CHAPTER II

REVIEW OF LITERATURE

This chapter presents about related information topic of this study. It is intended to provide the theoretical framework and previous study which support this investigation. The discussion is pretended following, Concept of Project-Based learning, Characteristic of Project-Based Learning, Advantages, and Challenges in Project-Based Learning and Previous Study.

2.1 Theoretical Framework

2.1.1 Concept of Project Based Learning

Project-based learning is concepts of active learning, collaborative learning, problem-based learning, and learning autonomy. It is a social practice in which students are socializing through activities involving simultaneous learning of language, content, and skills (Gai Mali, 2016). PBL refers to a method allowing "students to design, plan, and carry out an extended project that produces a publicly exhibited output such as a product, publication, or presentation (Patton, 2018). Second, PBL is an instructional approach in which students find complicated problems and questions to solve from the real world, build up the hypotheses and prove the as a series of projects (Bell, 2010). PBL requires learners to gather information with relevant topics, communicate and discuss with other people, and share what they have learned, this is PBL as a learner-centered teaching strategy (Hou et al., 2007). Another concept, Project-based learning is a concept student-centered form of instruction based on three constructivist principles: learning is context-specific, learners have involved actively in the learning process and they achieve their goals through social interactions and the sharing of knowledge and

understanding (Kokotsaki et al., 2016). It is considered a particular type of learning in which context learning is provided through authentic questions and problems in real-world practice (Vargas et al., 2019)and leads to meaningful learning experiences (Wurdinger et al., 2007). Project-based learning is a constructivist approach that necessitates students to take responsibility and support students' cooperation, decision making, management skills, and ability to connect students with what they have learned in the real world (Genc, 2015).

There are two essential components of projects: 1) They require a driving question or problem that serves to organize the project activities 2) these activities should result in artifacts that culminate in a final product that addresses the driving question (Blumentfeld et al., 2011). The driving question designed by students and/or teachers should not be so constrained that the outcomes are predetermined, leaving students with little room to develop their approaches to answering the question. Students' freedom to generate artifacts is critical because it is through this process that students construct their knowledge (Blumentfeld et al., 2011). Nation (2008) stated PBL constructs the critical thinking, problem-solving of the students and gives them experiences in the real situation. PBL generates learners who are actively engaged with corporations on real projects and contribute ideas in the project process is also emphasized (Danford, 2008). Thomas (2000) states the idea of assigning and implementing the project to students is not a new one and the benefits of learning by practice have long been touted. Furthermore, many researchers emphasized that project-based learning plays a crucial role in increasing the motivation of students. Project-based learning increase student motivation,

improves achievement, and provide positive learning experiences and authentic problem-solving opportunities (Gülbahar & Tinmaz, 2006).

Project-based learning as a form of instruction has connections with other pedagogical approaches, such as problem-based learning (Helle et al., 2006). The main difference between both, Is students in problem-based learning are primarily focused on the process of learning, project-based learning needs to culminate in the end product (Kokotsaki et al., 2016). Project-Based Learning teaching method where students design, designing, implement and producing products that can be published. According to Owens & Hite, (2020), PBL refers to a teaching method in the teaching and learning process that requires the students to design, plan carry out an extended project and produce a

Project-based learning also enables students to create solution-oriented products for a new situation that they face by relating their learning to real-life (Baysura et al., 2016). The use of project-based learning in class is possible after providing the information that is needed for the project, the classroom activities should be student-centered, cooperative, and interactive (Baş, 2011). In PBL, students will experience meaningful and interesting learning where they should accomplish the assigned project, and generally, they are given the freedom to plan and manage their project and the end product including the process involved should be presented in the class (Marwan, 2015). Project-based learning supports the constructivist principles; working collaboratively with others, reflecting on what has been learned, personal autonomy, and active engagement. Therefore, project-based learning is viewed as a type of inquiry learning (Doppelt, 2003).

