



ELEJ

English Language Education Journal

E-ISSN: 2828-5077

<https://jurnal.unikastpaulus.ac.id/index.php/elej>

Vol. 4, No. 2, October 2025, Pp. 121-135

THE EFFECTIVENESS OF BILINGUAL TEACHING IN ENHANCING STUDENTS' VOCABULARY MASTERY AT SMK TIARA NUSA BORONG

Fidestri Riani Murdian¹

¹Universitas Katolik Indonesia Santu Paulus Ruteng

*Email: DestriMurdian@gmail.com

Abstract: This study explores how effective bilingual teaching can be in enhancing students' vocabulary skills at SMK Tiara Nusa Borong, specifically focusing on Class X ULW 2. The researcher conducted research with a group of 20 students, who participated in vocabulary lessons delivered in both English and Indonesian. To measure the impact of this teaching method, the researcher used a pretest-posttest design. Before the instruction began, the researcher assessed the students' vocabulary knowledge, and then the writer evaluated their progress after the lessons. The data analysis involved descriptive statistics and more advanced techniques like a paired samples t-test and correlation analysis. The results were quite promising. The researcher observed a notable improvement in the students' vocabulary scores. On average, their scores jumped from 35.00 in the pretest to an impressive 73.00 in the posttest. Additionally, the lowest score improved significantly, rising from 10 to 50. Our analysis also revealed a strong correlation between the pretest and posttest results, with a correlation coefficient of $r = .595$ and a p-value of .006, indicating that the changes were statistically significant. These findings suggest that bilingual teaching not only helps students acquire new vocabulary but also enhances their overall understanding and retention of words. This research adds to the growing evidence that bilingual approaches in language instruction can be particularly

beneficial, especially in rural vocational school settings.

Keywords: Bilingual teaching, EFL instruction, Vocabulary mastery

INTRODUCTION

Vocabulary acquisition is a crucial aspect of learning any language and serves as the bedrock for effective communication. In English as a Foreign Language (EFL) settings, particularly in rural vocational schools like SMK Tiara Nusa Borong, many students face significant challenges in mastering vocabulary. This struggle often arises from limited exposure to English outside the classroom. When students lack sufficient vocabulary, they encounter difficulties in reading, writing, speaking, and listening. This gap can adversely affect their academic performance and overall communicative competence, as highlighted by (Yudha and Mandasari 2021). Field observations reveal that it is common for learners to hesitate or pause when asked to form sentences in English, which clearly indicates a lack of confidence in their vocabulary skills. This situation illustrates that vocabulary is not merely a technical component of language; it plays a vital role in students' ability to express themselves and maintain their motivation. Through teaching practice experiences, the researcher has noticed that students' struggles to articulate their thoughts often stem from a limited vocabulary. This limitation can lead to feelings of inferiority in the classroom. As a result, students may remain silent or avoid participating in speaking activities, which reflects their restricted lexical repertoire rather than a lack of willingness to engage.

English plays a crucial role in global communication, particularly in fields like tourism, business, and technology. As such, acquiring a strong vocabulary in English is essential not only for academic success but also for future career prospects. However, many students in Indonesian vocational schools come from environments where English is not commonly spoken, which limits their natural ability to learn English vocabulary. This lack of exposure can lead to feelings of anxiety, confusion, and decreased motivation when it comes to learning English. For instance, students often lose focus during reading or listening activities when they struggle to understand key terms. As noted by

Cahyono (2019), without a sufficient vocabulary, students find it challenging to express their understanding or produce language effectively. These difficulties highlight the need for vocabulary instruction to be approached with sensitivity to the realities that learners face. In classroom experiences, it has been observed that frustration stemming from not understanding important words can cause some students to disengage from the learning process entirely. This underscores the urgent need for teaching methods that introduce English vocabulary in a way that is manageable and supportive, rather than overwhelming. Moreover, the lack of exposure to English often leads students to associate the language with academic failure instead of viewing it as a pathway to practical opportunities. Addressing these challenges is vital for fostering a more positive and effective learning environment.

