MINISTRY OF INDUSTRY AND TRADE
HANOI UNIVERSITY OF INDUSTRY

MAI THI DINH

AN INSIGHT ON ENGLISH VOCABULARY LEARNING THROUGH THE EOP SYSTEM OF ENGLISH NON-MAJOR STUDENTS AT HAUI

MASTER THESIS IN ENGLISH LINGUISTICS

Hanoi, 2024

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Major: English Linguistics
Code: 8220201

MASTER THESIS IN ENGLISH LINGUISTICS

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Hanoi – 2024

DECLARATION BY THE AUTHOR

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Date: _____

Author's signature

Mai Thi Dinh

ACKNOWLEDGEMENTS

This dissertation signifies the culmination of an extensive expedition. From the inception of the project until the day of submission, I was subjected to a great deal of pressure, including locating a supervisor, locating reference materials, comprehending the materials, obtaining permission to collect data, and subsequently interpreting and analysing the collected data. Fortunately, I can complete it with the assistance of numerous individuals. Without those individuals, I would have been unable to accomplish this mission. This acknowledgment is to convey my appreciation to the fervent supporters who have assisted in the implementation of this thesis over the past few months.

Prior to anything else, I would like to extend my sincere gratitude to my supervisor, Dr. Tran Ngoc Duc, for his unwavering support, expertise, and knowledge, which enabled me to successfully complete the research. His encouragement, contribution, and tolerance for my procrastination are greatly appreciated. Furthermore, I wish to extend my most sincere gratitude to the faculty members at Hanoi University of Industry for their invaluable assistance throughout the data collection.

The ardent participation of the second-year students at Hanoi University of Industry is duly recognized. Their invaluable contributions in the form of sharing and complementation significantly augmented the data pool for the study.

Sincere appreciation is also extended to all of my husband and my parents, whose unwavering support has enabled me to surmount the challenges encountered throughout this research.

In conclusion, I express gratitude towards myself for persevering through the challenges of sleep deprivation, managing the stress associated with studying and working concurrently and completing this study to the present day.

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ABSTRACT

This study investigates the impact of the EOP (English for Occupational Purposes) system on the vocabulary learning progress of second-year non-English major students at Hanoi University of Industry through a comprehensive blend of quantitative and qualitative analyses involving 30 participants. Quantitative data reveals a substantial increase in mean scores from pre-test to post-test, supported by paired t-test validation, affirming the positive influence of the EOP system on vocabulary acquisition. In-depth qualitative analysis highlights positive aspects, including the system's suitability for learners' proficiency levels, practical application of vocabulary, and support for traditional classroom learning. Conversely, identified challenges encompass the perceived monotony of exercises and a lack of communication activities. The study suggests pedagogical implications, emphasizing the potential for blended learning approaches and personalized instruction. However, the limitations, notably the difficulty in controlling confounding variables, underscore the need for future research to employ randomized controlled trials and explore the sustained impact of the EOP system over an extended duration. These findings contribute to the discourse on language learning technologies, guiding educators and developers in optimizing online platforms for enhanced language acquisition.

Keyword: *blended learning, vocabulary learning, EOP system*

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LIST OF ABBREVIATIONS

CALL: Computer-assisted Language Learning

EOP: English for Occupational Purposes

EFL: English as Foreign Language

ESL: English as Second Language

ESP: English for Specific Purposes

HaUI: Hanoi University of Industry

L2: Second language

LMS: Learning management system

OALD: Oxford Advanced Learner's Dictionary

TBLT: Task-based Language Teaching

RCTs: Randomized controlled trials

SPSS: Statistical Package for the Social Sciences

INTRODUCTION

1. Rationale

As the world becomes more interconnected, it is imperative that languages become standardized across borders. Without a doubt, English will be the most pivotal language. Most Vietnamese universities recognized it, and English become one of the most important subjects. Hanoi University of Industry (HaUI) is not an exception.

The acquisition of vocabulary holds significant importance in the process of learning English as a Foreign Language (EFL). In order to achieve proficiency in English, it is imperative for students to consistently enhance their vocabulary knowledge. Given that individuals are not fully exposed to a setting where English is the predominant language, it becomes imperative to engage in focused and intentional vocabulary acquisition. A robust lexicon enables English as a Foreign Language (EFL) learners to comprehend texts of higher complexity, articulate more intricate concepts in oral and written communication, and cultivate enhanced self-assurance in language proficiency.

At HaUI, instructors utilize a blended learning approach via the English for Occupational Purposes (EOP) system to facilitate effective vocabulary acquisition. This combines traditional face-to-face instruction with online self-study modules. Learners access EOP to study new terms independently via games, quizzes, and interactive exercises. In class, teachers reinforce this knowledge through dialogues, role-plays, discussions, and tasks requiring vocabulary use. This exposure from multiple angles boosts retention and usage.

This study provides valuable understanding of how effective the English for Occupational Purposes (EOP) system is for building vocabulary competence. As English mastery grows increasingly vital for workplaces globally, developing lexicon is essential for HaUI graduates to access professional opportunities. This study generates data evaluating EOP's blended model of combining online self-directed vocabulary practice with teacher reinforcement in a classroom setting. The findings will help refine HaUI's English training to empower second-year non-English major students with occupation-oriented language ability. Overall, this research examines optimized vocabulary instruction critical for employability in Vietnam's globalized economy.

2. Aims and objectives of the study

This study investigates the effectiveness of the EOP system in enhancing vocabulary learning, explores the strategies students use, and identifies potential challenges faced in the process. From there, this study provides a comprehensive understanding of vocabulary acquisition for second-year non-English major students at HaUI through the use of the EOP system. By considering these aspects, this study contributes to the existing literature on language education and offers insights into optimizing vocabulary instruction for second-year students. two are not English majors in vocational contexts.

3. Research questions

To achieve the above purposes, this study focused on answering the following two questions:

1, To what extent is the English vocabulary learning of second-year non-English major students improved through the EOP system in a blended course at HaUI?

2, What are second-year non-English major students' perceptions of English vocabulary learning through the EOP system in a blended course at HaUI?

4. Scope of the study

The research involved 30 second-year Electric and Electronic Engineering students from Hanoi University of Industry. These candidates have a thorough understanding of the system because they have successfully completed English for Electric and Electronic Engineering 1 and English for Electric and Electronic Engineering 2 in particular. The choice of Electric and Electronic Engineering as the major is based on the significant number of students in the industry and the crucial role of English in this field. These standards aim to maintain uniformity in several aspects. Firstly, it is ensured that students admitted to the program possess comparable levels of proficiency. Secondly, it is guaranteed that student evaluation exams maintain a high level of uniformity and reliability.

5. Significance of the Study

Since the 1970s, studies on effective methods for learning a new language have been widely conducted, with a focus on vocabulary acquisition. Uhl & Michael O’malley (1986) research showed that almost any method for learning a language can be utilized to improve one's vocabulary.

The combination of face-to-face learning in class and online learning at home is one of the methods that are increasingly popular. Specifically, Hanoi University of Industry has developed an EOP system to support its students.

During the operation of the system, there seems to be no research that really focuses on testing its effectiveness in helping students learn vocabulary. Therefore, this study is expected to provide appropriate comments, assessments and suggestions so that the EOP system can best contribute to second-year non-English major students' English vocabulary learning in the near future**.**

CHAPTER 1: LITERATURE REVIEW

1.1. VOCABULARY ACQUISITION THEORIES

1.1.1. The definition of vocabulary

The Oxford Advanced Learner's Dictionary (OALD) defines vocabulary as "all the words known and used by a particular person" as well as "all the words in a language" and "the words used when talking about a particular subject." From a language learning perspective, vocabulary refers specifically to the body of words students must learn, understand, and use correctly to effectively communicate ideas and information in both spoken and written English. This encompasses individual word meanings and patterns as well as fixed phrases and expressions suited for particular contexts.

Nation (2001) presented that vocabulary knowledge refers to 3 main areas as following:

- Form: Spoken, Written, Word parts
- Meaning: Form and meaning, Concepts and references, Associations
- Use: Grammatical functions, Collocations, Constraints to use

Vocabulary is sometimes defined narrowly as the number of words one knows and their definitions. Another meaning of vocabulary can be an alphabetized list of words and their definitions. A word's definition in most linguistic studies is a composite of its meaning, register, association, collocation, grammatical behavior, spelling, pronunciation, and frequency in both written and spoken forms. There are seven facets of a word beyond its definition that must be mastered in order to use it effectively. Word knowledge is characterized by the aforementioned qualities (Schmitt, 2000).

The complexity of terminology is hidden by these seemingly simple definitions. There are two primary ways in which humans interact with language: orally, via hearing and speaking, and visually, through reading and writing. In addition, there are two types of word knowledge: receiving information and creating new information. Words that we know when we hear or see them are part of our receptive vocabulary. Words we regularly employ in conversation and composition are part of a productive vocabulary. Many words that we give some significance to even if we don't know their full definitions and implications - or ever use them ourselves as we talk and write - may be included in our receptive vocabulary, which is typically greater than our productive vocabulary (Kamil & Hiebert, 2001).

According to Schmitt (2000), the connection between a term and its referent—the person, thing, action, or situation—is what gives the word its meaning. A word's most fundamental meaning is the one given by dictionaries. A term, however, may carry additional significance when used in certain contexts.

Language learners may believe that acquiring a word is merely a matter of memorization; however, since words are typically found in context, a variety of factors must be considered. This is always a challenge to both language educators and learners.

1.1.2. Theoretical framework of teaching English vocabulary

Behaviorist theory, founded on the principles of stimulus and response, dominated psychology throughout the first half of the 20th century (Skinner, 1965). In the context of vocabulary acquisition, behaviorists believe learning occurs by establishing external associations between words and their meanings through repetition and reinforcement (Nation, 2013). Techniques include repetitive drills, flashcards, and substitution tables to condition stimulus-response connections. Positive reinforcement like rewards and praise can also facilitate vocabulary uptake. However, critics argue that the behaviorist framework is mechanistic and does not account for cognitive processes involved in deep vocabulary knowledge. (Brown, 2014) Nonetheless, principles of repetition and reinforcement remain applicable for vocabulary learning in combination with approaches that engage learners in deeper mental processing of lexical items.

The following are the principles of this theoretical framework:

1.1.2.1. Stimulus-Response Association

The Stimulus-Response Association principle is core to behaviorist vocabulary instruction (Nation, 2013). It states that learning occurs through associating the stimulus (the new vocabulary word encountered) with the response (its meaning or translation). Students develop conditioned responses when a vocabulary item elicits its target language meaning. These stimulus-response connections are strengthened through repetition activities like flashcards, drills, and reading aloud that pair the lexical item with its meaning consistently (Carter & McCarthy, 2014). Frequency aims to ingrain first-language translations and meanings such that students automatically retrieve them when confronted with the new word. An issue is overreliance on rote stimulus-response habits rather than deep processing for generative vocabulary use.

1.1.2.2. Repetition and Practice

Repetition and practice are two of the key principles of behaviorist vocabulary instruction (Schmitt, 2008). Behaviors like correctly producing a new word or its meaning are learned responses conditioned through repeated reinforcement (Brown, 2014). Vocabulary learning activities should provide students opportunities to encounter words multiple times and retrieve their meanings. Techniques include oral and written repetition, substitution drills, flashcards, reading aloud, and scheduling regular reviews (Nation, 2013) Each repetition strengthens stimulus-response associations in memory. However, solely repeating word forms does not necessarily build deeper knowledge for generative use. Thus, principles of spaced retrieval and repetition remain relevant for vocabulary learning, but may require supplementary cognitive processing strategies.

1.1.2.3. Drill Exercises

Drill exercises enable repetitive practice to establish stimulus-response connections between words and meanings (Thornbury, 2002). Substitution drills replace words in sentences to rehearse form-meaning links (Larsen-Freeman & Anderson, 2011). Oral repetition drills involve teacher modeling followed by students imitating word pronunciation and meanings verbally. Reading aloud drills pair written words with reading them out along with meanings. All facilitate repetition in varied contexts. While drills strengthen stimulus-response habits through overlearning, they have been critiqued as mindless, boring activities that rarely transfer to generative vocabulary usage (Schmitt, 2008). Modern implementations thus blend such repetitive drills with cognitively engaging tasks. Overall, drilling remains relevant for reinforcing newly learnt vocabulary, provided it is augmented with contextual processing.

1.1.2.4. Rote Memorization

Rote learning involves committing information to memory through repetition without deeper understanding (Brown, 2014). For vocabulary, this can mean mechanically memorizing word-meaning pairs through oral/written drilling without contextual processing. Critics argue rote recall hinders generative language use, but behaviorists contend repetition aids habit formation, retention and fluency (Nation, 2013). Modern perspectives recognize while repetitive rehearsal strengthens stimulus-response links, exclusive reliance on rote memorization precludes rich mental representations for

contextual application (Schmitt, 2008). Teachers now blend memorization strategies like flashcards with deeper processing via inferring meanings from context. Some rote learning remains useful for consolidation, but cognitive encoding likely produces more flexible, transferable lexical knowledge. A balanced approach suits various vocabulary learning needs.

