

FOREIGN LANGUAGES AND VIETNAMESE

STUDENT ATTITUDES, ENGAGEMENT, AND PERCEIVED EFFECTIVENESS OF ENVIRONMENTALLY FRIENDLY VOCABULARY TOOLS IN FOREIGN LANGUAGE LEARNING

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ABSTRACT: This study evaluates the opinions and engagement of students at the University of Danang with environmentally friendly vocabulary tools in their foreign language learning. Using a quantitative approach, a survey was conducted to collect data on students' attitudes, frequency of use, and the perceived impact of these tools on vocabulary acquisition. The findings revealed a positive attitude, with most students acknowledging the importance and effectiveness of these tools. However, the study also identified areas for improvement, such as increasing the integration of these tools into daily learning routines. Additionally, the research highlighted the preference for digital vocabulary resources over traditional materials and the potential of these tools to enhance vocabulary learning. Overall, the results suggest that environmentally friendly vocabulary tools can be valuable resources for language learners. However, further research is needed to explore their long-term impact and to identify strategies for optimizing their implementation in educational settings.

KEY WORDS: Environmentally friendly; vocabulary tools; foreign language learning; student engagement; sustainable education.

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1. Introduction

As global awareness of environmental sustainability increases, educational institutions are exploring ways to incorporate environmentally friendly practices into their curricula. One area of particular interest is the use of digital tools for language learning, especially in the context of vocabulary acquisition. Traditional printed materials, while effective, contribute to paper waste and lack the adaptability required to meet the diverse needs of learners. Conversely, digital tools, such as apps and online platforms, offer flexible, interactive, and eco-friendly alternatives (Rockinson-Szapkiw et al., 2013). Digital vocabulary resources are defined as online or app-based tools designed to support vocabulary learning through interactive and multimedia formats. These resources include flashcards, mobile apps, and web-based programs that allow learners to access, practice, and review vocabulary anytime and anywhere (Godwin-Jones, 2011).

The concept of environmentally friendly tools refers to resources and practices that align with sustainability principles, emphasizing the reduction of environmental impact. In the context of education, these tools often prioritize digital solutions over paper-based materials, thereby minimizing resource consumption while enhancing accessibility and adaptability (UNESCO, 2017).

The growing emphasis on sustainable education practices aligns with broader trends in language learning research, which increasingly recognize the significance of learning that occurs beyond the classroom. Reinders and Benson (2017) note that while much research on language learning has traditionally been conducted within classroom settings, there is a growing acknowledgment of the importance of what happens outside the classroom. The rapid development of online media and communication technologies, alongside the expanding opportunities for travel, has created a rich environment for language learning beyond the confines of traditional classrooms. This shift has led to the emergence of a new field of research focused on understanding the settings, processes, and methods of language learning beyond the classroom (Reinders & Benson, 2017; Nunan & Richards, 2015).

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In this context, the integration of digital tools as environmentally friendly vocabulary resources not only supports sustainable education but also reflects the broader shift towards learning that extends beyond classroom walls. This study investigates the opinions and engagement of students at the University of Danang with these tools, aiming to understand their preferences between digital and traditional learning materials, their attitudes toward sustainable education practices, and the potential impact of these tools on their language learning experience. By exploring these factors, the research contributes to the emerging field of language learning beyond the classroom and highlights the role of digital tools in promoting both environmental sustainability and effective language acquisition.

2. Theoretical background

Vocabulary acquisition is a critical aspect of language learning, yet it is often not explicitly taught in university classrooms. This is largely due to the limited time available in the curriculum, which is typically dominated by other core language skills such as reading, writing, speaking, and listening. Studies have shown that the emphasis on these skills often leaves vocabulary learning to be incidental rather than intentional (Schmitt, 2008; Nation, 2022). This situation highlights the need for supplementary methods that can support vocabulary acquisition outside the classroom.

