

# Comparing Rote Memorization and Contextual Learning in Vocabulary Acquisition among Upper Primary ESL Students

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## Abstract

The study aims at comparing between rote learning and contextual learning to determine which of the two methods is most effective in improving the vocabulary mastery of the upper primary ESL students. Vocabulary acquisition is of paramount importance to the linguistic proficiency and general interpersonal communication of the students in the process of second language acquisition. For this study, forty students were selected into two groups; the control group, Class A which was taught through rote method of repetition and spelling exercises and the experimental group Class B which was taught through contextual approach using storytelling and real-life situations. Pre and post tests were also used to check the amount of vocabulary retention and usage. Findings showed that both the methods were effective in enhancing vocabulary acquisition, however, students who learned through contextual methods were able to retain and use the acquired vocabulary effectively in the long run. Contextual learning fostered the extent of elaborated cognition, which enhanced the extent of comprehension, as opposed to rote learning, which enhanced the extent of recall. These findings are in accordance with other studies indicating that real-life experiences help in creating mental links that enhance vocabulary acquisition. It is advised that ESL instructors use context-based approaches such as storytelling, role play and discussion to improve the achievement of the goals set on vocabulary learning. It is found that the use of both memorization and contextual methods of teaching is the best combination to be used in instructions. The findings of the current study can be used in future studies to examine the generalizability of these methods in different learning contexts and their applicability for learners of different ages and with different levels of language proficiency. The knowledge of how contextualized exposure can be beneficial in the learning of new vocabulary will help in the development of better teaching strategies for the ESL students.

**Keywords:** Vocabulary Acquisition, Rote Memorization, Contextual Learning, ESL Instruction, Retention

## Introduction

Vocabulary learning is one of the critical areas of focus in the context of ESL since it is a crucial component of language mastery. It is important to master the vocabulary not only for the purpose of language proficiency but also for communication skills needed in academic and everyday life. In the past, ESL teaching and learning involved the memorization of words and their usage, with the help of drills which help the learners memorize words for a short-term basis. Although helpful for a short-term recall, such methods are not very helpful in terms of understanding or retention in the long run.

Modern studies in the process of teaching and learning have shown that memorization is not the best practice, and context-based learning is more effective. Contextual learning is a method of teaching, which involves the use of texts, stories, and real-life situations in order to make the vocabulary more meaningful to the students. In a study conducted by Nguyen & Pham in 2021, the authors discovered that learning vocabulary in context is more effective than memorization, which only produces rote learning that does not require the learner to understand what he or she is doing. This is in line with cognitive theories that propound that real-life contexts help in retention and mastery (Chen et al., 2022).

According to the current educational trends, teachers are still in the process of modifying their approaches to achieve the best combination of memorization and contextual approaches to teaching. According to Singh & Tan (2023), although rote learning helps in memorization and quick retrieval of information, it does not enable the learner to use the language in real-life situations. On the other hand, contextual learning provides a good linguistic context that facilitates deep cognitive understanding since learners can associate the words with real-life experiences. This is in line with the constructivism learning theory that propounds that learning involves active participation and construction of meaning (Zhao & Li, 2022). Other neuroscience studies also show that there is enhanced brain activity in areas associated with memory when learning vocabulary in context hence supporting contextual approach in ESL teaching and learning (Rahman et al., 2023).

Current research on the use of instructional methods for teaching and learning vocabulary supports the integration of memorization and contextual approach as a way of enhancing the learning achievement of the vocabulary. Hassan & Abdullah (2024) explain that the best learning experiences are achieved when the first vocabulary is repeated in a structured manner and practiced in context. Moreover, Martínez & García (2023) stress the importance of the use of technology and multimedia in the learning of vocabulary. These tools consist of simulations that can be used in the classroom to enhance learning, as they go beyond memorization of information to make the students understand the practical use of such knowledge.

In the context of the current and future development of language education, teachers have to use research-based practices to address students' learning differences. The study by Chung and Wang (2021) reveals that storytelling, role-play, and interactive discussions enhance the ESL students' vocabulary knowledge and use. According to the studies, contextualized methods of learning vocabulary improve student motivation and their level of engagement, which are crucial factors in language acquisition (Lee et al., 2023). Further research should be aimed at developing mass approaches to the teaching of memorization and contextual

learning in parallel with each other to provide students with effective ESL that will help them to communicate in real-life situations. Thus, using the findings of cognitive science and applied linguistics, the educators can find out the best ways of how to facilitate students' vocabulary growth so that the learners can become proficient and confident in second language communication.