1.1.2.5. Positive Reinforcement

Positive reinforcement facilitates vocabulary learning in behaviorist frameworks by strengthening desired stimulus-response connections through rewards or praise (Thornbury, 2002). Immediately rewarding correct recall or usage with points, prizes or verbal feedback conditions the stimulus (new word) association with achievement. Scheduling variable ratio reinforcements keeps motivation high (Brown, 2014). However, offering extrinsic rewards for quality vocabulary responses risks undermining long-term integration without consistent external validation (Deci et al., 2001). Modern approaches now blend intrinsic drive with positive reinforcement to encourage deeper cognitive engagement. While judicious rewards can motivate initial uptake, contemporary learning paradigms also emphasize constructive feedback, customized complexity and learner autonomy to build self-regulated vocabulary mastery.

1.1.2.6. Immediate Feedback

Providing feedback immediately after student responses is an effective reinforcement technique grounded in behaviorism (Barcroft, 2004). Instant affirmative feedback or correction following vocabulary retrieval or usage attempts helps condition correct stimulus-response associations (Thornbury, 2002). Delayed feedback risks weakening connections between words and meanings. However, exclusively emphasizing external evaluations over internal monitoring promotes dependency on teacher judgments rather than self-regulation (Nation & Webb, 2011). Current frameworks thus leverage immediate feedback to confirm accurate responses, not to overly scrutinize errors, balanced by delayed feedback to strengthen memory encoding. Learners also set personalized goals, self-assess using rubrics and track progress. In moderation, immediate feedback remains a useful reinforcement tool, now combined with reflection and metacognitive strategies.

1.1.2.7. Conditioning Techniques

Conditioning techniques reinforce desired vocabulary learning behaviors to increase correct stimulus-response probability through positive/negative reinforcement schedules (Skinner, 1965). Positive conditioning frequently rewards retrieval attempts with points or praise to associate words with achievement. Negative conditioning ignores incorrect responses to discourage inaccuracy. Shaping gradually molds improved responses through selective reinforcement towards a vocabulary learning goal. Fading/vanishing provides temporary learning aids like word lists, progressively removed as Independence increases. While conditioning techniques can boost motivation and accuracy, critics argue they foster dependency on external evaluation rather than intrinsic interest (Brown, 2014). Contemporary frameworks now promote self-direction alongside strategic conditioning, leveraging motivational strategies with graduated scaffolding towards autonomous vocabulary mastery.

1.1.2.8. Systematic Progression

Behaviorism emphasizes the ordered sequencing of vocabulary instruction from basic to more complex (Nation, 2013). Teachers first introduce the highest frequency words for wide coverage and daily usage before specialized terms. Controlled introduction considers learnability factors like pronounceability, regularity and synthesizability so earlier items prime further learning (Thornbury, 2002). Gradual progression then layers new words, cumulative review to reinforce maintenance. However, strictly regimented schedules can limit responsive customization to class abilities. Current approaches blend systematic planning of vocabulary types, leveled materials and recycled review with needs-based differentiation like preparatory pre-teaching for struggling students before whole-class introduction. Adaptive sequencing remains vital for vocabulary development, coupling teacher structuring with student readiness diagnosis.

1.1.2.9. Behavioral Objectives

Behaviorism focuses on observable, measurable outcomes as learning evidence (Brown, 2014). Setting behavioral vocabulary goals defines targeted mastery levels for tasks like recalling definitions or using new words in context. This enables monitoring student progress through changes in demonstrable capabilities over time relative to pre-determined criteria (Gronlund & Brookhart, 2009). However, while performance

objectives facilitate accountable instruction, over-emphasis on outcomes risks mechanistic teaching to rigid, narrow standards rather than adaptable processes tailored to evolving learner needs. The frameworks nowadays balance clearly communicating expectations with flexibility on customizable paths towards vocabulary development, prioritizing learner ownership through choice in personalized goal-setting. Clarity of purpose thus remains vital, enacted through responsive scaffolding not standardized prescription.

1.1.2.10. Behavior Modification

Behavior modification applies reinforcement principles to shape desired vocabulary learning behaviors in students (Ma, 2009). Positive reinforcement through encouragement or rewards and negative reinforcement by withdrawing stimuli can increase accurate responses. Cues, models and scaffolds also prime correct behaviors, faded out as independence increases. However, controlling environments to elicite certain verbal behaviors has been critiqued as reducing learner autonomy and ownership (Tomasello, 2001). While behaviorist strategies can optimize conditions for vocabulary growth, contemporary approaches also nurture self-direction to positively influence engagement and agency long-term. Teachers now actively collaborate with learners on setting personalized goals, monitoring tactics which meaningfully drive vocabulary mastery as an enabler towards communicative fluency.

1.1.3. English vocabulary teaching approaches

Vocabulary teaching approaches in the field of language education have evolved over the years, reflecting an ongoing quest to enhance language learners' lexical knowledge and usage. These approaches, often shaped by influential researchers and language educators, vary in their strategies and principles, offering a spectrum of methods to cater to the diverse needs and preferences of learners. This study focused on several key vocabulary teaching approaches and their proponents, citing relevant authors and years.

1.1.3.1. Direct vocabulary instruction

Direct Vocabulary Instruction is a well-established pedagogical approach that involves explicit and systematic teaching of vocabulary. This method is grounded in the belief that vocabulary plays a fundamental role in language development and that direct instruction enhances students' ability to comprehend and communicate effectively. The

work of Beck et al. (2002) in "Bringing Words to Life" is instrumental in shaping the principles of this approach. They emphasize the importance of teaching vocabulary through word lists, definitions, and memorization exercises, all of which provide students with structured and organized exposure to new words. Through this direct instruction, students can not only gain a better understanding of individual words but also develop strategies for word recognition and retention. The approach aims to bridge the gap between the vocabulary knowledge of proficient readers and that of struggling readers, advocating for explicit teaching as a means to level the playing field. In essence, Direct Vocabulary Instruction provides a clear and systematic framework for educators to facilitate vocabulary acquisition, essential for students' language proficiency and comprehension.

1.1.3.2. Contextual learning

Contextual learning, a dynamic approach to vocabulary instruction, emphasizes the acquisition of words within meaningful contexts. This method allows students to understand and use vocabulary in authentic situations, enhancing their language proficiency. Nation (2001) introduced the concept of "Narrow Reading," advocating that learners read extensively within specific topics of interest. This approach enables students to encounter vocabulary naturally in context, promoting a deeper understanding of word usage and nuances. In addition to Nation's work, the principles of contextual learning align with the broader field of language acquisition and theories on situated cognition (Lave & Wenger, 1991).

Contextual learning not only enhances vocabulary acquisition but also enriches students' ability to apply words effectively in real-world settings. By placing words within authentic contexts, this approach mirrors how native speakers learn and use language. It empowers students to navigate complex language usage and reinforces their ability to use vocabulary in meaningful communication. Contextual learning, through reading and engaging with relevant content, ensures that students develop a more profound and practical grasp of language, allowing them to become proficient and confident communicators.

1.1.3.3. Task-based language teaching

Task-based language teaching (TBLT) is a pedagogical approach that places practical language use at its core, making it a valuable method for teaching vocabulary in context.

Willis and Willis (2007) have been instrumental in promoting TBLT, emphasizing the importance of language learning through real-world tasks. In TBLT, vocabulary instruction occurs naturally as students engage in tasks that require the use of specific words and phrases. For instance, learners might be tasked with planning a trip, participating in a debate, or conducting job interviews, necessitating the use of a wide range of vocabulary.

TBLT aligns with contemporary theories on language acquisition, emphasizing the importance of meaningful and contextualized language use (Nunan, 2004). Through practical tasks, students encounter new vocabulary in authentic scenarios, which deepens their understanding of word usage and fosters practical language skills. By engaging with words in context, learners are more likely to remember and apply them in their communication.

Furthermore, TBLT encourages active engagement and problem-solving, which enhances both vocabulary acquisition and overall language proficiency. This method ensures that English vocabulary learning is not a detached or passive process but an integral part of effective language communication, addressing the practical and immediate needs of language learners.

1.1.3.4. Technology-enhanced English vocabulary learning

Technology-enhanced English vocabulary learning leverages digital tools and resources to enrich and modernize vocabulary instruction. Warschauer and Healey (1998) explored the role of technology in language learning and advocated for the use of computer-assisted language learning (CALL) to support vocabulary acquisition. In this approach, various digital resources, including language learning apps, online dictionaries, interactive exercises, and multimedia content, facilitate engaging and interactive English vocabulary learning experiences.

One of the primary advantages of technology-enhanced English vocabulary learning is its adaptability to individual learning needs and preferences. Learners can access a wide range of digital tools and applications that cater to diverse styles of learning, allowing them to select resources that align with their learning preferences and pace (Levy, 2009). With the help of technology, learners can practice vocabulary through games, quizzes, and interactive exercises that provide immediate feedback, enhancing retention and understanding (Levy & Stockwell, 2006).

Furthermore, technology-enhanced English vocabulary learning promotes self-directed learning. Learners have the flexibility to explore vocabulary resources independently, set their own learning goals, and monitor their progress (Levy & Stockwell, 2006). This autonomy aligns with contemporary educational theories that emphasize learner agency and metacognition (Deci & Ryan, 1985; Vygotsky, 1978).

The integration of technology not only engages learners but also supports vocabulary development beyond the classroom. Vocabulary apps, language learning websites, and mobile platforms offer convenient opportunities for learners to practice and expand their lexical knowledge anytime and anywhere. Technology-enhanced English vocabulary learning, therefore, provides an efficient and accessible means to boost vocabulary acquisition, making it an invaluable tool in modern language education.

1.1.3.5. Blended learning

Blended learning, a pedagogical approach that combines face-to-face instruction with digital resources, has proven to be a valuable method for teaching vocabulary. While there may not be specific citations associated with this concept, the approach aligns with the broader principles of blended learning, which have been championed by various educators and researchers. Blended learning offers a versatile platform for vocabulary instruction, allowing for the seamless integration of both in-person and online resources. In a blended learning environment, vocabulary instruction can be enriched through a combination of traditional classroom sessions and online components. Educators can leverage learning management systems (LMS) and digital tools to provide students with a variety of vocabulary-building resources, including multimedia presentations, interactive exercises, and access to online dictionaries. This approach enhances the accessibility and diversity of vocabulary materials, catering to students' individual needs and learning styles (Bonk & Graham, 2006).

Blended learning also fosters a sense of learner autonomy. Students have the flexibility to access digital resources at their own pace and engage in self-directed vocabulary practice. Furthermore, it allows for ongoing interaction and collaboration through online discussions, peer feedback, and collaborative projects, aligning with principles of community and social presence (D. R. Garrison & Anderson, 2003).

The versatility and adaptability of blended learning make it an effective and comprehensive approach to vocabulary instruction, as it leverages the strengths of both

in-person and digital modes of learning. While specific authors and years may not be tied to this approach, the principles of blended learning underscore its potential for enhancing vocabulary acquisition in diverse and engaging ways.

1.1.4. English vocabulary learning approaches

According to Nation (2013), it is crucial to choose the appropriate words to teach and consider the aspects of the word that will be emphasized during the session. After that, select the strategy and plan repetitions. When learners encounter a word, they can seek additional information about it by analyzing word parts, context, consulting reference sources, or drawing parallels with other languages. Educators must create opportunities for students to remember the word through observation, retrieval, and creative use. Lastly, develop fluency in the four skills through timed activities.

This taxonomy of vocabulary-learning strategies presents concepts comparable to the five-step model presented by Brown & Payne (1994): receiving, recognizing, retaining, retrieving, and recycling. Regardless of the language instructor's focus, vocabulary instruction should involve at least three steps: planning, practice, and continuous evaluation.

“Successful vocabulary acquisition depends on four different aspects: the type of task, the learner, the learning context, and the strategy used.” (Gu, 2003) Moreover, understanding the terms “explicit instruction” and “intentional vs incidental vocabulary learning” is also important to consider before choosing strategies for teaching and studying vocabulary.

Incidental vocabulary learning and intentional vocabulary learning are two distinct approaches to acquiring new words, each with its own merits and limitations. Incidental learning, as supported by research from Nagy & Herman (1987), occurs naturally during everyday activities like reading, listening, or interacting with language. Words are encountered in context, enabling learners to infer meanings based on the surrounding information. This approach is aligned with the Input Hypothesis proposed by Krashen (1981), emphasizing exposure to comprehensible language input for effective acquisition. On the other hand, intentional vocabulary learning involves deliberate effort and strategies, such as using dictionaries, flashcards, or mnemonic devices, as emphasized by Ellis (1994). This approach is beneficial when dealing with specific terms or technical jargon, allowing learners to actively engage with new vocabulary.

The distinction between the two lies in the level of control and focus. Incidental learning is unforced and spontaneous, often leading to a broad and diverse vocabulary that mirrors natural language use. It thrives on frequency, with words appearing repeatedly in various contexts, a point emphasized by Nation (2001). Intentional learning, while providing structured methods for memorization, can be more time-consuming and may not always result in the same level of contextual understanding. However, it proves useful for learners seeking precision, as highlighted by Laufer & Hulstijn (2001), and when preparing for academic or professional language requirements. In terms of cognitive load, incidental learning excels by integrating vocabulary acquisition within the flow of language interaction, an observation aligned with Hulstijn's work (2003). It doesn't burden learners with excessive memorization tasks, making it suitable for immersive language environments where natural communication takes precedence. However, intentional learning offers a sense of control and targeted vocabulary expansion that can be particularly valuable for those learning a language in non-immersive contexts.

Both incidental and intentional vocabulary learning approaches have their own strengths and applications. Incidental learning taps into the natural language acquisition processes, fostering a diverse vocabulary through exposure and context. On the other hand, intentional learning offers more structured and controlled methods for targeted vocabulary acquisition. The choice between these approaches often depends on learners' goals, preferences, and the learning environment, highlighting the importance of understanding their differences and potential synergies.

