

CHAPTER I

INTRODUCTION

1.1 BACKGROUND OF STUDY

In this era, the expectations for people to understand and be able to talk in an international language are increasing. Moreover, it becomes a culture to survive in every aspect of this world. English is seen as a foreign language for Indonesian people that is used for business and tourism purposes. Nowadays, we often see every company in Indonesia expect their employees able to communicate in English both spoken and written. In teaching English, the learners need topics to discuss any problems that they are familiar with. In this context, English is considered as a teaching that can enable students to build relationships among their friends to interact with each other with the aim as a main tool to communicate in the setting of everyday life.

Significantly, the English teacher should pay attention to students' engagement in the class. In bilingual classrooms, teachers are expected not only to increase students' English proficiency but also to create meaningful learning experiences that engage students' participation during lessons. However, learning through two languages may become challenging for elementary school students if the instructional process only focuses on delivering content. Students may experience difficulty understanding concepts, become passive during classroom activities, and gradually lose their interest in learning. As a result, maintaining students' motivation becomes one of the most important challenges in bilingual education.

Motivation plays a crucial role in determining students' success in bilingual learning, particularly in science classes where students are required to understand scientific concepts while simultaneously processing information in English. Learning science through a second language can increase students' cognitive demands because they must comprehend both the subject content and the language used to deliver it. When students experience difficulties in understanding scientific terminology or instructions in English, they may become less confident, participate less actively, and gradually lose motivation to learn. According to Ryan and Niemiec (2023), learning environments that support students' autonomy, competence, and relatedness can enhance intrinsic motivation and encourage active engagement in learning. In line with Schunk

and DiBenedetto (2023), motivated students demonstrate greater persistence, higher engagement, and stronger self-regulated learning when facing academic challenges. Therefore, maintaining students' motivation is essential in bilingual science classrooms, as motivated learners are more willing to communicate, collaborate, and actively construct scientific understanding despite the linguistic challenges they encounter.

According to Padmadewi & Artini (2024), Bilingual instruction is most effective when English is used as the primary language of instruction while Indonesian is strategically employed to clarify difficult concepts and ensure students' understanding. One of the schools that provides a bilingual program is Mahardika Elementary School. In the bilingual program at Mahardika Elementary School, there are two subjects, namely science and mathematics, which have English instruction in the classroom. Teacher competence is one of the key determinants of successful bilingual education. Teachers are expected to integrate content and language instruction while maintaining students' engagement throughout the learning process. Padmadewi et al. (2020) argued that effective bilingual education requires teachers to have strong pedagogical competence, English language proficiency, and instructional flexibility to accommodate students' diverse learning needs. However, at Mahardika Elementary School, the researcher realized that bilingual learning only focuses on delivering material. The teacher tends to teach the students with a traditional teacher-centred approach. Therefore, it increases the lack of student engagement with the learning because they only memorize the material presented by the teacher.

According to Patton (2012), PjBL is one of the methods recommended because it allows students to design, plan, and carry out an extended project that produces a publicly exhibited output such as a product, publication, or presentation. The implementation of Project-Based Learning (PjBL) could be one of the strategies to help students engage with the learning material with more activities. Project-based learning provides individual or group activities that go on over a period, resulting in a product, presentation, or performance. Based on the reality above, the researcher was interested in researching the effect of project-based learning in bilingual programs on students' motivation. Therefore, the researcher conducted this research entitled "The Effect of Project-Based Learning on Students' Motivation in a Bilingual Program at Mahardika Denpasar Elementary School".

1.2 Identification of Problems

There are two problems identified in the background of this study. The first problem is the low level of students' motivation in the bilingual science classroom. Learning science through English requires students to understand scientific concepts and English simultaneously, making the learning process more challenging. As a result, some students become less confident, participate passively in classroom activities, and show limited enthusiasm during the learning process.

The second problem is the limited use of student-centered instructional strategies to enhance students' motivation in the bilingual program. Based on the researcher's preliminary observation at Mahardika Denpasar Elementary School, bilingual science instruction mainly emphasizes teacher explanation and content delivery. Students are generally expected to listen to explanations, memorize concepts, and complete textbook-based exercises, with few opportunities to explore ideas, collaborate with peers, or apply their knowledge in meaningful learning activities. Consequently, classroom interaction remains limited, students' engagement is relatively low, and learning motivation is not optimally developed. Therefore, an instructional approach that actively involves students in meaningful and collaborative learning experiences, such as Project-Based Learning (PjBL), is needed to foster students' motivation in the bilingual science classroom.