It is important to grasp the connection between the two in the process of learning vocabulary. Learning vocabulary entails the use of various mental processes that involve meaningful interaction with the language. Contextual learning strategies help in enhancing the depth of cognitive processing and the mental models that the students build to enable them to understand the information better and for longer. This reasoning is in line with the constructivist perspective that underlines that knowledge is constructed from experiences and interactions with the environment (Zhao & Li, 2022).

Neuroscientific research also provides a deeper understanding of how the human brain processes vocabulary information. Using words in meaningful contexts of the practical application helps stimulate the regions of the brain that are involved in memory, comprehension, and language processing (Rahman et al., 2023). This neural activation indicates that contextual learning not only improves the vocabulary recall but also strengthens the neural connections that are important for language mastery.

When language teachers continue to develop new approaches and methodologies, the use of technology in the learning-teaching process is of great importance. Technology has made it easy for students to have firsthand experience of real-life situations using simulations. These platforms provide the students with the chance to use the vocabulary in real-life situations and in doing so, consolidate the knowledge learned. Martínez & García (2023) also state that technology has the possibility to build the cumulative vocabulary learning strategies that can help to find the connection between memorization and real-life application.

The nature of ESL learning requires that the teaching and learning strategies adopted are those that allow for learning through memorization as well as using examples and analogies. The implementation of research-based strategies and the use of information from the field of cognitive psychology can help educators develop effective instructional approaches that would promote the development of the students' vocabulary and help them become proficient in a second language. While the effectiveness of such methods in different learning contexts is under investigation, teachers are ready to create inclusive and context-sensitive teaching practices that would help students effectively communicate in a globalized world (Alijasir, 2025).

In addition, motivation and learners' interaction are important in the process of learning ESL vocabulary. This is because when students are motivated, they can participate in the learning process more effectively and this is likely to help them in their retention of the new vocabulary as well as their ability to use it. Contextual approaches, including storytelling and role-playing, elicit interest because the material is presented in a story or a practical context. This intrinsic motivation is a great incentive to learn languages as studies conducted by Lee et al., (2023) have established that motivated students have better language abilities.

Thus, combining contextual learning with memorization is an effective approach to teach vocabulary in ESL education. In this way, the meaningful learning environments, contexts, and activities are useful for vocabulary improvement and language acquisition by learners. With the advancement in the teaching of ESL, there is need for the educators to be acquainted with the current research and trends in the teaching of languages. In this way, educators can follow the principles of evidence-based instruction and develop the effective teaching strategies that will assist students in the process of vocabulary acquisition and second language use.

This research is driven by the necessity to discover more effective approaches for teaching vocabulary to upper primary ESL learners. Although rote memorization is frequently employed, its lasting effectiveness is often debated. By contrasting it with contextual learning, this research seeks to provide practical insights into vocabulary acquisition techniques that can enhance retention and usage among young students.

### **Research Questions**

The research questions of this study were as below:

#### **RQ1: Does contextual learning significantly enhance vocabulary acquisition among upper primary ESL students?**

Contextual learning makes use of meaningful and realistic contexts in which students use language in meaningful ways. This approach uses stories, examples, and discussions to present the meaning of the words in the way they are used in real life. It means that when words are put within a story or context of a particular use, then the children will have a better chance of grasping the meaning of the words. The hypothesis is that contextual learning helps improve the understanding of the words because it leads to deeper cognitive processing of the contextual information, which in turn helps the students to relate to the words and their meanings. It also helps in retention and proper use of the words in communication among the users of the language.

#### **RQ2: Does rote memorization significantly enhance vocabulary acquisition among upper primary ESL students?**

The rote memorization is one of the traditional approaches of learning where the students learn the vocabulary through repetition and drilling. This method involves memorization of words and their respective meanings without necessarily comprehending them within a context. Although it is useful for memorization in the short term, it may not help in the long-term retention or understanding of the material. The question that arises here is whether rote memorization can help in the acquisition of vocabulary in a way that is useful to some extent. This is in a way, testing if the students are able to remember the vocabulary for tests and how effectively they can use it in communication after memorization.

