

CHAPTER I

INTRODUCTION

1.1. Background

Education is learning the knowledge, skills, and habits of a group of people that are passed down from one generation to the next through teaching, training, or research. Understanding education in General is a planned attempt to bring about an atmosphere of learning and the learning process for students in order to develop the potential of him that had the power of religious, spiritual self-control, personality, intelligence, morals, as well as the necessary skills themselves and society.

The purpose of education itself very much, one of them as stated in the law, namely to develop the potential of students in order to become a man of faith and piety to God Almighty, precious, healthy, have learned, creative, independently as well as being a democratic citizen is also responsible.

According to law No. 20, 2003 " Education is a planned and conscious effort to bring about an atmosphere of learning and the learning process so that learners are actively developing the potential for her to have the spiritual power of the religious, self-control, personality, intelligence, noble character, as well as the necessary skills themselves, society, nation, and State ".

As we know, the quality of education in Indonesia is still a concern. This can be seen from the large number of constraints that affect the improvement of the quality of education in Indonesia. So that needs to be researched and noted so that the future nation of Indonesia can improve the quality of education by smoothly and can compete in the Era of globalization.

According to Soedijarto (1991:56), that low quality or the quality of education on the side caused by the granting of a role that is less proportional to the school, the less match the planning, execution, and management system of the curriculum, and the use of learning outcomes in the cognitive achievement as the only indicator of success education, also caused due to not planning evaluation

system is mounted as an educational tool and an integral part of the curriculum system.

Physics learning objectives namely to equip learners to gain knowledge and abilities in order to develop science and technology. Sapriati (in Nana,2018:36) proclaimed that learning does not only convey information (facts) and understanding the material, but also pay attention to the development of other capabilities such as the ability to use tools and solve the problem, even on the development of attitudes, appreciations, and interests of students.

Thus, the need for the role of teachers in the learning and determine the right learning model, which not only affect the results of the study course, but can also affect the process skills. According to Dimiyati (Agus, 2016:142) revealed that a teacher is not allowed to act as the sole person who can transfer facts and theories, so it takes the process of science skills to be applied in the process of teaching and learning.

Teachers serve as supervising and steering, while the process that drives the students. Thus, a teacher needs to apply an approach which directs students to be active and have to dig into the potential that exists in itself, so that students are able to develop science process skills such as observing, classifying, predicting, measuring, conclude, and communicate.

It is necessary for the development of skills in order to process and acquire all concepts, facts and principles to students. Hamalik (Juhji, 20016:61) suggests that the notion of process skills in the field of natural science is the knowledge of the concepts in the principles that can be obtained from learners when she has skills certain basic science process skills that is needed to use science.

According to Barba (Rina, 2012:53), Process Skills Science (PSS) in not being a basic process skills and skills for integrated process. The basic process skills include: observation, classification, measurement, communication, concludes, predictions, relationships or time of use, the use of identification numbers and variables. While the integrated process skills include: preparation of hypotheses, controlling variables, operational definition, investigation and experimentation.

Science process skills must be grown within the student in accordance with the extent of the development and rationale. These skills will be COGS discovery and development facts and concepts as well as the growth and development of the attitude, insight and value to students. One of the learning models that involve the liveliness of students to own construct knowledge inquiry is a model of social interactions (guided inquiry).

Sagala (in Agile, 2012:4), suggests *inquiry* is an approach to learning that can be applied to all levels of education. Learning with this approach deeply integrated on the application of the process of science with a logical thought process and critical thinking. Inquiry is an approach that is used to gain knowledge and understanding with the questioning, observation, investigation, analysis, and evaluation.

Inquiry social interactions is used for students who are less experienced in the learning inquiry Suparno (in Narni, 2013:4) posited through learning inquiry students learn model-oriented guidance and instructions of teachers so that students can understand the concepts of a lesson, so that with the model student is not easily confused and will not fail because of the teachers involved.

Model learning inquiry social interactions is a learning centered on students. Piaget (in Wulanningsih 2012:34) suggests that the model is a model of social interactions inquiry prepares learners to experiment on the situation itself extensively in order to see what happens. Model learning inquiry social interactions is very appropriate for the developing process of science skills, because the syntax or stage of learning inquiry social interactions that are developed with the scientific method science process skill can train on the students.

In general the process of inquiry according to Sanjaya (Grady 2013:83) can be done via several steps, which are: 1. To formulate problems; 2. Propose a hypothesis; 3. Collect data; 4. Test the data based on the data that is found; and 5. Make a conclusion.

