CHAPTER I

INTRODUCTION

In this part, the writer presents: (A) Background, (B) Identification of the problems, (C) Limitation of the problems, (D) Formulation of the problems, (E) The objectives of the problems, and (F) Benefits of the study.

A. Background

The world is constantly changing. Thus, students need to prepare for the changes. The twenty-first century marked the rapid changes happening in all aspects of life including in education. It is essential for students to be ready for 21st century skills needed. This is especially true for today's high school students.

In this 21st century, high school students need to be ready for university. When they are studying at university, higher order of thinking skills is required. Students do not only need to remember, understand and apply the information they have, they will also have to analyze, evaluate and eventually create something to solve problems. This is according to the framework of thinking which was developed by Bloom (2001) and later revised into six categories: remembering, understanding, applying, analyzing, evaluating and creating. The first three refers to the lower order of thinking and the last three refers to higher order of thinking skills which is also in line with the 21st century teaching and learning in which communication, collaboration, critical thinking and creativity (4C) are included. In fact, the higher order of thinking skills can be in use in their future and be parts of their long-life learning.

Students, unfortunately, are still struggling to use higher order of thinking

and continue to simply copy or imitate what the teacher asks them to do. Todays, students are unable to apply their higher order of thinking properly. Some students still have difficulty in delivering their thoughts. Other students can only remember information as presented to them. For university level, such learning skills are insufficient. This is where the problem lies. In the classroom, teachers did not teach students to have critical and creative ways of thinking. This cannot be done when most teachers still apply teacher-centered learning in which students only listen to teacher delivering the lesson.

The shift from teacher-centered classrooms to student-centered learning has profoundly impacted on education. It has changed the learning practices. It is necessary for teachers to provide learning activities that enable students to develop the 21st century skills including critical thinking skills and creativity. Students need to be encouraged to be creative and use their critical thinking skill in learning every lesson. This is definitely not an easy task to do. They have to be ready to question or reflect on their own knowledge and information given to them.

Critical thinking is defined as the capacity to think rationally and reflectively. It, therefore, enables ones to determine what to believe or do (Ennis, 2011) by engaging intellectual processes in conceptualizing, applying, analyzing, evaluating information leading to creation (Scriven, 2003). The skills are applied to solve problems in new situations, to make inferences and generalizations, to combine the information in new patterns, and to make evidence-based decisions. These involve higher order of thinking skills. Bloom Taxonomy, verbs for critical thinking skills, can be used as guidelines when teaching students. The lower order of thinking skill include remember, understand and apply. While in applying

the higher order of thinking, it starts with analyzing; teachers can ask students to contrast, connect, relate, devise, correlate, illustrate, conclude or categorize information. Next, teacher asks students to evaluate by criticizing, judging, defending, prioritizing, plan, or grade a piece of information. Finally, in creating a project, students should design, modify, role-play, develop, rewrite, invent or write.

Critical thinking is an ability that is transferable and can be independently acquired. In order to improve students' critical thinking, appropriate curricula and teaching methods can be developed (Kim, 2009). Critical thinking skills can be learned and therefore they can be taught (Robbins, 2006). Likewise, Eklof (2005) pointed out that critical thinking skills were a habit and an intellectual skill that guided someone to a reliable understanding; this habit is not an innate feature, but it had to be taught.

A German theoretical physicist and a worldly famous scientist, Albert Einstein, mentioned that imagination is more important than intelligence since knowledge is restricted to everything that we know and understand now, while imagination encompasses the whole universe, and everything that we will ever know and understand will be there. This is because innovation inspires people to consider, design, and develop new things, new medicine, or new technology. When taught to think objectively, critically, creatively, collaboratively, and independently, students will have creativity. As professional and important people, teachers need to prepare well to equip and inspire their students to have imagination by educating their students with higher-order thinking skills that are critical and creative thinking. Simply put, invention is turning your ideas, imagination, and dreams into reality. Lucas, B., E. and G. Claxton and Spencer

(2013) emphasized the five core dispositions of creative mind which are inquisitive, persistent, inventive, collaborative and disciplined. Inquisitive people in their creative domain are excellent at recognizing and pursuing fascinating and meaningful questions. Persistence in the form of tenacity is an important habit of mind which allows someone to go beyond familiar ideas and come up with innovative ones. Individuals with creative personality own the ability to come up with imaginative solutions and possibilities. Numerous recent approaches to creativity, such as that of John-Steiner (2006), highlighted the social and collaborative nature of the creative process. To balance the 'dreamy', imaginative side of creativity, knowledge and craft in shaping the creative product and in developing expertise are needed. Disciplined is about the learning of techniques and skills that may be existing or new, but in order to be developed, the creative person will practice. This is about dedicating resources to an innovative effort. A number of concepts and ideas require imagination in learning. Strong innovation will help learners find answers to the difficulties they face. In formulating and solving issues according to cognitive principles, creativity requires imaginative thought processes.

Project-Based Learning is one of the learning models that can allow students to improve their imagination along with critical thinking abilities. Project-Based Learning (PBL) is one of the models of learning that allows learners to use higher-order thinking skills. Project-based learning is a method of teaching in which students develop knowledge and skills by working to explore and respond to a specific question, problem, or challenge over an extended period of time. This learning model suits students from elementary to university level (Jacques, 2017; Burlbaw, 2013). PBL helps students to focus on conceptual understanding

together, to apply prior knowledge, and to learn skills.