#### **RQ3: Which instructional method—rote memorization or contextual learning—results in greater vocabulary acquisition?**

This research question aims at comparing the two approaches in order to establish which of the two methods promotes the learning of more vocabulary. This is done not only in terms of the number of words to be learned, but also in terms of the depth of understanding and the appropriacy of the use of the words in communication. Although, repetition might help in achieving the goal of memorization, contextual learning might help in the long run to recall and apply the information. This comparison is intended to determine which of the two

methods can establish a more extensive vocabulary acquisition in the short term and in the long run.

### **Research Objectives**

The research objectives of this study were as per below:

**RO1: To examine the impact of rote memorization on vocabulary retention and recall among upper primary ESL students.**

This objective relates to the extent to which rote memorization impacts on the learning and use of vocabulary in terms of retention and recall. Rote memorization entails the use of practice and drills in learning of vocabulary lists. The focus is to determine the extent to which students are able to retain and reproduce the vocabulary after the period of one week using this method. It aims at establishing the longevity of the memorized vocabulary and its efficiency in the tests and quizzes. Through this impact, the educators will be in a position to evaluate the effectiveness of rote memorization as an instructional technique in teaching the vocabulary.

**RO2: To assess the effectiveness of contextual learning strategies in enhancing vocabulary acquisition and long-term retention.**

This objective evaluates how contextual learning strategies influence vocabulary learning and retention over an extended period. Contextual learning integrates vocabulary acquisition within meaningful and relevant contexts, such as storytelling, real-life scenarios, and discussions. This objective aims to determine the extent to which these strategies enhance students' ability to understand, remember, and apply vocabulary in practical settings. By assessing the effectiveness of contextual learning, educators can identify its benefits in fostering deep cognitive processing, making vocabulary learning more engaging and meaningful.

**RO3: To determine whether a significant difference exists between students who learn vocabulary through rote memorization and those who learn through contextual learning.**

This objective entails analysing the difference in the two methods of instruction, rote memorization and contextual learning, in terms of vocabulary acquisition. The purpose is to identify which of the two methods is more effective in achieving positive results in terms of the use and retention of the learned vocabulary. This comparison will give information to the educators on which of the approaches is more effective in teaching and which of them should be adopted in teaching practices. In this way, it is possible to understand what aspects have to be improved in order to facilitate the process of vocabulary learning for ESL students

**RO4: To provide evidence-based recommendations for integrating effective vocabulary teaching strategies in ESL classrooms to optimize student learning outcomes.**

This objective is aimed at enhancing the process of applying the findings of research to the classroom practices. Drawing from the data gathered on rote memorization and contextual learning, the following objective is to establish findings that educators can implement. These recommendations will be research based and specific to the improvement of the students' vocabulary in ESL classrooms. The ultimate goal is to achieve the maximum in the learning outcomes of the students by applying a balance between memorization and contextual learning approaches in teaching the students for them to be proficient in their language skills.

## Methodology

In the study, an experimental design was used to compare the performance of the students in rote memorization and contextual learning in vocabulary among upper primary ESL students. The subjects involved were forty students who were grouped into two groups; one group which used rote learning strategies and the other group which used contextual learning strategies. The pre-test and post-test used in this study included vocabulary knowledge and application, and short term memory. The findings of the study were credible and valid since the assessment tools used were standardized vocabulary assessment tools as recommended by Kumar & Lee (2021). Students were divided into different groups, each of which was taught different methods for five months, and all of them learned the same sets of vocabulary.

The rote memorization group employed the use of repetition exercises, spelling, and word lists in their learning of vocabulary. Though, this method is known to improve short term memory recall, the level of learning engagement is still low (Hassan et al., 2022). On the other hand, the contextual learning group participated in storytelling, role play and real-life vocabulary activities. As Wang & Zhao (2023) suggest, these techniques facilitate links between the word and its real-life use, and thus enhances long-term storage and comprehension. Equal teaching periods meant that variations in the vocabulary mastery were a result of the teaching approaches and no other factors.

Quantitative data analysis was done using the statistical software called SPSS with the help of paired sample t-test and independent sample t-test in order to compare the scores of the pre-test and post-test of the two groups. The analysis was conducted at a significant level of 0.05, which established the validity of the outcomes as they were obtained with a 95% confidence level (Nguyen & Park, 2024). As seen in the results, the contextual learning group had higher long-term retention of the learned vocabulary than the control group though both groups improved in their vocabulary gains. These outcomes are in line with the cognitive learning theories that posit that enhanced interaction with the content leads to increased memory (Chen et al., 2023). The results of statistical tests showed the p-values that were less than the alpha level, which provided evidence for the hypothesis that contextual learning improves vocabulary knowledge better than memorization.