Based on the understanding about those approaches, some strategies are discussed in the following parts.

1.1.4.1. The use of dictionaries and technological resources

The use of dictionaries in English vocabulary learning has been a cornerstone of language acquisition strategies, offering learners a valuable resource for expanding their word knowledge. According to Nation (2001), dictionaries play a crucial role in providing definitions, pronunciations, and context-specific examples for new words. Learners can engage with dictionaries, both print and digital, to gain insights into word meanings, collocations, and various nuances of usage. The work of Schmitt (1997) highlighted the importance of learners' active involvement in using dictionaries

effectively to enhance vocabulary acquisition. However, the effective use of dictionaries requires understanding different types of information provided, as Ellis (2008) suggested, such as parts of speech and example sentences. Dictionaries also empower learners to take charge of their learning process by allowing them to explore words at their own pace.

In recent years, digital dictionaries and language learning apps have brought convenience and interactivity to this practice. The integration of technological resources has revolutionized vocabulary learning, offering learners innovative ways to engage with and master new words. Digital tools and language learning apps provide learners with instant access to a wide range of vocabulary exercises, quizzes, and interactive activities. These resources, aligned with the research of Kukulska-Hulme & Shield (2008), cater to different learning styles, allowing learners to personalize their learning experience. Mobile applications and online platforms, as highlighted by Stockwell (2007), enable learners to practice vocabulary on-the-go, transforming idle moments into productive learning opportunities. Moreover, the gamification aspect of technological resources, as explored by Kiili (2005), adds an element of engagement and motivation by turning vocabulary practice into an enjoyable challenge. However, as emphasized by Warschauer & Healey (1998), effective utilization of technology necessitates careful selection, ensuring alignment with learning goals and pedagogical approaches. In conclusion, technological resources have reshaped vocabulary learning by providing diverse and dynamic tools that empower learners to acquire and retain new words effectively.

1.1.4.2. Contextual Clues

The utilization of contextual clues is a foundational strategy in English vocabulary learning, allowing learners to decipher word meanings within the context of sentences, paragraphs, or conversations. According to Nagy & Herman, (1987), encountering words in authentic language usage provides learners with valuable cues that aid in understanding meanings without resorting to external resources. This approach aligns with the theory of schema activation proposed by Anderson & Pearson (1984), where existing knowledge is drawn upon to infer word meanings. Furthermore, the research of Laufer & Hulstijn (2001) underscored the role of context in enhancing word retention, as learners engage in deeper processing when they actively connect new words to their

surrounding linguistic environment. The ability to deduce meanings from context is a skill that, as advocated by Nation (2001), contributes to overall reading comprehension and language competence. The importance of this strategy is particularly notable in second language acquisition, where unfamiliar words are encountered frequently. However, the efficacy of contextual clues relies on learners' awareness of the various linguistic and semantic cues present, as discussed by Anderson & Nagy (1992), making it crucial for educators to foster metacognitive strategies to enhance its use. The skillful employment of contextual clues is a powerful tool in vocabulary learning, promoting not only word understanding but also the development of broader language comprehension abilities.

1.1.4.3. Word Associations

Word associations serve as a fundamental and effective strategy in English vocabulary learning, contributing to the expansion and retention of word knowledge. This approach leverages the human brain's natural tendency to link new information with existing cognitive frameworks. Forming associations between new words and familiar concepts facilitates the encoding of meanings into memory. Ausubel's theory of meaningful learning (1960) further supported this, highlighting how connecting new information to prior knowledge enhances comprehension and recall. By creating mental connections, learners establish a network of interrelated terms that enable easier retrieval, an idea emphasized by Meara (1980). These associations extend beyond mere memorization, allowing learners to discern nuances in word meanings and usage, as noted by Nagy & Herman (1987).

Furthermore, the role of word associations goes beyond vocabulary retention; it also aids in language production and comprehension. By building bridges between words, learners enhance their language fluency and expressiveness. The work of Schmitt (2000) underscored the importance of explicit instruction in forming meaningful connections, indicating that learners benefit from guidance on how to create relevant associations. Word associations also contribute to the development of a more extensive mental lexicon, as discussed by Laufer (1998), enabling learners to engage with language in a richer and more nuanced manner.

However, the efficacy of this strategy depends on the quality and relevance of the associations formed. Schmitt (2000) pointed out that learners should actively engage

with new words, experimenting with various connections to ensure meaningful associations. Educators can play a pivotal role by facilitating activities that encourage learners to make connections between words and their experiences, as suggested by Nation (2001). In conclusion, word associations are a powerful tool that taps into the brain's cognitive mechanisms, enabling learners to establish a robust network of vocabulary that enhances comprehension, expression, and language proficiency.

1.1.4.4. Mnemonics

Mnemonics play a pivotal role in English vocabulary learning by providing learners with effective memory aids that enhance the retention and retrieval of new words. The use of mnemonic devices, as highlighted by Atkinson & Raugh (1975), involves creating memorable associations between unfamiliar words and familiar concepts, often utilizing vivid imagery, acronyms, or rhymes. This approach aligns with cognitive psychology principles, particularly those of elaborative rehearsal and distinctive encoding. Mnemonics transform abstract linguistic information into concrete mental representations, tapping into the brain's visual and spatial memory systems, as outlined by Paivio's dual coding theory (2013), which ultimately leads to enhanced memory consolidation.

Furthermore, mnemonic strategies cater to individual learning preferences and facilitate active engagement. O'Neil an Carnine (1997) emphasized the personalization of mnemonic devices, allowing learners to create associations that resonate with their unique cognitive patterns. Mnemonics have also demonstrated success in various learning contexts beyond single-word acquisition. Richey (1983) indicated their potential in teaching word relationships, grammar rules, and complex language structures.

The efficacy of mnemonic strategies hinges on the quality and creativity of the associations formed. Dunlosky et al. (2013) emphasized that effective mnemonic devices are those that are not only memorable but also relevant to the target vocabulary. Educators play a crucial role in guiding learners to generate appropriate and meaningful mnemonic cues that accurately reflect word meanings and usage.

In summary, mnemonics offer learners practical tools to make word acquisition more engaging and memorable. By leveraging the brain's inherent ability to create vivid mental connections, mnemonics contribute to improved retention and recall of new

words. While their success relies on learners' creative associations, educators can facilitate effective mnemonic construction through explicit instruction and guidance. Ultimately, mnemonics provide learners with an invaluable strategy to unlock the potential of vocabulary acquisition.

1.1.4.5. Spaced Repetition

Spaced repetition is a learning technique that involves reviewing and practicing material at increasing intervals over time. The goal of spaced repetition is to optimize the retention and recall of information by strategically spacing out the review sessions.

In spaced repetition, learners encounter a piece of information, such as a vocabulary word or a concept, and then review it again after a certain period of time. The intervals between review sessions are gradually increased, with more challenging material being reviewed at longer intervals. This approach ensures that the information is revisited just before it is likely to be forgotten, maximizing the efficiency of the learning process.

The use of spaced repetition in vocabulary learning represents a sophisticated technique that optimizes memory retention through strategic review intervals. This approach involves revisiting and practicing vocabulary items at gradually increasing intervals over time. Ebbinghaus (2013) laid the foundation for spaced repetition with his research on the forgetting curve, revealing that memory retention declines over time but can be enhanced through systematic review. The method capitalizes on the psychological principle that spacing out learning sessions leads to more efficient encoding and long-term retention.

The efficacy of spaced repetition is evident in its ability to transform vocabulary acquisition from a time-intensive process to one that is efficient and enduring. By strategically reviewing words at optimal intervals, learners strengthen their memory traces, maximizing long-term retention. This approach not only reduces the amount of review needed but also aligns with the brain's natural memory processes.

In conclusion, the integration of spaced repetition into vocabulary learning harnesses cognitive principles to enhance memory retention. This technique, built upon Ebbinghaus's foundational research, has evolved with technological advancements to create personalized and efficient learning experiences. As the digital landscape continues to evolve, the role of spaced repetition in vocabulary acquisition remains pivotal.

1.2. BLENDED LEARNING APPROACH

1.2.1. Definition of blended learning

Blended learning, often referred to as hybrid learning, is a contemporary pedagogical approach that combines traditional face-to-face classroom instruction with digital technology and online learning components (Bonk & Graham, 2006). This innovative model offers a flexible and dynamic educational experience that allows students to engage with course content both in the physical classroom and through digital platforms. The concept of blended learning is characterized by its adaptability, as it can take on various forms, such as the rotation model, flipped classroom, or flex model, depending on the specific needs and objectives of the course (Bonk & Graham, 2006).

Blended learning aims to leverage the advantages of both in-person and online instruction, offering students the opportunity to receive personalized, self-paced learning experiences while benefiting from direct interaction with instructors and peers (D. R. Garrison & Kanuka, 2004). This approach is increasingly recognized for its potential to enhance student engagement, accommodate diverse learning styles, and optimize the use of digital resources in education.

1.2.2. Blended learning model

When conceptualizing a mixed learning classroom, it is imperative to take into account an explicit model. Horn & Staker (2011) identified six distinct models of blended learning, namely the Face-to-Face Driver Model, the Rotation Model, the Flex Model, the Online Lab Model, the Self-Blend Model, and the Online Driver Model.

The rotation model was employed as the principal model in this study. It is a dynamic approach where students cycle through different learning modalities, combining face-to-face and online instruction. Students transition between various activities, such as traditional classroom teaching, digital assignments, or collaborative projects, ensuring a well-rounded learning experience. This model aligns with the broader principles of blended learning, emphasizing technology integration and personalized learning (Bonk & Graham, 2006). It offers educators a versatile framework to create engaging and adaptive instructional environments that cater to diverse learning styles and preferences, ultimately enhancing student outcomes.

Figure 1 expresses the process of the rotation model.

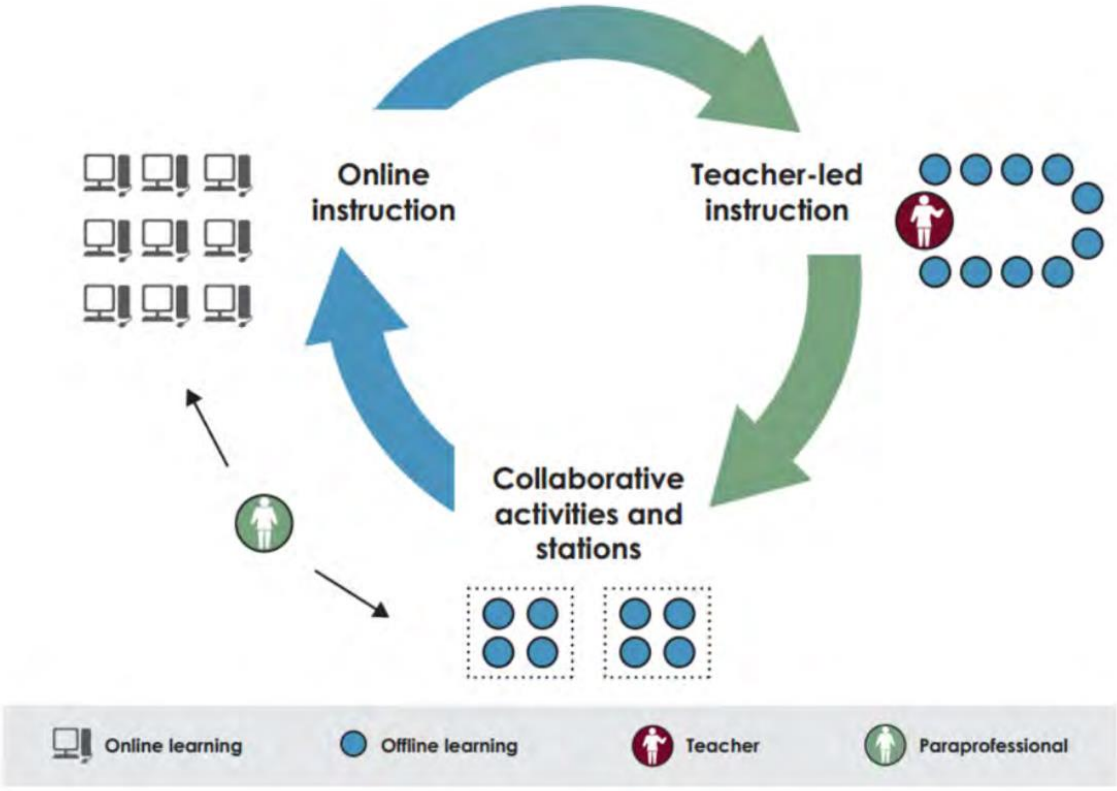

Figure 1.2.2.1: The rotation model (Horn & Staker, 2011)

In the process, learners initiate the process of acquiring course content by utilizing internet channels. This phenomenon is commonly referred to as online instruction. This stage holds significant importance as it enables learners to effectively utilize technological resources in order to acquire the foundational knowledge related to the learning topic. Subsequently, the teacher facilitates in-person education to enhance learners' comprehension and enable them to proficiently and precisely apply the material acquired through online instruction. The penultimate phase of the rotation model, prior to reverting back to the initial phase of online instruction, involves engaging in collaborative activities and stations, wherein learners engage in task-based exercises under the guidance and assistance of the teacher. This technique can be implemented in both traditional brick-and-mortar classrooms and virtual classrooms using online learning platforms. In this arrangement, the instructor possesses the ability to regulate the allocation of time between in-person instruction and online learning.

