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Memory strategies focused on english vocabulary learning: A case study in a public high school in Loja City

Estrategias de memoria enfocadas en el aprendizaje de vocabulario en inglés: Un estudio de caso en Colegio Público de la ciudad de Loja

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Abstract

The research "Memory Strategies Focused on English Vocabulary Learning: A Case Study in a Public High School in Loja City" aimed to determine the effectiveness of memory strategies focused on English vocabulary learning among students of a public high school in Loja City. This study examined how various memory strategies promote vocabulary acquisition and retention, as well as opportunities for students' practice in real contexts. It also investigated the adaptability of memory strategies to individual student needs and their efficacy for learners with diverse language proficiency levels or specific learning requirements. This study involved implementing four memory strategies, such as creating mental linkages, applying images and sound, reviewing well, and employing action, within the classroom setting over 12 weeks. Data collection methods included pre and post-assessments, student surveys, and classroom observations. Preliminary findings suggest that the use of specific memory strategies positively influences vocabulary retention and fosters a deeper understanding of language concepts. Finally, this research showed that memory strategies motivated vocabulary learning improvement and provided insights into improving language learning experiences for high school students.


Keywords: memory strategies, learning, english vocabulary

Resumen

La investigación "Estrategias de Memoria Centradas en el Aprendizaje del Vocabulario en inglés: Un Estudio de Caso en un Colegio Público de la Ciudad de Loja" tuvo como objetivo determinar la efectividad de las estrategias de memoria centradas en el aprendizaje del vocabulario en inglés de los estudiantes de una escuela secundaria pública en la ciudad de Loja. Este estudio examinó cómo diversas estrategias de memoria facilitan la adquisición y retención de vocabulario, así como las oportunidades para la práctica del idioma en contextos reales. También exploró cómo las estrategias de memoria pueden adaptarse a las necesidades individuales de los estudiantes, y cuáles fueron favorables para aquellos que tienen diferentes niveles de idioma o necesidades de aprendizaje

específicas. Este estudio implicó implementar cuatro estrategias de memoria, tales como crear vínculos mentales, aplicar imágenes y sonido, revisar bien y emplear acciones, dentro del entorno del aula durante 12 semanas. Los métodos de recopilación de datos incluyeron evaluaciones previas y posteriores, encuestas a los estudiantes y observaciones en el aula. Los hallazgos preliminares sugieren que la utilización de estrategias de memoria influye positivamente en la retención de vocabulario y fomenta una comprensión más profunda de los conceptos del lenguaje. Finalmente, esta investigación mostró que las estrategias de memoria motivaron el desarrollo del aprendizaje de vocabulario y proporcionaron ideas para mejorar las experiencias de aprendizaje del idioma inglés en los estudiantes de secundaria.

Palabras clave: estrategias de memoria, aprendizaje, vocabulario en inglés

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INTRODUCTION

English is one of the most spoken languages in the world that English as a foreign language students should master in this globalized society. Learning a second language can be seen as a challenging and daunting task, especially when students intend to acquire new vocabulary from one language to another. According to the Ministry of Education (2016), high school students should overpower the B1.2 English Level as identified by the Common European Framework of Reference for Languages (CEFR).

At this level, students can engage in everyday conversations, read straightforward texts, write personal emails or letters, and generally handle a range of tasks in English. However, they may still struggle with more complex language structures, advanced vocabulary, and nuanced expressions. Continued practice and exposure to the language will help them progress to higher levels of proficiency. Nevertheless, not all students master English vocabulary skills since they struggle with the meaning and use of the words. Likewise, vocabulary involves other aspects such as pronunciation, spelling, grammatical structures, connotations, and morphology (Ghalebi et al., 2020).

The vocabulary acquisition allows students to manage the four English skills. Ghalebi et al. (2020) claimed that learners are always looking for words to understand reading and listening, and to handle speaking and writing skills. Jamaludin et al. (2023) claim that students present problems in handwriting, organizing ideas, and placing new words into context. Vocabulary is a pivotal component in second language learning because it is necessary to communicate and comprehend what native speakers and non-native speakers express (Park & Lee, 2023).

Moreover, Ibarra and Martinez (2018) stated that most of the time students struggle with distraction, and short stored memory when they are learning a new language. Castillo (2021) based on the EF English Proficiency Index (EPI) exam report 2021, showed that Ecuador continues to be one of the worst English language proficiencies in Latin America. This problem can be directly affected by the lack of vocabulary and the traditional teaching where some EFL teachers just focus on grammar rather than vocabulary learning. Consequently, without sufficient vocabulary, learners cannot communicate effectively their spoken and written ideas.