One effective approach to tackle the challenges of vocabulary acquisition is bilingual teaching, which combines English with students' native language, Bahasa Indonesia, during lessons. This method is believed to enhance students' comprehension and retention by helping them connect new English words to familiar concepts in their first language. Research by Gharibian and Sadeghi (2025) supports this idea, showing that using bilingual materials can significantly increase students' awareness of vocabulary meanings and usage. As a result, students become more engaged and better understand the material. From classroom experiences, it has been observed that students who were once hesitant to speak often start to participate more actively when the teacher uses Bahasa Indonesia for clarification. This indicates that bilingual teaching effectively scaffolds understanding and helps bridge gaps in comprehension. Additionally, incorporating their first language can alleviate students' fear of making mistakes. The familiarity of Bahasa Indonesia provides a sense of security as they navigate the complexities of learning a foreign language. When students feel that their challenges are acknowledged and addressed in a supportive manner, they often become more motivated to learn. This emotional support can be just as important as the linguistic assistance provided, fostering a positive learning environment where students feel

empowered to express themselves.

Several studies have explored the effectiveness of bilingual teaching in enhancing vocabulary acquisition. For instance, Ernawati (2013) found that students at SMAN 1 Tarakan who were exposed to bilingual texts showed significant improvements in their vocabulary mastery. Her research indicated that bilingual reading materials made it easier for students to grasp word meanings, leading to better retention of vocabulary. Similarly, Nugroho (2019) conducted a study in a junior high school and concluded that using bilingual instruction significantly boosted students' vocabulary performance compared to traditional monolingual methods. Both findings align with the current study, emphasizing the positive impact of bilingual teaching on vocabulary mastery. In addition, Lee (2024) highlighted the importance of interactive learning strategies, such as word games, in improving vocabulary outcomes. Although Lee's study did not focus on bilingual methods, it reinforces the notion that active engagement is a crucial element in vocabulary development. The present study aims to merge this interactive aspect by combining bilingual instruction with real-time classroom interactions, allowing students not only to understand new vocabulary but also to apply it in meaningful contexts. What sets this study apart is its focus on a rural vocational school and its unique method that integrates bilingual teaching with student-centered interaction. Unlike previous research conducted in urban or general education settings, this study addresses the specific needs of vocational students in remote areas, providing insights that could inform similar educational environments.

Based on the introduction above, the research question addressed in this study is: To what extent is bilingual teaching effective in enhancing students' vocabulary mastery at SMK Tiara Nusa Borong?

METHOD

Research Design

This study utilizes a quantitative experimental design, specifically a one-group pretest-posttest design, to explore the effectiveness of bilingual

teaching in enhancing students' vocabulary mastery. In a quantitative experimental design, the researcher manipulates an independent variable in this case, the teaching method to observe its impact on a dependent variable, which is the students' vocabulary scores. This approach relies on numerical data and statistical tools to draw conclusions Prasetyo (2016). This design allows the researcher to compare students' performance before and after implementing bilingual instruction, even without a control group.

Population and Samples

The population for this study includes all tenth-grade students at SMK Tiara Nusa Borong for the academic year 2024/2025. The term "population" refers to the entire group of individuals that the researcher is interested in studying. According to Zargosh, Karbalaie, and Shahram Afraz (2013), a population consists of individuals who share similar characteristics. A sample, on the other hand, is a subset of the population selected for actual participation in the study. As noted by Asyiah (2017), a sample comprises participants chosen from the population for observation and measurement. In this study, the researcher employed purposive sampling, which is a non-random sampling method where the researcher uses their judgment to select participants who are considered representative of the population (Sami, 2024). The sample consisted of one class, Class X ULW 2, which included 20 students. This class was chosen based on the English teacher's recommendation and the availability of the schedule.