Out-of-classroom learning activities have emerged as a powerful tool for vocabulary development. According to Benson (2013), autonomous learning practices, such as self-directed vocabulary exercises, extensive reading, and the use of language learning apps, allow learners to expand their lexical knowledge at their own pace. These activities are particularly beneficial because they provide learners with repeated exposure to new words in varied contexts, which is essential for long-term retention (Laufer & Hulstijn, 2001). Furthermore, as students often lack the opportunity to engage deeply with vocabulary in class, out-of-class activities fill this gap by offering more opportunities for practice and reinforcement (Nation, 2022).

The integration of digital tools into language learning has gained a special attention, especially in the context of promoting environmentally sustainable education. Digital vocabulary tools, such as mobile apps and online platforms, offer several advantages over traditional paper-based methods. For instance, these tools can provide instant feedback, track progress, and adapt to the learner's individual pace, making them more engaging and effective. Moreover, the use of digital tools aligns with the growing trend of environmentally friendly practices in education. As institutions seek to reduce their carbon footprint, digital resources are increasingly seen as a viable alternative to printed materials. However, while the potential of these tools is evident, more empirical research is needed to evaluate their actual impact on vocabulary learning outcomes across different educational settings (Stockwell, 2010).

To address this gap in the literature, this study aims to investigate the following research questions:

1. What are the attitudes of students at the University of Danang toward the importance and preference for using environmentally friendly vocabulary tools in sustainable foreign language learning?

2. To what extent students at the University of Danang engage in environmentally friendly vocabulary tools?

3. How do students perceive the effectiveness of environmentally friendly vocabulary tools in enhancing their vocabulary acquisition?

By addressing these questions, this research seeks to contribute to the understanding of the effectiveness of digital vocabulary tools and their potential role in promoting sustainable education practices.

3. Methodology

Participants

A total of 342 students from diverse majors at the University of Danang participated in the study. The gender distribution was 58.2% female and 41.8% male, with participants ranging in age from 17

to 25 years. The students represented various fields of study, with 41.5% majoring in technology, 32.7% in engineering, 15.2% in economics, and 10.5% in foreign languages. Most participants were studying English at the A1-A2 proficiency level (59.6%), followed by those at level B1 (20.8%). The remaining students were at levels C1 (10.2%), B2 (5%), and beginners (4.4%).

Research instruments

An online survey was developed to collect quantitative data from students at the University of Danang. The survey included a series of structured questions designed to assess students' opinions on the importance of environmentally friendly vocabulary tools, their preferences between digital and traditional learning materials, and their frequency of usage of digital tools. The survey also included sections on the effectiveness of these tools in vocabulary acquisition and retention. The design of the questionnaire was informed by previous research on learner engagement with language learning tools (Godwin-Jones, 2011; Stockwell, 2010), task-induced involvement in vocabulary acquisition (Laufer & Hulstijn, 2001), and the use of digital tools in language education (Reinders & Benson, 2017; Rockinson-Szapkiw et al., 2013). These studies provided frameworks for developing questions that assess both learner preferences and the impact of digital tools on vocabulary learning.

Data collection analysis

The online survey, developed using Google Forms, was distributed to students at the University of Danang through email and social media platforms. Participants were informed about the purpose of the study and were assured that their responses would be anonymous and confidential. The data analysis involved both quantitative and qualitative approaches. Descriptive statistics were used to summarize the participants' demographic information and their responses to the Likert scale items. Frequency distributions and percentages were calculated to identify trends in students' preferences between digital and traditional learning materials. The qualitative data from open-ended survey responses were analyzed using thematic analysis.

4. Results

RQ1: What are the attitudes of students at the University of Danang toward the importance and preference for using environmentally friendly vocabulary tools in sustainable foreign language learning?

Firstly, a significant majority of students acknowledge the importance of environmentally friendly vocabulary tools. This is evident as most participants either agreed (41.5%) or strongly agreed (38.6%) with the statement that these tools are important for sustainable foreign language learning. Only a small fraction of the respondents expressed disagreement (9.7%) or strong disagreement (5.3%). This strong positive reception highlights the growing awareness among students of the need for sustainable practices in education, which aligns with global trends emphasizing environmental responsibility in all aspects of life, including learning.