Project-Based Learning defines as a teaching model that supports student cooperation, project planning enhancement, decision-making, and time management skills; this model reinforces students' ability to link what they have learned to the real world, facilitates students' recollection, offers cooperative informational structuring opportunities and upgrades problem-solving skills (Guo et al., 2020). Shin (2018) believes that project-based learning improves cooperation and responsibility, problem-solving ability, communication ability, creative thinking, critical thinking, and self-directed learning ability.

In project-based learning, students solve challenging and authentic problems by working in collaboration with each other. Therefore, project-based learning not only has students apply their knowledge to their experience, but it also lets students work in teams to solve (Li et al., 2015). PBL encourages learners to work in small groups with hands-on experience in a meaningful context, so it increases their motivation and interest (Supara, 2016). PBL also places students in realistic, contextualized problem-solving environments. In so doing, projects can serve to build bridges between phenomena in the classroom and real-life experiences; the questions and answers that arise in their daily enterprise are given value and are shown to be open to systematic inquiry (Aksela & Haatainen, 2019).

Project-based learning is a type of learning in which 'a translation project is provided as a learning experience, and students have to face several problems that will develop different types of competencies (translation-related problems, technical problems, management problems, and teamwork problems (García González & Veiga Díaz, 2015). It can be concluded that the concept of project-based learning is a teaching method that involves students in a social practice with

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a series of activities where students can design, design projects, and apply their knowledge individually and collaboratively to produce the product in the real world by exploring and problem-solving. PBL also improves student's critical thinking, problem-solving and gives students experiences.

2.1.2 Implementing PBL in EFL Classroom

The potential of project-based learning method for EFL learners can be used to improve students not only motivation in learning English also proficiency in mastering the language, it is recommended for Indonesian teachers to apply PBL during classroom instruction. There are four steps to applying PBL in the classroom (Castañeda, 2014). In the first step, teachers give some questions or selected topics to be studied and the teacher and students make a list of a familiar topics. Moreover, they also make connections between what they had read or heard in other areas and their daily lives. The topic for the students is discussed in detail. Usually, students elaborate questions to be analyzed. These questions contribute to focusing on the topic and predicting the findings at the end of the project. In this case, the students were focused on thinking and solving the problem. For instance, at the university level, the teacher gives questions about how to teach vocabulary to elementary students. The teacher asks the students to think about the materials and the media which are suitable for students in elementary students.

The second, doing the project itself. In this step, learners can investigate events, objects, places, or topics. It allows them to get in contact with different contexts and their activities. In addition to increasing English learning motivation, through their work, students can draw skills from observations, construct models, and verify their new understanding.

The third is culminating and debriefing events. In this step, students demonstrate their acquired knowledge. They prepare and present information through different artifacts and their contributions. In this stage, the students can exhibit their final product to answer the teacher's questions. If in the previous example, the teacher asked the students how to teach vocabulary for elementary students. In the final stage, the university students presented they product from their project. The students presented their results from the previous stage.

The last is evaluation. Evaluation refers to the assessment of the activities from the students. The evaluation can be conducted by peers or by the teacher. The teacher can ask other groups to evaluate the final product. In this case, the teacher should give a description on how to evaluate the product in all the aspects. At the end of the sessions, teachers should also give feedback on every result of the project. The feedback should not only focus on grammatical aspects but focus more on the content of the product.

2.1.3 Project Based Learning in EFL Translation Classroom

The activities translation in the EFL classroom is good demonstrated in the classroom not only improved four language skills but also enhanced students' clarity, flexibility, and accuracy (Mbeudeu, 2017). In the implementation of activities translation in EFL classroom have to follow criteria: language used for the purpose, create a desire communication, encouraged students to be creative and contribute the ideas, focused on what they are saying and how they are saying it, work independently, and determine what students want to say or write (Calis & Dikilitas, 2012). Project-based learning in the EFL translation classroom has been a trending topic and has a lot of advantages. First, students become competent in

the use of target language and develop centeredness, motivation, and skill practice (Aziza, 2017). Also, project based learning in translation is improved language skills and requires varieties of activities (Levine, 2004).

