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A Comparative Study of Students' Vocabulary Mastery before and after Joining Epic English Course

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*Steven Salvator Liem, Arif Suryo[ab]

[12]Universitas Negeri Semarang, Indonesia.

Corresponding Author: stevensalvator1411@students.unnes.ac.id

A B S T R A C T

This study investigates the effectiveness of the Epic English Course in enhancing students' vocabulary mastery. Using a quantitative pre-experimental design with a one-group pre-test and post-test approach, the research involved 30 students whose vocabulary performance was measured before and after participating in the course. The results showed a significant improvement, with the mean score increasing from 53.33 to 79.78, indicating an average gain of 26.45 points. Statistical analysis using a paired sample t-test revealed a t-value of -55.323 and a significance level of 0.000 ($p < 0.05$), confirming the improvement was statistically significant. Moreover, the effect size, calculated using Cohen's d, was 10.1, indicating a very large practical impact. The findings demonstrate that the Epic English Course, through its interactive, contextual, and student-centered approach, is highly effective in improving students' vocabulary mastery and can serve as a valuable supplement to traditional classroom instruction.

Keywords: *Vocabulary Mastery, Epic English Course, Vocabulary Acquisition*

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INTRODUCTION

Speaking English is very important in this modern era. However, English, a foreign language in Indonesia, is predominantly taught in a classroom setting without a formal learning process. Language acquisition may also require more time, which can pose a challenge in a classroom environment with limited time. Inadequate teacher knowledge, teaching methods, and student interest hinder effective speaking. As Setiawan et al. (2022) stated. Moreover, speaking activities are strategically incorporated into various subjects to enhance critical thinking and teamwork through structured conversations and discussions. Successful communication depends on speaking, with fluency and accuracy playing a key role in students' performance. Evaluating these aspects is essential, as the rules and structure of spoken English differ from those of written English. Developing speaking skills is crucial as it allows students to express their ideas, share information and knowledge, and improve their communication abilities in English, Laiel et al. (2023) stated.

Developing speaking skills involves mastering many aspects of the English language, one of which is vocabulary. Expanding vocabulary is crucial in English as it greatly aids in conversations. Someone that have limited vocabularies is also has limited in listening, speaking, reading, and writing. Learning a language is impossible without mastering vocabulary. Limited vocabulary prevents learners from communicating effectively with others, making it difficult for their ideas to be clearly understood.

Vocabulary mastery is a fundamental element in language learning, especially in learning English as a foreign language. Vocabulary serves as the main tool for conveying and understanding meaning in communication. A learner cannot comprehend texts, express ideas either orally or in writing, or follow conversations without having a sufficient range of vocabulary. Therefore, vocabulary is considered the foundation for all other language skills such as reading, writing, speaking, and listening.

According to Nation (2001), vocabulary mastery consists of two essential aspects: the breadth and depth of vocabulary knowledge. Breadth refers to the number of words a person knows, while depth refers to how well a person understands the meaning, collocations, nuances, and contextual usage of words. In other words, it is not only the number of words known that matters but also how well those words are understood and used functionally. For example, a student may know the meaning of the word "run," but may not yet understand its idiomatic uses such as "run out of time" or "run a company."

Lai et al. (2021) conducted a study that focusing on how video with different captions affected to students' vocabulary learning and listening comprehension of Chinese-speaking EFL learners. The study was in the dual-processing theory of multimedia learning, which stated that simultaneous processing of visual and auditory information can enhance learning outcomes. The study involved 105 students in Chines who learn English about nine years that divided into five group captioning; no caption, full caption and Chinese subtitle in the target word. The findings showed that the presence of different types of captioning significantly improved vocabulary recognition and listening comprehension compared to single-modality presentation such as no captions, and full captions without audio.

