

# CHAPTER I

## INTRODUCTION

### A. Background

Depdiknas (2006), Science is associated to the way to know the nature systematically, so science is not only a mastery of knowledge in the form of facts, concepts, or principles but also the process of discovery. Science education is expected to be the vehicle for students to know themselves and the environment, and the prospect of further development in applying it to the daily life.

The learning process emphasizes on providing direct experience to develop competence in order to explore and understand the environment scientifically. Science education is directed to inquiry and to do something that assist students to gain more understanding about the environment.

Science is not just a collection of concepts and knowledge but also the process how the concept is gained. Science can be used to develop of thinking way, knowledge, motor skill, scientific attitude. Learning Science is not only reading and memorizing concepts but the more important is to know how the Science concept is found through experiment done in laboratory.

In Science learning, the use of laboratory or experiment activities is part of teaching and learning process. Through experiment activities, students will prove the existing concept or theory and can experience the experiment process itself and then make the conclusion so it can support students'

understanding of the materials. In this case, if students more understand of the material, their learning outcome is expected to be increased.

Amien (2003) stated that experiment is one of laboratory activities that support the success of teaching and learning of Science. With experiment, students can learn Science through direct observation of the phenomenon of process of Science, train to think scientifically, instill and develop scientific attitude, find and solve several new problems through scientific method and others (p. 47).

Using of Scientific laboratory is intended to (1) develop student's skill in doing observation, recording data, and using tools; (2) train students to work accurately and discipline; (3) develop student's way of thinking through analysis and interpretation of experimental results; (4) develop honesty, cooperation and a sense of responsibility (Anonim, 2010, p. 4).

The mastery of Science for Junior High School is not adequate. From the survey, students ranked 32<sup>th</sup> from 34 countries. Therefore, it needs hard work and effort to improve Science learning achievement especially for students of Secondary School at Jogjakarta which is famous as the student area (Indayani, 2008, p. 2).

As one of learning sources at school, the laboratory helps the achievement of school vision and mission. Thinking about the important of laboratory, it needs an appropriate management that make its function is really realized.

Management is a process of utilization of resources effectively and efficiently to achieve the expected goal optimally by considering the sustainability of resources functions. Sagala (2006) defines management as a process to plan and maintain the environment where individual can cooperate in group efficiently to achieve the goal (p. 18).

In the context of education in school, laboratory has a function as a place of learning process with practical method that can give learning experience for students to interact with tools and material as well as directly observation of several phenomena. Organizing or managing of laboratory can be interpreted as the implementation of the administration, maintenance, security, and planning for the development effectively and efficiently.

As bilingual school, Junior High School *Semesta Semarang* has complete facilities to support teaching and learning process at school. The facilities include language laboratory, Science laboratory, library, big classroom, and others. The Science laboratory assists students in teaching and learning process both for practice activity and delivering of material. It can be seen from the students who always become the winner of Physic competition in the school level, national, and international level such as physic competition at Turkey.

Based on the above background, the researcher is interested in conducting a research entitled “Science Laboratory Management: State Owned Junior High School *Semesta Semarang*.”

## **B. Research Focus**

This study has a focus on managing Science laboratory at Junior High School *Semesta Semarang*. The focus is described into three subfocuses.

1. How are characteristic of Science laboratory room setting?
2. How are characteristic of Science laboratory material management?
3. How are characteristic of the satisfaction of using Science laboratory?

## **C. Research Objective**

There are three specific objectives of this study.

1. Describe setting of Science laboratory room
2. Describe characteristic of Science laboratory material management
3. Describe the satisfaction of using the Science laboratory

## **D. Benefit of Research**

The results of this study are expected to provide theoretical and practical benefits for the management of Science laboratory at Junior High School *Semesta Semarang*.

1. Theoretical Benefit

To provide the clear information on the management of Science laboratory at Junior High School *Semesta Semarang*.

2. Practical Benefit

- a. Provide ideas on the importance of Science laboratory management at Junior High School *Semesta Semarang*

- b. Provides useful input in an effort to improve the management of Science laboratory at Junior High School *Semesta Semarang*.
- c. With understanding of several problems about the management of laboratory, it enables to do the improvement and development so the Science laboratory at Junior High School *Semesta Semarang* is expected to be better.

#### **E. Glossary**

1. Laboratory is as a space or place to do experiment or study.
2. Management is a process of utilization of resources effectively and efficiently to achieve a goal that is expected to be optimal with considering the sustainability of resource function.
3. Satisfaction is a respond of discrepancy evaluation perceived between the prior expectation and the actual product's performance felt after the user.