Enhancing Long-term Memory Through Keeping Vocabulary Records Strategy in an Islamic Higher Education

Meningkatkan Daya Ingat Jangka Panjang melalui Strategi Pencatatan Kosakata di Perguruan Tinggi Islam

Uswatun Hasanah
STIT Sunan Giri Trenggalek
Email: miss.uswatun@gmail.com

Siti Nurul Hidayah
STIT Sunan Giri Trenggalek
Email: sitinurulhiday@gmail.com

Abstract

Improving vocabulary mastery in English can be challenging for some students, especially for learners who predominantly speak Javanese and are learning English as a second language. This research focuses on employing keeping vocabulary record strategies to enhance students' vocabulary mastery at STIT Sunan Giri Trenggalek during the academic year 2024-2025, highlighting the uniqueness and distinctive characteristics of these strategies. The study utilizes a classroom action research approach, which includes two cycles of quantitative and qualitative data collection. For quantitative analysis, students' test scores were gathered, while qualitative data was collected through observations, questionnaires, and interviews. This data was then examined using descriptive analysis, supplemented by insights from the qualitative data. The results indicate significant progress among students in their long-term retention of vocabulary proficiency. In particular, students' vocabulary retention improved by up to 22% across various aspects, including spelling, pronunciation, meaning, and use. Additionally, the implementation of these strategies has fostered a more

interactive and positive classroom environment. To further enhance their learning, students are encouraged to practice these strategies outside of class and explore a variety of vocabulary resources.

Abstrak

Meningkatkan penguasaan kosakata dalam bahasa Inggris dapat menjadi tantangan bagi sebagian siswa, terutama bagi pelajar yang sebagian besar berbicara bahasa Jawa dan sedang belajar bahasa Inggris sebagai bahasa kedua. Penelitian ini berfokus pada penerapan strategi pencatatan kosakata untuk meningkatkan penguasaan kosakata siswa di STIT Sunan Giri Trenggalek selama tahun ajaran 2024-2025, dengan menyoroti keunikan dan karakteristik khas dari strategi-strategi ini. Penelitian ini menggunakan pendekatan penelitian tindakan kelas, yang mencakup dua siklus pengumpulan data kuantitatif dan kualitatif. Untuk analisis kuantitatif, nilai ujian siswa dikumpulkan, sedangkan data kualitatif dikumpulkan melalui observasi, kuesioner, dan wawancara. Data ini kemudian diperiksa menggunakan analisis deskriptif, dilengkapi dengan wawasan dari data kualitatif. Hasilnya menunjukkan kemajuan yang signifikan di antara siswa dalam retensi jangka panjang mereka terhadap kemahiran kosakata. Secara khusus, retensi kosakata siswa meningkat hingga 22% di berbagai aspek, termasuk ejaan, pengucapan, makna, dan penggunaan. Selain itu, penerapan strategi ini telah menumbuhkan lingkungan kelas yang lebih interaktif dan positif. Untuk lebih meningkatkan pembelajaran mereka, siswa didorong untuk mempraktikkan strategi ini di luar kelas dan mengeksplorasi berbagai sumber kosakata.

Kata Kunci: *Memori Jangka Panjang, Menyimpan Catatan Kosakata, Pendidikan Tinggi Islam*

A. Introduction

Acquiring new vocabulary sets its unique problems in producing permanent use in communication, especially for higher education learners with limited access to English resources. The problems include all aspects of vocabulary: use, spelling, pronunciation, and meaning. The challenges in remembering words, particularly for English language learners, stem from various cognitive and contextual factors. Cognitive challenges include the forgetting mechanisms due to interferences from the brain and pronunciation issues (Raximovna et al., 2020; Allanazarova, 2020, Rezkianti, 2021; Tsuraya et al., 2022). Focusing on cognitive challenges, Hayes (2009) emphasizes the issue of how hard a word can be memorized for learners. Learners of English tend to forget their vocabulary easily as they engage in various activities in dissimilar situations of learning in certain periods; they will forget 80% of those words in 24 hours (Thornbury, 2000). In some cases, they forget right after the class ends (Schmitt, 2000).

Contextual factors of remembering words are on the relevance of vocabulary that do not align with the learners' personal or academic needs and on the word segmentation (Rezkianti, 2021; Tsuraya et al., 2022; (Jusczyk, 1997). On this matter, to comprehend English words is extremely challenging. Nation (2006) states that at least 2000-word families must be acquired by learners as their basic vocabulary mastery and up to 9000-word families to read and understand English literary works. It means that learners need to adjust themselves with some strategies to improve their vocabularies and permanently store them in their communication. Learners must acquire all the skills to communicate successfully in the target language. The words' morphology, production, meaning and pronunciation contain complex use tangled with the context in which those words are used in written and spoken language production (Kamil and Hiebert, 2005). The diverse forms of English vocabulary, both written and spoken, present significant challenges for new learners, often leading to frustration in their learning process. Vocabulary is fundamental to effective communication, as it serves as the building blocks of language,

with a robust vocabulary being essential for mastering all aspects of communication (Barani & Seyyedrezaie, 2013). This complexity can overwhelm learners, particularly when they encounter difficulties in both receptive and productive vocabulary use (Duan, 2017).