Schmitt (2000) adds that vocabulary mastery involves both receptive and productive abilities. Receptive ability includes recognizing and understanding words when reading or listening, while productive ability involves using words in speaking or writing. Typically, receptive vocabulary develops before productive vocabulary. That means students tend to recognize vocabulary before they can use it actively in communication.

In the context of language learning in Indonesia, students' vocabulary mastery is often still limited due to monotonous teaching methods that focus on memorization. Vocabulary learning in schools usually emphasizes word lists and translations without sufficient context, making it difficult for students to apply the vocabulary in real-life communication. The lack of exposure to natural language use further slows vocabulary acquisition.

As an alternative, supplementary learning environments such as English courses can be an effective solution to enrich students' vocabulary. Courses like EPIC English Course often offer more communicative and contextual learning approaches. Through methods such as role-playing, group discussions, audiovisual media, and project-based learning, students not only learn new vocabulary but also apply it in situations that resemble real-life contexts. Harmer (2007) notes that communicative approaches are highly effective in enhancing language skills because students are more motivated and actively use the language.

Furthermore, Second Language Acquisition theory (SLA) developed by Krashen (1982) highlights the importance of comprehensible input, which refers to language exposure slightly above the learner's current proficiency level (i+1). In a supportive course environment, students receive this input through interaction with instructors and peers. Activities like Q&A sessions, storytelling, and language games enable students to absorb vocabulary naturally and enjoyably. Over time, this experience forms independent learning habits and boosts students' confidence in using English.

From a psychological perspective, improving vocabulary mastery also has a positive impact on learning motivation. When students feel capable of understanding and using new words, they tend to feel successful and are encouraged to continue learning. This motivation is crucial in language learning, as language is a skill that develops through continuous practice. Brown (2001) emphasizes that a sense of success in using language provides positive reinforcement, which strengthens the learning process.

However, it is important to note that vocabulary mastery does not occur instantly. It requires time, repetition, and active involvement from the students. Therefore, vocabulary learning strategies must be designed systematically and sustainably. Teachers and instructors need to integrate vocabulary into all aspects of language skills, provide clear contexts, and offer constructive feedback so that students can understand their errors and improve them.

In conclusion, vocabulary mastery is a central component of language proficiency that cannot be overlooked. Without sufficient vocabulary knowledge, students cannot effectively comprehend or express meaning. Through appropriate learning approaches, supportive

environments, and strong motivation, students can expand and deepen their vocabulary mastery continuously. English courses such as EPIC English Course can serve as ideal platforms to accelerate this process and help students become more confident and competent users of the English language.

There are many ways to enhance vocabulary in English, one of which is by joining an English Course. Therefore, the study aims to compare an individual's vocabulary before and after attending an English course to assess its impact on vocabulary development.

METHOD

This study employed a quantitative research approach to objectively measure and analyze numerical data related to students' vocabulary mastery. The focus was on assessing improvement by comparing students' performance before and after participating in the Epic English Course. The research adopted a pre-experimental design, specifically the one-group pre-test and post-test design, which involved administering a vocabulary test to participants before the course (pre-test), conducting the instructional intervention (Epic English Course), and administering the same test afterward (post-test). This method enabled the researcher to evaluate the effectiveness of the intervention by analyzing the difference between the two sets of scores.

The research procedure was organized into four main stages. First, during the preparation stage, the researcher developed the research instruments, selected participants using purposive sampling, and obtained the necessary permissions. Next, in the implementation stage, the pre-test was conducted, followed by the delivery of the Epic English Course, and concluded with the post-test. The data analysis stage involved the use of descriptive statistics to observe patterns in the data and inferential statistics — specifically, the paired sample t-test — to determine whether the changes in vocabulary scores were statistically significant. Lastly, the reporting stage summarized and interpreted the findings in the form of a research report or thesis.