Additionally, the preference for digital vocabulary resources, such as apps and websites, over traditional materials was strongly evident among the participants. A substantial number of students agreed (44.1%) or strongly agreed (31.6%) that they prefer using these digital tools. This finding aligns with existing research that suggests a shift towards digital learning tools due to their adaptability and user-friendliness (Godwin-Jones, 2011).

Moreover, the belief that environmentally friendly vocabulary tools are effective was also supported by the majority of the participants. With 48.2% agreeing and 28.4% strongly agreeing. It is clear that students not only value these tools for their environmental benefits but also recognize their practical effectiveness in enhancing vocabulary acquisition.

RQ2: To what extent students at the University of Danang engage in environmentally friendly vocabulary tools?

The data, as illustrated by Figure 1, shows varying levels of engagement with environmentally friendly vocabulary tools among the participants. The majority of students reported these tools either "Sometimes" (51.2%) or "Often" (28.7%), indicating a moderate to high level of engagement with

these resources. This suggests that while students recognize the value of these tools, they may not be fully integrated into their daily learning routines.

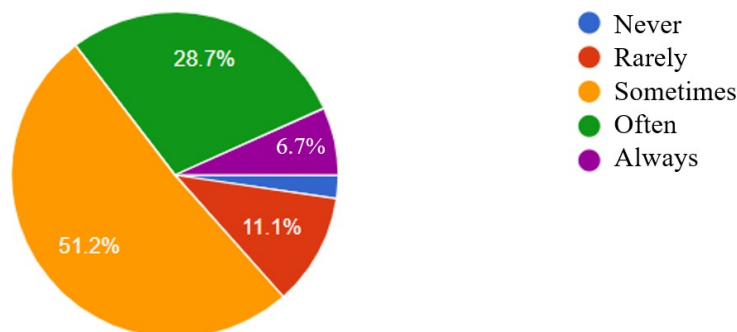


Figure 1. Frequency of using environmentally friendly vocabulary tools

A smaller percentage of participants indicated lower levels of usage, with 11.1% reporting they "Rarely" use these tools and a minimal 2.6% stating they "Never" use them. On the other end of the spectrum, a noteworthy 6.4% of students reported "Always" using environmentally friendly vocabulary tools, highlighting a subset of learners who are fully committed to sustainable practices in their language acquisition.

The study also examined the types of environmentally friendly vocabulary tools that students frequently use in their language learning. Online vocabulary games were the most popular, with exactly 50% of respondents (171 students) reporting regular usage. Interactive language learning websites and digital flashcard applications were also widely adopted, with 48.2% (165 students) and 30.1% (103 students) respectively, indicating frequent use. Additionally, digital dictionaries and e-books/digital textbooks were utilized by a significant number of students, with 40.4% (138 students) and 37.7% (129 students) incorporating these tools into their learning routines.

RQ3: How do students perceive the effectiveness of environmentally friendly vocabulary tools in enhancing their vocabulary acquisition?

The findings suggest that the majority of students perceive environmentally friendly vocabulary tools as effective in supporting their language learning (see Figure 2). A significant number (46.2%) rated these tools as moderately effective, while 36.5% considered them very effective. A smaller percentage (7.3%) found them extremely effective, demonstrating a high level of appreciation for their benefits. Notably, no respondent indicated that these tools are ineffective at all, emphasizing their positive impact on all students, albeit to varying degrees.

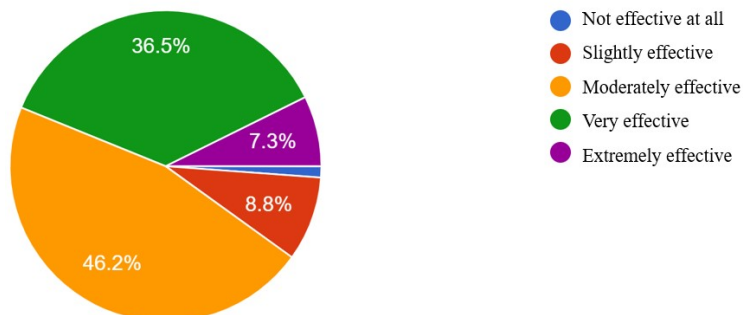


Figure 2. Students' perceptions of the effectiveness of environmentally friendly vocabulary tools

The survey data also revealed a strong preference for environmentally friendly vocabulary tools among students at the University of Danang (Figure 3). A significant majority of students (79.2%) found themselves more interested in learning vocabulary using environmentally friendly tools compared to traditional materials. A small percentage (15.8%) did not find these tools more engaging, while students (5%) remained unsure about their preference.

