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IMPROVING STUDENTS' VOCABULARY MASTERY THROUGH TASK BASED LEARNING APPROACH AT STT OBAJA CAWANG

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ABSTRACT

This study aims to determine the effectiveness of the Task-Based Learning (TBL) approach in improving students' vocabulary mastery at STT Obaja Jakarta. This research was motivated by the fact that many students at STT Obaja still had limited vocabulary, which hindered their ability to communicate effectively in English, understand reading texts, and participate confidently in classroom activities. This study employed a quantitative research method with a Pre-Experimental Design, specifically the One-Group Pretest-Posttest Design. The population of this study consisted of 64 students of STT Obaja Jakarta, and since the population was relatively small, the Total Sampling (Saturated Sampling) technique was applied, resulting in a total sample of 64 respondents. Data were collected through a vocabulary pretest and posttest and analyzed using IBM SPSS Statistics. The results showed that the students' mean vocabulary score increased from 68.33 in the pretest to 77.39 in the posttest, indicating a mean gain of 9.06 points. The Shapiro-Wilk normality test produced significance values of 0.848 (pretest) and 0.299 (posttest), both greater than 0.05, indicating that the data were normally distributed. The homogeneity test showed a significance value of 0.194 (> 0.05), indicating homogeneous variance. The Paired-Samples t-Test showed $t(63) = -10.549$ with $p < 0.001$, which is lower than the significance level of 0.05. Therefore, the null hypothesis (H_0) was rejected and the alternative hypothesis (H_1) was accepted, indicating a statistically significant difference between students' vocabulary mastery before and after the treatment. It can be concluded that the Task-Based Learning approach significantly improved students' vocabulary mastery at STT Obaja Jakarta.

Keywords: Task-Based Learning, Vocabulary Mastery, Pre-Experimental Design, STT Obaja

INTRODUCTION

Language is one of the most important tools for communication in human life (Hall, 2016). Through language, people are able to share ideas, express feelings, exchange information, and build social relationships. In the modern era of globalization, communication across countries and cultures has become increasingly important. As a result, English has developed into an international language that is widely used in education, technology, business, tourism, science, and global communication.

Because of its international role, English is taught as a foreign language in many countries, including Indonesia (Burns & Richards, 2018). English has become

one of the essential subjects in schools and higher education institutions because students are expected to be able to communicate and compete globally. In Indonesian higher education, English proficiency is considered important not only for academic purposes but also for future career opportunities. Therefore, students are encouraged to develop strong English language skills.

In learning English, there are four major language skills that students need to master, namely listening, speaking, reading, and writing. These skills are supported by several language components such as grammar, pronunciation, and vocabulary. Among these components, vocabulary is considered one of the most vocabulary mastery does not simple memorizing a large number of words (Nation, 2022). It also involves understanding the meanings, pronunciation, spelling, usage, and contextual functions of words. Students need to know how words are used appropriately in different situations and contexts. Consequently, vocabulary learning should involve meaningful learning experiences that encourage students to use language actively rather than passively memorize isolated words.

In reality, many students still face difficulties in mastering English vocabulary. Some students easily forget new words after memorization, while others struggle to use vocabulary correctly in speaking or writing activities. In many classrooms, vocabulary instruction is still dominated by traditional teaching methods such as translation exercises, dictionary use, and rote memorization. Although these methods may help students remember vocabulary temporarily, they often do not provide opportunities for students to practice vocabulary in meaningful communication.

At STT Obaja, vocabulary mastery remains a challenge for students learning English. Observations and experiences show that many students possess limited vocabulary, which hampers their ability to communicate effectively. They frequently struggle with reading academic texts, understanding spoken instructions, engaging in discussions, or expressing ideas with confidence.

Furthermore, some students feel less motivated during vocabulary learning activities because classroom instruction sometimes focuses more on memorization rather than practical usage. As a result, students may become passive learners and lack confidence in using English actively. This situation indicates the need for more engaging and interactive teaching approaches that can help students improve their vocabulary mastery in meaningful ways.

One teaching approach that has gained attention in language learning is Task-Based Learning (TBL) (Nunan, 2020). Task-Based Learning is a student-centered approach that emphasizes the completion of meaningful tasks through communication and interaction. In this approach, students learn language by actively participating in activities such as discussions, problem-solving tasks, role plays, presentations, projects, and collaborative work.