The rotation model was chosen because it is suitable for the participants' study program at HaUI.

1.2.3. Blended learning at HaUI

Hanoi University of Industry was one of the early adopters of blended learning in English teaching. Over the years, the school has continuously improved its learning model to achieve the best results.

The Blended Learning Platform, called EOP System, is a customized online learning platform. It contains online lessons on vocabulary, grammar, and practice exercises for all four English language skills. The exercises are related to the content that students will learn in class and are mostly related to communication situations in the student's major. Additionally, students can participate in the study at any time, from any device with an internet connection.

During a course, students are required to complete vocabulary, grammar, and practice exercises on the EOP system before coming to class. This helps them to consciously learn the lesson and prepare the background knowledge, making classroom activities run more smoothly and efficiently. Thus, during class time, students can spend more time on communication activities such as interviews and presentations. This process is related to the rotation model.

Online assessments are also provided by the EOP System. In addition to helping students' study and prepare for lessons before class, the system provides periodic tests to assess student performance. There are four tests that students can take on their own, called Unit Tests. After every two units, students will take one test. Additionally, there are two tests, Progress Test 1 and Mid-term Test, which are also performed on EOP but require the management and supervision of lecturers. These online assessment tests help teachers understand students' learning more often and quickly. However, fraud is inevitable, and this study did not discuss it further.

1.2.4. Role of Technology in Blended Learning

The role of technology in blended learning is instrumental, revolutionizing the way education is delivered and enhancing the learning experience for students. Authors such as Graham (2006) have explored the integration of technology in blended learning, emphasizing its transformative potential. Technology serves several critical functions in this educational approach.

Firstly, technology provides flexibility in content delivery and access. Through Learning Management Systems (LMS) and online platforms, educators can upload

materials, lecture recordings, and interactive resources, making content accessible to students at their convenience. This flexibility enables learners to pace their own learning and revisit materials as needed (Means et al., 2009).

Secondly, technology facilitates personalized learning. Adaptive learning software and intelligent algorithms can tailor content to individual student needs. By tracking student progress and performance, technology can provide customized recommendations, ensuring that students receive the support and content that align with their specific learning requirements (R. D. Garrison & Vaughan, 2018).

Technology also supports collaboration and interaction in blended learning. Tools like discussion forums, video conferencing, and collaborative documents enable students to engage with their peers and instructors, fostering a sense of community and connectedness, even in online settings (D. R. Garrison & Anderson, 2003).

Furthermore, technology enhances assessment and feedback. Digital assessment tools allow for efficient grading and analytics, providing instructors with insights into student progress. Immediate feedback through online quizzes and assignments encourages students to reflect on their performance and make improvements (Bonk & Graham, 2006).

Lastly, technology strengthens the role of the teacher. Instructors can use technology to track student participation, provide timely feedback, and monitor progress. This data-driven approach allows for more targeted instruction, ensuring that students receive the support they need.

Technology's role in blended learning is multifaceted and transformative. It empowers students by providing flexible access to resources, enabling personalized learning experiences, and fostering collaboration. For educators, technology offers valuable data and tools to enhance teaching and assessment. Blended learning, with its seamless integration of technology, capitalizes on the advantages of both in-person and online instruction, making education more accessible and effective for students in today's digital age.

1.3. EOP SYSTEM

1.3.1. EOP in general

According to Koester (2013), it refers to the specific ways English is used in different work and professional situations. EOP is a subset of ESP, which focuses on teaching

English to learners with specific needs and goals. EOP is typically taught as part of a professional curriculum, such as English for Secretaries, Technicians, Pilots, or Nurses (Johns & Dudley-Evans, 1991; Kim, 2008), because its goal is to help students achieve both linguistic and occupational competence.

The language skills taught in EOP are tailored to meet the communication demands of various workplace contexts, such as business, healthcare, aviation, engineering, hospitality, and many others.

The main aim of EOP is to equip learners with the language and communication skills needed to perform their job-related tasks effectively, interact with colleagues and customers, understand technical jargon, write reports, give presentations, and handle other work-related activities in English. This specialized approach ensures that learners can communicate proficiently and confidently in their professional environment, enhancing their job performance and career prospects.

EOP courses typically include topics and activities relevant to specific industries, incorporating authentic materials like business documents, industry-specific texts, case studies, and workplace simulations to create a practical and relevant learning experience.

1.3.2. EOP system at HaUI

The EOP system is software developed by Hanoi University of Industry to facilitate the process of applying Rotation model of blended learning in teaching and learning foreign languages. Each unit in the EOP system comprises seven sections: Vocabulary, Grammar, Listening, Reading, Writing, Speaking, and Pronunciation as Figure 1.

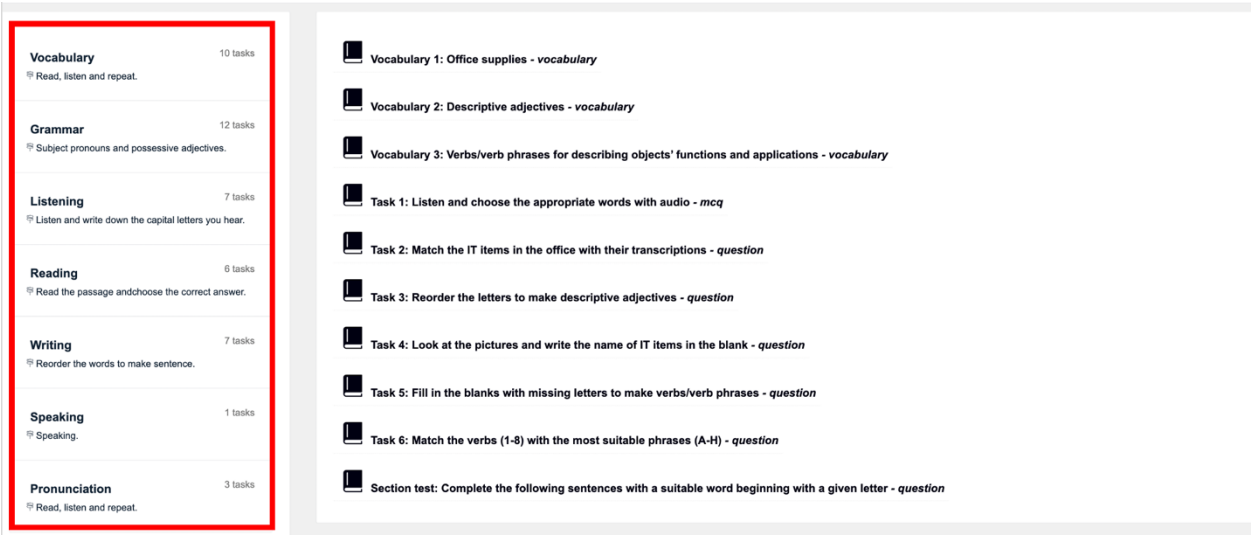

Figure 1.3.2.1: Seven sections in one unit on EOP system

This study focused on the vocabulary learning section and provide a detailed description of it.

1.3.2.1. Vocabulary section in particular

The vocabulary exercises implemented on the EOP system are constructed in accordance with the principles of Behaviorist Theory.

Moreover, the vocabulary section also follows the intentional vocabulary learning approach. This means that the exercises are designed to help students learn specific vocabulary words related to the topic they are studying in each unit.

The most commonly used strategy in this section is mnemonics. Additionally, dictionaries and contextual clues are also used to design the exercises.

First, the vocabulary is introduced in the form of dictionaries, as shown in Figure 2.

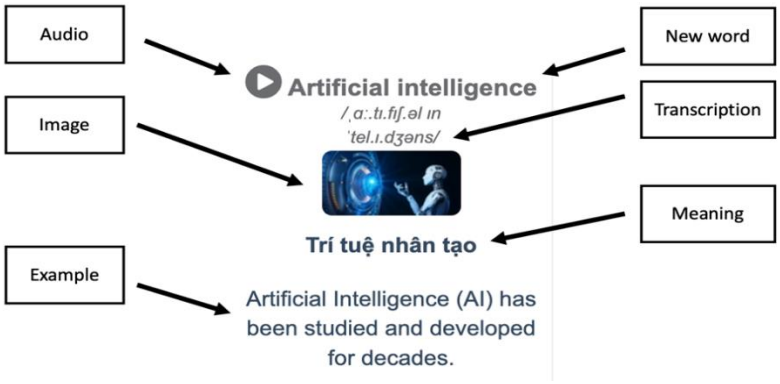

Figure 1.3.2.2: Word presentation in dictionaries form

This section helps students to grasp the spoken form, written form, meaning, and concepts of the vocabulary to be learned, as compared with the 9 aspects of vocabulary knowledge (Nation, 2001).

After the presentation of the vocabulary to be learned in the lesson, the mnemonics strategy is fully utilized in the form of exercises, such as those listed below:

- Listen and choose the correct word/phrase
- Look at the picture and choose the correct word/phrase
- Look at the transcription and write the correct word/phrase
- Reorder letters to make correct word/phrase
- Match word/phrase with its meaning

These exercises help students practice recognizing repetitive vocabulary at the most basic level. This helps students consolidate their knowledge of spoken and written forms, word parts, and meanings learned in dictionaries part.

Finally, the "Fill in the blank" exercise uses the strategy of contextual clues. Here, students begin to use words in the context of sentences. Although the difficulty in this section is not high, it helps students familiarize themselves with the remaining aspects of vocabulary knowledge, namely concepts, associations, grammatical functions, collocations, and constraints on use.

1.3.2.2. Vocabulary learning in other sections

Vocabulary is not only learned separately in the Vocabulary section, but it is also integrated into skills practice in the remaining parts of the course. The exercises are designed using the Incidental vocabulary learning approach and focus on deepening students' vocabulary knowledge, including concepts, associations, grammatical

functions, collocations, and constraints on use. Therefore, the use of vocabulary in the exercises in these sections will be more challenging than in the Vocabulary section. Specifically, the Grammar section contains exercises that focus on the grammar topic of the lesson, but previously learned vocabulary is also used extensively, allowing students to passively expose themselves to new words.

For example, the words "Scanner," "Smart TV," and "Video conference" are learned in the Vocabulary section, as shown in Figure 3.

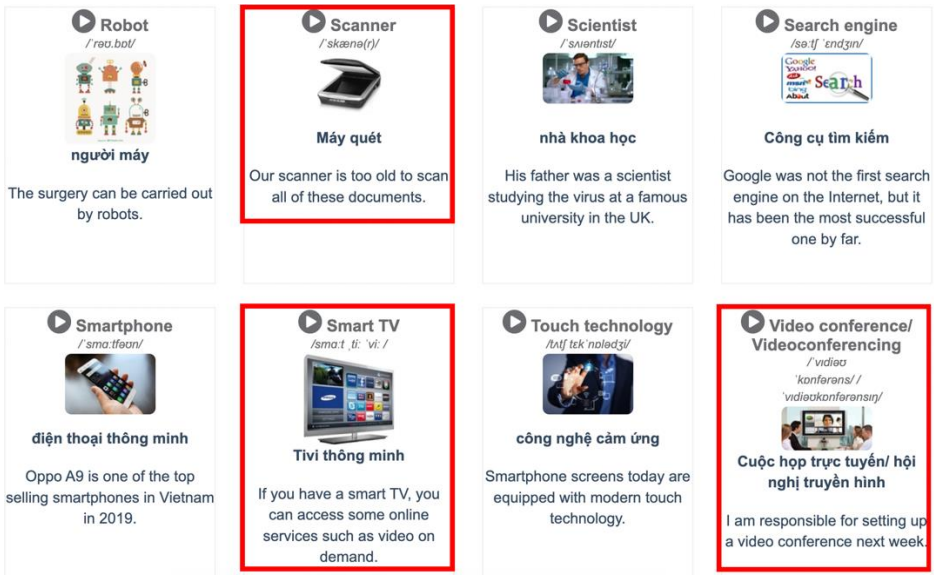

Figure 1.3.2.3: Vocabulary dictionary on EOP system

Then, these items are employed in the exercise titled "Choose the correct answer" within the Grammar part, as depicted in Figure 4.

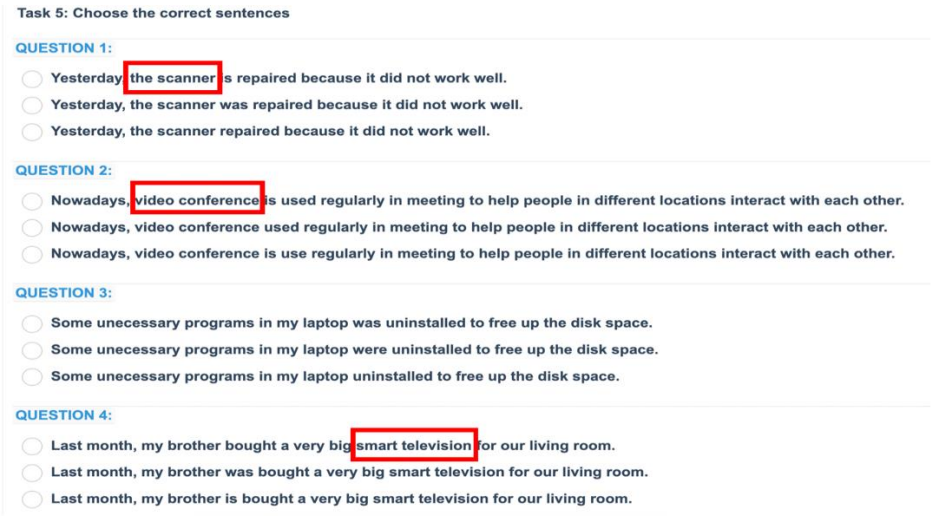

Figure 1.3.2.4: "Choose correct answer" exercise in Grammar section on EOP system

Similarly, the Listening, Reading, and Writing parts adhere to the aforementioned principle.