Teaching methods were presented in the form of lesson plans to reduce subjectivity and control for extraneous factors that may influence the outcome of the study (Martínez & García, 2024). This helped to reduce the impact of prior language proficiency on the groups because the students were randomly assigned to the groups. Ethical considerations were observed by seeking consent from the students and their parents before administering the tests. The participants' identity was preserved and their information was disguised to ensure anonymity, as per the guidelines provided by Rahman et al. (2023). The methodological approach used in this study offers a contribution to the field of vocabulary acquisition and offers practical recommendations to ESL teachers regarding the choice of instructional methods.

The future research should examine the effectiveness of the technology-based tools in the context of the ESL classrooms. Thus, researching on the use of multimodality such as gamification and virtual reality learning environments could provide new perspectives on improving vocabulary learning as suggested by Chung & Wang (2023). Through research and



analysis of results in this study, this paper contributes to the body of knowledge of the strategies used in the teaching of vocabulary in second language, especially the use of context in teaching.

## Findings

### *Rote Memorization and Vocabulary Acquisition*

The paired sample t-test examined how effective rote memorization is for vocabulary learning among upper primary ESL pupils. The analysis revealed a statistically significant improvement from pre-test to post-test scores which demonstrated that rote memorization produced measurable short-term vocabulary recall gains.

Table 1

*Paired Sample t-Test for Rote Memorization Group*

| Test Type | Mean | Std. Deviation | t-value | df | p-value |
|-----------|------|----------------|---------|----|---------|
| Pre-Test  | 45.6 | 6.2            | 6.52    | 19 | <.001   |
| Post-Test | 62.4 | 5.8            |         |    |         |

Participants improved their vocabulary scores from a pre-test mean of 45.6 (SD = 6.2) to a post-test mean of 62.4 (SD = 5.8). The statistical analysis shows a t-value of 6.52 with 19 degrees of freedom alongside a p-value less than .001 which demonstrates a highly significant improvement. The results indicate rote memorization improves short-term vocabulary recall. Rote learning has always been part of the educational practices especially when learning a new language where memorization of new vocabulary is common. Its effectiveness, which is a subject of discussion in the circles of educators and researchers, is based on the fact that it helps to improve immediate recall through practice. The data presented in Table 1 above supports the use of rote memorization in enhancing the upper primary ESL students' vocabulary test results. The results of the study show a significant improvement in the students' vocabulary performance as demonstrated by the difference in the scores obtained in the pre and posttests. In particular, the participants in the rote memorization group improved their vocabulary scores; the mean of the pre-test was 45.6 (SD = 6.2) while that of the post-test was 62.4 (SD = 5.8). This significant improvement demonstrates that the method enhances the recall of the short-term memory which is essential in the acquisition of new vocabulary. The analysis of the results also supports this by showing a t-value of 6.52 and 19 degrees of freedom at a  $p < 0.05$ . The p-value of 0.001 is less than the accepted value of .05 therefore meaning that there is a highly significant improvement in the vocabulary scores. This statistical significance simply means that even if rote memorization is somewhat restrictive, it is a central component of vocabulary recall in the short term.

The strength of rote memorization is that it is a structured process of repetition that strengthens the memory tracks. In rote learning, students are taken through a number of drills and exercises that involve the use of vocabulary and this has been known to benefit because the brain is able to retain information that is repeated in one's daily practice. This method is particularly useful for the first time when one needs to memorize a certain amount of words in order to build up a basic vocabulary list; however, the data also reveals some drawbacks of this approach. The method of repetition and recall that is at the core of the method does not necessarily mean that the knowledge is retained for the long term or understood in depth.

In this regard, it is essential to recognize the need to complement rote memorization with other learning approaches that enhance the students' critical thinking skills as shown in table 1. The research data which include the test scores show that the method has positive effects on immediate recall. But it is important for educators and researchers to remember the limitations of the method and attempt to integrate it with other approaches that would help in long term retention of knowledge and understanding. In this way, they can guarantee a better approach to the learning of vocabulary that will help the students to cope with the challenges of learning languages.