Learners' complications in memorizing English words are reasonable. Thonbury (2000) elaborates on how the human brain works with words. There is a systematic and sophisticated storage system for vocabulary in the system. The brain's storage of words operates through a complex system known as the mental lexicon, which categorizes and connects words based on meaning rather than strict alphabetical order. It reflects a network of interconnected words, allowing for dynamic retrieval and processing during language use (Libben, 2022). This dynamic organization allows for efficient language processing, crucial for both comprehension and production. Learners often struggle with vocabulary acquisition due to the intricate nature of this system, which relies on the brain's ability to form connections and representations of words. Unfamiliar words may lack established links, complicating memorization (Klein, 2007).

English education for higher education students is a multifaceted endeavor that involves not only the acquisition of language skills but also the development of core literacy and employability competencies (Zhu, 2023). The current landscape of English education at the university level is characterized by various challenges and opportunities. Anggrisia and Robah (2023) conclude that the learning challenges of higher education learners into two issues. The first is the linguistic issues. Learners in higher education tend to get confused in the tenses use and the diction selection. Learners also face psychological issues in delivering messages in English as they get nervous and feared of making mistakes. These challenges need focused strategies in enhancing the memory, cognitive and social aspects. These strategies also need to boost their motivation as it plays crucial role into the success of the leaners' English mastery. This could be done by giving effective instructional practices and positive classroom climates to stimulate students' engagement (Ortega-Auquilla et al., 2022; Auquilla et al., 2024).

However, some factors prevent learners from advancing their vocabulary mastery. There are two main factors influencing learners' failure to memorize vocabulary: word frequency and recency (Gain and Redman, 1986). Word frequency is a crucial factor in vocabulary acquisition. Frequent encounters with words increase familiarity and aid in learning. Studies show that higher frequency words are learned more effectively than lower frequency words (Song & Nishida, 2003; Teng, 2016). Repeated exposure to vocabulary in various contexts can lead to incidental learning, where learners acquire vocabulary without explicit instruction. This method is particularly effective when words are encountered frequently (Webb, 2014). The selection of a technique in serving these two factors is necessary.

In addition, another crucial factor that impacts the learners' vocabulary mastery and memory depends on the teacher's teaching aptitude. Ur (1991) mentions the role of a teacher in an English classroom context. A teacher delivers some language aspects, including the collocation, the grammar, the form, the pronunciation, and the meaning of words in teaching vocabulary to focus on both high-frequency and low frequency words as well as academic and technical vocabulary, depending on the learners' needs (Nowbakht et al., 2015; Lockhart, 2015). Teachers' beliefs about vocabulary teaching significantly influence their instructional strategies. Function-based teaching beliefs, which emphasize the practical use of vocabulary in context, have been shown to be more effective than memory-based or meaning-based approaches (Hassankiadeh et al., 2012). Another critical teacher role is that a teacher also should teach words in the spoken and written form (McCarten, 2007) and connect them with the words' register and association. A teacher needs to show a teaching strategy for the learners to help them master and record them in their prolonged memory. Strategies such as experiential learning and elaboration theory, which connect vocabulary with personal experiences and prior knowledge, enhance the use of episodic memory for better recall (Sadiq, 2023).

This study was conducted as a result of the learners' vocabulary mastery drawbacks. Based on the pre-research test done on the students in

STIT Sunan Giri Trenggalek, it shows that vocabulary learning needs special treatment in terms of the way they store their vocabulary, as they forget easily, regardless of the teacher's effort in giving intensive drilling and exercises. The test investigates the students' ability to understand and produce vocabulary. The average score is 60 out of 100. This number is considered low.

Principally, spelling and pronunciation are the main problems here. Students can understand the meaning and use it in productive skills like writing; however, they face challenges in their spelling and pronunciation. According to the observation result, the students face difficulties in connecting the different sounds of the words produced when reading texts in English and Indonesian. The different sounds confused the students. The students themselves do not have certain strategies for recording their new words. They only write the words in their book without proper follow-up learning of the words.

In this case, improving vocabulary mastery without employing an appropriate learning strategy and gaining a teacher's support can be problematic. Thornbury (2002) states that organizing the learning of words must be done by learners. They need to be active in exposing themselves to different learning resources such as dictionaries and notebooks. In this matter, teachers' role is crucial. In classroom practice, students need guidance and supervision in different methods of organizing their vocabulary effectively. Therefore, in this research, the researchers use the Keeping Vocabulary Records Strategy to assist the students advance their prolonged memory of vocabulary mastery.

Keeping vocabulary records are a technique of organizing and storing vocabulary by using a notebook. Thornbury (2000) ascertains that using a notebook is helping students learn new words to the point that they depend on it. This technique provides a structured way for learners to engage with new vocabulary, fostering a sense of ownership and responsibility over their learning (Mei-jun, n.d.; Chien, 2013). This technique is chosen to provide a more structured way of organizing and practicing new words in classroom practice to comprehend how memory works (Scmitt, 2000). It contains repetition and organization to support the

transformation of the new words into a prolonged memory. Gains and Redman (1986) agree that recording vocabulary in written storage is a legitimate tool for storing words permanently.

The researchers promoting the same issue conclude the importance of certain strategies in improving vocabulary records. Tran and Do's (2023) study on the EFL non-majors ESP vocabulary shows significant improvement in both vocabulary acquisition and retention. Walters and Boskurt (2009) focus on the impact of keeping vocabulary records technique in motivation aspects. Nosratinia et. al (2013) confirms the correlation between vocabulary mastery and the students' characteristics. Also, Uzun (2012) concludes that vocabulary is improved by the use of a notebook regardless of gender or the learners. These findings show that learning vocabulary using appropriate storing vocabulary techniques certainly improves the skills in many aspects; however, in terms of prolonged memory, more practice should be conducted.