The utilization of words within a certain contextual framework indirectly employs the methods of Contextual Clues and Associations. Learners are not obligated to allocate their full attention exclusively to those words; however, while engaging in various skills exercises, new words emerge, coexist with other words, and contribute to the formation of a distinct and meaningful linguistic context. This facilitates students in acquiring a more profound understanding of word usage in both exercises and practical application of the language.

The speaking and pronunciation components are anticipated to showcase the students' ability to creatively employ terminology, with a focus on the subject covered in the session as a whole. However, these are two parts that students need to actively upload their assignments according to the requirements of the topic, so the impact of the EOP system on learning vocabulary related to these two parts was not be mentioned in this study.

1.3.3. Role of Teachers in Vocabulary Instruction through EOP system

The role of teachers in vocabulary instruction through EOP system is multifaceted, encompassing several critical aspects that contribute to effective language learning. Educators serve as facilitators and guides, seamlessly integrate vocabulary into the curriculum, provide ongoing monitoring and feedback, and engage in continuous professional development to refine their teaching strategies. These roles are paramount in ensuring that vocabulary instruction through EOP system is both engaging and successful.

Firstly, teachers act as facilitators and guides in the digital realm. They curate and design content within the EOP system, selecting vocabulary materials that align with curriculum objectives and student needs. They play an active role in creating a navigable learning environment, offering students clear pathways for vocabulary acquisition, and assisting them in understanding and accessing the digital resources available.

Secondly, curriculum integration is a fundamental aspect of teachers' responsibilities. In the context of EOP system, instructors infuse vocabulary instruction seamlessly into the broader curriculum. They ensure that vocabulary exercises, assignments, and

assessments are aligned with the course objectives. This integration enhances the relevance of vocabulary instruction and underscores its importance in language learning.

Thirdly, teachers play a crucial role in monitoring and providing feedback through EOP system. They can track student progress, analyze their performance on vocabulary-related tasks, and provide timely feedback to address areas of improvement. The digital environment allows for more efficient data collection, enabling instructors to better understand individual student needs and tailor their feedback accordingly.

Lastly, ongoing professional development is imperative for educators utilizing EOP system for vocabulary instruction. As technology and pedagogical approaches evolve, teachers must continually refine their digital teaching skills. This involves staying current with the latest EOP features, incorporating innovative strategies for vocabulary instruction, and participating in training and development programs.

In conclusion, teachers' roles in vocabulary instruction through EOP system encompass facilitation and guidance, curriculum integration, monitoring and feedback, and ongoing professional development. These aspects collectively contribute to the effectiveness of vocabulary instruction in the digital realm, ensuring that students receive comprehensive, engaging, and adaptive language learning experiences.

1.3.4. Role of Learners in Vocabulary Instruction through EOP system

In the realm of vocabulary instruction through the EOP system, learners assume multifaceted roles that are integral to their learning journey. Firstly, learners actively engage with the diverse array of vocabulary exercises and activities provided by the EOP platform, taking ownership of their learning process.

Additionally, learners serve as evaluators of their own progress, continuously monitoring their performance and reflecting on their strengths and areas for improvement. This self-assessment empowers learners to identify gaps in their vocabulary knowledge and take proactive steps to address them, fostering a sense of responsibility for their learning outcomes.

Furthermore, learners engage in collaborative learning experiences facilitated by the EOP system, interacting with peers to reinforce their understanding of vocabulary concepts and gain diverse perspectives. By participating in peer-to-peer discussions and activities, learners contribute to a supportive and collaborative learning environment, enhancing their vocabulary acquisition through social interaction.

Moreover, learners act as communicators as they practice using newly acquired vocabulary in authentic language contexts. Through simulated conversations, presentations, and written assignments, learners apply their vocabulary knowledge in real-world scenarios, honing their language proficiency and confidence in using English vocabulary effectively.

Overall, learners play pivotal roles in vocabulary instruction through the EOP system, actively shaping their learning experiences and contributing to their linguistic development.

1.4. RELATED STUDIES

1.4.1. In the world

Blended learning, with its integration of traditional classroom instruction and digital resources, has garnered considerable attention in the realm of language education, including English vocabulary learning. Several studies and research initiatives worldwide have investigated the effectiveness of blended learning in enhancing vocabulary acquisition and have yielded valuable insights into its impact on learners.

One notable study is by Neri (2002), which explored the integration of computer-assisted vocabulary learning in a blended language learning program. The study revealed that the digital component complemented traditional classroom instruction, providing students with opportunities to practice vocabulary in context and enhancing their retention of newly acquired words.

Additionally, Grgurovic (2012) conducted research on the implementation of blended learning in vocabulary instruction, focusing on its impact on vocabulary retention and recall. The study found that the blended learning model, which combined in-class instruction with online vocabulary exercises, significantly improved students' vocabulary retention and recall, indicating the efficacy of this approach.

Research conducted by Hung and Chou (2015) in the context of English as a Second Language (ESL) education examined the effects of blended learning on vocabulary acquisition among non-native English speakers. The findings indicated that the integration of digital tools and online resources enhanced English vocabulary learning and encouraged student engagement, particularly in self-directed vocabulary practice.

In a broader context, research by Graham (2006) explored the principles of blended learning systems and their applications in various educational settings. While not

focused exclusively on vocabulary learning, this work underscored the adaptability and versatility of blended learning in delivering content effectively, which includes vocabulary instruction.

Furthermore, a study by Smit, Van Eerde, and Veldkamp (2017) investigated the potential of a blended learning approach, combining classroom teaching and mobile vocabulary apps, to improve vocabulary acquisition in a university setting. The research demonstrated the positive effects of this blended model on students' vocabulary knowledge and the convenience of mobile apps for vocabulary practice.

Collectively, these studies highlight the effectiveness and adaptability of blended learning in vocabulary instruction across diverse language learning contexts. The integration of digital resources enhances vocabulary retention and recall, encourages student engagement, and provides valuable opportunities for self-directed vocabulary practice. While these studies offer valuable insights, ongoing research in the field of blended learning and vocabulary acquisition continues to explore the nuances and best practices of this pedagogical approach.

1.4.2. In Vietnam

Blended learning in vocabulary acquisition has been a growing area of interest in the context of Vietnam, as the country's education system seeks to incorporate innovative pedagogical approaches to enhance language learning. Several studies conducted in Vietnam have shed light on the effectiveness of blended learning in vocabulary instruction and its impact on students.

One of the notable studies specific to Vietnam was conducted by Van (2015), which examined the integration of blended learning in an English language course. The study found that the blended learning approach, combining traditional classroom instruction with online vocabulary exercises, significantly improved students' vocabulary retention and recall. This research highlighted the potential of blended learning in Vietnam to enhance language learning outcomes, particularly with regard to vocabulary acquisition.

Another study by Trang and Lan (2018) explored the effects of a blended learning model on vocabulary acquisition among Vietnamese learners of English as a foreign language. The research demonstrated that the integration of digital resources and online vocabulary exercises in the classroom not only enhanced students' vocabulary knowledge but also promoted active engagement and self-directed vocabulary practice.

In addition to vocabulary acquisition, studies have also investigated the impact of blended learning on vocabulary assessment and performance. A research project by Khoi and Tien (2019) focused on the use of blended learning to assess students' vocabulary knowledge and found that it improved assessment accuracy and provided valuable insights into students' vocabulary proficiency. This demonstrates how blended learning can be a valuable tool for both teaching and evaluating vocabulary.

Furthermore, a study by Nguyen (Nguyen, 2018) examined the effectiveness of blended learning in a Vietnamese high school setting, emphasizing the positive effects of combining traditional classroom instruction with online vocabulary resources. The study highlighted the potential of blended learning to cater to diverse learning styles and the benefits of integrating technology into vocabulary instruction.

While these studies indicate the positive impact of blended learning on vocabulary acquisition and assessment in Vietnam, it is important to note that there is ongoing research in the field, and further investigation is needed to explore the nuances and best practices of this pedagogical approach in the Vietnamese context.

Studies conducted in Vietnam emphasize the effectiveness of blended learning in vocabulary acquisition, assessment, and performance. The integration of digital resources and online vocabulary exercises in the classroom has demonstrated positive outcomes, including improved vocabulary retention, active student engagement, and enhanced assessment accuracy. These findings underscore the potential of blended learning as a valuable tool in the context of Vietnamese language education.

While there exists a significant amount of research on blended learning and English vocabulary learning strategies, there is a scarcity of studies examining the efficacy of the blended learning platform, particularly the EOP system, in enhancing vocabulary acquisition among non-English major students at Vietnamese universities. Therefore, this study was conducted to fill the existing research gap.

CHAPTER 2: RESEARCH METHODOLOGY

2.1. RESEARCH SETTING

The research setting is the Hanoi University of Industry (HaUI) in Vietnam. This study focuses on English vocabulary learning through EOP system among second-year non-English major students at HaUI. The university serves as the context for investigating how students engage with the EOP system, aiming to provide a deeper understanding of their vocabulary acquisition processes. Conducting the research within this specific educational environment allows for an exploration of the unique challenges, strategies, and outcomes related to English vocabulary learning through the EOP curriculum among second-year non-English major students at HaUI.

2.2. RESEARCH DESIGN

The research employed a one-group pretest-posttest design, wherein the participants group consisted solely of a single group of 30 participants.

It was conducted following mixed methods to gain a comprehensive understanding of complex phenomena by combining both quantitative and qualitative data. By using mixed methods, researchers can triangulate findings, cross-validate results, and provide a deeper contextual understanding of research questions.

The quantitative research method was used to answer the research question 1: “To what extent is the English vocabulary learning of second-year non-English major students improved through the EOP system in a blended course at HaUI?” The qualitative research method was used to answer the research question 2: “What are second-year non-English major students' perceptions of English vocabulary learning through the EOP system in a blended course at HaUI?”

The EOP system constituted a component of the blended learning program used throughout the course. The course followed the Rotation model, a blended learning approach defined by Horn and Staker (2011). Roughly 55 percent of the course occurred through in-person, face-to-face sessions, while nearly 45 percent took place through online lessons provided by the EOP system. In other words, students participated in 40 live classes and 35 online modules.

A major aspect studied was the extent to which students improved their vocabulary knowledge. After completing assessments, an interview further probed students'

perceptions of the blended approach. This research design was selected for its feasibility and appropriateness within a real university context.

The research design of the study is depicted in Figure 6.

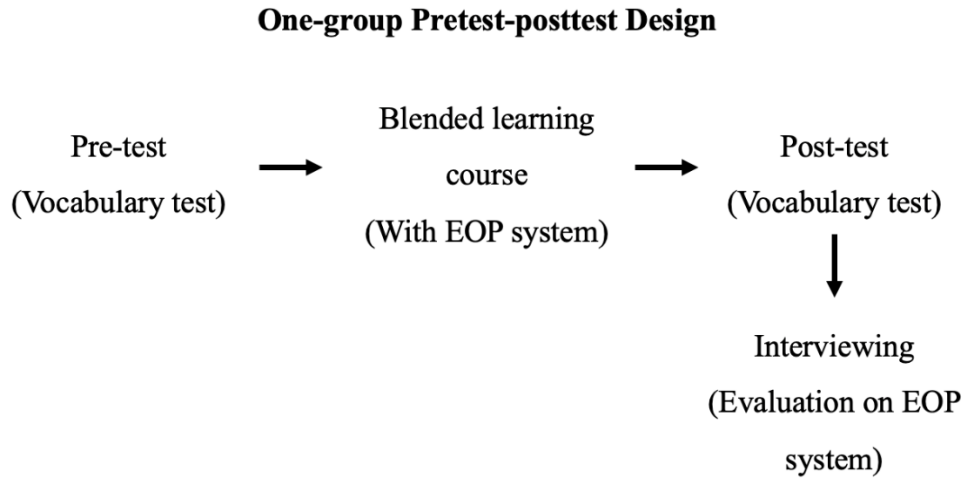

Figure 2.3.1: The research design of the present study

2.3. PARTICIPANTS

The quantitative component of this research was carried out on a sample of 30 second-year non-English major students who are pursuing a major in Electric and Electronic Engineering at HaUI. It is imperative for these students to ensure that they have successfully fulfilled the requirements for English for Electric and Electronic Engineering 1 and English for Electric and Electronic Engineering 2, that means they have reached level 1 English proficiency in the 6-level foreign language competency framework for Vietnam (Equivalent to CEFR A1). Second-year students are selected due to their greater familiarity with the EOP system compared to freshmen, as well as the moderate level of academic knowledge in their English program, which is not as advanced as that of third-year students.

For the qualitative research component, a total of 10 students, who was chosen from the 30 participants above, were asked for the purpose of studying students' perceptions about learning vocabulary via EOP system.

In order to assure the objectivity and reliability of the study's findings, a random selection process was employed to determine the participants for this study.