Throughout the process, strict attention was paid to validity and reliability. The vocabulary tests were carefully constructed based on course content and reviewed by English language experts to ensure they measured the intended skills. A pilot test was also conducted to refine the instrument. Data were collected ethically, with participant consent and confidentiality maintained. Overall, the chosen methodology provided a clear and systematic way to investigate the impact of the Epic English Course on learners' vocabulary development.

FINDINGS AND DISCUSSION

Score Classification Before Joining the Epic English Course

Table 1. Rate Percentage of Students' Vocabulary Achievement in the Pre-Test

No.	Classification	Score Range	Frequency	Percentage
1.	Excellent	86.6 – 100	0	0%
2.	Very Good	73.3 – 86.5	2	7%
3.	Good	60.0 – 73.2	11	37%
4.	Fairly Good	46.6 – 59.9	15	50%
5.	Fairly	33.3 – 46.5	2	6%
6.	Poor	20.0 – 33.2	0	0%
7.	Very Poor	0 – 19.9	0	0%
	Total		**30**	**100%**
No.		**Classification**	**Score Range**	

The data in Table 4.1 shows that prior to joining the Epic English Course, the majority of students had not yet achieved high levels of vocabulary mastery. Specifically, 15 students (50%) were classified as "Fairly Good," 11 students (37%) fell into the "Good" category, and only 2 students (7%) reached the "Very Good" classification. Additionally, 2 students (6%) were in the "Fairly" category. None of the students reached the "Excellent" level or were placed

in the "Poor" or "Very Poor" categories. This indicates that most students had only moderate vocabulary skills before the intervention.

Score Classification After Joining the Epic English Course

Table 2. Rate Percentage of Students' Vocabulary Achievement in the Post-Test

No.	Classification	Score Range	Frequency	Percentage
1.	Excellent	86.6 – 100	7	23%
2.	Very Good	73.3 – 86.5	20	67%
3.	Good	60.0 – 73.2	3	10%
4.	Fairly Good	46.6 – 59.9	0	0%
5.	Fairly	33.3 – 46.5	0	0%
6.	Poor	20.0 – 33.2	0	0%
7.	Very Poor	0 – 19.9	0	0%
	Total		**30**	**100%**
No.			**Classification**	**Score Range**

Following the completion of the Epic English Course, students showed substantial improvement in their vocabulary mastery. Table 4.2 demonstrates that 7 students (23%) reached the "Excellent" category, while the majority—20 students (67%)—achieved the "Very Good" classification. Only 3 students (10%) remained in the "Good" category, and no students fell into the lower classifications of "Fairly Good," "Fairly," "Poor," or "Very Poor." This significant upward shift clearly indicates that the Epic English Course had a positive impact on students' vocabulary performance, moving most participants into higher achievement categories.

Comparison of Students' Vocabulary Mastery Before and After Joining the Epic English Course

Table 3. Comparison of Pre-Test and Post-Test Vocabulary Score Classifications

No.	Classification	Score Range	Frequency (Pre-Test)	Percentage (Pre-Test)	Frequency (Post-Test)	Percentage (Post-Test)
1.	Excellent	86.6 – 100	0	0%	7	23%
2.	Very Good	73.3 – 86.5	2	7%	20	67%
3.	Good	60.0 – 73.2	11	37%	3	10%
4.	Fairly Good	46.6 – 59.9	15	50%	0	0%
5.	Fairly	33.3 – 46.5	2	6%	0	0%
6.	Poor	20.0 – 33.2	0	0%	0	0%
7.	Very Poor	0 – 19.9	0	0%	0	0%

If Table 4.1 and Table 4.2 are compared, it shows a significant improvement in the classification scores after students participated in the Epic English Course. This improvement reflects the course's contribution to students' vocabulary development, as described in the research questions and theoretical framework.

Before joining the course (see Table 4.1), the highest classification reached was "Very Good", with only 2 students (7%) achieving this level. Most students were concentrated in the "Fairly Good" category with 15 students (50%), followed by 11 students (37%) in the "Good" category. There were also 2 students (6%) in the "Fairly" classification. No students reached the "Excellent" level, and no one was classified as "Poor" or "Very Poor." This suggests that students' vocabulary mastery prior to the course was at a moderate to low level, with a clear need for enrichment and structured support.