B. Method

This research aimed to evaluate the effectiveness of the "keeping vocabulary records" strategy in enhancing long-term memory vocabulary retention among higher education learners in STIT Sunan Giri Trenggalek in the second year of 2024-2025 academic year. The study focuses on vocabulary retention supported by similar research efforts that emphasize the importance of effective vocabulary storage techniques in improving the memory and the mastery or the words.

The data was systematically collected from multiple sources, including tests, students' notebooks, classroom observations, and individual interviews to support a thorough analysis. The process of data collection includes three key steps: thinking, analyzing, and acting. This routine helps clarify the issue being investigated, creates a preliminary understanding of the people involved and the context, and aids in designing a research plan (Stringer, 2014). In this research, we conducted a pre-test before the action and a post-test afterward to measure progress effectively. Interviews were strategically held both prior to and following the action. Observations took place at each stage of the research—before,

during, and after—to ensure gathered comprehensive information that strengthens our data analysis.

The stages of the action research approach were completed using the procedures elaborated by Kemis and McTaggart (1985) as illustrated in the following figure:
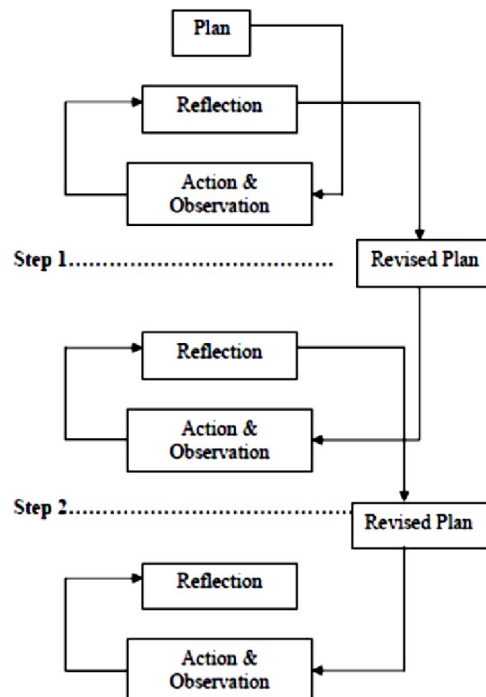

Figure 1. Action Research Procedure

The stages consist of four steps: identifying problems and creating an action plan, implementing actions and making observations, reflecting on the process, and revising the plan for the next step.

The action research was carried out in two cycles. Each cycle followed a specific procedure to determine whether the chosen method effectively addressed the identified problems. The cycles allowed the researchers to uncover both the strengths and weaknesses of the teaching practices in the classroom. The first cycle included four meetings:

1. In the first meeting, students received notebooks and learned to keep vocabulary records.

2. The second meeting introduced phonemic sounds and new vocabulary based on specific topics, focusing on form, pronunciation, and meaning, with translations into L2.
3. In the third meeting, teachers expanded vocabulary by introducing additional words and their translations, guiding students to create sketches and definitions in their notebooks.
4. Teachers reinforced all vocabulary aspects through drills and writing activities.

After the four meetings, a post-test was administered, followed by a reflection on the activities and the redesign of teaching plans for the next cycle. After completing the first cycle, the researchers reflected on the lessons learned and developed plans for teaching improvements based on the reflective data gathered. The second cycle implements new or revised strategies in their teaching practices in three meetings, including:

1. The first meeting was about giving more new words to the students and instructing them to record the vocabulary in their notebooks freely according to their preferences.
2. In the second meeting, the teacher introduced new words from a story text. The students then recorded difficult words in their notebooks.
3. The third meeting was another word rehearsal by drilling and writing sentences. It concluded all the vocabulary aspects.

At the end of the cycle, the teacher gave the last post-test followed by interviews and reflections.

This action research employs a mixed-methods approach, combining both qualitative and quantitative data to gain a comprehensive understanding of the research issue. This methodology allows for the simultaneous or sequential collection and analysis of data, providing a more robust framework for addressing complex problems and enhancing the validity and generalizability of research findings (Cabaroğlu, 2023).

The quantitative data of the research were in the form of the test results. They were analyzed using descriptive statistics of basic mathematics (Toaml, 2010) to find the average score and identify the

improvement of the students' prolonged memory. The data were taken from the pre-test and post-test in the first and the second cycle. To assess long-term memory in vocabulary mastery, Thornbury (2000) suggests that teachers can utilize a gap-filling test. In this type of test, students are required to complete sentences and phrases, which helps them recall information related to form, meaning, pronunciation, and usage. To evaluate students' spelling abilities, teachers can administer a dictation test, which examines how well students can remember the written form of words (Thornbury, 2000).

Qualitative data analysis focuses on interpreting non-numerical information taken from interviews, observations, and documents. Common techniques for this analysis include thematic analysis and coding, which help identify patterns and themes within the data. This approach is crucial in educational research to provide a comprehensive understanding of the phenomena being studied. The qualitative data analysis process typically includes data reduction, data display, conclusion drawing, and verification, which are essential for deriving meaningful insights from the data (Kordel & Gruber, 2024; Puppis, 2019; Fitria, 2024; Noermanzah et al., 2022). These steps ensure that the data is systematically organized and interpreted to support the research objectives.