#### *Contextual Learning and Vocabulary Acquisition*

The paired sample t-test results for the contextual learning group showed a meaningful rise in vocabulary test scores which demonstrates that contextual learning methods lead to better vocabulary learning outcomes.

Table 2

*Paired Sample t-Test for Contextual Learning Group*

| Test Type | Mean | Std. Deviation | t-value | df | p-value |
|-----------|------|----------------|---------|----|---------|
| Pre-Test  | 46.3 | 6.5            | 8.21    | 19 | <.001   |
| Post-Test | 75.8 | 5.2            |         |    |         |

The vocabulary score grew from 46.3 (SD = 6.5) at pre-test to 75.8 (SD = 5.2) at post-test. The statistical test results with a t-value of 8.21 and 19 degrees of freedom showed a p-value < .001 indicating that contextual learning produces significant improvements in vocabulary acquisition which leads to better retention and application of new words.

Contextual learning in the acquisition of words has been a popular topic in the field of education due to the benefits that it provides in the learning process, especially in the retention and understanding of the learned material beyond simple memorization. Table 2 provides a rich source of evidence on the effectiveness of contextual learning methods in enhancing the performance of upper primary ESL students in vocabulary tests showing the extent to which this approach has transformed students' performance.

The results show that there was a rise in the performance of the students in the vocabulary tests after contextual learning activities. The pre-test mean score of 46.3 (SD = 6.5) has increased significantly to the post-test mean score of 75.8 (SD = 5.2). This not only proves the efficiency of contextual learning but also the superiority of contextual learning in enhancing the understanding and use of the vocabulary. The results of the statistical analysis also support the findings with a  $t=8.21$ ,  $df=19$ ,  $p<.001$ .

A probability of less than .001 is considerably lower than the accepted alpha level of .05, which means that the enhancement in the scores of vocabularies is not random. The findings support the suggested hypothesis that contextual learning techniques enhance the learning of new words and improve their retention and usage. The power of contextual learning is in the fact that it anchors the vocabulary in meaningful and realistic contexts, including storytelling, acting out, and practical use. It allows students to link the words to the context where they can be used, and this enhances the level of thinking in the process of learning.



While repetition is the main strategy embraced in rote learning, contextual learning entails the use of real-life situations to teach new concepts to students and thus the enhanced retention of the new knowledge. Contextual learning was seen to have a significant impact in boosting the performance of the students and the marked increase in scores of the students in the contextual learning group is an indication that this method does not only help in the acquisition of new knowledge but also the ability to use it. Therefore, the study results highlighted in Table 2 provide a clear indication of how contextual learning is effective in boosting the vocabulary knowledge of the ESL students. The increase in the test scores as backed by statistical means shows that the method can help in improving the mastery and usage of the vocabulary. In an effort to enhance language education, the use of contextual learning strategies can be considered as an effective way of enhancing the learning of more words. Thus, focusing on the approaches that promote students' meaningful participation, educators will be able to prepare the students for the challenges of language use and communication.

#### *Comparative Analysis of Rote Memorization vs. Contextual Learning*

An independent sample t-test examined post-test scores from both groups to compare the effectiveness of the two instructional methods. The analysis showed a statistically significant difference which proved that students who learned through contextual methods performed better than students who used rote memorization.

Table 3

*Independent Sample t-Test Comparing Rote Memorization and Contextual Learning*

| Group                      | Mean | Std. Deviation | t-value | df | p-value |
|----------------------------|------|----------------|---------|----|---------|
| <b>Rote Memorization</b>   | 62.4 | 5.8            | 7.45    | 38 | <.001   |
| <b>Contextual Learning</b> | 75.8 | 5.2            |         |    |         |

The contextual learning group achieved significantly greater post-test mean scores ( $M = 75.8$ ,  $SD = 5.2$ ) than the rote memorization group ( $M = 62.4$ ,  $SD = 5.8$ ). Results with a t-value of 7.45 and 38 degrees of freedom and a p-value less than .001 demonstrate that contextual learning proves superior for vocabulary acquisition which emphasizes meaningful language exposure above memorization-based methods.

Among the instructional strategies that have received considerable attention in the context of ESL learning, rote memorization and contextual learning have been of interest to scholars to understand their impact in teaching vocabulary. Table 3 looks at the results of an independent sample t-test, which was conducted on the post-test results of the students who underwent these two different learning styles. The results indicate the statistical significance of contextual learning over rote memorization. The post-test result indicates that the students under the contextual learning group had a higher mean score ( $M = 75.8$ ,  $SD = 5.2$ ) compared to the students under the rote memorization group ( $M = 62.4$ ,  $SD = 5.8$ ). The t-value of 7.45, 38 degrees of freedom, and the p-value of less than .001 establish that this difference is not a result of chance but points to the fact that the instructional method affects vocabulary in a significant way.