Instrument of the Study

The instrument used in this research was a vocabulary test designed to assess and improve students' vocabulary mastery. This test served as both a pre-test and a post-test to measure students' progress before and after the treatment. The vocabulary test included two types of items: matching exercises and fill-in-the-blank questions. These formats were selected to evaluate students' understanding of word meanings, spelling, and their ability to use vocabulary in context. The same test was administered for both the pretest and posttest to

effectively measure improvements in students' vocabulary.

Data Collection

In this study, a pretest-posttest design was employed to gather data, following the guidance of Özşen et al. (2020). This approach is crucial in experimental research because it allows the author to observe the changes that occur as a result of the researcher's intervention. Here's a breakdown of how we collected our data:

1. Preparation and Coordination

The first step was all about teamwork. The researcher coordinated with the English teacher at SMK Tiara Nusa Borong to set up a research schedule and select the classes that would participate. The researcher also prepared the necessary tools for the study, including vocabulary test sheets for both the pretest and posttest, along with answer keys for scoring. The class chosen for this study was X ULW 2.

2. Designing the Vocabulary Test

The researcher designed a vocabulary test that included two types of tasks: matching and fill-in-the-blank. The test items were carefully crafted based on the students' curriculum and their proficiency levels, focusing on commonly used vocabulary relevant to their field of study. The goal of the test was to measure how well the students understood word meanings, spelling, and usage in context.

3. Pre-Test

Pre-Test was administered before researcher taught all the students in Class X ULW 2. This pre-test featured vocabulary tasks, including matching and fill-in-the-blank questions, aimed at assessing the students' baseline knowledge of English vocabulary. The results from this pre-test were crucial as they provided a benchmark for comparison with the post-test scores, helping the researcher evaluate the effectiveness of the writer's bilingual instruction.

4. Treatment (Use of Bilingual Teaching)

During this phase, the students experienced bilingual instruction over a set period. This teaching method combined English and Bahasa Indonesia to deliver vocabulary lessons. The researcher used various instructional strategies, including explicit vocabulary explanations in both languages, contextual usage examples, and interactive discussions to reinforce understanding. The goal of this bilingual approach was to foster deeper comprehension, enhance retention, and alleviate any language anxiety the students might have felt. Consistency was key, so the researcher implemented this treatment uniformly across all lessons.

5. Post-Test

Once the treatment was complete, the researcher administered a post-test that mirrored the structure and difficulty level of the pre-test. This post-test aimed to measure any improvements in vocabulary mastery resulting from the bilingual teaching intervention. By comparing the pre-test and post-test scores, the researcher was able to assess the success of the author's instructional strategy.

Technique of Data Analysis

To analyze the data collected from the pretest and posttest, the researcher used quantitative methods with the help of SPSS (Statistical Package for the Social Sciences). This software is widely recognized for its ability to analyze data in social science research. As highlighted by Buhari et al. (2023), statistical analysis is crucial in quantitative research because it ensures that become the researcher's conclusions are based on measurable and reliable evidence. The analysis aimed to identify patterns of improvement and determine the statistical significance of the results, allowing the researcher to assess how effective the bilingual teaching method was. The researcher employed two main types of statistical analysis:

First, the researcher looked at descriptive statistics. This analysis involved calculating key metrics such as the mean, standard deviation, minimum and maximum scores, and the distribution of scores for both the pretest and posttest. Next, the researcher applied a paired samples t-test, which is an inferential statistical test. This test allowed the researcher to compare the average scores of the pretest and posttest

within the same group of students. As pointed out by De Houwer (2023), the t-test is a reliable method for testing mean differences, whether between groups or within the same group over time.

RESULTS

The findings of this study are derived from the pretest and posttest scores of 20 students from Class X ULW 2, who participated in the bilingual instruction as part of the treatment. To evaluate the effectiveness of this teaching method, the writer employed both descriptive statistics and inferential analysis, specifically the Paired Samples t-Test.