The development of vocabulary learning is crucial for learners where EFL teachers and curriculum developers are searching for strategies and activities that help learners enhance their vocabulary. Abbassi et al. (2018) indicate that "series of memory strategies gradually increase progress in their retention and retrieval of words" (p.2). Likewise, Alzaidi (2018) mentions that the application of strategies in the classroom allows learners to monitor their performance, and treat the English language as a system and as a means of communication. Aljurbuja (2020) stresses that memory teaching strategies assist students to learn, memorize, and practice vocabulary. Mohamad et al. (2021) claim that memory methods as a learning methodology in vocabulary learning are more fruitful than using word records.

Ghalebi et al. (2020) in their research study called Vocabulary Learning Strategies: A Comparative Study of EFL Learners found that there are different vocabulary teaching-learning strategies such as metacognitive, cognitive, social, determination, affective, and memory strategies. Hence, they suggest future studies with different levels of academics, ages, and sexes to identify the best teaching strategy for vocabulary improvement. Therefore, this research study is focused on memory strategies in vocabulary learning.

The main purpose of this study is to determine the effectiveness of memory strategies to improve vocabulary learning among high school students, specifically, the four memory strategies such as creating mental linkages, applying images and sound, reviewing well, and employing action. This study also describes the perceptions of using memory strategies in promoting vocabulary acquisition

superior to basic education students. The research questions are: What is the effectiveness of memory strategies in improving vocabulary learning among high school students at a public institution in Loja City? What are the student's perceptions about the implementation of memory strategies to improve vocabulary learning among high school students at a public institution in Loja City?

METHODOLOGY

This study is action research aimed at determining the effectiveness of memory strategies in improving English vocabulary learning, as well as exploring how memory strategies can adapt to the needs and students' English levels. Gunbayi (2020) defines action research as the process of expanding knowledge through interventions to solve an identified problem. Furthermore, action research involves the participation of researchers and a group of participants applying an intervention proposal.

This research has a mixed-method approach because it contains quantitative and qualitative data. Kandel (2020) mentions that quantitative data refers to getting numerical information by using mathematical methods while Kandel argues that qualitative data collects information about people who are observed, qualitative data helps researchers to develop concepts and ideas about the gathered information about the view of the participants. Moreover, it follows an action research model.

The participants of this study were high school students who should overpower the B1.2 English Level. The participants were a group of students aged between 15 to 19 years old. The intervention lasted 16 weeks, with 5 hours of classes per week. Therefore, the information was called by administering a standardized test before and after the intervention, aiming to evaluate English vocabulary acquisition improvements. In the words of Cohen, et al. (2013) t-tests were employed to measure if there was a notable disparity between the mean scores of two data sets, a common practice in research to determine the effectiveness of interventions or treatments on a given variable.

Furthermore, surveys were administered to participants to know their perceptions about the use of memory strategies to improve English learning, encompassing its efficacy and user-friendliness. Cohen et al. (2013) defined survey research as the collection of data from a subset of individuals through their responses to inquiries. Additionally, classroom observations were undertaken to gather data throughout the intervention period, specifically concentrating on notable occurrences such as student engagement with memory strategies in the teaching-learning process. Subsequently, both quantitative and qualitative data were scrutinized to assess the efficacy of memory strategies. Quantitative data underwent analysis using statistical techniques like t-tests to ascertain if there were substantial disparities in pre and post-intervention. Descriptive statistics, as outlined by Sze (2018), were utilized as an analytical method to systematically summarize collected data, thus revealing the interrelation among the variables under investigation. Qualitative data were subjected to content analysis to identify recurring patterns and emerging themes within the opinions and experiences of the study participants.

RESULTS AND DISCUSSION

This section presents the outcomes obtained from employing memory strategies to enhance vocabulary learning among high school students, along with detailing the approach used to accomplish the specific goals during the intervention. The initial objective is explained through numerical data consequent from both pretest and posttest assessments. Meanwhile, comprehension of the second objective is associated with qualitative data gathered from a survey exploring students' perceptions. Consequently, the findings are illustrated through tables, accompanied by their respective analysis and interpretation.