The fact that contextual learning performed better in this regard can be attributed to the fact that it encompasses a wider exposure to the language. The use of context that is meaningful

to the students ensures that the vocabulary is processed at a deeper level in their brain. This method helps the students to associate the words with their use in the real world hence enhancing their knowledge and retention of the words. On the other hand, memorization, though good for cramming in the information for the test, does not give the depth required for long-term knowledge and understanding. Despite the fact that it entails repetition and memorization of words, it does not mean that it is effective in teaching students how to use the words in different contexts. When students are exposed to the words through stories, acting out the scenes and observing the words in use in real life situations, they are likely to understand and memorize them better.

From the study of the results presented in Table 3, it can be concluded that this method is highly effective in the acquisition of ESL vocabulary knowledge. This is the reason why the contextual learning approach has proved to be beneficial for the students' performance and the need to use instructional strategies that do not involve rote learning. In their attempts to enhance language acquisition, educators should consider integrating contextual teaching and learning and this way, the students will be able to grasp more comprehensive and permanent vocabulary, which will have an overall positive impact on their language and communication skills. In this way, focusing on the methods that promote interaction with the language material, the educators will be able to prepare the students for the actual usage of the language and communication in various contexts.

### Discussion

The results presented in Table 1, 2 and 3 offer a clear story on the impact of contextual learning over rote learning of vocabulary among the upper primary ESL students. These tables provide quantitative information about the effects of various instructional methods on the learning of the vocabulary, which may help to support educational theories and practices.

Table 1 shows the effect of memorization on the learning of new vocabulary. The rote memorization group also improved a lot in vocabulary with the pre- test mean scores of 45.6 (SD = 6.2) improving to the post-test mean scores of 62.4 (SD = 5.8). The t-test result of 6.52 with a significance level of  $p < 0.001$  means that there was a statistically significant improvement in the short-term vocabulary retention. The findings support the literature that supports rote memorization as an effective way of enhancing short-term memory (Hassan et al., 2022). Nevertheless, the drawbacks of this method are quite noticeable when it comes to long-term storage and recall as well as critical thinking, as rote learning does not involve understanding the meaning of the words.

On the other hand, table 2 shows the improvement of contextual learning whereby the students' vocabulary improved from the pre-test mean of 46.3 (SD = 6.5) to the post-test mean of 75.8 (SD = 5.2). The t-value of 8.21 and the p-value of .0001 mean that the findings support the use of contextual learning in improving vocabulary. These findings can be explained by the constructivist theory that suggests that authentic contexts are crucial for knowledge acquisition (Chen et al., 2023). Thus, by placing the words in meaningful contexts, the students are able to comprehend the usage of the words and this enhances their comprehension, understanding, retention and utilization of the words (Le et.al, 2020). This is in line with the study by Nguyen & Tan (2022) that reveal that contextual learning enhances

cognitive engagement since it helps the students make meaningful relations between the words and their application (Taj et.al, 2025).

Table 3 shows the comparison of the two forms of instruction using an independent sample t-test. The results of the study showed that the contextual learning group had a better post-test mean score ( $M = 75.8$ ,  $SD = 5.2$ ) than the rote memorization group ( $M = 62.4$ ,  $SD = 5.8$ ) with t-value 7.45 and p-value  $< .001$ . This statistically significant difference justifies the effectiveness of contextual learning method in enhancing the learning of vocabularies. The results are in line with cognitive load theory that posits that the rote learning approach to knowledge delivery inundates the learners with discrete pieces of information that are difficult to recall (Rahman et al., 2021). Thus, contextual learning, which spreads cognitive loads across different learning contexts, provides constant exposure and repetition of the required vocabulary (Lee & Park, 2024). This way the meaning of the words is better understood and the retention of these terms is improved, as Wang et al. (2023) underlined the necessity of contextual approach while teaching vocabulary.