According to Jufri (in Yasmin, 2015:70) there are five phases/steps in the method of inquiry in General, namely: a) formulate questions; b) formulate

hypotheses; c) collecting data; d) test the hypothesis; and e) draw conclusions. Joyce and Weil (Dedi, 2015:303) suggests that inquiry -based learning model is a processtrain students to investigate and explain an unusual phenomenon. Inquiry learning is designed to let students directly that does scientific process through practice in a short time.

Based on the results of observation that has the author done at boarding schools MAWARIDUSSALAM, States that the factors that cause the learners did not reach the appropriate value KKM on subjects of Physics (especially in material measurement) is caused by the lack of interest in learning the learners to learn the material due to the teaching and learning of Physics in the classroom tends to be analytical with operates on losing formulas physics through mathematical analysis. Students trying to memorize the formula but less interpret what and how the formula was used. So did the problems given by the teacher emphasizes mathematically so that underprivileged students in mathematics will find it hard to learn physics so that the learning of physics become less meaningful and interesting for the students themselves.

This is in accordance with the research conducted by Sri Wuryastuti (in Destya, 2014) suggests that some of the problems of learning Physics that occur in field nowadays, that is located on the process of teaching and learning that still focuses on teachers, learning materials are inadequate, not applying the science process skills while learning activities of students, and only prepares students to continue their higher studies, not the setting up of HUMAN RESOURCES are critical, sensitive to the environment, creative, and understand the simple technology is present amongst the people.

Based on the circumstances of learners which I observe in boarding schools MAWARIDUSSALAM, it takes an innovation in the form of learning models that can help students in the train and develop the skills of students with the process of science using a model of learning inquiry social interactions.

Based on the background that had been featured in the above, the authors would like to conduct research with the title: "**The Effect of Guided Inquiry**

Learning Model Towards Students Science Proses Skills About Measurement Topic in Class XI MAWARIDUSSALAM".

1.2. Identification of Problems

Based on the description on the background above, several problems can be identified, namely::

1. Students not interested in learning physics.
2. Students activity in learning process is passive.
3. Physics learning process is still centered on teacher.
4. Students science process skills is still low.
5. The model that used by teacher is lecturing.

1.3. Scope of Problem

In order for this study to be more focused, the problem limitation in research in class XI is the Islamic Boarding School of MAWARIDUSSALAM Academic Year 2019/2020, namely:

1. Applying Guided Inquiry Learning Model in the experimental class and Conventional Learning in the control class to see differences in students' science process skills.
2. The research subjects are students of Islamic Boarding School MAWARIDUSSALAM class XI semester I 2019/2020 academic year
3. Material in semester XI physics class I is Measurement

1.4. Formulation of Problem

Based on the background above, the problem statement in this study is:

1. How is the student' Sciences Process Skill using Guided Inquiry Learning Model on Elasticity topic in class XI Science Mawaridussalam A.Y 2019/2020?
2. How is the student' Sciences Process Skill Conventional Model on Elasticity topic in class XI Science Mawaridussalam A.Y 2019/2020?

3. How is the influence of the Guided Inquiry Learning Model on Elasticity topic in class XI Science Mawaridussalam A.Y 2019/2020?

1.5. Research purpose

In line with the formulation of the problems stated above, the objectives to be achieved through this research are:

1. To know the student' Sciences Process Skill using Guided Inquiry Learning Model on Elasticity topic in class XI Science Mawaridussalam A.Y 2019/2020?
2. To know the student' Sciences Process Skill Conventional Model on Elasticity topic in class XI Science Mawaridussalam A.Y 2019/2020?
3. To know the influence of the Guided Inquiry Learning Model on Elasticity topic in class XI Science Mawaridussalam A.Y 2019/2020?

1.6. Benefits of Research

This research is expected to be useful for several parties including:

1. For teachers, as input and consideration material in choosing teaching materials learning models.
2. For students, increase students' interest in learning and understanding in learning
3. For researchers, increase knowledge and broaden their horizons in increasing their competence as prospective teachers
4. For schools, as one alternative to improve the teaching system in the teaching and learning process.

1.7. Operational Definition

An operational definition is a definition given to a personvariable by giving meaning or providing an operation needed to measure the variable, while the operational definition in this study is:

1. The learning model is defined as a pattern that is used as a guide in planning classroom learning and tutorials. (Suprijono, 2010)

2. Learning Model Guided Inquiry is a learning model that creates a learning environment so as to provide opportunities for students to shape their knowledge and build in-depth knowledge as experiences for students, (Kuhlthau, 2007).
3. Science process skills are scientific series derived from behaviors carried out by scientists to find concepts, theories and formulations to explain natural phenomena. Science process skills consist of activities: observation, collecting and managing data, identifying and controlling variables, formulating and testing hypotheses and explanations and drawing conclusions. (Joyce, 2009)