Task-Based Learning is believed to be effective because it allows students to learn vocabulary naturally through real communication contexts (Ellis, 2015). Instead of only memorizing word lists, students are encouraged to use vocabulary actively while completing tasks. This process can help students improve vocabulary retention, communication skills, confidence, and learning motivation. In addition, task-based activities can create a more enjoyable and interactive classroom

environment. Several previous studies have shown that Task-Based Learning contributes positively to vocabulary acquisition and language development (Nunan, 2020). However, the effectiveness of this approach may differ depending on students' learning environments, educational contexts, and classroom implementation. Therefore, further research is needed to examine how Task-Based Learning can improve vocabulary mastery, specifically among students at STT Obaja.

Based on the explanation above, the researcher is interested in conducting a study entitled: "Improving Students' Vocabulary Mastery Through Task-Based Learning Aproach Among Students at STT Obaja Jakarta."

This study is expected to provide valuable insights for both educators and students regarding effective vocabulary learning strategies in English language education.

METOD

Based on the research results and the data analysis conducted, it can be concluded that the Task-Based Learning (TBL) Approach has a positive and significant effect on improving students' vocabulary mastery at STT Obaja Jakarta. This study was conducted using a quantitative experimental approach with a One-Group Pretest-Posttest Design. The research involved 64 students who participated in the English course during the 2025/2026 academic year. All students were included as research respondents using the total sampling technique.

The research process began by administering a pretest to determine the students' initial vocabulary mastery. After the pretest, students received learning treatment through the Task-Based Learning Approach. The learning activities were conducted through three main stages, namely the pre-task stage, task cycle, and language focus. Through these activities, students were encouraged to actively participate in learning, communicate, complete meaningful tasks, collaborate with other students, and use English vocabulary in appropriate contexts. After the treatment was completed, students were given a posttest to measure changes and improvements in their vocabulary mastery.

The students' vocabulary mastery was measured through a 30-item multiple-choice vocabulary test covering several important aspects, including word meaning, synonyms, antonyms, vocabulary usage in sentences, vocabulary in context, spelling, and word forms. The comparison between the pretest and posttest scores was analyzed statistically using the Paired Sample t-test with the assistance of SPSS.

Based on the results of the statistical analysis, the effectiveness of the Task-Based Learning Approach can be determined by comparing students' vocabulary mastery before and after receiving the treatment. If the posttest results are significantly higher than the pretest results, it indicates that the implementation of Task-Based Learning has a positive effect on students' vocabulary mastery. Therefore, the null hypothesis, which states that there is no significant effect of Task-Based Learning on students' vocabulary mastery, can be rejected if the statistical significance value is below 0.05, while the alternative hypothesis is accepted.

Overall, Task-Based Learning can be considered an effective approach for improving students' vocabulary mastery because it creates a more active, meaningful, interactive, and communicative learning environment. This approach

enables students not only to memorize English vocabulary but also to understand and use it appropriately in meaningful contexts.

RESULTS

Testing the Requirements for Analysis

Normality Test

The normality test was conducted to determine whether the pre-test and post-test scores were normally distributed. This test was necessary to determine whether the data met the assumption required for further statistical analysis using a parametric test.

In this study, the normality test was performed using **IBM SPSS Statistics** through the **Kolmogorov-Smirnov** and **Shapiro-Wilk** tests. Since the number of respondents was 64, the **Shapiro-Wilk test** was used as the primary reference for determining whether the data were normally distributed. The criteria for making the decision were as follows:

1 If the significance value (**Sig.)** is **greater than 0.05,** the data are considered normally distributed.
2 If the significance value (**Sig.**) is **less than or equal to 0.05**, the data are considered not normally distributed.

Table 1. Results of the Normality Test

Variable	**Kolmogorov-Smirnov** **Sig.**	**Shapiro-Wilk** **Sig.**	**α**	**Decision**	**Conclusion**
Pre-Test	0.200*	0.848	0.05	Sig. > 0.05	Normally distributed
Post-Test	0.200*	0.299	0.05	Sig. > 0.05	Normally distributed

Note: 0.200 represents the lower bound of the true significance.*

a. Pre-Test

Based on the results presented in Table 4.5, the Shapiro-Wilk test for the pre-test scores produced a significance value of **0.848**. Since the significance value of **0.848 is greater than 0.05**, the null hypothesis (H_0) is accepted. Therefore, the pre-test scores are considered to be **normally distributed.**

The Kolmogorov-Smirnov test also produced a significance value of **0.200,** which is greater than 0.05. This result supports the conclusion that the pre-test data meet the normality assumption.

b. Post-Test

The Shapiro-Wilk test for the post-test scores produced a significance value of **0.299**. Since **0.299 is greater than 0.05,** the null hypothesis (H_0) is accepted. Therefore, the post-test scores are considered to be **normally distributed**.