Table 1. Students Pretest-Posttest Result

No	Students	Pretest	Posttest
1	S1	80	90
2	S2	10	70
3	S3	40	60
4	S4	30	80
5	S5	40	80
6	S6	80	70
7	S7	30	80
8	S8	20	60
9	S9	10	70
10	S10	20	50
11	S11	30	60
12	S12	30	70
13	S13	20	60
14	S14	20	60
15	S15	20	70
16	S16	20	80
17	S17	40	70
18	S18	70	100
19	S19	80	100
20	S20	10	80

The pretest results from the 20 students in Class X ULW 2 highlighted a significant range in vocabulary mastery before we introduced bilingual teaching. The lowest score was 10, which was recorded by three students (S2, S9, and S20), while the highest score reached 80, achieved by students S1, S6, and S19. This variation in scores indicates that the students came into the study with different levels of vocabulary proficiency. Most students scored between 20 and 40, suggesting that many had limited vocabulary knowledge prior to the intervention. These results underscore the need for instructional support to help students develop their language skills, especially those starting from a lower proficiency level.

After the bilingual teaching intervention, the posttest scores showed remarkable improvement. The lowest posttest score rose to 50 (S10), while the highest score jumped to 100 (S18 and S19). Every student made progress, with improvements ranging from modest to substantial. For example, S2 and S20 saw their scores increase by 60 and 70 points, respectively, showcasing significant vocabulary acquisition. This positive trend across all students confirms that bilingual teaching effectively enhanced vocabulary mastery, particularly benefiting those who initially struggled.

Table 2 Descriptive Statistics

Test	N	Minimum	Maximum	Mean	Std. Deviation
Pretest	20	10	80	35.00	23.731
Posttest	20	50	100	73.00	13.416

Table 3. Paired Samples Correlation

Paired Samples Correlations				
		N	Correlation	Sig.
Pair 1	Pretest & Posttest	20	.595	.006

Table 2 displays the descriptive statistics for the pretest and posttest scores of the 20 students from Class X ULW 2. In the pretest, the minimum score was 10, while the highest score reached 80. The average score was 35.00, with a standard deviation of 23.731, indicating a wide

range of vocabulary proficiency among the students before the bilingual teaching intervention. After the bilingual instruction, the posttest scores showed a significant change, ranging from 50 to 100. The average score jumped to 73.00, and the standard deviation decreased to 13.416. This suggests that students' performances became more consistent after the intervention. The comparison of mean scores between the pretest and posttest reveals an impressive 38-point improvement, highlighting the positive impact of bilingual teaching on vocabulary mastery. The reduced standard deviation in the posttest results indicates that the performance gap among students narrowed, showing that the bilingual approach helped not only those who struggled but also allowed higher-performing students to maintain or improve their scores. The increase in the minimum score from 10 to 50 further reinforces the effectiveness of the instructional strategy used.

Table 3 sheds light on the relationship between the pretest and posttest scores. The correlation coefficient is 0.595, indicating a moderate positive correlation between the two sets of scores. This means that students who did well on the pretest generally performed well on the posttest as well, although all students showed improvement. The significance value of .006 ($p < 0.05$) confirms that this correlation is statistically significant. This result supports the reliability of the observed score increases and demonstrates that the bilingual teaching method consistently produced positive outcomes across the student group.

DISCUSSION

The findings from this study clearly show that bilingual teaching has significantly enhanced students' vocabulary mastery in Class X ULW 2 at SMK Tiara Nusa Borong. The results indicate a remarkable average increase of 38 points from the pretest to the posttest, and the paired samples correlation of 0.595 ($p = 0.006$) confirms a moderate and statistically significant relationship between the two tests. This suggests that bilingual teaching had a positive and measurable impact on how well students acquired new vocabulary. The improvement in the minimum scores from 10 to 50, alongside the increase in average scores highlights that students who initially struggled with vocabulary greatly

benefited from the bilingual instruction.