C.   Result and Discussion

Keeping Vocabulary Records is a technique that involves not only documenting new words but also capturing various aspects of vocabulary, such as definitions, phonemic pronunciations, sketches, and examples of word usage in productive writing. This approach enhances vocabulary mastery by fostering a deeper understanding and retention of words through multiple modalities, including visual and contextual representations. It aligns with the multi-modality vocabulary representation method, which emphasizes the significance of integrating both textual and visual contexts to facilitate vocabulary acquisition and retention (Hansen, 2024). Research indicates that this technique can

substantially improve long-term memory related to vocabulary mastery, yielding a 25% enhancement across various vocabulary dimensions (Hasanah, 2016). The appeal of Keeping Vocabulary Records lies in its inherent flexibility, allowing learners to customize and adapt their vocabulary entries. They can easily record the words along with their translations and incorporate brief writing exercises. Furthermore, integrating illustrations connected to the meanings of the words can aid in memorization, ultimately ensuring that the vocabulary is firmly anchored in their mental lexicon.

The research was conducted over two cycles from January 8 to February 8, 2025, involving 15 students from STIT Sunan Giri Trenggalek during the 2024-2025 academic year. This study aims to investigate the effectiveness of keeping vocabulary record strategies in enhancing long-term memory retention among students, particularly within the context of Islamic higher education. The findings are anticipated to provide valuable insights into effective teaching methodologies that can improve student learning outcomes in Islamic educational settings. The research was informed by classroom observations conducted in the preceding semester. Results will be analyzed to assess the impact of these strategies on students' vocabulary acquisition and retention in the context of Islamic education. Observations indicated that the overall learning environment appeared to be ineffective, as English is not a primary subject at the university, leading to a passive approach among students during speaking and writing exercises. This passivity may impede their ability to effectively acquire and retain vocabulary, highlighting the necessity for innovative teaching strategies tailored to their unique educational context. Additionally, the students' enthusiasm for learning new vocabulary was hindered by their focus on various Islamic religious subjects.

In the initial phase of data collection, the researchers gathered information through interviews, observations, and pre-tests prior to implementing the "keeping vocabulary records" strategy. During the interviews, students expressed their enthusiasm for learning English, but many found it challenging to memorize new vocabulary in the classroom. While they could recall the words during lessons, they would often forget

them the following day. A significant number of students (65%) reported that memorizing new vocabulary was a difficult task. This struggle was attributed to their confusion between the spelling of English words and their correct pronunciation, which differed from that of their native language. Additionally, students mentioned that their teacher did not provide adequate practice in pronunciation.

The findings from the interviews were closely tied to the students' pre-test scores, offering significant insights into their learning processes. The average pre-test score was 59.50, indicating a lack of proficiency in vocabulary acquisition. This suggests that the students have not developed effective strategies for learning and retaining new vocabulary, especially regarding how they permanently document new words. Additionally, when analyzing the specific components of their language skills, the average pronunciation score was alarmingly low at 38.00. In contrast, the scores related to vocabulary meaning averaged 62.67, reflecting a moderate understanding of word meanings. The usage aspect fared slightly better, with an average score of 66.00, indicating some ability to apply learned vocabulary in context. Furthermore, the unexpectedly low scores in pronunciation raise questions about the effectiveness of current learning methods, particularly given the students' active participation in English classes and their access to a wide range of resources intended to support language practice. This discrepancy highlights the need for a more structured approach to improving their pronunciation skills.

The assessment of the meaning and usage aspects revealed significant shortcomings. A key drawback was the limited exposure to effective teaching techniques, which created a less engaging and positive learning environment for the students. They primarily focused on writing words without sufficient emphasis on pronunciation and usage. Interestingly, the learners demonstrated proficiency in spelling, achieving an average score of 71.33. However, interview results indicated that students felt they lacked adequate practice in pronunciation, as their teacher prioritized writing exercises over verbal skills.

Table 1.1 The Score of Pre-Test

No	Vocabulary aspect	Mean score
1.	Spelling	71.33
2.	Pronunciation	38.00
3.	Meaning	62.67
4.	Use	66.00
Overall mean score		59.50

The observation findings revealed that the students lacked an effective strategy for recording their vocabulary. They recorded new words in their notebooks without delving deeper into their meanings or usages. Essentially, they only focused on mastering the spelling and basic definitions. Most relied on traditional methods for recording their learning materials, and some even mixed their notes from different subjects. From the teacher's perspective, she acknowledged her own limitations in providing a variety of strategies for students to effectively record their vocabulary. She believed that memorizing the spelling of words was the most crucial aspect of vocabulary acquisition.

In conclusion, the initial data collected from a combination of classroom observations, supplemental interviews, and pre-test scores revealed remarkably consistent findings. Both students and the teacher expressed a shared consensus regarding the inadequacies of the learning environment, attributing these shortcomings to ineffective teaching strategies employed for vocabulary development. This identified challenge within the educational context prompted the implementation of a structured classroom action research approach, encompassing two distinct cycles aimed at refining instructional methods and enhancing student engagement in vocabulary learning. Through this iterative process, the study aimed to address and rectify the identified issues, ultimately fostering a more effective and conducive learning environment.

