

## CHAPTER I INTRODUCTION

### A. Background

There are several things that hang on experiences and adding visualization in the teaching learning practice for the student in the class that can improve students soft skill. Visualize the concept of the science materials can increase students interest to science. This thing has already implemented in some schools, such as poster presentation as assessment. Visualize the concept of science is also benefit during the teaching activities.

Some students seem to be less interested in the science class while they were only listening to teacher's explanation, taking notes and explanation only. Sometimes, teacher hard to find or identify the students who has already understood about the material or they who don't understand about the material. When I was a child, I like visualization in science, maybe visualization can answer the question of how to measure student understanding about the material during the class.

According to American Heart Association 2004 (MacIntosh, 2007: 351) "A poster presentation consists of a visual display of research highlights on fiberboard background combined with an interpersonal question and answer period". There are the key benefits for students because poster are student centered, encourage students to reflect on their learning during their class activity, and enable students to demonstrate their learning and to learn from other students' experience. They are also felt to be less intimidating than standard oral presentations by enabling the flow of discussion around student experience (McNamara, *et al*, 2010:5).

According to Stegemann and Sutton-Brady (McNamara, *et al*, 2010:5) provide a useful summary of the benefits of posters as identified by the literature. Several studies have reported that students feel comfortable with the concept of poster presentations. Presentation at a poster session is an enjoyable and rewarding experience for students. Constructing a poster is an effective of developing both research skills and creative

abilities”. According to Huddle (McNamara, et al 2010:5). “Poster preparation allows students to become active learners and encourages deeper learning”.

The use of poster presentation is being one of the triggers for student’s enthusiasm in learning science, because as stated by the experts they found that poster presentation is effective in visual learning. Learning science using a poster presentation is expected to enhance student’s creativity and understanding. By way of an effective teaching and educational, it is expected the students to feel comfortable while learning activities.

Papers are designed to appeal to an indicator of scholarly journal, and to meet the formal organizational and informational requirements of publication. Posters are often designed to appeal to peers and colleagues at public display. A poster presentation can allow for question and answer sessions, and the exchange of ideas and information regarding research.

According to Bloom’s Taxonomy proposed (Anderson, 2001) reveal the mastery is the ability of these terms, like being able to capture a material that is presented in a form that can be understood and be able to provide interpretation and classify. Mastery and understand of the concept of a person’s level of learning outcomes that can define or describe a piece of information with their own words, students are required not merely to remember the material by using their own words. Mastery and understand the concepts is essential in teaching and learning activities because without concept, the learning process will be hampered.

Pollution is a topic to be raised in the learning using a poster presentation. There are various kind of pollution on earth, such as water pollution, air pollution, land pollution, etc. Those kind of pollution materials will be separated into several groups in the class that hopefully can be explored by students during the activity. This activity will increase of students skills in finding the problem of pollution until solve the problem in briefly explanation through a poster presentation.

## **B. Research Problem**

According to what have stated aboved, so the research problem how is the effect of poster presentation towards students' creativity and concept comprehension about pollution?

## **C. Research Questions.**

1. How does the creativity of students through poster presentation about pollution?
2. How does the improvement of students' concept comprehension before and after they make a poster presentation about pollution concept?
3. How is the correlation between students' creativity and concept comprehension?

## **D. Aim of the Study**

1. To investigate the creativity of students through poster presentation.
2. To investigate the improvement of students' concept comprehension through poster presentation about pollution concept.
3. To investigate the correlation between students' creativity and concept comprehension.

## **E. Limitation of Research**

This study was conducted at one class of grade 10 science class in Senior High School. This study was implemented only in one class because of the limitation of time and class available. This study was implemented in second semester or 4<sup>th</sup> term in Senior High School. Pollution concept was chosen in this activity of poster presentation. Comprehension test was chosen to measure students concept comprehension. Meanwhile Rubric and observational sheet was chosen to guide and measured students' creativity

## F. Assumption

According to Vujakovic, 1995 and Wihempfheimer, 2004 (McNamara, *et al* 2010:5) “Constructing a poster is an effective means of developing both research skills and creative abilities.”. According to Huddle, 2000 “Poster preparation allows students to become active learners” and Pearce and Sutton-Brady, 2003 “encourages deeper learning”. (McNamara, *et al* 2010:5)

## G. Organization Structure of Research Paper

This research paper is arranged based on its necessity .In order to get organized structure of paper, this research paper is arranged based on the following organization structure:

### 1. Chapter 1 : Introduction

This chapter elaborates the background of the research followed by the problem proposed as well as its limitation. In this part also explain the aim of the research and the benefit for other parties in the same field of study.

### 2. Chapter II : Literature Review

This chapter describes some literatures and basic theories of the research. This research is reviewing poster presentation, creativity, concept comprehensio and pollution concept. Those theories are used to strengthen or support the data gained from the research in analysis part.

### 3. Chapter III : Methodology

This chapter examines the step of research procedures, the type of research, how the data will be obtained, what is the object of the research, the instruments, and the research plot.

### 4. Chapter IV : Result and Discussion

In this part, all of the data from the research will be interpreted as result of the research. The discussion of the result will be followed after, it analyzes the result of research and the correlation between the result and the theories.

### 5. Chapter V : Conclusion and Recommendation

As its title conclusion and recommendation, in this chapter all of research question will be answered based on the result. The difficulties and obstacles that found in this research will be discussed in recommendation part.

## **H. Significance of Research**

1. For Teachers: Teachers should be able to understand the students who have already learnt the material. Small group with poster presentation should be use for the student in the end of the class. Teacher was expected to be able to develop the activity using poster presentation as their assessment to evaluate the understanding of the materials.
2. For Students: This study is expected the students to explore their knowledge through drawing, and they should be able to illustrate their verbal statement. This study is expected for students to feel enjoy when they learn science in visual. Through poster, it was hopefully that students should have more opportunity to develop their soft skill and explore their mind.
3. For Researcher: This study is expected to provide experience in developing an alternative device in teaching and learning that can display the improvement of students creativity and concept comprhension through poster presentation used as an evaluation tool in learning science.