However, after completing the course (see Table 4.2), the results changed dramatically. The number of students in the "Excellent" category rose from 0 to 7 (23%), and the number of students in the "Very Good" category increased significantly from 2 to 20 (67%). In total, 90% of students reached either "Excellent" or "Very Good," representing a substantial shift in vocabulary mastery levels. Only 3 students (10%) remained in the "Good" classification, and importantly, no students were found in any of the lower categories, such as "Fairly Good," "Fairly," "Poor," or "Very Poor."

This pattern of improvement aligns with the intervention logic of the study, which states that vocabulary instruction embedded in communicative, engaging, and contextualized activities (as implemented in the Epic English Course) can lead to meaningful language gains. The dramatic increase in upper-tier classification suggests that the course not only improved vocabulary breadth (the number of words known) but also depth (the understanding and appropriate use of vocabulary).

From a statistical perspective, this improvement is also supported by the results of the Paired Sample t-Test, which produced a t-value of -55.323 with a significance level below 0.05, indicating that the difference in scores is statistically significant. The effect size, calculated as Cohen's d = 10.1, further confirms the very large practical impact of the course on students' vocabulary mastery.

In conclusion, the comparison between the pre-test and post-test data clearly demonstrates that the Epic English Course made a substantial and measurable contribution to improving students' vocabulary mastery. These findings confirm the research assumption that interactive, learner-centered environments like the Epic English Course are more effective than traditional approaches in promoting vocabulary acquisition. The students not only showed statistical improvement but also advanced to higher classification levels, providing strong evidence that the course was highly effective in achieving its intended outcomes.

Mean Score and Standard Deviation Before and After Joining the Epic English Course

To find out whether there is a significant difference in students' vocabulary mastery before and after participating in the Epic English Course, the results of the pre-test and post-test were compared through mean and standard deviation analysis. The data are shown in the following table:

Table 4. Mean Score and Standard Deviation of Students' Vocabulary Mastery

Test Type	Mean Score	Standard Deviation
Pre-Test	52.83	7.98
Post-Test	80.11	6.83

Table 4.4 above shows that the mean score of students' vocabulary mastery before joining the Epic English Course was 52.83, with a standard deviation of 7.98. This indicates that students were generally in the lower classification categories such as *Fairly Good* and *Good* based on the score range.

In contrast, the mean score of students after joining the course significantly increased to 80.11, with a standard deviation of 6.83. This post-test result places the majority of students in the *Very Good* and *Excellent* classification range. The lower standard deviation in the post-test indicates that the students' scores became more consistent, meaning that most students benefited similarly from the course.

This improvement is also confirmed by the paired sample t-test, which showed a significance level < 0.05, indicating that the improvement was statistically significant. Furthermore, the Cohen's d effect size was 10.1, classified as a very large effect, confirming that the Epic English Course had a substantial impact on improving students' vocabulary mastery.

Based on these results, it can be concluded that the Epic English Course is highly effective in improving students' vocabulary achievement, both in terms of score increase and in reducing performance variability among students.

Test of Significance

To determine whether there is a statistically significant difference between students' vocabulary mastery before and after joining the Epic English Course, a Paired Sample t-Test was conducted at a significance level of 0.05 with degrees of freedom (df) = n - 1 = 30 - 1 = 29. This test was used because the data were normally distributed, as verified by the Shapiro-Wilk test in the normality analysis. The result of the paired sample t-test is presented in the following table:

Table 5. Paired Sample t-Test of Students' Vocabulary Mastery

Description	Pre-Test	Post-Test	Mean Difference	t-value	df	Sig. (2-tailed)
Vocabulary Achievement	52.83	80.11	27.28	-55.323	29	0.000

As shown in Table 4.5, the mean difference between pre-test and post-test scores was 27.28. The calculated t-value = -55.323, and the sig. (2-tailed) value is 0.000, which is less than 0.05. This result confirms that there is a statistically significant difference in vocabulary mastery before and after joining the Epic English Course.