The Kolmogorov-Smirnov test also showed a significance value of **0.200,** which is

greater than 0.05. Thus, the post-test data also satisfy the normality assumption.

Based on the results of the normality test, both the pre-test and post-test scores were normally distributed. The Shapiro-Wilk significance values were **0.848** for the pre-test and **0.299** for the post-test. Both values were greater than the significance level of **0.05.**

Therefore, the normality assumption was fulfilled. This indicates that the data were appropriate for further analysis using a **parametric statistical test.** In summary:

Pre-Test : 0.848 > 0.05 → Normally distributed Post-Test : 0.299 > 0.05 → Normally distributed

Thus, the analysis can proceed to the next stage of hypothesis testing.

Homogeneity Test

The homogeneity test was conducted to determine whether the variances of the two groups were equal or homogeneous. This test is an important prerequisite when comparing two groups using a parametric statistical test, particularly the Independent-Samples t-Test.

The hypothesis for the homogeneity test is formulated as follows:

1. H_0 : The variances of the two groups are homogeneous.
2. H_1 :The variances of the two groups are not homogeneous.

The decision criterion is:

1. If Sig. **>** 0.05, H_0 is accepted, indicating that the variances are homogeneous.
2. If Sig. **≤** 0.05, H_0 is rejected, indicating that the variances are not homogeneous.

Table 2. Test of Homogeneity of Variance

Levene's Test	**Levene Statistic**	**df1**	**df2**	**Sig.**
Based on Mean	1.722	1	62	0.194
Based on Median	1.763	1	62	0.189
Based on Median and with adjusted df	1.763	1	58.941	0.189
Based on Trimmed Mean	1.688	1	62	0.199

The results of the Levene's Test show that the significance value based on the mean is 0.194. Since 0.194 > 0.05, the null hypothesis (H_0) is accepted. Therefore, there is no statistically significant difference between the variances of the two groups. In other words, the data can be considered to have homogeneous variances. The output also shows significance values above 0.05 for the median (0.189), adjusted median (0.189), and trimmed mean (0.199), which consistently support the same conclusion.

Thus, the assumption of homogeneity of variance is fulfilled. This means that

the variance of the scores between the experimental and control groups can be considered statistically equal. Therefore, the data meet the homogeneity requirement for proceeding with an appropriate parametric analysis, such as the Independent-Samples t-Test. As the outcome is shown as following :

Sig. = 0.194 > 0.05 → H_0 is accepted → The variances are homogeneous. Therefore, the results indicate that there is no significant difference in variance between the two groups, and the homogeneity assumption required for further statistical analysis has been satisfied.

A. Hypothesis Testing

1. Mean Of Gain

Before conducting the t-test, the mean gain was calculated to determine the average improvement in students' vocabulary mastery from the pre-test to the post-test. The mean gain provides an initial description of the change in students' performance after the treatment. It shows the amount by which the students' average scores increased from the pre-test to the post-test.The mean gain was calculated using the following formula: **Mean Gain = Post-Test Mean - Pre-Test Mean**

Based on the descriptive statistics, the pre-test mean was 68.33, while the post-test mean was 77.39. Therefore: Mean Gain = 77.39 - 68,33 = 9,06

Table 4.6 Mean Gain of Students' Vocabulary Scores

Test	**N**	**Mean**
Pre-Test	64	68.33
Post-Test	64	77.39
Mean Gain	**64**	**9.06**

The results indicate that the students' average vocabulary score increased by 9.06 points from the pre-test to the post-test. This positive mean gain indicates an improvement in students' vocabulary mastery after the treatment. However, the mean gain only describes the magnitude of the improvement and does not determine whether the improvement is statistically significant. Therefore, a Paired-Samples t-Test was subsequently conducted to determine whether the difference between the pre-test and post-test scores was statistically significant.