2.4. DATA COLLECTION INSTRUMENTS

This study involved a vocabulary pretest and posttest by the researcher, with the aim of examining the impact of EOP system on the improvement of students' English vocabulary proficiency. The vocabulary pretest and posttest were comprised of 20 questions that were identical in nature. Pre-tests had been conducted before the course started, and the post-test was proceeded 5 weeks later. The tests encompassed the lexical items featured in five units, which were delivered throughout ten lessons within the textbook that had been studied by the pupils. They were developed by the online platform vocabulary.com, which is widely relied upon by numerous individuals involved in the domain of vocabulary instruction and acquisition. Additionally, a test item analysis was performed to determine the discriminatory power and difficulty index of the test, with the aim of guaranteeing its suitability for the level A1 of participants.

Moreover, the researcher conducted an in-depth interview to gather qualitative information. The study employed the utilization of the EOP system to examine students' perspectives regarding its impact on vocabulary acquisition. The researcher compiled a set of five interview inquiries pertaining to the students' general sentiments towards the EOP system, their perspectives on the impact of vocabulary acquisition via the system, and their progress in vocabulary proficiency. The responses provided by the participants were inherently and spontaneously influenced by the knowledge acquired through the blended learning program. Furthermore, the interview inquiries were conducted in the Vietnamese language, and the duration of the interviewing procedure was approximately 10 minutes per individual.

2.5. RESEARCH PROCEDURES

The research procedures are described in the figure below:

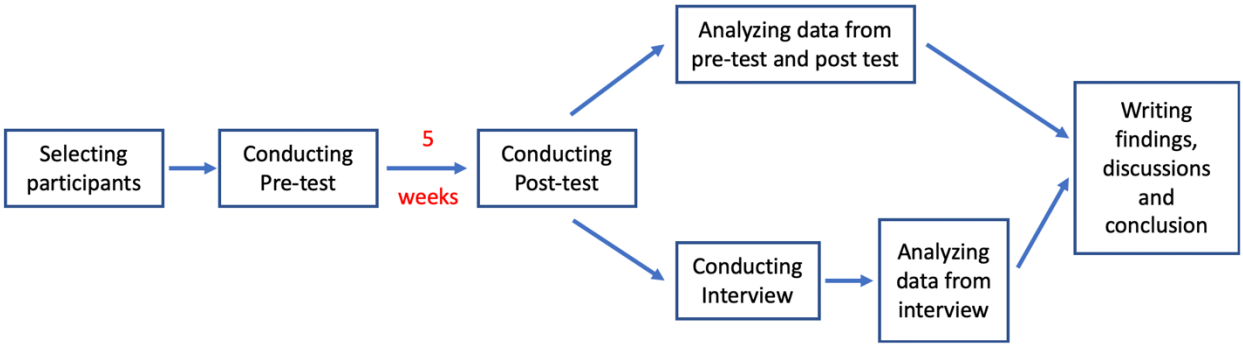

Figure 2.5.1: Research procedure

Firstly, it is imperative that research endeavors are appropriately authorized and adhere to a prescribed set of procedural requirements in order to be effectively executed. Subsequently, the sequential execution of the stages was undertaken as depicted in the above table. There are certain concurrent tasks that may need to be undertaken, such as analyzing data from pre-test and post-test, and conducting interview. The successful execution of research necessitates the possession of time management and multitasking abilities by researchers in order to effectively advance and maintain the quality of the study.

2.6. DATA ANALYSIS

The collection and analysis of data obtained through quantitative research methods were conducted using the SPSS (Statistical Package for the Social Sciences) software version 25.

Descriptive statistics and a paired-samples t-test were employed to analyze and compare the pre-test and post-test outcomes, with the aim of drawing conclusions on the influence of the EOP system on vocabulary acquisition among second-year non-English major students in a blended course.

In the context of qualitative research, the information obtained through interviews was transcribed from audio recordings into written format. Subsequently, the collected data underwent a series of procedural stages, including coding, identification, and labeling of each topic, concept, and idea. By systematically organizing, coding, and interpreting the data, researchers transform raw qualitative information into meaningful findings that address research questions and shed light on the complexities of the study's subject.

2.7. ETHICAL CONSIDERATION

Ethical considerations in research are essential to protect participants' rights and welfare. It is important obtain informed consent, ensuring participants understand the study's purpose, procedures, and potential risks. Confidentiality and anonymity must be maintained to safeguard participants' privacy. Minimizing harm and addressing power imbalances are critical, especially with vulnerable populations. Transparency in reporting findings, avoiding manipulation, and acknowledging conflicts of interest maintain research integrity. Upholding these principles ensures ethical research conduct, respect for participants, and the credibility of research outcomes.

CHAPTER 3: FINDINGS AND DISCUSIONS

3.1. THE IMPROVEMENT OF PARTICIPANTS' VOCABULARY LEARNING THROUGH EOP SYSTEM

3.1.1. The descriptive statistics

Table 3.1.1.1: Statistics

		Pre-test	Post-test
N	Valid	30	30
	Missing	0	0
Mean		6.23	14.73
Median		6.00	15.00
Mode		6	14[a]
Std. Deviation		1.736	2.067
Variance		3.013	4.271
Minimum		2	11
Maximum		9	18
Sum		187	442

The sample size for both the pre-test and post-test is 30, indicating that the data is complete with no missing values.

In the pre-test, the mean vocabulary score is 6.23, and in the post-test, it increases significantly to 14.73. This suggests that, on average, students made notable improvements in English vocabulary learning through the EOP system.

The median values for both the pre-test and post-test are close to their respective means, indicating relatively symmetric distributions of scores.

The mode for the pre-test is 6, which suggests that 6 was the most frequently occurring score in the pre-test data. In the post-test, multiple modes exist, and the smallest value is "14a," which means that 14a appeared most frequently. The "a" might indicate that there are multiple modes with a frequency of 14.

The standard deviation in the post-test (2.067) is higher than in the pre-test (1.736), indicating greater variability in the post-test scores. This suggests that some students made substantial gains while others may not have improved as much.

The variance in the post-test (4.271) is also higher than in the pre-test (3.013), reinforcing the idea of increased variability in post-test scores.

The minimum and maximum values provide insights into the range of scores. In the pre-test, scores range from 2 to 9, while in the post-test, scores range from 11 to 18.

Table 2 and 3 express the detailed frequency of pre-test and post-test results:

Table 3.1.1.2 : Pre-test

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	1	3.3	3.3	3.3
	3	2	6.7	6.7	10.0
	4	2	6.7	6.7	16.7
	5	2	6.7	6.7	23.3
	6	9	30.0	30.0	53.3
	7	7	23.3	23.3	76.7
	8	5	16.7	16.7	93.3
	9	2	6.7	6.7	100.0
	Total	30	100.0	100.0	

The pre-test scores range from 2 to 9, with 2 being the lowest score and 9 being the highest.

The most common scores are 6 and 7, with 9 participants scoring 6 and 7 participants scoring 7. These scores account for a significant portion of the total respondents.

Scores of 3, 4, and 5 are less common, with 2 participants each, making up a smaller percentage of the total.

Scores of 8 and 9 are also less common, with 5 and 2 participants, respectively.

The cumulative percentage shows that about 53.3% of participants scored 6 or lower, while about 76.7% scored 7 or lower.

In terms of the distribution of scores, it appears that the majority of students scored in the mid-range (between 6 and 7), with fewer students scoring higher or lower.

Table 3.1.1.3 : Post-test

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	11	2	6.7	6.7	6.7
	12	3	10.0	10.0	16.7
	13	3	10.0	10.0	26.7
	14	6	20.0	20.0	46.7
	15	6	20.0	20.0	66.7
	16	2	6.7	6.7	73.3
	17	5	16.7	16.7	90.0
	18	3	10.0	10.0	100.0
	Total	30	100.0	100.0	

The post-test scores range from 11 to 18. with the majority of participants scoring between 14 and 15 (20.0% for each). Score of 17 comes later with 17%. The other scores appear with the frequency of equal to or lower than 10%.

The cumulative percent indicates that 46.7% of participants scored 14 or lower, while 90.0% scored 17 or lower.

In summary, the data suggests that, on average, second-year non-English major students made significant progress in English vocabulary learning through the EOP system between the pre-test and post-test assessments. However, the increased standard deviation and variance in the post-test scores indicate varying levels of improvement among the students, with some making substantial gains and others showing less progress. Further analysis and interpretation may be required to understand the factors contributing to these variations in learning outcomes.

3.1.2. The paired-samples t-test

The results of the paired-sample t-test complement the results in the descriptive statistics section, reinforcing the conclusions made previously.

Table 3.1.2.1: Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pre-test	6.23	30	1.736	.317
	Post-test	14.73	30	2.067	.377

The paired-samples statistics provide essential information about the pre-test and post-test scores.

For the pre-test, the mean score was 6.23, with a sample size (N) of 30. The standard deviation (Std. Deviation) was 1.736, and the standard error of the mean (Std. Error Mean) was 0.317.

In contrast, the post-test had a significantly higher mean score of 14.73. Like the pre-test, the post-test also had a sample size of 30. The standard deviation for the post-test was 2.067, and the standard error of the mean was 0.377.

The results suggest a substantial increase in the mean score from the pre-test to the post-test. This improvement implies that the EOP system had a positive impact on the English vocabulary learning of second-year non-English major students.

Table 3.1.2.2: Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	Pre-test & Post-test	30	.950	.000

Based on the paired samples correlations output, a strong positive correlation of 0.950 was found between students' pre-test and post-test scores. This high correlation coefficient indicates that students who performed better on the pre-test tended to also have higher scores on the post-test. The significance value of 0.000 confirms this correlation is statistically significant.

Table 3.1.2.3: Paired Samples Test

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 Post-test - Pre-test	8.500	-0.682	-0.125	8.755	8.245	68.236	29	.000

The paired samples test results indicate that the mean score for the pre-test (M = 8.500) was significantly higher than the mean score for the post-test (M = 16.000). Specifically, the mean difference between pre-test and post-test scores was -8.500, with a standard deviation of 0.682.

With a standard error of the mean of 0.125, the 95% confidence interval for the difference ranged from -8.755 to -8.245. Since this range does not include zero, we can infer the difference in mean scores is statistically significant.

The t-statistic obtained was -68.236, with 29 degrees of freedom. The significance level is 0.000, which is less than the conventional cutoff of 0.05.

The paired samples t-test analysis provides strong evidence that the EOP system was effective at improving English vocabulary learning outcomes for second-year non-English major students. Both the high positive correlation between pre-and post-tests, as well as the significant increase in mean scores post-learning, suggest that students benefited from and retained more vocabulary through using this online resource. The findings support the effectiveness of the EOP system for vocabulary acquisition in this student population.

The results indicate a substantial improvement in the mean test scores of second-year non-English major students who used the EOP system, suggesting a positive impact on their English vocabulary learning. Paired t-test results confirm that students performed better on vocabulary assessments after using the EOP online platform compared to before when they didn't have access to it.

In conclusion, the paired samples t-test analysis provides strong evidence that the EOP system effectively enhanced English vocabulary learning outcomes for second-year non-English major students. A high positive correlation between pre- and post-tests, along with a significant increase in mean scores post-learning, suggests students gained and retained more vocabulary through this online resource. These findings support the EOP system's effectiveness in vocabulary acquisition

3.2. PARTICIPANTS' PERCEPTIONS OF ENGLISH VOCABULARY LEARNING THROUGH THE EOP SYSTEM

3.2.1. The suitability of the level of vocabulary on EOP system

The data gathered from student responses regarding their experiences with English vocabulary learning on EOP reflects a multifaceted landscape of opinions and perspectives. These insights are invaluable for understanding the dynamics of English vocabulary learning, and they can be particularly informative for those involved in curriculum development and instructional design, as well as for educators seeking to optimize the learning experience for their students during interviews on English vocabulary learning.

One predominant theme that emerged from the responses is that a substantial portion of students perceive the vocabulary level and quantity on EOP to be fitting for their needs. A majority expressed that the difficulty level is moderate, with words found in the curriculum generally resonating with their coursework and daily language use. Approximately 30% of respondents indicated that the level of vocabulary is either suitable or not overly challenging. One student aptly pointed out that "The level and amount of vocabulary provided on EOP is full. Because too much vocabulary can cause overload for students." This insight underscores the importance of striking a balance between providing a comprehensive vocabulary repertoire while avoiding overwhelming students with excessive linguistic demands.

On the other hand, roughly 20% of students conveyed a desire for a more expansive and diverse vocabulary selection. These students expressed a need for more practical terms that extend beyond the boundaries of course materials. As one respondent succinctly put it, "I think the vocabulary has not been diverse enough, so more practical words should

be added." This perspective highlights the aspiration of some students to acquire a broader lexicon that accommodates their real-world communication needs.

An intriguing observation was made in relation to the impact of one's major on vocabulary perception. A student noted that "Compared to other majors at the university, I think our major has less and simpler vocabulary that is easy to remember and apply." This assertion implies that the level of vocabulary difficulty may vary depending on the specific field of study. Recognizing this differentiation, it becomes evident that English vocabulary learning experiences are not uniform across academic disciplines, and curricular adjustments might be considered accordingly.

Regarding the quantity of vocabulary introduced per unit, the consensus appears to lean towards acceptance. However, a minority, around 10% of respondents, pointed out that the weekly pace might be too rapid, making it challenging to thoroughly absorb the words presented in each unit. As one student elucidated, "The amount of vocabulary in a unit is quite a lot compared to the frequency of studying 1 unit/week currently." This observation underscores the importance of not only the quantity of vocabulary but also the pace of instruction in ensuring effective retention and application of new terms.

