

# CHAPTER I

## INTRODUCTION

### A. Background

Constructivism in learning concerns on facilitating students to be more active in classroom to gain the knowledge (Jacobsen, Eggen, and Kauchak, 2009). Constructivism in learning provides students an active learning where they are involved in solving problem, working in small group, participating on collaborative learning, taking investigative work, and having experiential learning. It is significantly different comparing activities in constructivism learning with passive learning activities. Passive learning activities only enacting students as information receiver and evolving them as a very loyal listener to the teacher. That is why nowadays, constructivism in learning is being focused by teachers to improve the quality of learning activities in classroom. Therefore, students will not be passive learner anymore but they are triggered to have more interactions. Teachers try to stimulate students in gaining knowledge by themselves through such activities they create in the classroom.

Regarding to the implementation of constructivism in learning, different learning environment might be created as teacher creatively willing to construct the best learning activity which suit student needs and learning objectives. Based on Fraser (1986), valuable goal of school intrinsically begun at having constructivism learning environments. Having a positive classroom environment is an educationally desirable end in its own right. Nature of learning environment has a potent influence on how well students achieve a range of desired educational outcomes. Cognitive ability of students is one of educational outcomes that should be achieved by teacher. As the final consideration, learning environment is desirably noted as a potent influence towards cognitive ability of student itself.

Teachers can have constructivism in learning through some learning strategies which can be applied in instruction. Teachers can increasingly draw

on an expanding body of strategies and methods that will enable them to create more positive and supportive learning environment (Jones and Jones, 1994). An effective teacher using different learning strategies to help students reach the goals which previously composed in instruction planning (Jacobsen, Eggen, and Kauchak, 2009). Teachers apply student-centered learning strategy to facilitate them constructing their own knowledge. Students are given more responsibility to seek what they need to know when they gaining their knowledge (Jacobsen, Eggen, and Kauchak, 2009). This teachers' effort have been relevant with constructivism in learning theory. After that, teachers need to apply teaching method which support student-centered learning strategy. According to Rahman et al. (2011), teaching method could be occurred simultaneously or in a sequence in the proper ways. Teachers have to consider a teaching method which suit both the concepts and the students in order to achieve the goal of learning.

One of method that has emerged constructivism in learning is discussion method. It is also usually conducted in the classroom. Sometimes, teachers want to have an independent learning activity for students which can increase their cognitive ability. Then, instructing students to have a discussion with their peers is decided. Bennett et al. (2004) stated that discussion has been strongly advocated as an important teaching approach for a number of years, partly arising from a more general movement towards student-centered learning. It is seen as a very important method to provide students an opportunity to articulate and reflect on their own ideas about scientific phenomena. Discussion method has great potential for classroom teaching because it implies open and active participation of students (Gall and Gillet, 2001). Even, teacher can vary its use to achieve several different instructional purposes.

Students in Sekolah Indonesia Kuala Lumpur (SIKL) come from various cities in Indonesia. They are very different in attitude and cultures. Most of them coming from high-economic level families with high education. That is why they are mostly more critical and active in arguing something. They

currently have their own perspective and have their own way to strengthen it. In learning activities, students' characteristics are shown, especially when discussion is applied by teacher. In this school, discussion is a method which used to be implemented by teacher.

Discussion is a process whereby two or more people express, clarify and pool their knowledge, experiences, opinions, and feelings (Rahman et al., 2011). Discussion is neither interview nor talking with persons, yet it is an activity in which students collect the data and information sistematically to achieve their current purposes (Irwanto, 2006). In every day conversation, the term discussion could be a talk about anything, but actually discussion is considered to be a serious and systematic talk about a specific topic. Discussion is task-oriented that's why it is held to achieve a common purpose or a goal of a group.

Looking at those experts' statement, it is clarified that discussion will provide students such activities in learning. Students are allowed to express their opinions, argue some statements, ask questions, and negotiate other responses. Moreover, students might have conflict with others when they discuss some problems. Nevertheless, they are expected to respect other opinions, be calm and be patient when someone pose some arguments which contradict with theirs. Students have to obey all of rules in discussion, unless they distract discussion itself. Therefore, in discussion, good interaction among members will lead to the achievement of current purposes.

Discussion which is held by teacher will create its learning environment in the classroom. Students who used to have discussion in learning activities might have such an effect of this activity, for example cognitive ability. As some experts claims that learning environment will influence desired educational outcomes, then paying much attention to learning environment and cognitive ability of students is urgently needed. Therefore, a research which present a current profile of learning environment and cognitive ability of students by using discussion method at Sekolah Indonesia Kuala Lumpur is conducted.

## **B. Research Problem**

The research problem of this study is “How is The Profile of Learning Environment and Cognitive Ability of Students in Learning Environmental Pollution by Discussion at Sekolah Indonesia Kuala Lumpur?”

## **C. Research Question**

Elaborating the research problem, the research attempts to explore these following questions:

1. How is the profile of learning environment when students learn environmental pollution by discussion at Sekolah Indonesia Kuala Lumpur?
2. How is the profile of cognitive ability of students in learning environmental pollution by discussion at Sekolah Indonesia Kuala Lumpur?
3. What are factors that influence students’ discussion process when they learn environmental pollution by discussion at Sekolah Indonesia Kuala Lumpur?

## **D. Limitation of Problem**

In order to make the research become more focused, the problem is limited as follow:

1. Learning activity that is done in this reseach is discussion.
2. Cognitive ability of students that is described in this research is starting from C1 (remembering) until C5 (evaluating), based on Anderson et al. (2001).
3. Learning environment that is described in this research is based on Constructivism Learning Environment Survey developed by Taylor, Fraser, & White (1994). It consists of five aspects such as personal relevance, uncertainty, critical voice, shared control, and student negotiation.

### **E. Research Objectives**

This research has objectives as follow;

1. To analyze the profile of learning environment when students learn environmental pollution by discussion at Sekolah Indonesia Kuala Lumpur.
2. To analyze the profile of cognitive ability of students in learning environmental pollution by discussion at Sekolah Indonesia Kuala Lumpur.
3. To analyze aspects that influence students' discussion process in learning environmental pollution by discussion at Sekolah Indonesia Kuala Lumpur.

### **F. Research Benefits**

The results of this research are expected to provide benefits as follow:

1. For teachers, this research will provide them the descriptions of learning environment which are created when teacher implements discussion in the classroom. Other than that, the result of this research will give another informations how discussion implementation might affect to cognitive ability of students at Sekolah Indonesia Kuala Lumpur. Thus, teachers' perspective on discussion implementation in learning would be explored reasonably based on results of this research.
2. For students, this research will provide them such an independent learning activity called discussion. Through this activity, students will try to actively build their own knowledge toward environmental pollution issues and discuss those issues with their member of group in discussion. These activities are expected not only to give students different atmosphere in learning but also to avoid such a boredom in the classroom where students is just being passive learner who always listen teacher explanations. Discussion might let students to have conflict among their friends as they have to argue to each other but in the other

hand, discussion might let students to have a good teamwork to accomplish their own goal.

3. For another researcher, this research will be references to develop another kind of research which involve discussion as the focus of research. The informations which are appeared through this research could be evaluated as the way to have more better ideas for the future impactful research. Hopefully, in the future, more researches that are conducted by other reseachers will give valuable influences for better educational improvement.