1.3 Scope of the research

The study will be conducted with Quasi-experimental research which will be applied to two classes of sixth-grade students of Mahardika Denpasar Elementary School on Science Bilingual subjects which will be divided into a control group and an experimental group. The bilingual program at this school applied to the Merdeka Curriculum. This study intends to reveal and describe the implementation of project-based learning in Bilingual programs and whether it can increase students' motivation in learning science.

1.4 Research questions

The research questions can be formulated as follows:

1. Is there a significant effect of Project-Based Learning on students' motivation in the bilingual Science program at Mahardika Denpasar Elementary School?

2. How is Project-Based Learning implemented in the bilingual Science classroom at Mahardika Denpasar Elementary School?

1.5 Objective of the research

1.5.1 General Objective

This research aims to gain depth into the effect of project-based learning on students' motivation in a bilingual program at Mahardika Denpasar Elementary School.

1.5.2 Specific Objective

Based on the research questions, the specific objectives of this study are:

1. To analyze whether Project-Based Learning has a significant effect on students' motivation in the bilingual Science program at Mahardika Denpasar Elementary School.
2. To identify the level of students' motivation before and after the implementation of Project-Based Learning in the bilingual Science program at Mahardika Denpasar Elementary School.

1.6 Significance of research

1.6.1 Theoretical significance

This study is expected to contribute to the theoretical development of teaching and learning, particularly in the fields of Project-Based Learning (PjBL), learning motivation, and bilingual education. The findings are expected to enrich existing literature by providing empirical evidence on the effect of Project-Based Learning on students' motivation in a bilingual Science classroom at the elementary school level. Furthermore, this study may serve as a reference for researchers and educators who are interested in implementing student-centered learning approaches to foster motivation in bilingual education.

1.6.2 Practical Significance

a. Teacher

In practice, this research has important implications for teachers and students in the classroom teaching and learning process, and will increase their understanding of teacher-student interaction. The use of Project-based learning gains students' interest, motivation, and engagement in learning the subject. The findings may assist teachers in

designing more engaging, student-centered learning activities that encourage students' active participation, collaboration, and motivation throughout the learning process.

b. Students

The use of project-based learning in bilingual subjects provides students with a more engaging and meaningful learning experience. Through hands-on projects, students not only gain a deeper understanding of academic content but also increase their language skills in both languages. By participating in collaborative projects and solving real-world problems, students are expected to become more motivated, actively engaged, and confident in learning Science through English.

c. Future researcher

This study provides an understanding of how PjBL influences bilingual learners' academic performance and language development. This research expected to serve as a reference for future researchers who are interested in investigating Project-Based Learning, learning motivation, and bilingual education. The findings may provide a foundation for further studies involving different educational levels, subject areas, research designs, or other variables related to students' motivation and learning outcomes.

1.7 Definition of the Key Term

1.7.1 Conceptual Key Term

A. Bilingual Program

According to Colin Baker (2006), the Bilingual program is education that uses and promotes two languages. The bilingual program in this research refers to an additional method used in the learning process in the classroom in two languages.

B. Project-Based Learning

Blumenfield (in Arifin, 2013:7) defines Project Based Learning as a comprehensive approach to classroom teaching and learning that is designed to engage students in the investigation of authentic problems.

C. Learning motivation

According to Deci and Ryan (1985), motivation is the intrinsic and extrinsic desire to gain interest, enjoyment, and reward, which affects how students initiate, sustain, and complete learning tasks.

1.7.2 Operational Keyterm

A. Bilingual Program

The bilingual program in this research is the program that provides in Mahardika Elementary School that focuses on the science subject in two languages which are Bahasa Indonesia and English.

B. Project-Based Learning

Operationally, PBL in this study refers to a teaching method applied in English and Indonesian classes at Mahardika Denpasar Elementary School, where students work collaboratively on real-life projects (such as presentations, posters, or mini-research) within a set period. The implementation includes stages of planning, executing, and presenting projects guided by the teacher.

C. Learning Motivation

learning motivation is measured through students' responses to a motivation questionnaire adapted from the Motivated Strategies for Learning Questionnaire (MSLQ) by Pintrich & De Groot (1990). It focuses on aspects such as interest in learning, persistence, effort, and enthusiasm during the PBL process. Scores from the questionnaire represent the level of students' learning motivation.

