human activity in the form of knowledge, ideas, and concepts are organized on the environment based on experience gained through a series of scientific processes. This means that physics should be taught to students completely as scientific attitude, scientific process, and scientific products, so that students can learn independently to achieve optimal results. One way to teach physics completely is to choose the suitable learning model. According Butar-butur (2010), the Problem Based Learning (PBL) model is the appropriate model for the development of Physics Science.

PBL is a learning model that presents problem to students before they construct their knowledge. The problem presented is problem which always experienced by students in their daily live. Through PBL students trained construct their own knowledge, develop problem solving skills, accustomed in using media, and used to enhance interaction among students of students, so students become independent, more confident and have a great motivation in learning physics. Problem-based learning is an educational methodology that emphasizes real-world challenges, higher order thinking skills, interdisciplinary learning, independent learning, information-mining skills, teamwork and communication skills (Tan, 2003). Arends (2009) states that there are three learning outcomes (outcomes) obtained learners who are taught by PBL, namely:

(1) inquiry and problem solving skills, (2) adult role behaviors and social skills, and (3) skills for independent learning. Students should have hard work character to become independent learning.

Based on the descriptions above, it is understood that in the process of learning physics in addition to the ability of the teacher to design and manage learning that can engage students actively in learning and solving physics problems is also necessary seriousness and hard work of students in learning and understanding the concepts of physics teachers taught, so that students can solve problems related to the physics that ultimately students can obtain a more optimal learning outcomes.

Hence, needed to study more in depth about hard work of students in learning physics and Problem Base Learning (PBL) model to increase the learning outcomes of students in Physics with title **The Effect of Hard Work Character and Problem Based Learning Model toward Physics Learning Outcomes Students at SMPN 4 Sei Suka.**

1.2 Problems Identification

Based on the background of the problems that have been mentioned above, can be identified some problems related to physics, as follows:

1. Basically a lot of factors that affect student achievement particularly in physics, both internal factors and external factors.
2. Teachers' ability and creativity in designing and managing learning is one of the factors that may affect the achievement of student learning outcomes.
3. Study habits of students who are less well of course a bad influence for the development of the student learning including low student achievement.
4. Lack of earnest and hard work of students in learning and understanding the concepts taught physics teacher, resulting in students not able to complete tasks well and on time, so a negative impact on student achievement.

1.3 Problems Limitation

Problems that developed in this paper should be limited to be more focused and provide a clear picture of the issues that will be reviewed. In accordance with the identification of the problem, limit the problem in this paper is as follows:

1. Learning outcome physics is limited by the cognitive in the material vibration and wave in even semester of the academic year 2013/2014 in SMPN 4 Sei Suka
2. Learning model used is a problem based learning and direct instructional model with high and low hard work character.

1.4 Problems Formulation

Based on the background of the problem, identify problems, and limitation issues, the research problem can be formulated as follows:

1. Is there difference in physics learning outcomes of students using problem based learning model with direct instructional model?
2. Is there difference in physics learning outcomes of students who have high hard work character with students who have low hard work character?
3. Is there interaction between hard work character and problem based learning model toward physics learning outcomes?

1.5 Research Objectives

This research objective to know:

1. The difference in physics learning outcomes of students using problem based learning model with direct instructional model.
2. The difference in physics learning outcomes of students who have high hard work character with students who have low hard work character.
3. The interaction between hard work character and problem based learning model toward physics learning outcomes.

1.6 Research Benefits

The result of this study are expected to provide benefits to various parties, including the:

1. Students, the information and consideration to further improve the earnestness and hard work in the study physics in order to obtain more optimal learning outcomes.
2. Teacher, as an input and feedback to grow and improve the students' hard work in learning physics by designing and managing the learning processes that allow active student involvement in learning and solve physics problems.
3. Headmaster, as an input and consideration in order to improve the effectiveness and efficiency of learning that teachers do in the classroom in an effort to embed and improve the earnestness and hard work of students in learning physics so that students gain a more optimal learning outcomes and quality.
4. Researcher hereinafter, the expected results of this study can be used as a reference or consideration for doing research on the same topic in the future.