The findings of the study highlight the importance of change in the ESL teaching approaches to include contextual learning methods. Although rote learning is beneficial in helping students memorize the words and be able to recall them, it is not helpful in helping the students use the words in different situations (Hassan et al., 2022). The excellent performance of the contextual learning group proves how storytelling, discussion, and real-life examples promote learning environments that encourage learning with new vocabularies and their comprehension and usage (Martínez & García, 2023). These methods are in tandem with Zhao & Chen's (2020) study, which supports the use of meaningful and interactive exposure in L2 learning.

Also, the study emphasizes the importance of learners' participation and interest in the learning process of the vocabulary. The contextual learning group was more enthusiastic and confident when using the new acquired vocabulary as learner-centered approaches are motivational (Liu et al., 2023). These approaches promote motivation and higher level of language acquisition and development of environments that will sustain language learning in the long run (Xie & Wong, 2021).

These discussions when combined with the numerical findings indicate how the information can be used in designing educational curricula. Contextual learning is more effective in the long run and rote learning is effective for memorizing basic vocabulary. Rahim & Abdullah (2024) argue that there should be a dual approach where in addition to teaching structured vocabularies meaningfully, the child is exposed to meaningful use of language. This strategy helps students not only to memorize the terms but also to use them correctly in different situations.

There is a need to further research on how the use of technology in learning can help in the teaching of vocabulary in ESL classes (Chung et al., 2023). As technology advances in education, it is possible to develop learning environment that would be tailored to the needs of each learner. The use of adaptive learning technologies can help in providing differentiated instruction to students and improve the language and communication skills. In this way, the use of these technologies will enable educators to improve the approach to the teaching of

vocabulary, so that it is not only memorization, but also practical application of the new terms in different contexts.

### **Conclusion and Recommendations**

This research effectively establishes that upper primary ESL students learn the content vocabulary through contextual approach than through memorization. The improvement evident in the contextual learning group is evident in the ability in which words are learned in meaningful contexts that improve retention and usage. According to Chen et al. (2023), the constructivism learning theory supports the use of real knowledge as one of the key components of learning. The results corroborate the previous studies which state that contextual learning enhances the students' critical thinking skills and helps them make connections between the words and their real-life application (Nguyen and Tan, 2022).

The statistical analysis revealed that there was an increase in the vocabulary acquisition for both instructional methods; nevertheless, contextual learning was more effective in the long run. According to the cognitive load theory, when learners memorize, they are likely to be loaded with discrete pieces of information that may be difficult for them to store in the long-term memory (Rahman et al., 2021). On the other hand, contextual learning means that cognitive load is distributed in more appropriate manner and therefore ensures that the terms have been learnt thoroughly through exposure in the different contexts (Lee & Park, 2024). Wang et al. (2023) give additional cue to the fact that when language is presented in a context, the semantic processing becomes easier and even the learners are able to recall the words correctly without a lot of mistakes (Javorsky, 2024).

The present study therefore calls for the incorporation of contextual learning approaches in the teaching of ESL. While memorization is effective in helping one to recall terms parroting them, it lacks the ability to apply them in different contexts as pointed out by Hassan et al. (2022). The use of storytelling, discussions, and real-life examples as a way of teaching enables the students to use the new vocabulary in a dynamic way, thus enhancing their understanding and ability to recall the vocabulary (Martínez & García, 2023). Zhao & Chen (2020) support these ideas by arguing that interactivity and meaningfulness are crucial in second language acquisition process.

This paper discusses the importance of motivation and learner participation in the learning of vocabulary. Students who were taught in the context showed more interest and self confidence in the use of the newly learnt words than the ones who were taught through memorization. This is in line with the study conducted by Liu et al. (2023) that revealed that learner-centered approaches improve students' motivation and learning. Through the use of contextual elements, the ESL teachers can develop the learner's interest and enhance learning motivation and language acquisition (Xie & Wong, 2021).

These practical implications support the use of a combination of approaches in teaching vocabulary in curriculum. Although understanding words in context is helpful for the long-term storage of the information, there is still a need to use the rote method for reinforcement. Rahim & Abdullah (2024) suggest an integrated approach where students go through a direct instruction on the particular words and meaningful language use. Future studies should focus on the effects of using digital resources and teaching and learning

environments supported by technology in ESL vocabulary acquisition (Chung et al., 2023). The use of adaptive learning technologies can be seen as the way to provide individualized learning experience, to develop the student's language skills, and to enhance their communication skills. By means of these innovations, the teachers will be able to offer more effective ESL learning and pass all the necessary tools to their students.

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