While the majority of students' express satisfaction with the vocabulary program on EOP, there is constructive feedback that can inform improvements. This feedback suggests opportunities to diversify vocabulary offerings, adjust difficulty or pace according to different majors, and allocate more time for the absorption of each unit's vocabulary. These nuanced perspectives provide valuable guidance for educators and curriculum developers, enabling them to adapt vocabulary learning experiences to better cater to the diverse needs and expectations of their students during interviews on vocabulary learning.

3.2.2. Opinion about the forms of exercises

Participants also mentioned the types of exercise, which they found the most effective, during interview section.

A myriad of responses was offered by the survey participants, reflecting their diverse perspectives and experiences with English vocabulary learning on the EOP platform. Notably, the majority of respondents, comprising a significant 50%, expressed a strong inclination towards exercises that directly engage with vocabulary. Such exercises encompassed tasks like writing sentences, filling in blanks, and matching words to their

corresponding definitions or visual representations. These individuals firmly believed that these exercises were the most potent tools for acquiring and retaining new words.

The resounding endorsement of filling in blanks was particularly striking, with approximately 30% of respondents emphasizing its efficacy. This exercise type was lauded for its unique ability to foster a deep understanding of word meanings within the context of a sentence. Furthermore, it actively necessitates the recall of words to complete sentences, making it a powerful vehicle for enhancing vocabulary.

Writing sentences emerged as another highly favored exercise, with 20% of participants championing its merits. They appreciated the dual benefits it offered: not only did it serve as a means of practicing correct grammar, but it also proved to be an invaluable tool for vocabulary acquisition.

Intriguingly, 15% of respondents gravitated towards listening and speaking exercises. They perceived these exercises as pivotal in the process of vocabulary acquisition, asserting that the ability to apply newly learned words orally played a substantial role in solidifying their understanding of the language.

Reading exercises found favor with 10% of the participants who deemed them beneficial for their real-life applicability. They recognized that reading exercises provided an avenue to encounter vocabulary in authentic contexts, thereby reinforcing their practical utility.

Intriguingly, a smaller subset of respondents, constituting about 5% of the total, expressed a preference for multiple-choice questions. Their rationale lay in the exposure to a multitude of words at once. However, they also acknowledged that this method might not necessitate as much active recall when compared to the more interactive exercises involving writing or speaking tasks.

A noteworthy trend that emerged from the responses was the recognition of the importance of employing a variety of exercise types. Approximately 20% of participants stressed the need for a well-rounded approach that encompassed different skills. They believed that the development of skills in writing, speaking, and the practical application of vocabulary could be achieved through a harmonious blend of various exercises. For them, mastering vocabulary was a holistic endeavor, requiring the utilization of diverse methods over time.

The survey responses highlight a consensus regarding the efficacy of exercises that require productive language usage through speaking, writing, and filling in blanks in promoting vocabulary retention and understanding. The practice of active recall and the application of new words within the context of sentences are cited as significant factors contributing to the success of these exercise types. The overarching lesson gleaned from this analysis is that a well-balanced combination of exercise types is the optimal approach for nurturing all language skills. This nuanced understanding underscores the importance of adaptability and variety in English vocabulary learning on the EOP platform, thereby enabling learners to embark on a comprehensive and effective language acquisition journey

3.2.3. Students' application of major-related vocabulary

In the analysis of the responses to the question concerning the application of vocabulary learned from English for Academic Purposes (EOP) in major-related communication situations, it becomes evident that there is a diverse spectrum of opinions and experiences among the students. This analysis sheds light on the significance of English vocabulary learning in the context of interviews and the potential challenges faced in transferring this knowledge to real-world situations.

The responses provided by the students reflect a mixed perspective on their ability to utilize EOP-acquired vocabulary in their major-related contexts. Roughly half of the students express that they can apply this vocabulary to some extent, primarily in scenarios like examinations, presentations, or basic conversations related to their field of study. However, a significant portion of the respondents notes that the application of specialized vocabulary remains somewhat limited.

A notable aspect of this analysis is the inclusion of specific examples provided by a few students to illustrate their use of EOP-acquired vocabulary. For instance, one student mentioned the ability to inquire about lab equipment in the context of their major in engineering, demonstrating a practical application. Another student shared their experience of incorporating English terms in a PowerPoint presentation, particularly when attempting to find useful search results in Vietnamese yielded suboptimal outcomes. These instances showcase how English vocabulary learning from EOP can indeed be beneficial in specific scenarios within their major-related communication.

However, it is important to acknowledge the challenges many students face when trying to apply this vocabulary in communication related to their major. A common challenge cited was the limited opportunity to practice communicating using specialized terminology in their respective fields. Some students estimated their current ability to communicate major-related concepts using vocabulary acquired from the EOP to be only about 50%.

The overall analysis shows that the vocabulary acquired through EOP has been applied practically, especially in basic interactive and assessment situations related to the student's major. However, the potential for using specialized vocabulary in real-world, major-related contexts appears to be limited at this stage.

It is clear from the responses that there is room for growth in confidently transferring English vocabulary learning from the EOP to authentic professional situations that students may encounter in their future careers. To address this challenge, EOP system developers should consider adding exercise types that support students in practicing vocabulary in more real-life specialized contexts.

3.2.4. The reflection about the effectiveness of EOP system

Second-year non-English major students' responses to the interview questions also reveal their expectations about the effectiveness of EOP system in learning vocabulary. Several students expressed a positive sentiment, highlighting how EOP aligns with their expectations. One student appreciated EOP's immediate vocabulary review following classroom lessons, finding it effective in reinforcing their learning. Another student noted that EOP partly met their expectations, emphasizing its utility in covering specialized terms commonly found in work documents. This student's experience underscored the platform's relevance in enhancing their vocabulary.

However, not all students shared such enthusiastic views. Some expressed mixed or negative perspectives on the effectiveness of EOP's English vocabulary learning. For one student, the platform was deemed moderately effective, citing concerns about the limited testing of vocabulary and the constrained opportunities for in-class application. Another student conveyed that EOP had not fully met their expectations, raising a valid point about the limited number of words introduced in each lesson. They suggested the inclusion of a more diverse range of vocabulary, spanning from easy to challenging words, to better facilitate the advancement of learners.

One respondent delved deeper into their experience, emphasizing that while EOP was generally acceptable, it tended to become monotonous and dry over time. This student expressed the need for an expansion in vocabulary, structure, and grammar options to cater to those students who seek greater challenges and more engaging content. This feedback highlights the importance of keeping learners motivated and engaged throughout their English vocabulary learning journey.

The collected responses offer a nuanced picture of the effectiveness of English vocabulary learning on EOP. While some students find it to be in alignment with their expectations, particularly in terms of reinforcement and coverage of essential terms, others raise valid concerns about its depth, variety, and ability to fully engage advanced learners. These responses underscore the need for a more robust and dynamically tailored vocabulary offering that can accommodate diverse learning styles, needs, and motivations. The effectiveness of EOP's English vocabulary learning appears to span a continuum from fully meeting to only partially meeting expectations, reflecting the multifaceted nature of vocabulary acquisition in an educational context. This highlights the importance of considering individual learning styles and goals when designing and implementing English vocabulary learning programs.

3.2.5. Suggestions to EOP system

Interview section also explored the perspectives and desires of participants when it comes to improve the EOP system.

A substantial portion of respondents expressed their desire for the EOP system to tailor the volume of exercises according to the learner's grade level. This alignment with grade level was seen as crucial to making the English vocabulary learning experience more effective. Moreover, many respondents emphasized the significance of communication in the process of learning English. They advocated for exercises that foster interaction, recognizing the pivotal role it plays in language acquisition. In this regard, a reduction in the number of sections required to complete and an incorporation of vocabulary relevant to real-life situations were suggested. These recommendations were seen as strategies to promote practical and context-based language learning.

Another aspect that garnered attention was the need for error correction within the EOP system. Respondents pointed out existing issues such as incorrect vocabulary, titles, and erroneous answer options. Addressing these problems was deemed essential to ensuring

an efficient and accurate vocabulary acquisition process. One respondent even suggested the inclusion of guessing games based on images, potentially enhancing the engagement and learning experience.

Furthermore, several respondents expressed the desire for a more comprehensive approach to listening exercises. They proposed the inclusion of written summaries of conversations following listening exercises. This addition aimed to provide learners with a deeper understanding of the context and content beyond just key words. Moreover, some users wished for a writing section that incorporated the full dialogue from listening practices. This approach was seen as beneficial for enhancing listening skills and comprehension.

In terms of content and format, respondents urged the EOP system to expand its vocabulary offerings and introduce innovative task formats to combat boredom. One creative suggestion was the incorporation of videos within the grammar section. This diversification in content aimed to keep learners engaged and motivated throughout their English vocabulary learning journey.

In summary, the responses to the question about improving the EOP system for more effective English vocabulary learning reveal a diverse range of perspectives and requirements. The overarching theme is a call for a balanced approach that considers grade levels, communication, real-world relevance, error correction, and the integration of various media to enhance the user experience and comprehension. While there are variations in opinions, the ultimate goal remains consistent: to optimize the EOP system's functionality and content to best support vocabulary acquisition. This analysis underscores the importance of user feedback in shaping educational tools and ensuring their effectiveness in facilitating English vocabulary learning.

3.3. DISCUSSIONS

The study under scrutiny offers a comprehensive exploration of the impact of the EOP system on students' English vocabulary learning progress, employing both quantitative and qualitative analyses. The quantitative facet of the study delves into the numerical representation of the observed effects, aiming to provide a nuanced understanding of the system's impact on language acquisition. The results of the quantitative analysis unequivocally confirm a substantial increase in the mean scores from the pre-test to the post-test. This statistical leap not only underscores the effectiveness of the EOP system

but also quantifies the magnitude of the improvement, offering a tangible measure of the system's influence on students' English vocabulary learning.

The use of a paired t-test adds a layer of robustness to the quantitative findings. By directly comparing the performance of students before and after exposure to the EOP online platform, the paired t-test serves as a statistical validation, ensuring that the observed improvements are not mere artifacts of chance. This analytical rigor strengthens the study's internal validity, instilling confidence in the reliability of the reported positive effects.

Going beyond the surface-level findings, an exploration of effect sizes could enhance the interpretation of the quantitative results. Effect sizes provide a measure of the practical significance of the observed changes, offering insights into the real-world implications of the EOP system's impact on vocabulary acquisition. This nuanced perspective can be particularly valuable in understanding not just whether the system is effective, but also the extent to which it contributes meaningfully to students' language proficiency.

Furthermore, an in-depth examination of specific subgroups within the study population can unveil differential impacts and shed light on the system's effectiveness across diverse learner profiles. Exploring whether students with varying initial proficiency levels experience different degrees of improvement can inform targeted educational interventions, allowing for a more personalized approach to language learning.

Transitioning to the qualitative analysis, the study presents a nuanced exploration of the positive and negative aspects of the EOP system. On the positive side, the qualitative findings highlight several strengths, including the system's ability to provide a suitable level of vocabulary for learners. This tailoring of content to students' proficiency levels ensures that the learning material is neither too challenging nor too simplistic, promoting an optimal learning experience. Additionally, the qualitative data underscore the practical application of learned vocabulary in real-life situations, emphasizing the system's capacity to facilitate the transfer of knowledge from the online platform to authentic communication scenarios.

Moreover, the qualitative analysis points to the EOP system's role in supporting English vocabulary learning in direct classes. This integration of online resources with traditional classroom instruction not only reinforces the relevance of the EOP system

but also underscores its potential as a complementary tool in broader educational contexts. The identification of the most effective exercises, particularly those involving listening and reading, adds granularity to the qualitative findings. Understanding which modalities and activities resonate most with students provides actionable insights for refining and optimizing the learning experience.

However, the qualitative analysis does not shy away from addressing the negative aspects of the EOP system. The identification of boring exercise types raises important considerations about the system's ability to maintain student engagement over time. While the quantitative data may capture the overall improvement in English vocabulary learning, the qualitative insights provide a valuable perspective on the potential challenges and areas for enhancement in terms of students' experience.

Furthermore, the qualitative analysis highlights a perceived lack of communication activities within the EOP system. This finding aligns with the broader pedagogical understanding that language proficiency is not solely about vocabulary knowledge but also about the ability to effectively communicate in real-world contexts. Incorporating more communication-focused exercises could address this limitation, fostering a more comprehensive and practical language learning experience.

The qualitative findings also draw attention to some errors within the EOP system, including issues of format, spelling, and answer appearance. While these may be perceived as minor in the broader context of the system's impact on English vocabulary learning, they underscore the importance of refining the technical aspects of the platform to ensure a seamless and error-free learners experience.

In conclusion, the discussion of the study intricately weaves together the quantitative and qualitative analyses, providing a comprehensive understanding of the EOP system's impact on second-year non-English major students' English vocabulary learning progress. The quantitative analysis establishes a solid foundation by confirming the positive effects through statistical measures, while the qualitative insights add depth by exploring the nuanced aspects of the system's strengths and weaknesses. This multifaceted approach not only contributes to the academic discourse on language learning but also offers practical implications for educators, curriculum designers, and developers to refine and optimize online language learning platforms.

