

CHAPTER I

INTRODUCTION

1.1. Background

Indonesia is already implementing significant policy changes to enhance quality education, based on the data record of the World Bank. There is a constitutional authority to spend on education 20 percent of the national budget. The government also boosted income from the *Bantuan Operasional Sekolah* program and *Program Indonesia Pintar* to schools. As Indonesia's education system's goal has risen, significant implementation difficulties sadly remain. Between 2001 and 2017, student entry increased by 23 percent or 10 million students, along with only a slow increase in quality. Indonesia's International Student Assessment Program (PISA) scores have risen, but Indonesia will only achieve average nation ratings in 60 years at its present pace. In Science, the mean rating for the Junior High School National Examination 2015 is only 59.88 for Kementerian Pendidikan dan Kebudayaan record information. The government has already been assessed and *Kurikulum 2013* was proclaimed. *Kurikulum 2013* will concentrate on making students more creative through student-centered activities based on Paparan Wamendik.

Two third creativity derives from education and 1/3 from genetics (Dyer, 2011). Creativity can be accomplished through observation, questioning, experimentation, association and networking. Cooperative learning is therefore selected as the government's policy to enhance student performance in the educational and learning setting so that all these components are completed. Cooperative learning with a focus on "natural learning" may form part of problem-based teaching (Johnson, 2014). The random group work of students will have an effect on the society and they should create their own teaching status. Cooperative learning will have greater contact with society, but it will make it possible for an person to be able to speak to the community to compete and strive in close quarters. Cooperative learning will therefore trigger anxiety for students.

Anxiety is a weakened mixture in the learning process of adverse emotional fear and cognition (Mallow, 1987). Due to past negative experiences, it generates

a lack of role models, gender, ethnicity, etc. Everybody is anxious and especially in science their conceptual mastery will be affected. Some of the supporters of education do not acknowledge this. They concentrate only on their students' cognitive as well as psychological. While supporting the accomplishment of students in learning process is also an significant thing.

There are many models for cooperative learning, but the Round Table is a multifunctional cooperative learning model that doesn't require much. The assessment of prior knowledge, testing, data review, the creation of cooperative arts and teams is education and social skills. (Kagan, 1989). Write only one reply for each student in a paper group turns the practice and should be transferred around the group.

Some colleges skip the material when they learn global warming at Junior High School, because there is no calculation and it can be easily categorized. So, it does not include into focus for preparing National Examination. Also, in National Examination, the question about global warming is only one question and categorize in C1 (Remembering). Comprehension of global warming is to be known and not applied to the everyday lives of learners. However, global warming is happening right now. Everyone feels the impacts of global warming. But students do not exactly understand what global warming is. It is kind of danger since there is no awareness from the students.

The dangerous one based on research from YouGov said Indonesia becomes the third countries which does not believe about global warming after United States and Saudi Arabia. The Guardian said 18 percent Indonesian said if the global warming is really happening, but it is not caused by human activities. In the other hand, global warming experts agreed if human is causing the global warming for this three decades with supporting the statement from United Nation that said if one million species in this Earth will extinct because of human activities also human makes the extinct faster which never happened before.

It shows if the government still not ready for making the regulations regarding global warming. The fact shows from 2009, the farmers cannot predict the weather forecast which effect their harvest time. There is no major research that find how much the loss because of global warming, but in 2011 there was 3

trillion rupiahs loss in East Java. Indonesia also becomes the sixth contributor to carbon emissions on the basis of the World Resource Institute.

Of all the issues, the researcher hope that after the research learners will become more aware of global warming, master the ideas of global warming and influence their anxiety in the teaching of science in a beneficial manner. The researcher not only hopes that global warming will be the focus of the teaching / learning process.

1.2. Research Problem

The research problem of this research is “Does Round Table give an effect on Students’ Concept Mastery and Science Anxiety in Learning Global Warming?”.

Based on the research problem, researcher elaborates the question to be explored into:

1. How is the implementation of round table cooperative learning in learning global warming?
2. How is the effect of round table cooperative learning on students’ concept mastery in learning global warming?
3. How is the effect of round table cooperative learning on science anxiety in learning global warming?

1.3. Research Objective

Based on the research problems, researcher specifies the research objective as below:

1. To investigate the implementation of round table cooperative learning in learning global warming
2. To investigate the effect of round table cooperative learning on students’ concept mastery in learning global warming
3. To investigate the effect of round table cooperative learning on science anxiety in learning global warming

1.4. Research Benefit

The results of this study are expected to provide the following benefits:

1. For teachers, this research may give an insight to raise an awareness in using Cooperative Learning to support one of *Kurikulum* 2013's aim, to be student-centered. Also, this research wants to show if Science Anxiety also can be used as one of measurement to escalate students' understanding in learning Science.

2. For students, this research may motivate them to be more enjoy in learning Science and make them aware about the importance to take care of their academic, social, and psychological.

3. For another researchers, this research may be selected as a focus since there still pros and cons if Cooperative Learning can give a positive impact towards Students' Concept Mastery and Science Anxiety.

1.5. Organizational Structure of Research Paper

The organizational structure of research paper is to describe the content of every chapter, the arrangement of writing and the connection between one chapter to other chapters. The organizational structure of this research is as follows:

Chapter I: Introduction consists of background of research, research problem, research objective, research benefit, structure of research paper, and limitation of problem.

Chapter II: Literature review consists of round table cooperative learning, concept mastery, science anxiety, and global warming.

Chapter III: Research methodology consists of research method and research design, population and sample, assumption, research instrument, instrument and validation result, research procedure, data process, and operational definition.

Chapter IV: Result and discussion consists of research result and research discussion

Chapter V: Conclusion and recommendation consists of conclusion and recommendation

1.6. Limitation of Problem

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

1. Round table cooperative learning used as a treatment for experimental group. It is using with combining academic and social skills with the steps grouping, preparing, brainstorming, writing, presenting, evaluating, and revising (Kagan, 1989).

2. Students' concept mastery is measured in this research involves level cognitive of remembering (C1), understanding (C2), applying (C3), and analyzing (C4) based on Bloom's revised taxonomy (Anderson & Krathwohl, 2001).

3. Students' science anxiety is measuring in this research divides into four aspects which are self efficacy, grade anxiety, future, and in class and management (May, 2009)

4. In this research, the topic is global warming was limited by Core Competence no. 3 and Basic Competence no. 3.9 of 7th Junior High School on Kurikulum 2013. The topics that will elaborate are explain the understanding of greenhouse effect, explain the process of greenhouse effect, describe the definition of global warming, describe the causes of global warming, describe the effect of global warming for life on Earth, and describe several efforts to tackle the global warming.