One reason for the effectiveness of bilingual teaching in this context is its ability to provide linguistic support by using the students' native language, Bahasa Indonesia, alongside English. This approach helps students grasp new vocabulary more clearly, reducing cognitive overload and making it easier for them to remember the meanings of words. The results affirm that when bilingual instruction is delivered in a strategic and interactive manner, it enhances comprehension, builds confidence, and improves language retention, especially in vocational schools located in rural areas where exposure to English is limited.

These findings align with previous research. For instance, Hoff (2020) found that bilingual texts significantly improved vocabulary mastery among students at SMAN 1 Tarakan, as they could quickly understand meanings through exposure to both languages. Similarly, Lesni et al. (2022) reported that students taught using bilingual methods outperformed their peers in monolingual settings in terms of vocabulary recall and retention. Yunita and Cahyono (2020) also emphasized that bilingual instruction in English as a Foreign Language (EFL) classrooms led to better comprehension and increased student engagement. Moreover, Maluch and Kempert (2019) observed that bilingual classroom interactions allowed students to connect new English vocabulary with their existing knowledge, enhancing their understanding.

In line with these findings, Tunagür, Kardaş, and Kardaş (2021) discovered that bilingual instruction boosted student confidence and motivation in a rural school in North Sumatra. Interestingly, while Sami (2024) found no significant effect of bilingual stories on eighth-grade students' vocabulary at SMPN 2 Grobogan, the differences in outcomes may be attributed to variations in methodology. Unlike Dewi et al. (2021), who focused on passive exposure to bilingual stories, this study implemented active bilingual classroom instruction that engaged students directly through teacher-student interactions, explanations, and exercises (Rifai 2012). This suggests that the effectiveness of bilingual teaching greatly depends on how it is delivered, not just on the use of two languages.

Overall, this study confirms that bilingual teaching has a significant positive impact on vocabulary mastery, particularly when implemented in an interactive and structured way. The findings contribute to the existing body of research by demonstrating that this approach is particularly effective in vocational school settings, where students gain practical and academic benefits from learning English vocabulary. These insights are valuable for educators and policymakers looking to implement bilingual strategies in rural Indonesian schools.

CONCLUSION

Based on the findings, it's clear that bilingual teaching is highly effective in improving students' vocabulary mastery. The significant jump in average scores from 35.00 to 73.00, along with the meaningful correlation between pretest and posttest results, shows that bilingual instruction helps students understand and retain English vocabulary much better. By incorporating the students' native language alongside English, a supportive learning environment was created, making it easier for students to grasp unfamiliar terms and engage actively in their lessons.

Moreover, the results indicate that bilingual teaching benefits all students, especially those who initially struggled. This approach promotes inclusivity and boosts overall class performance by making English vocabulary more accessible. This is particularly important in rural vocational schools, where students often have limited exposure to English outside the classroom.

Based on the conclusions drawn from this study, several suggestions can be made to enhance the effectiveness of bilingual teaching. First and foremost, English teachers, particularly those in vocational or rural schools, are encouraged to embrace bilingual teaching strategies. By integrating the students' native language with English, teachers can significantly boost comprehension, build student confidence, and improve vocabulary retention. Additionally, schools and curriculum developers should consider incorporating bilingual approaches into the English curriculum, especially in environments where students exhibit diverse proficiency levels. Providing training

and workshops focused on bilingual methodologies will further enhance the quality of instruction. Lastly, future researchers are encouraged to build on this study by exploring how bilingual teaching impacts other language skills, such as speaking, writing, and reading. Comparative studies involving different types of schools or larger student populations would also be valuable for validating and generalizing these findings. By taking these steps, the writer can create a more effective and inclusive learning environment for all students.