To create a project, various disciplines can be integrated (Capraro & Slough, 2013). Moreover, PBL's other advantages encourage students to demonstrate higher skills (Crowley, 2015), increase the achievement of students (Ali, Akhter, Shahzad, Sultana, & Ramzan, 2011), challenge students to solve real problems, become a successful collaborator (Roberts, 2011), inspire students (Liu, 2010), improve material awareness, and meet the needs of students with different skills and abilities (Roberts, 2011), (Coyne, Hollas, & Potter, 2016). One of the advantages of PBL is to illustrate the greater skill of the learner. We could observe the student's creativity through different projects by using PBL.

From the writer’s preliminary observations, she found out that there was a lack of critical thinking skills and creativity in the students of General English of Pre Intermediate 4 class. When in discussions, it was very difficult for students to try to provide reasoning. They repeated the response of friends and seemed to have no idea about the subject of the debate. Before making decisions, they could not combine the information they know with the information they obtained.

To further reassure herself about the situation in the class, the writer then distributed a critical thinking questionnaire. There were five components that were scored 1-5 with 1 being never manifested and 5 always manifested in the questionnaire including the use of various types of reasoning; the analysis and evaluation of evidence, arguments, claims and beliefs; the synthesis and connection between information and arguments; the interpretation of information and conclusion based on the best analysis; and the critical reflection on learning experiences and processes (see appendix).

From the result of the critical thinking questionnaire, the writer found out that out of 20 students, only 10 students could reach the percentage of 72% or more. These students already reached the desired level of critical thinking skills based on the 5 components.The highest percentage ranges from 72% - 92%. It also indicated that only around 50% could reach the desired level of critical thinking skills. Unfortunately, other 10 students belonged to the category ranges from 52% to 68%. The students reached below the desired level of critical thinking. The results showed that students in the class still need to improve their critical thinking skills because the class' overall performance on the critical thinking skills was still under 85% (see appendix).

After that, the writer gave the students the self-efficacy creativity questionnaire to get more detailed data about the general situation in the class. It is a three-item questionnaire of questions/statements from the general survey. Students were asked how much the statements are true for him/her personally. The statements asked the students about how much they are good at coming up with new ideas or whether they have a lot of ideas and or a good imagination. The scales 1-5 range from 1 being not (true) at all until 5 being very true. The analysis of the scores were categorized into five levels: having little or no creativity, minimal creativity, some creativity, clear creativity and exceptional creativity.

From the results of the creativity questionnaire, the writer found out that out of 20 students in the class, 12 students or 60% already showed minimal or some dispositions of creativity. However, this was still below the standard level of creativity. This also indicated that only around 40% of the students or 8 students showed desired disposition of creativity. This led to the conclusion that less than

85% of the class showed dispositions of desired creativity (green area) (see appendix). Students mostly answered perfect score for statements no 3 (I have a good imagination). According to Einstein, imagination is more important than knowledge, since imagination involves the whole universe and knowledge is restricted to what we know and understand now. In my understanding, students might have a good start to develop and improve their creativity. From the results, the writer felt there will be improvement on students' creativity. This results motivated the writer to implement the Project-Based Learning model in the class to improve the critical thinking skills and creativity of the students. After applying Project-Based Learning model, it was hoped that they would make it a habit to engage in using higher order of thinking in class.

Based on the explanation above, the writer is interested in conducting a study entitled "Improving Students' Critical Thinking Skills and Creativity through Project-Based Learning (PBL) in General English for Pre Intermediate 4 Class in LB LIA Palembang".

B. Identification of Problems

Based on the background of the study, the writer identifies the problems as follows:

1. Students' lagging of Critical Thinking Skills
2. Students' lagging of Creativity
3. Students' less familiarity with Project-Based Learning Model

C. Limitation of Problems

The problem of this research is limited to "Improving Students' Critical Thinking Skills and Creativity through Project-Based Learning (PBL) in General English for Pre Intermediate 4 Class in LB LIA Palembang".

D. Formulation of Problem.

Based on the limitation of the problem above, the problems of this study are formulated as follows:

1. How can the application of Project-Based Learning (PBL) in General English for Pre Intermediate 4 Class in LB LIA Palembang improve students' Critical Thinking Skills?
2. How can the application of Project-Based Learning (PBL) in General English for Pre Intermediate 4 Class in LB LIA Palembang improve students' Creativity?

E. Objectives of the Study

The objectives of this research are to find out:

1. Significant improvement in students' Critical Thinking Skills through Project-Based Learning (PBL) in General English for Pre Intermediate 4 Class in LB LIA Palembang.
2. Significant improvement in students' Creativity through Project-Based Learning (PBL) in General English for Pre Intermediate 4 Class in LB LIA Palembang.

F. Significance of the Study

This study hopefully will give meaningful contribution for teachers, for the students, and the writer herself;

1. For the Teacher of English

   The findings of this study is expected to give useful information about the improvement of students' critical thinking skills and creativity through PBL.

2. For the Students

   The result of this study will inform the students about how PBL helps them in improving their critical thinking skills and creativity.

3. For the writer Herself

   This study can enlarge her knowledge about the importance of critical thinking skills and creativity in helping students compete in a global society.