Table 1

Results of Pre/Post-tests

Indicators	Participants	Use (3 points)	Meaning (3 points)	Form (3 points)	Total mean 9/9
Pre-test	38	1,04	1,05	1,10	3,19
Post-test	38	2,90	2,15	2,75	7.80
Difference	n/d	1.86	1.10	1.65	4.61

The findings demonstrate a notable shift in test scores before and after the intervention, emphasizing the significance of using memory strategies such as creating mental linkages, applying images and sound, reviewing well, and employing action to enhance English vocabulary acquisition among high school students. The data presented in Table 1 indicates a significant improvement in vocabulary learning, especially in use, meaning, and form, with a score difference of 4.61 between pre and post-tests, highlighting the efficacy of memory strategies. These strategies show promise in enhancing both the application and structure of English vocabulary learning, as evidenced by Smith (2022), in his study of the impact of memory strategies on vocabulary use. Moreover, memory strategies have the adaptability to adapt to individual student needs, a crucial aspect in second-language acquisition (Al-Jafar, 2019). Additionally, the results show that memory strategies empower English learners to build a robust vocabulary foundation, leading to improved language proficiency and communication skills. Nguyen and Gu (2022) advocate that effective memory strategies are essential for enhancing vocabulary retention and proficiency among language learners in classrooms. Successful application of memory strategies offers numerous benefits for improving English vocabulary acquisition and retention, including enhanced retention, increased vocabulary size, improved recall and recognition, faster language processing, increased confidence, facilitated communication skills, and long-term language proficiency (Liu et al., 2021).

Table 2

Survey Results about Students' Perceptions

Indicators	Description	Agree	Disagree
Effectiveness	Students' perception of how effective they believe memory strategies are in helping them learn and retain English vocabulary	95%	5%
Usage Frequency	The frequency with which students report using different memory strategies to learn English vocabulary	93%	7%
Preference	Students' preferences for certain memory strategies over others	97%	3%
Satisfaction	Students' overall satisfaction with the memory strategies they use to improve English vocabulary.	98%	2%
Perceived Difficulty	Students' perception of the difficulty level associated with different memory strategies.	3%	97%
Impact on Learning	Students' beliefs about the impact of memory strategies on their English vocabulary learning outcomes.	99%	1%

The table 2 illustrates the participants' views on how effective memory strategies are in supporting their learning process. These insights are crucial for evaluating how memory strategies impact the enhancement of English vocabulary and for understanding its effectiveness in the Foreign Language learning process (Dunlosky et al., 2013). In addition, a summary of the analyzed data reveals that most participants found creating mental linkages, applying images and sound, reviewing well, and employing

actions beneficial for improving use, meaning, and form because of their adaptability to the student's needs (Thomson and Scoppa, 2021).

This flexibility allows for accommodating varying English levels and learning preferences, as highlighted by Plata and Franco (2021) in their study on enhancing English vocabulary learning through the use of mnemonic Devices. Furthermore, the findings suggest that participants believe memory strategies are helping them learn and retain English vocabulary these memory strategies link new vocabulary or concepts to familiar ones, and learners can enhance understanding and retention. Creating mental linkages helps organize information in a meaningful way, making it easier to recall later. Song and Lee (2021) stress the importance of creating mental linkages, applying images and sound, reviewing well, and employing action strategies that can support memory by providing additional sensory inputs. Associating new vocabulary with images, sounds, or even gestures can make it more memorable and easier to recall (Al_Khresheh & Al-Ruwaili, 2020).

CONCLUSIONS

Memory strategies offer significant enhancements to learners' spelling proficiency, largely owing to the repetitive and engaging nature of game-based learning. These strategies not only support understanding word meanings and usage more effectively than traditional methods but also facilitate pronunciation improvement through immediate feedback and pronunciation guides. The interactive contexts provided by memory strategies contribute to better comprehension and auditory learning experiences.

The meaningful way to learn English vocabulary through memory strategies motivates students to actively participate and continue learning, fostering a sense of competence. Strategies such as creating mental linkages and employing action demonstrate benefits for teaching spelling by presenting multiple options for students to choose from, helping them grasp word meanings through associated images. Similarly, applying images and sound show effective for teaching word classifications and pronunciation, offering students opportunities to listen to correct word pronunciations. Reviewing well emerges as a valuable tool for teaching word usage in various contexts and categorizing words based on their use.

Moreover, memory strategies in the teaching-learning process of English as a foreign language promote positive behavioral changes by capturing students' attention, fostering teamwork, and motivating collaborative efforts toward shared goals. Engaging with content in a game format not only enhances learning experiences but also promotes skill mastery and a sense of achievement among learners. Finally, the interactive and memorable nature of gamified learning experiences enhances the retention and recall of learned content.

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