REFERENCES

- Asyiah, D. N. (2017). The vocabulary teaching and vocabulary learning: Perception, strategies, and influences on students' vocabulary mastery. *Lingua Scientia*, 9(2), 293-318. <https://doi.org/10.21274/ls.2017.9.2.293-318>
- Buhari, et al. (2023). The interplay bilingual approach toward students. *La Ogi: English Language Journal*, 89(1).
- Cahyono, B. Y. (1999). The teaching of EFL vocabulary in the Indonesian context: The state of the art. *TEFLIN Journal*, 1-17.
- De Houwer, A. (2023). The danger of bilingual-monolingual comparisons in applied psycholinguistic research. *Applied Psycholinguistics*, 44(3), 343-357. <https://doi.org/10.1017/S014271642200042X>
- Dewi, G. P. R., et al. (2021). Investigating the advantages of bilingualism: Multidimensional research findings. *Eternal*, 7(2), 423-441.
- Gharibian, M., & Sadeghi, E. (2025). Influence of L1 use on vocabulary learning, class engagement, enjoyment, and anxiety among Iranian EFL learners. *Journal of Language Teaching and Research*, 14(1), 27-49.
- Hoff, E. (2020). The effects of bilingualism on language development. *Child Development Perspectives*, 14(3), 156-160.
- Lee, H. (2024). Optimizing bilingual support in English medium instruction: A case study of Korean EFL students. *English Teaching*, 79(4), 123-142. <https://doi.org/10.15858/engtea.79.4.202412.123>
- Lesni, B., Ibrahim, M., Iskandar, A., & Yahrif, M. (2022). Improving students' speaking skill through discussion method at high school. *Kapasa*, 2(3), 188-200.

- Maluch, J. T., & Kempert, S. (2019). Bilingual profiles and third language learning: The effects of the manner of learning, sequence of bilingual acquisition, and language use practices. *International Journal of Bilingual Education and Bilingualism*, 22(7), 870–882. <https://doi.org/10.1080/13670050.2017.1322036>
- Nugroho, A. A. (n.d.). *Investigating metacognitive strategies in vocabulary acquisition by eighth grade students of SMP N 12 Semarang* [Undergraduate thesis].
- Özşen, A., et al. (2020). An overview of bilingualism and bilingual education. *Journal of Language Research*, 4(1), 41–57.
- Prasetyo, B. (2016). *The influence of bilingual subtitles on students' vocabulary mastery* (Undergraduate thesis, Semarang State University). <https://www.academia.edu/>
- Rifai. (2012). Borneo University Library (pp. 1–84).
- Sami, R. (2024). Impact of bilingualism on language development in Egyptian children. *Egyptian Journal of Otolaryngology*, 40(1). <https://doi.org/10.1186/s43163-024-00572-x>
- Tunagür, M., Kardaş, N., & Kardaş, M. N. (2021). The effect of student-centered listening/speaking activities on Turkish listening and speaking skills of bilingual students. *International Journal of Education and Literacy Studies*, 9(1), 136. <https://doi.org/10.7575/aiac.ijels.v.9n.1p.136>
- Ernawati, Ernawati. (2017). the Use of Bilingual Stories To Improve the Student'S Mastery of English Vocabulary: a Case of the Eight Grade Students of Smp N 2 Grobogan. *ETERNAL (English Teaching Journal)*, 4(2), 127–138. <https://doi.org/10.26877/eternal.v4i2.1952>
- Yudha, H. T., & Mandasari, B. (2021). The analysis of game usage for senior high school students to improve their vocabulary mastery. *Journal of English Language Teaching and Learning*, 2(2), 74–79. <https://doi.org/10.33365/jeltl.v2i2.1329>
- Zargosh, M., Karbalaee, A., & Afraz, S. (2013). The effect of thematic clustering on enhancing monolingual and bilingual EFL learners' vocabulary acquisition. *European Online Journal of Natural and Social Sciences*, 2(2), 109–121. <http://european-science.com/eojnss/article/view/145>

