

CHAPTER I

INTRODUCTION

1.1 Background

The significant development of technology and information has brought a lot of new inventions that are intended to make people's life easier. To live in this high technology era, people are pushed to have a good education to follow and survive. People are trying to shift the manual into automatic, the conventional into digital things around in order to be more efficient and effective in life. The young generations are forced to have a good education to be able to adjust and live in this era. Cowan (2010) stated that the chance to be educated by having the ability to think can make children be able to examine their surroundings in greater context.

Berkhof and Van Til (1989) stated that education is a divinely ordained need. This statement does not only show how important education is in humans' life, but also shows that education is one of the essential needs that God intended for humans. Since the word "education" was not only limited to a specific educational level, the author of the book emphasized the definition of education with some purpose and task of humans, such as to dedicate their lives to God, and to develop themselves and use their mind in order to fulfil God's purpose in humans' life.

Furthermore, in the book entitled *Foundation of Christian Education*, one of the responsibilities of the humans is to think what God is thinking (Berkhof & Van Til, 1989). The author of the book highlighted the uniqueness of being humans because humans bear God's image. God gave humans the ability to gain

information, process it in their mind, analyse it, and make decisions as one of His characters that inherited for humans. This is also one of the things that makes humans different and special above the other creation of God. In Genesis 1:28, God charge humankind to fulfil and “subdue” the earth. Following that, in order to subdue it, God inherit His characteristics to humans, such as the ability to be mindful and thoughtful.

So in order to be educated, mindful, and thoughtful, humans needs to develop their skill of thinking, especially the skill to think critically. Critical thinking skill is an essential thinking skill which allows the students to think logically and rationally, and also promotes the other thinking skills to help students learn optimally. This skill is not gained by humans instantly, but it needs to be developed and trained gradually. Some people are not aware of the importance of having this critical thinking skill. Some of them may also not know what critical thinking means and how to train for it.

There was a survey done by Organisation for Economic Co-operation and Development called Programme for International Student Assessment (PISA), which purposely assessed the thinking skills of 15 years-old-students from different countries around the world in reading, mathematics, and science. After that, the result of the test would be given back to the participated country, to help them develop their education system (Organisation for Economic Co-operation and Development, 2016). According to the result of the survey, out of 65 countries who participated in this survey, Indonesia was in the 64th position, which means we had the second lowest mean score among all participated countries. Indonesian students got below the standard score set by PISA, both in

reading, mathematics, and science. This result is very shocking because it indicates a low score on the critical thinking skill of the young generations.

Moreover, based on the observation which also supported by the discussion between the researcher and the classroom teachers, the result revealed that Grade I students couldn't show the critical thinking skill during the lesson. This was proven when only a few students were able to answer questions which required higher level of thinking skill, such as "how" and "why" questions that the teacher was asking. There were only a few students who asked deep questions about the lesson (which not shown the critical thinking skill standards). Further, the researcher found out that they couldn't acquire this skill because they were not exposed to it, so they were not familiar with asking and answering questions in order to gain further information about the lesson.

As Christian educators, it is very important to face and fix this kind of situation. In Ephesians 4:23, God told humans to renew their mind to be more like Christ. Thus, Hoffecker (1986) explained that God is the source of meaning and the ultimate presupposition of knowledge. As created in God's image, yet fallen because of sin, mankind needs both to be redeemed from sin and to be renewed in His knowledge. Indeed, the wonderful capacity of humans' mind should not be explored wildly – no limitation and no basis, but it needs to be nurtured and developed in the knowledge of the Lord. As a result, in order to enhance the full potential of humans' thinking skill, Christian educators need to direct and guide the students to think critically while standing firm on the basis of the Bible.

Regarding to the low score of the critical thinking skill of the students as young generation and future leaders, the researcher decided to implement an

inquiry based instructional model called 5E. The researcher decided to use this model because the nature of 5E which allow the students to inquire was beneficial for the students to practice their thinking skill, including the critical thinking skill. Moreover, there was a higher level of flexibility in planning and implementing the model. The researcher could plan every learning activity which fits to the situation of the students, and even modifying or trying new learning activities which was very suitable for the students in a lower grade.

Furthermore, the 5E instructional model describes a teaching sequence that can be used for entire programs, specific units, and individual lessons (BSCS, 2006). The 5E instructional model consists of five phrases in sequence: engagement, exploration, explanation, elaboration, and evaluation. It focuses on the students' active learning to stimulate students' critical thinking skill. The activity on each phase could be designed flexibly according to the age of the learners, the infrastructure available, and the topic of the lesson itself.

Even though the 5E instructional model is not a new model in education world, this model is rarely used in teaching and learning process inside the classroom. For instance, two of the teachers in Grade I classroom where the researcher found this problem admitted that they didn't know about this instructional model. The teachers only taught using direct teaching method during Biblical Studies lesson and of course, they couldn't get the benefits from implementing this model.

Pointing out to the importance of having and developing critical thinking skill to the maximum potential God has given to humankind, the researcher conducted a research to show how the implementation of 5E instructional model

could affect the development of Grade I students' critical thinking skill in Biblical Studies lesson at ABC School Lippo Village.

1.2 Research Question

Based on the explanation above, this research aims to describe how the 5E instructional model is implemented in Biblical Studies lesson in Grade I and how it helps students to stimulate their critical thinking skill. The problems to be discussed in this research include:

1. Does the implementation of the 5E instructional model develop Grade I students' critical thinking skill?
2. How does the implementation of the 5E instructional model develop Grade I students' critical thinking skill?

1.3 Purpose of the Research

This research has some purposes which are derived from the statement of problem mentioned above:

1. To develop Grade I students' critical thinking skill through the implementation of 5E instructional model.
2. To investigate the implementation of 5E instructional model in developing Grade I students' critical thinking skill.

1.4 Benefits of the Research

By doing this research, it is expected that it will provide beneficial contributions to students, teachers and the researcher.

1.4.1 For students:

- a) Students will understand the lesson deeper through the implementation of the 5E instructional model
- b) Students will develop their critical thinking skill

1.4.2 For teachers:

- a) Teachers will have another alternative teaching model to help students promote their critical thinking skill
- b) Teachers will get suggestions and information about the critical thinking skill and the 5E instructional model

1.4.3 For researcher:

- a) The researcher will get experience of doing classroom action research
- b) The researcher will get evaluation of the strengths and weaknesses of implementing the 5E instructional model

1.5 Definition of Terms

1.5.1 Critical Thinking Skill

Critical thinking skill is an ability to acquire mode of thinking which is active and persistent to gather more relevant information, to answer questions rationally, and to make decision / judgment. (Inch, Warnick, & Endres, 2006; Dewey in Fisher, 2009; Moore & Parker, 2009; Paul, Fisher, and Nosich in Fisher, 2009).

1.5.2 The 5E Instructional Model

The 5E instructional model is an approach of teaching which consists of five teaching sequences: engagement, exploration, explanation, elaboration, evaluation that can be used for specific unit and lessons (Eggen & Kauchak, 2007; BSCS, 2006).