Second, project-based learning in Translation class as the most of language skill will develop such as reading, writing, grammar and vocabulary (Kiraly, 2005). Li et al., (2015), have investigated the project of students in an EFL classroom to translate a business report from English to Chinese, in process of completing the project they activate and improve students' competencies. Moghaddas & Khoshsaligheh (2019) in the project translation which used real clients and read by recipients, students acquire not only translation competence, also translator competence.

Third, project-based learning in the EFL translation classroom has been enhanced students' collaborative teamwork, problem-solving, negotiating to translate, and other interpersonal skills (Kapp, 2009). Besides, Rochmahwati (2015) states that PBL helps students to develop evaluation skills for presentation and reduce anxiety in communication. PBL in translation class can improve students' language skills in many contexts. Another research of translation in EFL classroom, Apandi & Afiah (2019) several historical texts translated from Indonesia to English by students helped them develop learning skills and used cognitive strategies solution to the problem.

2.1.4 Characteristics of Project Based Learning

Some of the characteristics of Project-Based Learning. The number of characteristic PBL; 1) Leads students to investigate important ideas and questions, (2) Is framed around an inquiry process, (3) Is differentiated according to student

needs and interests, (4) Is driven by student independent production and presentation rather than teacher delivery of information, (5) Requires the use of creative thinking, critical thinking, and information skills to investigate, draw, (6) conclusions about, and create content, and (7) Connects to the real world and authentic problems and issues (Wahyudin, 2017). Kubiatko & Vaculová (2011) divided it into four characteristics of PBL: 1. Self-responsibility for thinking and learning; 2. awareness of social responsibility; 3. thinking and acting from the specific perspective but in a practical application; 4. relating both group process and product with professional practice.

Another study mentioned characteristic PBL, the characteristics of PBL are developing students'" thinking skills, allowing them to have creativity, encouraging them to work cooperatively, and leading them to access the information on their own and to demonstrate this information (Chiang & Lee, 2016). Danford's (2008) characteristic PBL includes; 1. Students have some choice of topic as well as the nature and the extent of content in the project; 2. Authentic context, complex real-world problems; 3. Students can try to shape their projects to fit their interests and abilities; 4. Students use multiple sources of information; 5. Projects usually cut across several disciplines; 6. The project extends over a significant period; 7. Students plan for the effective use of their time (and resources). Mioduser & Betzer (2008), the main characteristic of project-based learning based on the idea: 1. A creative and branching process triggered by an authentic need or problem, leading towards a working solution; 2. A progression of stages of varied nature is required for the device of the solution, e.g., accurate definition of the problem, and its solution requirements and constraints; generation of alternative solutions and their

evaluation by defined criteria; model building; 3. The demand for a wide array of skills related to different functions, e.g., information search and retrieval; representing ideas using formal notations; building physical models; 4. The demand for collaborative work skills, e.g., distribution of functions according to expertise; parallel and cooperative work; 5. Continuous evaluation of each stage's products and the solution at all. Given that each student has a different learning style, then the PBL provides an opportunity for students to explore the content (material) using a variety of ways that are meaningful to them and conducted experiments collaboratively (Sumarni, 2015).

Furthermore, project-based learning is convenient for an interdisciplinary and It is also appropriate to build the conceptual understanding through subject assimilation (Susilawati et al., 2017). According to Thomas (2000) project-based learning has five key characteristics: a). Projects related to the curriculum Students learn the target contents through the projects which are linked to the curriculum, b). A driving question related to target content Questions, problems, or topics that the students need to work on must "drive" or lead the students to the target contents, c). Constructive investigation Projects must allow students to investigate the topic or problem to build up new knowledge or skills related to the target content. This is possible through inquiry, planning, exploring, decision-making, problem-solving, and reporting the findings, d). Autonomy PBL projects should allow a considerable amount of time for students to work on their own. Students are responsible for completing their projects under the supervision of their teacher, e). Real-life application Projects must incorporate topics, tasks, products, or performances that the students can encounter or use in real-life situations.