The implementation of the Keeping Vocabulary Records Technique aimed at enhancing students' long-term memory was carried out through two cycles of action research. Throughout this process, students were introduced to a variety of new vocabulary topics, including sports, medicine, forests, and more. The first cycle concentrated on the

methodology of recording new vocabulary and its practical application. Students received clear instructions and examples on how to effectively document their vocabulary in dedicated notebooks. This approach not only promotes vocabulary retention but also encourages students to take ownership of their learning journey. Such ownership is essential for cultivating self-regulated learners who can independently navigate their educational paths and improve their academic performance. This method is consistent with findings indicating that explicit instruction in memory strategies significantly enhances vocabulary retention among learners (Kobayashi & Little, 2018). By actively engaging with their vocabulary records, students can enhance both their short-term and long-term retention of new words.

First Cycle

The implementation of the first cycle revealed a noticeable improvement in students' test scores. The average score of the first post-test was 64.17% higher than that of the pre-test. Although the improvement was not statistically significant, it indicated that the technique had positively influenced the students' cognitive understanding. The most substantial advancement was observed in the aspect of meaning, with a score of 77.33. This enhancement was largely facilitated by the intensive drilling and the extensive word exposure incorporated in the strategy practice, particularly through the sketches and definitions recorded in their notebooks. The visual representation of the words enhanced the students' perceptions of how these words related to real-life contexts.

Table 2. The score comparison of Pre-Test and Post-Test 1

Aspect	Pre-Test Mean Score	Post-Test 1 Mean Score	Progress (%)
Spelling	71,33	69,33	-2
Pronunciation	38,00	46,67	8,67
Meaning	62,67	77,33	14,66

Use	66,00	63,33	-2,67
Mean Score	59,50	64,17	4,665

The evaluation of pronunciation and usage demonstrated no significant improvement, attaining scores of 46.67 and 63.33, respectively. During the implementation of the technique in Cycle 1, students predominantly concentrated on writing and embellishing their notebooks, which resulted in a degree of neglect regarding pronunciation aspects. The limited practice in constructing sentences within appropriate contexts contributed to a modest decline in the usage score. Although this decrease was less than 5%, it underscored a deficiency in the presentation of vocabulary. The primary factors contributing to this shortcoming were the insufficient practice time and the students' focus on these particular elements. Furthermore, the supplementary nature of English learning within this course, coupled with the homework commitments from their regular educational curriculum, significantly impacted the overall outcomes.

The findings indicate a moderate decline in spelling performance, with scores decreasing from 73.79 to 69.33. It is clear that the technique utilized necessitates further refinement. There is a pressing need for increased variability in the delivery of new vocabulary and in the construction of sentences. Although students appear to engage positively with the practice of recording vocabulary in their notebooks, their retention of this vocabulary has not yet demonstrated significant improvement.

The findings regarding student progress, particularly in relation to the highest and lowest scores, indicate significant discrepancies. Upon the collection and organization of the test scores, the researcher discerned that the students achieving the highest scores demonstrated a modest increase of 7.5%, rising from 65.00 to 72.50. Conversely, students with the lowest scores exhibited a similarly limited advancement of only 2.5%, moving from a score of 47.50 to 50.00. This suggests that the applied technique may not be effective for students with lower cognitive capabilities and did not significantly influence the academic achievement of higher-scoring

students in mastering vocabulary. Furthermore, insights gathered from student interviews revealed that many participants felt unable to fully utilize the notebook, largely due to a lack of interest in the vocabulary and techniques presented. The progression of scores is visually represented in the accompanying graph.

Table 3. Students' Progress Seen from the Highest and the Lowest Score

Aspect	Pre-test mean score	Post-test 1 mean score	Students' progress (%)
Highest score	65,00	72,50	7,5
Lowest score	47,50	50,00	2,5

The initial cycle of the study revealed both the strengths and weaknesses of the implemented technique. This approach allowed students to choose their preferred methods for independently learning vocabulary through the use of a notebook. Such autonomy fosters deeper engagement with the material, resulting in improved retention and understanding of vocabulary over time. Moreover, students were able to challenge themselves creatively by recording and practicing vocabulary spontaneously, without external interference. This method aligns with effective learning strategies, highlighting the significance of autonomy and creativity in enhancing vocabulary retention.

Intensive drilling emerged as the most effective strategy for mastering the meanings of new words. Students reported enjoying the classroom environment, which encouraged the expression of their ideas and helped them visualize vocabulary in a tangible way. Not only did this method improve vocabulary retention, but it also motivated students to develop their own mnemonic strategies, enriching their overall learning experiences. The findings suggest that integrating creative and autonomous learning methods can significantly enhance vocabulary retention among higher education students. Additionally, incorporating diverse mnemonic strategies can further bolster vocabulary retention, consistent with prior research on effective learning techniques (Elsisi, 2023).

Conversely, the implementation of a vocabulary recording strategy may not adequately support young students in comprehensively documenting new words. The multiple steps involved in recording a significant number of new terms can contribute to an increased cognitive burden during the learning process. This observation suggests that while vocabulary recording can be advantageous, it has the potential to overwhelm students if not effectively integrated with established memory strategies (Nemati, 2010). To optimize the efficacy of vocabulary recording, it is imperative to combine it with recognized memory techniques that can reduce cognitive load and enhance retention (Zaidi & Zaidi, 2022). Therefore, the incorporation of strategies such as retrieval practice and other memory-enhancing techniques can significantly improve vocabulary retention and alleviate cognitive strain on students.