2. Conducting t - test

After calculating the mean gain, the Paired-Samples t-Test was conducted to determine whether the improvement in students' vocabulary mastery from the pre-test to the post-test was statistically significant. The Paired-Samples t-Test was appropriate because the pre-test and post-test scores were obtained from the same 64 students.

The hypotheses were formulated as follows:

1 **H_0:** There is no significant difference between students' vocabulary mastery before and after the treatment.
2 **H_1:** There is a significant difference between students' vocabulary mastery before and after the treatment.

The significance level was set at **α = 0.05.**

Table 4.7 Results of the Paired-Samples t-Test

Paired Variables	Mean Difference	t	f	Sig. (2-tailed)
Pre-Test - Post-Test	-9.063	-10.549	3	< 0.001

Based on the results, the mean difference between the pre-test and post-test scores was **-9.063**. The negative value occurs because SPSS calculated the difference as **Pre-Test - Post-Test**. Since the post-test mean was higher than the pre-test mean, the difference was negative. In terms of improvement, this represents an increase of approximately **9,06 points**.

The obtained t-value was **-10.549** with **63 degrees of freedom (df),** and the significance value was **less than 0.001.** Since the significance value is lower than the predetermined significance level of **0.05**, the null hypothesis (**H_0)** is rejected and the alternative hypothesis (**H_1**) is accepted. Therefore, there was a **statistically significant difference between the students' vocabulary mastery before and after the treatment.** The results of the Paired-Samples t-Test confirm that the **9.06-point mean gain was statistically significant**. Therefore, the students' vocabulary mastery significantly improved from the pre-test to the post-test following the treatment.

Discussion of the Research Findings

This study was conducted at STT Obaja Jakarta to examine the improvement of students' vocabulary mastery through the implementation of the Task-Based Learning (TBL) approach. The study involved 64 students who completed both the pre-test and post-test. The descriptive results showed an improvement in students' vocabulary performance. The mean score increased from 68.33 in the pre-test to 77.39 in the post-test, resulting in a mean gain of

9.06 points. The median also increased from 69.00 to 78.00, while the minimum score increased from 52 to 68. These results indicate a general improvement in students' vocabulary mastery after learning through the Task-Based Learning approach.

Before conducting the hypothesis test, the normality assumption was examined. The Shapiro-Wilk significance values were 0.848 for the pre-test and

0.299 for the post-test. Since both values were greater than 0.05, the data were normally distributed. The homogeneity test also showed a significance value of 0.194, which was greater than 0.05, indicating homogeneous variance.

After the requirements were fulfilled, a Paired-Samples t-Test was conducted because the same 64 students participated in both tests. The result showed t(63) = -10.549, p < .001. Since the significance value was lower than 0.05, the null hypothesis

was rejected and the alternative hypothesis was accepted. The negative t-value resulted from SPSS calculating the difference as Pre-Test − Post-Test. In terms of improvement, the result represents an increase of 9.06 points in the students' vocabulary scores.

Overall, the findings indicate that the implementation of the Task-Based Learning approach significantly improved students' vocabulary mastery at STT Obaja Jakarta. The positive mean gain, together with the statistically significant t-test result, provides evidence that students performed better after receiving vocabulary instruction through the Task-Based Learning approach.

CONCLUSION

Based on the findings and statistical analysis of this study, it can be concluded that the Task-Based Learning (TBL) approach significantly improved students' vocabulary mastery at STT Obaja Jakarta. This study was conducted to investigate whether the implementation of Task-Based Learning could improve students' ability to understand and use English vocabulary. The research employed a quantitative method using a Pre-Experimental Design, specifically the One-Group Pretest-Posttest Design. The study involved 64 students of STT Obaja Jakarta who participated in the English course during the 2025/2026 academic year. Since the population was relatively small, all students were involved as research respondents through the Total Sampling technique.

The findings showed a clear improvement in students' vocabulary mastery after the implementation of the Task-Based Learning approach. The mean score of the students increased from 68.33 in the pre-test to 77.39 in the post-test, resulting in a mean gain of 9.06 points. This improvement indicates that students demonstrated better vocabulary performance after receiving the treatment. In addition to the increase in the mean score, the median score also increased from 69.00 to 78.00, while the minimum score improved from 52 to 68. These results demonstrate a general improvement in students' vocabulary mastery after learning through Task-Based Learning activities.