More important, In language instruction, project-based learning is a flexible methodology that allows multiple skills to be developed in an integrated, meaningful, and activity (Lam, 2011).In addition, PBL makes students have more autonomy in what they learn, interesting and motivates students to take more responsibility (Kubiatko & Vaculová, 2011). Also, PBL supports the process of knowledge construction and development of students' productive competence that appears in the forms of occupational/technical skills, and employability skills.

2.1.5 Advantages and Experiences of PBL in EFL Classroom

Many studies have discussed the success of implementation project-based learning towards English foreign language students. Some studies added the best practice in the learning process for EFL students in project-based learning to develop students' attitudes toward the learning process and help students prepare to learn from daily activities (Susilawati et al., 2017). To the benefit of PBL, students may be interested in the topic and possess relevant knowledge and solve problems or master new material (Blumentfeld et al., 2011). The other positive outcomes using Project-Based Learning are reduction students anxiety and enhance students learning quality compared with conventional teaching methods (Efstratia, 2014). Multiple studies reported students in PBL classrooms to demonstrate improved critical-thinking and problem solving (Zhang et al., 2009). Project-based learning can contribute to the development of students' creativity, internal motivation and interest, responsibility, communication skills with others, social skills, cooperation, and problem-solving ability(Shin, 2018). A common goal for PBL has been to help students acquire deeper content knowledge, skills as well as feelings of commitment and ownership of their learning (Han et al., 2015). In other words,

Project-based learning (PBL) improves the students' skills are needed to meet the global community. It supports student learning outcomes and develops students' abilities, especially for communication, cooperation, creativity, and especially critical thinking. As students take part in the learning process, this develops a deeper understanding of the content and the required skills in schools, universities, work, and life in general (Issa & Khataibeh, 2021).

However, that project-based learning contributes to increasing EFL students' oral performance in terms of comprehension and fluency (Wahyudin, 2017) and project-based learning has been helped students acquire deeper knowledge, skill, and commitment in learning (Han et al., 2015). The advantage of implementing project-based learning in the EFL classroom is increased language skills because students are involved in communication purposes to complete authentic activities and they have the opportunity to use language naturally and participate in meaningful activities that require practice language (Pham, 2019).On the other hand, learners in PBL had the opportunity to create knowledge by providing their projects based on their interests and individual differences. They made connections between their new knowledge and their existing knowledge and were able to apply them to similar settings. They learned in a significant context while generating the end product (Wrigley, 1998). Studies reveal project-based learning has a positive effect on the development of higher-order thinking skills in a group of students, students with low verbal ability, and students previous knowledge learned more in PBL-taught classes than in traditionally-taught classes (Mioduser & Betzer, 2008). As well, the benefit of students' active participation in project-based learning lies in working collaboratively to solve problems, then discussing what they have

learned (Doppelt, 2003). In Indonesia, PBL was firstly assigned only for vocational high schools, but there are finally a lot of studies which result in the fact that PBL does not only focuses on getting solutions for social issues related to economy and entrepreneurship but also improving students" academic achievement, motivation, creativity/skills and attitudes (Sumarni, 2015). Furthermore, project-based learning enhanced professionalism and collaboration with teachers and increased attendance, self-reliance, and improved attitudes towards students in learning (Aksela & Haatainen, 2019).