Moreover, the constrained duration of each meeting, limited to just 90 minutes, significantly diminished students' opportunities to learn, practice, and record vocabulary. Although students could arrange their recordings at home, this added to their existing workload alongside school assignments, leading to feelings of being overwhelmed by this new learning habit. To address these challenges, educators should contemplate the provision of structured guidance on effective memory strategies, as this could promote better vocabulary retention without inducing excessive stress on students. The implementation of systematic review techniques, as recommended by Oxford and Pimsleur, may help mitigate these difficulties and enhance vocabulary retention among students (Nemati, 2009). By adopting these strategies, educators will not only support vocabulary retention but also foster a more manageable learning experience for students, ultimately contributing to improved academic performance.

After conducting a comprehensive analysis of student progress, the researcher devised a revised plan for the second cycle. New materials were developed while carefully considering the time required for each instructional step. The quantity of words to be recorded was minimized; students were instructed to document only those words they did not understand, rather than all vocabulary encountered. Furthermore, the

researcher designed a new activity aimed at enhancing students' pronunciation skills and allowing additional time for sentence production. The use of drilling will continue as a method for conveying the meanings of words during dictation, with the objective of bolstering students' ability to write these words accurately. This revised approach strives to achieve a balance between vocabulary acquisition and manageable learning tasks, thereby fostering a more effective and less stressful educational environment for students.

Second Cycle

In the implementation of the second cycle, the researcher integrated additional teaching media, such as pictures and videos, to enhance learners' comprehension of vocabulary usage in real conversational contexts. This multimedia approach not only facilitates understanding but also reinforces vocabulary retention by providing contextual examples that resonate with students' experiences. The videos utilized were sourced from YouTube. This methodology aligns with the established principles of effective teaching in higher education, emphasizing the significance of engaging multimedia resources in enhancing learning outcomes. The incorporation of multimedia resources is essential for promoting student engagement and improving academic performance in educational settings (Sabri, et al., 2024). Additionally, the use of multimedia resources can substantially increase students' motivation and interest in learning, leading to improved retention and application of vocabulary in various contexts. In this cycle, the methods employed for recording vocabulary included semantic maps, word pairs, and sentence production, allowing students the autonomy to choose their preferred recording method. This flexibility accommodates diverse learning styles and can further enhance vocabulary retention among students.

Cycle two was implemented across three meetings, with a heightened focus on pronunciation and usage due to the students' low scores after the initial post-test. In relation to pronunciation, the majority of sounds could not be accurately recorded in the students' notebooks, as

they had yet to master the phonemic symbols. To facilitate understanding, students were permitted to represent or write the sounds of words in a manner that they found comprehensible, provided they could memorize them effectively. Concerning usage, students were encouraged to utilize the vocabulary freely to construct sentences on designated topics.

In the second cycle, the classroom dynamics proved to be more manageable. The students exhibited increased confidence in their tasks, as they were now familiar with the new vocabulary. This enhancement fostered a more positive learning environment, enabling students to record the words without the previous burden they had experienced. Moreover, the instructor provided more flexible opportunities to elucidate strategies and engage in additional learning exercises.

The post-test results demonstrate a significant improvement following the second cycle, as evidenced in the accompanying table. The mean score of the second post-test was 81.50, representing a 22% increase over the first post-test. This outcome indicates that the strategy of maintaining vocabulary records has effectively enhanced the students' long-term retention and addressed the challenges associated with vocabulary acquisition. Additionally, there is strong evidence that the students have developed greater confidence in their written expression, as well as in their ability to record and utilize new vocabulary effectively.

Table 4. The score comparison of Post-Test 1 and Post-Test 2

Vocabulary Aspect	Post Test1	Post Test 2	Students Progress (%)
Spelling	69,33	84,67	15,34
Pronunciation	46,67	82,00	35,33
Meaning	77,33	80,00	2,67
Use	63,33	79,33	16
Mean Score	64,17	81,50	17,335

A significant finding of this study indicated that the increased intensity of drilling exercises, along with the incorporation of supplementary visual aids such as images and videos, cultivated a new learning environment during cycle two. This enhanced pedagogical

approach yielded substantial improvements in various aspects of vocabulary acquisition: spelling accuracy increased by 15%, pronunciation improved by 35%, comprehension of meanings demonstrated a rise of 2.67%, and practical application of vocabulary showed a 16% enhancement. When compared to cycle one, it was evident that students not only gained confidence in utilizing these techniques but also achieved more effective learning outcomes as a result.

Despite the noted improvements in vocabulary acquisition, the results exhibited certain limitations. An analysis of the comparative data between the highest and lowest scores from the first and second cycles indicated a 7.5% decline among students categorized as low scorers. Furthermore, when assessed against the pre-test results, there was an absence of observable progress in this group, with their scores showing a decrease of 27.5%. Conversely, students with higher scores experienced a substantial improvement, achieving an increase of 20%. To substantiate these findings, the researchers conducted interviews with the students. The feedback from low-scoring students revealed that they perceived familiar words as easier to learn, while words with complex spelling and pronunciation continued to pose significant challenges. This suggests that these students were unable to fully optimize the vocabulary learning technique, as the intricate steps and the quantity of vocabulary presented during the intervention were overwhelming.

The findings of this study underscore the positive outcomes associated with the implementation of the strategy across two cycles. A notable strength of this strategy was the increased autonomy it provided to students in selecting their vocabulary recording techniques. This autonomy enabled students to identify and filter the words of greatest relevance to their needs, thereby facilitating targeted recording and the enhancement of specific language skills. This approach also highlights the critical importance of tailoring vocabulary strategies to address the diverse needs of individual students, particularly those who experience difficulties with complex language components.