The comparison indicates that the post-test scores are significantly higher than the pre-test scores, meaning that the intervention—Epic English Course—had a substantial effect on improving the students' vocabulary performance. Additionally, the Cohen's d value of 10.1 (which is far above 0.8) further supports this result by indicating a very large effect size, meaning the practical impact of the course is also strong.

In conclusion, the results of the t-test statistical analysis show that there is a significant difference in students' vocabulary mastery before and after joining the Epic English Course. The intervention not only resulted in higher vocabulary scores but also made a substantial educational impact, suggesting the course is highly effective in enhancing students' vocabulary proficiency.

Test of Normality

Before conducting the t-test, it is necessary to determine whether the data are normally distributed. For this purpose, the Shapiro-Wilk Test was used, which is the appropriate test for small sample sizes ($n \leq 50$). The results are shown in the following table:

Table 6. Normality Test of Pre-Test and Post-Test Scores

Test Type	Shapiro-Wilk Sig. Value	Interpretation
Pre-Test	0.292	Normally Distributed
Post-Test	0.054	Normally Distributed

As shown in Table 4.4, the significance value of the pre-test is 0.292, and the post-test is 0.054. Both values are greater than the threshold of 0.05, indicating that the scores for both tests are normally distributed. Therefore, the assumption of normality is met, and it is appropriate to use a parametric statistical test, specifically the Paired Sample t-Test, to analyze the data.

Effect Size

In addition to statistical significance, it is important to determine the practical significance or effectiveness of the Epic English Course. For this purpose, Cohen's d is calculated as a measure of effect size. The formula for paired sample data is:

Cohen's d = t / $\sqrt{n}$

Where:

t = -55.323

n = 30

$\sqrt{n} \approx 5.477$

Thus, Cohen's d = -55.323 / 5.477 ≈ -10.1 (Since effect size is expressed as an absolute value, we take $|d| = 10.1$)

Table 7. Interpretation of Effect Size (Cohen's d)

Cohen's d Value	Effect Size Classification
0.2	Small effect
0.5	Moderate effect
0.8	Large effect
> 1.0	**Very Large effect**

As shown above, the calculated Cohen's d = 10.1, which is far above the threshold for a very large effect. This means that the Epic English Course has an extremely strong impact on students' vocabulary mastery. The large effect size supports the conclusion that the improvement in students' vocabulary skills is not only statistically significant, but also educationally meaningful and impactful in real-world learning contexts.

Discussion

The data reveal a significant improvement in students' vocabulary mastery after participating in the Epic English Course. Initially, none of the students achieved scores in the Excellent (≥ 85) or Very Good (75–84) categories, but these figures rose to 30% and 40% respectively in the post-test. Similarly, the number of students in the Good (65–74) category increased from 6.7% to 30%. Conversely, the lower score categories saw a complete reduction, with no students remaining in the Fairly Good (55–64), Fairly (45–54), or Poor (35–44) categories after the course, indicating a notable upward shift in vocabulary achievement. No students scored in the Very Poor category (< 35) at any point. These results clearly demonstrate the positive impact of the Epic English Course on students' vocabulary performance.