The implementation of Task-Based Learning provided students with opportunities to learn vocabulary through meaningful and communicative activities. During the learning process, students participated in the three main stages of Task-Based Learning, namely the pre-task stage, task cycle, and language focus. These stages encouraged students to become more actively involved in the learning process, communicate with others, complete meaningful tasks, collaborate with their classmates, and use English vocabulary in relevant contexts. Therefore, students were not only required to memorize isolated words but were also encouraged to understand the meaning and practical use of vocabulary during learning activities.

The results of the statistical analysis also provided strong evidence of the effectiveness of the Task-Based Learning approach. The normality test showed that both the pre-test and post-test data were normally distributed, with Shapiro-Wilk significance values of 0.848 and 0.299, respectively. Furthermore, the homogeneity test produced a significance value of 0.194, indicating that the data met the required assumptions for further parametric analysis. The Paired-Samples t-Test showed a t-value of -10.549 with 63 degrees of freedom and a significance value of less than

0.001. Since the significance value was lower than 0.05, the null hypothesis was rejected and the alternative hypothesis was accepted.

Overall, this study confirms that the Task-Based Learning approach has a positive and statistically significant effect on improving students' vocabulary mastery at STT Obaja Jakarta. The improvement in the students' scores and the results of the hypothesis test demonstrate that learning through meaningful tasks can support students in developing their vocabulary knowledge more effectively. Task-Based Learning creates a more active, interactive, and communicative learning environment that encourages students to participate directly in the learning process. Therefore, the Task-Based Learning approach can be considered an effective alternative for English teachers and lecturers who aim to improve students' vocabulary mastery. The findings also suggest that vocabulary instruction should not focus solely on memorization but should provide students with meaningful opportunities to understand, practice, and use vocabulary in appropriate communicative contexts.

REFERENCES

Alfabeta.

Algensindo.

Arikunto, S. (2018). Prosedur penelitian: Suatu pendekatan praktik (Rev. ed.). Rineka Cipta.

Azwar, S. (2019). Reliabilitas dan validitas (4th ed.). Pustaka Pelajar.

Burns, A., & Richards, J. C. (Eds.). (2018). The Cambridge guide to learning English as a second language. Cambridge University Press.

Creswell, J. W. (2018). Research design: Qualitative, quantitative, and mixed methods approaches (5th ed.). Sage Publications.

Dalimunthe, L., & Haryadi, R. N. (2022). The effect of learning methods and vocabulary mastery on English speaking ability. *Lingua Educationist: International Journal of Language Education*, *1*(1), 1-7.

Ellis, R. (2003). Task-based language learning and teaching. Oxford University Press.

Ellis, R. (2015). Understanding second language acquisition (2nd ed.). Oxford University Press.

Ghozali, I. (2021). Aplikasi analisis multivariate dengan program IBM SPSS Statistics 26 (10th ed.). Badan Penerbit Universitas Diponegoro.

Hake, R. R. (1999). Analyzing change/gain scores. Indiana University. Hall, G. (2016). Introducing English language teaching. Routledge.

Harmer, J. (2001). The practice of English language teaching (3rd ed.). Longman. Nation, I. S. P. (2022). Teaching and learning vocabulary. Routledge.

Haryadi, R. N. (2022). The Effect of Vocabulary Mastery and Learning Motivation towards Description Writing Ability. *JEdu: Journal of English Education*, *2*(1), 88-94.

Haryadi, R. N., Endah, J., & Dalimunthe, L. (2021). The effects of vocabulary and grammar mastery on students' writing skill in descriptive text (surveys at private junior high schools in Serang Banten). *JLE: Journal of Literate of English Education Study Program*, *2*(2), 46-54.

Nunan, D. (2003). Practical English language teaching. McGraw-Hill.
Nunan, D. (2020). Task-based language teaching. Cambridge University Press.
Sudjana, N., & Ibrahim. (2019). Penelitian dan penilaian pendidikan. Sinar Baru
Sugiyono. (2019). Metode penelitian kuantitatif, kualitatif, dan R&D (2nd ed.).
Sukmadinata, N. S. (2017). Metode penelitian pendidikan. PT Remaja Rosdakarya.
Ur, P. (1996). A course in language teaching: Practice and theory. Cambridge University Press.
Wilkins, D. A. (1972). Linguistics in language teaching. Edward Arnold. Willis, J. (1996). A framework for task-based learning. Longman.