There are some experiences in project-based learning that impact students. First, translation skills and strategies. Most students reported in their summary of the project that they were wrong to think that English to Chinese translation of such a business report on a topic that is not very professional would be easy as long as they could understand the source text and they met a lot of words and sentences that they did understand but failed to find a proper Chinese translation for them and as a result, they have to refer to textbooks or other academic sources for techniques of translation and work out a solution (Li, 2013). Second, their primary task is to complete a translation project, with guidance from their teachers only when the need arises. In the process of completing the translation assignment, they activate and improve their translation competencies. PBL gives students learning experience and practice in organizing projects and makes the time allotment and other resources such as equipment for finishing tasks, providing learning experiences that complexly engage the students and are designed to develop according to the real world (Bilgin et al., 2015). The result is that they gain better translation skills and at the same time become familiar with some of the dynamics of working as a

professional translator in the real world (Li et al., 2015). PBL increases the motivation of students. When teachers in pairs. successfully implement PBL, students can be highly motivated, feel actively involved in their learning, and be presented for investigation. The learning is designed to produce complex, high-quality work (Blumentfeld et al., 2011).

The other major showed that some pre-service teachers were unwilling and not confident to apply project-based learning because they had a prejudice if they applied project-based learning students would create noise in the classroom and they would not be able to make them calm and get their attention easily (Aldabbus, 2018). Second, other barriers with the implementation of PBL are teachers confusing inquiry-based instruction with hands-on activities, inability to motivate students to work in collaborative teams, scaffolding instructions, the development of authentic assessments, and overcoming student resistance to employing critical thinking (Mentzer et al., 2017). Frank & Barzilia (2004) found that students who applied the PBL approach admitted statistically higher grades on the Critical Thinking Test than did those in the comparative group who had studied traditionally.

The PBL students also demonstrated greater self-confidence and improved learning abilities. Furthermore, implementation of project-based learning grounded in the poster and academic essay projects appears to prove a high level of students' learning participation in a way able the students can experience working together with their group mates to articulate their thought, to negotiate, and to appreciate different perspectives (Gai Mali, 2016). PBL created a different teaching environment by getting students out of the boring routine in the classroom. This

teaching environment is more interesting, fun, and useful for students and allows them to build knowledge in an authentic context (Papanikolaou & Boubouka, 2010).

2.2 Previous Studies

There are some studies relevant to this study. First, research from Craig & Marshall (2019) reported on a project-based intervention during which sixth-graders designed chairs. The result was that during the intervention students' scores on the Standard Geometry test increased by approximately 10% points. What is noteworthy is that no interaction between time and achievement level could be detected; in other words, the lower-achieving students benefited from the intervention as much as average and high achieving students.

In Turkish literature, Çakici & Nihal (2013) examined the effect of the PBL approach on the academic achievement and academic self-concept, and study time of 7th-grade students. While the control group followed textbook and teacher-centered activities, the experimental group students experienced project-based learning. After the project process, they reported that there was a significant difference in favor of the experimental group in terms of academic achievement, academic self-concept, and study time. Poonpon (2017) conducted a Thai study on enhancing English skills through project-based learning. Forty-seven undergraduate students who were the participants worked in groups to complete an interdisciplinary-based project. Then, a semi-structured interview was used to elicit students' opinions about the project and how the project may enhance their English skills. The findings suggested that the students perceived that their reading, writing, and speaking skills, as well as vocabulary knowledge, were improved because such

skills were employed in integration while they worked on their project.

Second, research from Cintang et al., (2018) on project-based learning is applied to the elementary schools of the 2013 curriculum pilot project. To the end of the academic year 2016/2017, the implementation of project-based learning in pilot schools ideally would have been running for 4 (four) years. In Banyumas Regency, there are 11 elementary schools of the 2013 curriculum pilot project. This research was conducted on teachers of 4th and 5th grades, in sum, there were 22 teachers. As the results of the preliminary study, it was found that only 7 teachers implemented project-based learning, while 15 teachers did not implement it for several reasons. The data were obtained based on the conclusions of general sense results through in-depth interviews.