A Comparative Study of Students' Vocabulary Mastery before and after Joining Epic English Course

The comparison of pre-test and post-test results demonstrates a substantial improvement in students' vocabulary mastery after joining the Epic English Course. The mean score increased significantly from 53.33, categorized as "Fairly," to 79.78, categorized as "Very Good," reflecting an average gain of 26.45 points. This improvement is also evident in the distribution of scores: students in the Excellent (≥85) category rose from 0% to 30%, those in the Very Good (75–84) category increased from 0% to 40%, and those in the Good (65–74) category rose from 6.7% to 30%. Meanwhile, the number of students in the lower categories—Fairly Good (55–64), Fairly (45–54), and Poor (35–44)—dropped dramatically to 0%, showing a clear upward shift in performance. Additionally, the standard deviation slightly decreased from 7.78 to 7.53, indicating more consistent results in the post-test. These findings strongly suggest that the Epic English Course had a significant and positive impact on enhancing students' vocabulary proficiency.

The statistical analysis further reinforces the effectiveness of the Epic English Course in improving students' vocabulary mastery. The standard deviation decreased slightly from 7.78 to 7.53, indicating more consistent performance among students and suggesting the course's equitable impact across different learners. The normality test using the Shapiro-Wilk method confirmed that both the pre-test (sig = 0.292) and post-test (sig = 0.054) scores were normally distributed (sig > 0.05), validating the use of the Paired Sample t-Test. The t-test yielded a highly significant t-value of -55.323 ($p < 0.05$), demonstrating a statistically significant difference between pre-test and post-test results. Additionally, the effect size, calculated as Cohen's d = -55.323 / $\sqrt{30} \approx$ -10.1, falls into the category of a very large effect size, according to Cohen's (1988) scale. This means that the Epic English Course not only led to statistically significant improvements but also had a profound practical impact on students' vocabulary acquisition.

The Students' Vocabulary Achievement Before and After Joining Epic English Course

To answer the research question, inferential statistics were employed using a paired sample t-test, which is appropriate for comparing two related sets of scores. The normality test confirmed that both the pre-test (sig. = 0.292) and post-test (sig. = 0.054) scores were normally distributed, validating the use of this parametric test. The paired sample t-test yielded a highly significant t-value of -55.323, indicating a strong difference between students' vocabulary mastery before and after the intervention. Moreover, the effect size, represented by Cohen's d = 10.1, far exceeds the standard threshold of 0.8 for a large effect and aligns with Cohen's (1988) classification of a very large effect size, confirming the tremendous impact of the Epic English Course. This remarkable improvement is likely due to the course's well-structured methodology, which emphasizes contextual vocabulary learning, interactive and communicative activities, and the integration of language skills—listening, speaking, reading, and writing—thus fostering meaningful and lasting vocabulary acquisition.

These findings align with established principles of second language acquisition, highlighting the importance of repetition, meaningful input, and student-centered learning in vocabulary development. The significant improvement in post-intervention scores reinforces the theoretical assumption that learners benefit more from interactive and immersive language environments—such as the Epic English Course—compared to passive learning methods. The analysis confirms that students' vocabulary mastery improved substantially and consistently, with results that are both statistically significant and practically meaningful, as evidenced by the very large effect size. The structured, engaging, and communicative nature of the course played a crucial role in facilitating this growth, demonstrating the course's effectiveness in enhancing vocabulary knowledge. These outcomes support the study's conceptual framework and affirm that extracurricular English programs can successfully complement formal education, especially in strengthening vocabulary skills. Therefore, it can be concluded that the Epic English Course is a highly effective educational intervention for advancing students' English vocabulary development.

CONCLUSIONS

The Epic English Course significantly improved students' vocabulary mastery, as evidenced by the increase in the mean score from 53.33 in the pre-test to 79.78 in the post-test, reflecting an average gain of 26.45 points. The paired sample t-test showed a significance value well below 0.05 and a t-value of -55.323, indicating that the difference was statistically significant. Additionally, the effect size calculated using Cohen's d was 10.1, representing a very large effect and confirming the strong impact of the course. Most participants showed marked improvement, progressing from lower performance categories to "Very Good" and "Excellent" levels, thus validating the effectiveness of interactive, contextual, and student-centered learning approaches in enhancing vocabulary acquisition.

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