CONCLUSION

1. Recapitulation

This study was conducted to evaluate the effectiveness of the EOP system on English vocabulary learning of second-year non-English major students at Hanoi University of Industry. The research makes use of qualitative and quantitative approaches in order to deliver an objective evaluation that is based on the answers to the following research questions:

1, To what extent does the English vocabulary learning of second-year non-English major students improve through the EOP system in a blended course at HaUI?

2, What are second-year non-English major students' perceptions of English vocabulary learning through the EOP system in a blended course at HaUI?

The most significant discovery made by the research was that the EOP system has a beneficial impact on the vocabulary acquisition progress of students who are not majoring in English.

The next set of significant discoveries pertains to the details of the EOP platform. First, more than half of the people who participated in the study felt that the platform met their needs. They acknowledged that EOP had assisted them in better remembering language and in being able to use terminology in a few straightforward instances. Second, students pointed out both the positive aspects of the system, which help students learn more successfully and enjoyably, and the negative aspects of the system, which need to be improved in order for the system to provide students with better assistance for acquiring important vocabulary.

As a consequence of this, participants offered a few recommendations to enhance the effectiveness of the EOP system. The two suggestions that were brought up the most frequently were to broaden the scope of the different kinds of exercises and to incorporate more activities that were centered on communication in order to more effectively apply the specialized language.

It is anticipated that the findings of this research would be utilized to enhance the EOP system, which was expected to assist students in making the most of available resources and learning the specialized vocabulary in the most efficient manner possible.

2. Implications

The pedagogical implications derived from this study extend beyond the confines of the research setting, offering valuable insights for educators, curriculum designers, and developers in the field of language learning. The study's confirmation of the positive impact of the EOP system on second-year non-English major students' English vocabulary learning progress holds several implications for pedagogy.

First and foremost, educators can leverage the findings to inform instructional strategies. The identification of effective exercises, particularly those involving listening and reading, provides concrete guidance on incorporating multimedia elements into language instruction. By integrating these modalities, educators can create dynamic and engaging learning experiences that align with the preferences and efficacy demonstrated by the EOP system.

The study's revelation regarding the EOP system's ability to support English vocabulary learning in direct classes underscores the potential for blended learning approaches. Educators can strategically integrate online platforms like EOP into traditional classroom settings, fostering a symbiotic relationship between digital resources and face-to-face instruction. This integration not only enhances the accessibility of learning materials but also capitalizes on the strengths of both modalities for a more comprehensive language learning experience.

Furthermore, the study's acknowledgment of the EOP system's role in practical application and its suitability for learners' proficiency levels has implications for curriculum design. Developers and educators can prioritize the creation of adaptive learning materials that cater to individual proficiency levels, ensuring that learners are appropriately challenged without feeling overwhelmed or under-stimulated. This personalized approach aligns with the study's emphasis on tailoring content to meet the diverse needs of learners.

Despite the positive outcomes, the study's identification of limitations, particularly the challenge of controlling confounding variables, prompts educators to approach the integration of the EOP system with a degree of caution. Acknowledging the broader context of students' language learning experiences beyond the online platform encourages a holistic approach. Educators should complement the use of digital resources with an understanding of the diverse strategies students may employ

independently, fostering a more inclusive and supportive language learning environment.

In conclusion, the pedagogical implications drawn from this study underscore the potential of the EOP system as a valuable tool in the language learning landscape. By incorporating effective exercises, supporting direct classes, and catering to individual proficiency levels, educators can optimize the integration of online platforms like EOP into their instructional practices. However, a nuanced understanding of the broader context of students' language learning experiences remains essential, guiding educators towards a balanced and holistic approach to language instruction.

3. Limitations

While the study provides valuable insights into the positive impact of the EOP system on second-year non-English major students' English vocabulary learning progress, it is crucial to acknowledge and critically evaluate its limitations. One prominent constraint lies in the inherent difficulty of controlling confounding variables, particularly other activities related to learning vocabulary that students may engage in concurrently with the EOP system.

The nature of language acquisition is intricate and multifaceted, with students often adopting various strategies simultaneously to enhance their language skills. Beyond the confines of the EOP system, students may participate in additional language courses, engage in self-directed study efforts, or undergo exposure to English outside the online platform. These external influences, often referred to as confounding variables, can significantly impact the observed outcomes of the study.

The study, by its design, may not fully account for the diverse array of activities students undertake to bolster their vocabulary. The lack of control over these concurrent learning experiences introduces a level of uncertainty in attributing the observed improvements solely to the EOP system. It becomes challenging to disentangle the specific contributions of the online platform from the myriad of other potential factors influencing English vocabulary learning.

To address this limitation in future research, employing more sophisticated experimental designs, such as randomized controlled trials (RCTs), could enhance the study's internal validity. RCTs involve randomly assigning participants to different conditions, including a control group that does not receive the intervention. This randomization

helps balance out potential confounding variables across groups, allowing for a more accurate assessment of the EOP system's isolated effects on English vocabulary learning.

Another avenue for improvement could involve collecting detailed information about participants' extracurricular language learning activities, enabling researchers to factor these variables into the analysis. Surveys, interviews, or logs could provide insights into the diverse strategies students employ outside the EOP system, allowing for a more nuanced understanding of the contextual factors influencing their vocabulary acquisition.

In conclusion, while the study sheds light on the positive impact of the EOP system, its limitations, particularly the challenge of controlling confounding variables related to concurrent language learning activities, should be acknowledged. Addressing this limitation in future research through more sophisticated experimental designs and detailed data collection methods was expected to contribute to a more comprehensive understanding of the EOP system's true efficacy in enhancing students' English vocabulary learning.

4. Suggestions for further studies

Several avenues for future studies can enhance the robustness and applicability of the findings presented in the current research. Firstly, expanding the participant pool would bolster the study's external validity. Increasing the sample size and diversifying the demographic characteristics of participants, such as age, majors, would provide a more comprehensive understanding of how the EOP system impacts a broader range of learners. This inclusivity is crucial for ensuring that the benefits observed in the study can be generalized across diverse student populations.

In addition to widening the participant pool, incorporating the perspective of educators through teacher perception surveys or interviews could offer valuable insights. Understanding how teachers perceive the integration of the EOP system into their instructional practices, as well as their observations of students' responses, challenges, and achievements, would provide a holistic view of the platform's impact within the educational ecosystem. Teachers' perspectives can illuminate aspects of the learning process that may not be captured through quantitative or student-reported data alone.

Finally, considering the temporal aspect of learning, conducting studies with different durations of exposure to the EOP system could reveal insights into the optimal usage patterns. Examining whether longer durations result in sustained improvement or whether there is an ideal dosage of exposure for maximum efficacy can inform recommendations for integrating the EOP system into language curricula.

In essence, expanding the participant base, incorporating teacher perspectives, conducting comparative analyses, and exploring optimal usage patterns are key suggestions for future studies. These avenues of research would contribute to a more comprehensive understanding of the EOP system's impact on English vocabulary learning and inform educators and developers on effective strategies for enhancing vocabulary instruction.

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APPENDIXES

APPENDIX 1: TEST

No	Requirement	Question	Answer
1	Fill in the blank	A_ _ _ _ _ _ _ isn't toxic so people use it to make many things.	aluminum
2	Choose the correct answer	It is an important item when walking in the dark A. Torch B. Stove C. Blender D. Speaker	A
3	Fill in the blank	This light bulb consumes 30 _ _ _ _ _ per hour.	watts
4	What shape is this?		Rectangle
5	Fill in the blank	How many bolts are there in that c _ _ _ _ _ _ _ _?	cardboard
6	Choose the correct answer	A _____ _____ is used to switch channels on TV. A. Hard drive B. Reference number C. Remote control D. Nylon rope	C

7	What are they?		cursors
8	Fill in the blank	They offer a 1-year _____ against rusting.	guarantee
9	Fill in the blank	I can't hear the sound. Could you please _____ the recording?	rewind
10	Choose the correct answer	It's a 5-metre _____ cable. A. internet B. network C. ethernet D. net	C
11	Answer the question	What is the written form of /ˈmanjʊ(ə)l/?	discount
12	Choose the correct answer	What is the pronunciation of "compass"? A. /ˈkɒmpʌs/ B. /ˈkʌmpəs/ C. /ˈkɒmpəs/ D. /ˈkʌmpʌs/	B
13	Fill in the blank	My wireless headphone is c_ _ _ _ _ _ every 2 days.	charged
14	Choose the suitable word	 A. Dashboard	C

		B. Board C. Motherboard D. Keyboard	
15	Choose the correct answer	His phone doesn't have a _____ _____ so its screen was cracked. A. touch screen B. power supply C. display screen D. screen protector	C
16	Fill in the blank	This mouse doesn't work. It's out of _ _ _ _ _.	dash
17	Fill in the blank	This PC needs a _____ to make video calls.	webcam
18	Choose the correct answer	"SIM card" stands for: A. Security Information Management card B. System Information Mode card C. Subscriber Identity Module card D. Social Inclusion Measure card	C
19	Answer the question with no more than 3 words	What is he doing? 	replacing the bulb
20	What is this?		Clamp

APPENDIX 2: INTERVIEW QUESTIONS

A. Vietnamese interview questions

1. Em đánh giá như thế nào về từ vựng được cung cấp trên EOP?
2. Dạng bài tập nào trên EOP giúp em tiếp thu từ vựng tốt nhất? Tại sao em nghĩ như vậy?
3. Em có thể sử dụng các từ vựng học trên EOP trong những bối cảnh liên quan đến chuyên ngành của mình chứ? Em hãy chia sẻ một ví dụ cụ thể.
4. Em cảm thấy hiệu quả của việc học từ vựng trên EOP có đáp ứng kỳ vọng của em không? Tại sao?
5. Điều em mong muốn hệ thống EOP có thể cải thiện để giúp em học từ vựng tốt hơn là gì? Tại sao?

B. English interview questions

1. How do you evaluate the vocabulary provided on EOP?
2. What type of exercises in EOP do you find most effective for vocabulary acquisition? Why do you think so?
3. Can you apply the vocabulary you've learned from EOP in your major-context communication situations? Please share a specific example.
4. Do you feel that the effectiveness of vocabulary learning on EOP meets your expectations? Why or why not?
5. What improvements do you wish the EOP system could make to help you learn vocabulary more effectively? Why?

APPENDIX 3: CONSENT FORM PRE-TEST AND POST-TEST

CAM KẾT ĐỒNG THUẬN

Tôi _____đồng ý tham gia vào nghiên cứu *"Tìm hiểu về việc học từ vựng thông qua hệ thống EOP của sinh viên không chuyên tiếng Anh tại Đại học Công nghiệp Hà Nội*" được tiến hành bởi cô Mai Thị Dinh (email: dinhmt@haui.edu.vn) trường Đại học Công nghiệp Hà Nội trong yêu cầu chương trình đào tạo thạc sĩ.

Tôi đã được phổ biến và hiểu rõ về mục đích của nghiên cứu này.
Tôi hiểu rằng tôi được yêu cầu tham gia nghiên cứu vì tôi có khả năng cung cấp những thông tin cần thiết cho nghiên cứu liên quan đến kinh nghiệm và cảm nhận của tôi với vai trò là người tiếp nhận chương trình học kết hợp thông qua hệ thống EOP. Tôi hiểu rằng mình sẽ cần tham gia vào khoá học, thực hiện các bài kiểm tra đầu khoá và cuối khoá. Tôi nhận thức được rằng tôi có thể liên lạc với cô Dinh khi có bấy kỳ thắc mắc liên quan đến nghiên cứu.
Tôi đồng ý những dữ liệu được thu thập trong nghiên cứu này có thể được công khai mà không để lộ danh tính của tôi theo bất cứ hình thức nào.

Chữ ký người tham gia **Chữ ký tác giả (người nghiên cứu)**

Mai Thị Dinh

APPENDIX 4: CONSENT FORM INTERVIEW

CAM KẾT ĐỒNG THUẬN

Tôi _____đồng ý tham gia vào nghiên cứu *"Tìm hiểu về việc học từ vựng thông qua hệ thống EOP của sinh viên không chuyên tiếng Anh tại Đại học Công nghiệp Hà Nội*" được tiến hành bởi cô Mai Thị Dinh (email: dinhmt@haui.edu.vn) trường Đại học Công nghiệp Hà Nội trong yêu cầu chương trình đào tạo thạc sĩ.

Tôi đã được phổ biến và hiểu rõ về mục đích của nghiên cứu này.
Tôi hiểu rằng tôi được yêu cầu tham gia nghiên cứu vì tôi có khả năng cung cấp những thông tin cần thiết cho nghiên cứu liên quan đến kinh nghiệm và cảm nhận của tôi với vai trò là người tiếp nhận chương trình học kết hợp thông qua hệ thống EOP. Tôi hiểu rằng mình sẽ cần tham gia vào buổi phỏng vấn kéo dài 15 - 20 phút. Cuộc phỏng vấn sẽ được ghi âm và lời nói của tôi sẽ được chuyển sang dạng văn bản. Tôi nhận thức được rằng tôi có thể liên lạc với cô Dinh khi có bấy kỳ thắc mắc liên quan đến nghiên cứu.
Tôi đồng ý sẽ trả lời đầy đủ và rõ ràng nhất có thể những câu hỏi trong phần phỏng vấn để phục vụ cho mục đích nghiên cứu.

Tôi đồng ý những dữ liệu được thu thập trong nghiên cứu này có thể được công khai mà không để lộ danh tính của tôi theo bất cứ hình thức nào.

Chữ ký người tham gia **Chữ ký tác giả (người nghiên cứu)**

Mai Thị Dinh