The research findings revealed several significant limitations that warrant further investigation. A primary issue identified was the

inadequate amount of time devoted to the application of vocabulary components within the curriculum. This deficiency hampers students' ability to effectively internalize and retain new vocabulary over the long term. To address this challenge, it is crucial to revise and enhance teaching strategies and methodologies. By integrating more comprehensive and targeted practices, educators can better support student vocabulary retention, ultimately promoting a deeper understanding and more proficient use of language in various contexts. In this regard, the teachers' role in fostering an encouraging and enjoyable learning environment was essential for motivating students in their educational journey.

One significant limitation of the study was its primary focus on grammatical elements in sentence production, which inadvertently sidelined the critical relationship between grammar and vocabulary retention. This oversight resulted in numerous errors within the students' sentences, including the omission of essential auxiliary verbs and articles, as well as instances of incorrect pronoun usage. Such frequent mistakes not only highlighted the students' struggles with basic grammatical structure but also underscored the need for an integrated approach that combines both grammar instruction and vocabulary acquisition to enhance overall language proficiency.

**Reflection and Recommendation**

The objective of this research was to enhance the long-term retention of vocabulary mastery among students enrolled in the STIT Sunan Giri Trenggalek. Throughout the study, several significant findings emerged regarding the effectiveness of the implemented technique in improving academic performance across two cycles. The technique contributed to a 22% increase in students' long-term retention pertaining to vocabulary mastery. This progress included positive developments in all four dimensions of vocabulary. The results of the students' scores, following the completion of the post-tests, are outlined below.

Table 5. The overall Students' Progress

Vocabulary Aspect	Pre-Test	Post-Test 1	Post-Test 2	Overall Progress (%)
Spelling	71,33	69,33	84,67	13,34
Pronunciation	38,00	46,67	82,00	44
Meaning	62,67	77,33	80,00	17,33
Use	66,00	63,33	79,33	13,33
Mean Score	59,50	64,17	81,50	22

Overall, the students demonstrated increased confidence in their ability to memorize and apply vocabulary in productive ways. Supporting the findings from interviews, the students expressed satisfaction and newfound enthusiasm for recording new words using their own techniques. The freedom to visualize these words in their notebooks introduced a novel dynamic to their vocabulary learning process. They found memorization easier as they created mental images of the words. Additionally, practices involving drilling and sentence production in the classroom contributed to this positive outcome.

The subsequent graph will demonstrate the efficacy of the technique across various aspects of vocabulary development. Notably, the most significant improvement is observed in the pronunciation domain, with a progress rate of 44%. In contrast, while positive advancements are evident in the other areas of learning, they are not statistically significant.
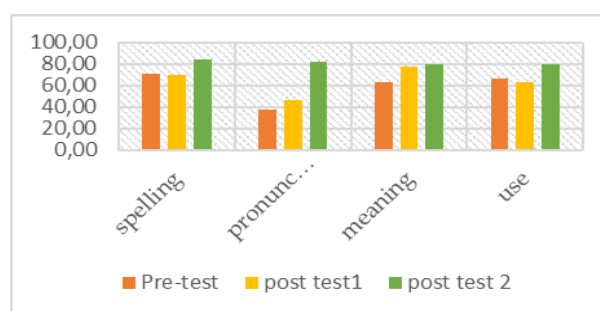
Graph 1. The students' progress

In their analysis of the research, the investigators identified both the strengths and weaknesses associated with the technique in the context of prolonged memory. These findings will be elaborated upon in the subsequent paragraph.

The Strengths of the Technique

The primary advantage of the Keeping Vocabulary Records strategy is reflected in its remarkable outcomes. Students exhibited improvements of up to 22% across various aspects of vocabulary retention, such as spelling, pronunciation, meaning, and usage. They noted that the ability to visualize words in their notebooks created a new dynamic in their vocabulary acquisition process, which greatly facilitated memorization. This autonomy enabled students to tailor their vocabulary learning strategies at their own pace, leading to long-term retention with minimal instructor intervention. Such independence is essential for fostering an inclusive learning environment that caters to all learners, particularly those who struggle with vocabulary acquisition. Consequently, students expressed enthusiasm for learning English vocabulary.

Moreover, the implementation of this strategy affords students enhanced autonomy in memorizing and learning each word within their notebooks. This approach facilitates a deeper familiarity with each word, allowing these terms to become firmly established in students' long-term memory, ultimately achieving permanence. The visualization of words represents a novel technique that aids in spontaneous recall when such words are required. Consequently, students demonstrate increased confidence and enthusiasm in their vocabulary development. The capacity to visualize words in their notebooks not only empowers learners but also highlights the significance of personalized methodologies in vocabulary acquisition, as corroborated by existing literature (Paredes et al., 2024; Rosyada-AS & Apoko, 2023). This study illustrates the importance of tailored vocabulary learning strategies that can substantially improve student engagement and retention of new vocabulary, particularly among individuals who encounter difficulties in the acquisition process. This method promotes familiarity with vocabulary, effectively embedding words into long-term memory. Furthermore, the technique of visualization proves to be an effective means for facilitating spontaneous recall when necessary. Overall, this approach enhances long-term

retention while fostering active engagement with vocabulary, ultimately contributing to a comprehensive understanding of language within context.