Several empirical studies established the effectiveness of PBL. Shanthi & Rao (2015) investigated the impact of PBL in improving learners' communication skills and result students developed better speaking and listening skills in English. Lee (2012) conducted a pre-experimental study in Malaysia, found the English skills of learners improved significantly after the implementation of PBL in an English course. Research from Rochmahwati (2015) The success of PBL implementation has been reported by Gaer who taught speaking skills to a population of Southeast Asian refugees who had been in their beginning-level ESOL (English for Speaker of Other Language) classes.

Their speaking skill is improved through PBL. Sun & Chayanuvat (2020) conducted a research study on using project-based learning with middle school students, found that it increased their learning of design knowledge, their cognitive strategy use, and their motivation towards learning. Baş (2011) studied the effects

of project-based learning on students' academic achievement and attitudes towards English lessons. The participants were 60 grade-10 students in a high school in Nigde, Turkey. The pre-test post-test design was utilized to obtain data and the PBL was used as a treatment in the experimental group. The results showed that the attitude scores of the experiment group and the control group were significantly different.

Moreover, it was revealed that project-based learning was more effective in positively developing the students' academic achievement. Therefore, Baş (2011) concluded that the students who were educated by project-based learning had higher academic achievement and attitude levels towards the lesson than the students in the text-based instruction. The PBL research studies in the Thai context to date have tended to focus on teaching English as a subject and using PBL with no emphasis on content knowledge of students in their fields of study. There has been little evidence supporting the effectiveness and implementation of PBL in an English class where the English language is linked to students' content knowledge. For this reason, the present study aims to investigate opinions of Thai learners of English toward the implementation of PBL, in the form of an interdisciplinary-based project, in a language class and their opinions about how PBL can enhance their English skills (Poonpon, 2017)

In the end, she reverted to more traditional, teacher-directed activities. Zhang et.al (2009), when investigated students' online collaboration in project-based learning this PBL experience, students reported that they had gained a lot of knowledge in addition to the software program, Excel, which would be the only focus in a typical face-to-face course like this. Overall, participants reported

positively about their PBL experience in this study. Jia Ming (male, superior participation) mentioned that PBL had led to more active, practical, and meaningful learning for him. He commented that in traditional lectures, which were a dominant practice in Taiwan and common elsewhere, he would be doing his things, and would not be engaged in the learning process. And as a result, he would simply forget what had been lectured very soon. In PBL, they had to actively figure out what was needed to be done, and how to get there, and thus had to be consciously engaged. And when actively engaged in meaningful searches and inquiries, they learned more and better (Zhang et al., 2009).

Last, research from Li Defeng et al., (2015) translation-oriented PBL, students preferably work together in small groups and engage themselves in the production of an authentic or simulated translation assignment. Their primary task is to complete a translation project, with guidance from their teachers only when the need arises. In the process of completing the translation assignment, they activate and improve their translation competencies. The result is that they gain better translation skills and at the same time become familiar with some of the dynamics of working as a professional translator in the real world. Gülbahar & Tinmaz, (2006) when carried out a study to explore the effect of project-based learning approach on the 4th-grade students' academic achievement, their attitude, and persistency for the unit electricity. While the unit electricity is taught with a project-based learning approach in the experimental group (73 students), the control group followed the traditional method (70 students). The results showed that project-based learning increased students' achievement and retention of knowledge. Supara (2016) conducted another study on project-based learning in an EFL Thai

classroom. She instructed the students to work on the interview with the NEST project. NEST in her study referred to native English-speaking teachers. The participants were students who took English as their minor subject. Then, she interviewed students and NEST about the project. From the findings, she reported that the students perceived the projects as valuable and beneficial as they allowed them to learn about different cultures by conversing with the NEST. Also, students were more motivated to practice and use English.

Many research discussed experiences in applied PBL in different contexts. Some research focuses on the implementation of PBL such as in-class pilot, assessment environmental of pollution topics, and in any of skills in English. The difference between this research with the other research is a research focus on students' experiences in the Translation project at IAIN Kendari. The researcher wants to investigate students' experiences in Translation project-based learning.