### CHAPTER I INTRODUCTION

#### 1.1 The Background of the Study

English has become an important language in the age of globalization. It is medium of communication among people throughout the world. In Indonesia, students learn English as a foreign language (EFL). They are taught four skills of English: listening, reading, speaking, and writing. Of all the four skills, writing has become more important in the era of Teaching English as a Foreign Language (TEFL). Writing as one of the language skill must be taught in English classes especially Senior High School Students. Through the teaching and learning of writing the students are expected to be able to produce a text well. This is in line with the objective of writing instruction in Senior High School, to develop the students' writing skill in order they can write into English effectively and accurately.

Writing is unlike spoken language in that it requires the reader or the audience to understand and interpret what has been written. Nunan (2010) state that "the most difficult task to do in language learning is to produce a coherent, fluent, extended piece of writing, which is even more challenging for second language learners. "Written products are often the results of thinking, drafting and revising procedures that require specialized skills, skills that not every speaker develops naturally (Brown, 2011). Emmons (2013) states that "writing is a basic skill that needs to be mastered by all English Language major students. It is believed that writing demands a great deal of

skills and conventions such as writing readiness and grammatical rules for the students to become proficient and effective writers.

At the level of Senior High School, generally it has two majors, Natural Science major (IPA) and Social Science major (IPS). The students of the two majors have different cognitive process in doing something. Cognitive Process is something happening in the students' mind. The cognitive abilities of the Natural Science (IPA) students are different with Social Science (IPS) student. However, it is caused of the different way of their cognitive process of processing something. The ways they express their ideas is not similar and depend on their characteristics.

Zabu & Davia (2013) states that the students who study in Natural Science tend to think logically and based on the fact. He also categorized students who study in Natural science (IPA) major into conservative. In this category, they like adhering to existing rules and procedures, minimize changes, avoid ambiguous situations as far as possible, and prefer familiarity in life and work.

Actually, the students of Natural Science (IPA) major have such a way of thinking because their activities during learning in the classroom are engaging in investigations and activities that would allow them to develop deep conceptual understandings of scientific ideas and of the process of inquiry. They also read the work of others as their progress through an investigation to help them make sense of their own findings. In addition, because investigation is generally complex, the students of Natural Science often act like scientist; must record data points, observations, and initial analysis in writing. It is reflected through their activity in the laboratory, doing experiments and other subjects that required them to think critically. Most of IPA students use the left brain. Because in studying science, they will study logic, count, sequence, and analyze. Many people think they are serious, hard to play with, hard to socialize and quite. They are accustomed to reasoning, solving problem, tinkering with numbers and counting them. Not just fixated with the formula. They can find a new formula that is easier for them, if they are able to develop its basic nature.

Meanwhile, the IPS students, they prefer to use the right brain. Because in learning IPS, the use creativity more. And look at the outside world. They cannot just study books. They also must be active in society. Therefore, they are judged to be active, talking, sociable, and broader in their insights. Many people think they are stubborn. Actually they are not suborned; it's just that they are less serious about facing something. But in society, they are more sought after. Because they are easy to socialize.

Scharfersmen in Synder and Mark (2014) states that students who study in Social Science major are accustomed to explain something based on social phenomenon. It is in line with Stenberg in Zabu (2014) that proposed the students who study in Social Science major tend to memorize and recall information. Related to the learning style, Stenberg in Zabu (2014) also categorized students who study in social major into liberal. In this category, they like surpassing rules and procedures and attempt to maximize changes. In addition, they also seek or are at least comfortable with ambiguous situations, and accept to certain degree unfamiliarity in life and work.

The students of Social Science (IPS) major have such a way of thinking because their activities or the subjects during learning in the classroom are engaging them in memorizing and arguing toward the social phenomenon that existing in the social life. They also consider of others' opinion or ideas as they progress through a discussion and they respect the differences as it is accepted by the society. The students of Social Science act like politician who generally good in arguing in spoken and therefore want to communicate their ideas to other people directly. Finally, students of social studies programs construct a knowledge base and attitudes from academic disciplines as specialized ways of viewing reality. They begin from a specific perspective and apply unique processes for knowing to the study of reality.

The ability to comprehend arguments is a fundamental aspect of human decision making and social interaction. It is also an ability that we expect the educational system to impact to students during their schooling. There is a national expectation that students become able to comprehend and think critically within a domain. On the other hand, Analytical Exposition text is kind of text in which the process of making what writers or speakers think clear to themselves and to others are organized systematically. As proposed by Nippold, Ward-Lonergen, & Fanning in Chase (2011), Analytical Exposition text requires the writer to embrace a particular point of view and try to convince the readers in order to have the same perspective. The writers also have to arise the problems and attempt to map language onto his or her own thoughts and feelings as well as the expectations of the reader. It is in line with Saito's opinion (2010) that the production of Analytical Exposition text is a reflection of cognitive process of problem solving. Saito (2010) stated that in order to make an argument in Analytical Exposition text, the writers need to express their point of view on a controversial issue or claim support it with evidence including facts or their own opinions in order to convince the readers.

As the previous research conducted by Eka Maria (2016) state that cognitive process of the students in translating simple sentence of a paragraph in science, and also the reseach by Halpen (2004) about the cognitive process taxonomy based on the sex differences, the writer is interested to do a research based on SMA majors, the students of Natural Science major (IPA) and Social Science (IPS) in writing Analytical Exposition text. It is assumed that the students from both the two majors have their own way in expressing their ideas in Analytical Exposition text as the students from the two majors have their own characteristics. Their cognitive process will be reflected in their Analytical Exposition text and at least, we should realize that every student has same opportunity and no major is better than another major.

#### **1.2 The Problems of the Study**

The problems of this study were stated in the following questions:

- 1. How do cognitive processes occur in writing analytical exposition text by students' majoring in natural and social sciences?
- 2. Why do cognitive processes occur in the ways they do?

# **1.3 The Objectives of the Study**

This study was aimed at studying the new phenomenon on the cognitive process of the students in writing analytical exposition text. It specially attempts to explain objectively the cognitive process of the students in writing analytical exposition text as well as the reasons of doing such way. Thus, the objectives of this study were

- to investigate cognitive processes applied by students' majoring in natural and social science in writing analytical exposition text, and
- to reason for the way of cognitive processes occurring in natural and social science in writing analytical exposition text.

### 1.4 The Scopes of the Study

The scope of this study is limited to the cognitive processes which are involves the 3 mainly aspects namely; planning, translating, and reviewing.

# **1.5 The Significances of the Study**

Findings of this study were strongly expected to have the theoretically and practically indispensable significance. Theoretically, on one hand, the research findings were expected to be valuable contributions for other researchers who would be conduct the studies in the field of writing studies, particularly about the cognitive process in writing analytical exposition text.

Practically, on the other hand, this study focus on students of different majors, Natural Science Major (IPA) and Social Science Major (IPS) and their cognitive process in writing genre text, this study hopefully would help the SMA students both IPA and IPS majors to construct an effective analytical exposition text by using their individual writing processes in appropriate context of genre. Besides, the teacher should concern of these differences; they could help learners of the both majors in different ways in writing a text by concentrating on learners' characteristics and provide successful learning situations.