The implementation of the Keeping Vocabulary Records strategy in the classroom is effectively realized through the use of a notebook. This approach offers students an engaging way to practice vocabulary both in class and in non-traditional learning environments. As a result, students show increased enthusiasm and satisfaction toward their assignments and assessments. This positive change contributes to the establishment of a comfortable learning atmosphere that encourages active participation from both students and educators in various activities. These observations are consistent with the findings of Dubiner (2017), which indicate that vocabulary notebooks can significantly enhance both vocabulary acquisition and retention. Additionally, the vocabulary notebook serves as a valuable tool in promoting vocabulary learning and fostering student autonomy, thereby boosting motivation to learn English (Vela & Rushidi, 2016). The notable transformation in classroom dynamics illustrates the substantial impact that engaging vocabulary strategies can have on student motivation and educational outcomes, ultimately leading to a more effective learning experience. The findings emphasize the crucial relationship between innovative instructional methods and student motivation, underscoring the necessity for ongoing innovation in vocabulary teaching strategies to optimize learning outcomes.

The Weakness of the Technique

The effectiveness of the technique in enhancing students' long-term retention of vocabulary has presented new challenges. A primary concern is the substantial amount of time required for learning, particularly among young learners. Additionally, the targeted number of vocabulary words was not fully attained. Consequently, the instructor decided to reduce the word count in the subsequent cycle. Future research should explore the extension of vocabulary instruction duration while incorporating diverse pedagogical methods to accommodate varying learning preferences. This approach underscores the significance of customizing vocabulary

strategies to meet the unique needs of individual students, especially those who encounter difficulties with complex language elements. Such adaptability not only empowers learners but also aligns with the necessity for tailored vocabulary acquisition methods, as noted in relevant literature (Arslan, 2024). Emphasizing personalized strategies can significantly enhance student engagement and retention of new vocabulary, particularly for those facing challenges in language acquisition (Stroud, 2014). Furthermore, investigating the incorporation of technology and interactive components—such as Massive Open Online Courses (MOOCs) for vocabulary instruction (Hidayah, 2022)—may further improve engagement and retention (Arslan, 2024). By implementing these strategies, educators can create more customized learning experiences that effectively address individual student needs (McKeown, 2019), leading to enhanced educational outcomes.

It has become clear that the student with lower scores faced difficulties in effectively applying the technique, indicating a need for increased support. During interviews, students expressed that the drawing and recording components were overwhelming, which impeded their ability to keep up with their peers during tasks. This feedback highlights the necessity for differentiated instruction that caters to diverse learning paces and preferences, especially for students struggling with vocabulary acquisition. Hence, the teacher's role is crucial in ensuring that every student receives the support they require to succeed in their vocabulary learning journey. Educators' involvement in fostering a supportive and engaging learning environment is essential for motivating students academically. This underscores the need for innovative instructional methods that not only enhance vocabulary acquisition but also promote inclusivity. Recent studies (Arslan, 2024; Muryani & Yunus, 2024) emphasize the importance of employing diverse vocabulary instruction strategies to effectively engage students. To facilitate this, teachers should pursue professional training and mentoring programs designed to refine their instructional practices and support students in their vocabulary development. As highlighted by Hidayah (2016), such professional development can enhance teaching skills and provide

personalized support. Furthermore, universities can cultivate a positive learning atmosphere by functioning as learning organizations, empowering all educators to take the lead in their professional development (Hidayah, 2025).

The application of grammar was somewhat overlooked in the instructional approach. The focus on visualization and drilling resulted in numerous mistakes in students' sentences, particularly concerning verb usage, pronunciation, and the use of connectors. Incorrect tense usage was also noted. To address these issues, future instructional strategies should include explicit grammar instruction alongside vocabulary practices. This will help students develop a well-rounded understanding of language use and structure. A comprehensive approach to both vocabulary and grammar instruction not only enhances students' language skills but also creates a more engaging and effective learning environment. By combining grammar instruction with vocabulary strategies, we can promote a balanced language proficiency that is vital for effective communication. This aligns with modern pedagogical approaches that recognize the connection between vocabulary and grammar (Xu, 2024). Additionally, adopting this holistic perspective can enhance students' language skills and communicative competence. Research indicates that integrating vocabulary and grammar instruction can improve language proficiency and communicative effectiveness (Li, 2023). This study advocates for effective vocabulary instruction tailored to meet the individual needs of students, thereby facilitating both retention and practical application in real-world situations.

D. Conclusion

The study findings revealed that using the Keeping Vocabulary Records technique helped the students increase their vocabulary retention by up to 22%. This technique allowed students to learn, repeat, and recycle words at their own pace, leading to improved motivation and confidence in learning new vocabulary. The technique was also effective in increasing the students' prolonged memory.

The strategy has shown significant potential for enhancing long-term vocabulary retention among students in Islamic higher education contexts. Findings indicate noteworthy improvements in spelling, pronunciation, meaning, and usage, with students expressing greater engagement in learning English vocabulary. Visualizing words in dedicated notebooks has proven effective in fostering autonomy and personalized learning, especially for those struggling with vocabulary acquisition. However, the approach presents challenges such as its time-intensive nature and the need for differentiated instruction to meet diverse learning paces. Future research should seek to refine this technique by integrating explicit grammar instruction and exploring innovative pedagogical methods, including technology-enhanced learning environments. Overall, the study highlights the importance of customized vocabulary instruction to improve retention and promote a comprehensive understanding of the language, thus enhancing students' communication skills.

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