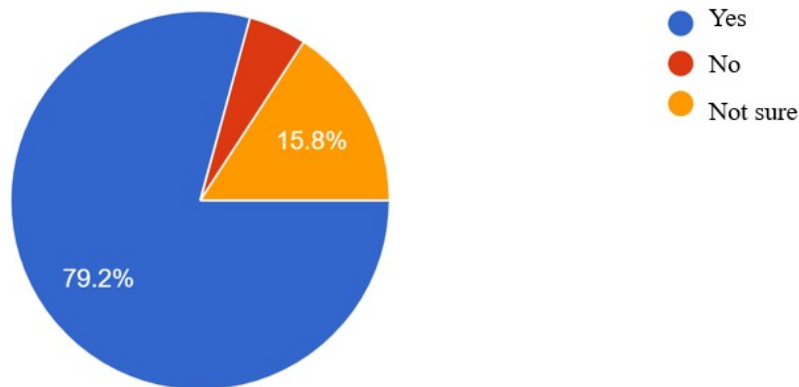


Figure 3. *Students' preferences for environmentally friendly vocabulary tools*

Furthermore, participants offered a variety of suggestions and opinions on environmentally friendly vocabulary tools in language education. Some respondents emphasized the importance of increasing the visibility and accessibility of these tools, as well as improving their practicality and effectiveness. For example, one participant suggested incorporating more contextual examples, such as dialogues, to enhance vocabulary retention.

Another respondent expressed a preference for traditional methods like writing on paper, highlighting the potential variability in tool effectiveness based on individual learning styles. There were also suggestions to optimize tools for offline use and incorporate visually engaging elements to make learning more appealing. Additionally, feedback addressed technical aspects, such as the need for continuous updates, improved bilingual explanations, and a wider range of vocabulary contexts.

Specific suggestions included using flashcards made from recycled paper or combining elements from different language learning apps. While some responses were neutral, others expressed satisfaction with the tools and their potential to motivate learners. Overall, the feedback indicates a general approval of environmentally friendly vocabulary tools, but also suggests that there is room for development to better meet the diverse needs and preferences of learners.

5. Discussion

The findings of this study provide valuable insights into the perceptions and engagement of students at the University of Danang regarding environmentally friendly vocabulary tools. The results indicate a positive attitude towards these tools, which aligns with the growing emphasis on autonomous learning practices (Benson, 2013) and out-of-classroom vocabulary development (Nation, 2022).

Perceptions of environmentally friendly vocabulary tools

The positive reception of environmentally friendly vocabulary tools reflects a growing awareness among students of the importance of sustainable practices in education. This finding aligns with global trends that emphasize integrating environmental responsibility into all aspects of life, including learning. The students' preference for digital vocabulary resources over traditional materials highlights a shift towards technology-enhanced learning, offering greater flexibility, accessibility, and personalization. These tools support self-directed vocabulary exercises, as noted by

Benson (2013), suggesting that environmentally friendly tools not only align with sustainable practices but also cater to modern educational needs. This strong preference indicates that students at the University of Danang value both the environmental and practical benefits of these tools in their language learning process.

Engagement with environmentally friendly vocabulary tools

While the majority of students reported using environmentally friendly vocabulary tools at least sometimes, the data also revealed a significant proportion who use these tools infrequently or never. This suggests that there is still room for improvement in terms of integrating these tools into the daily learning routines of students. Factors such as familiarity with traditional methods, limited access to technology, or a lack of awareness about the benefits of these tools may contribute to lower levels of engagement. Additionally, as the study focused on student perceptions, it is important to consider the potential for a discrepancy between reported use and actual practice (Reinders & Benson, 2017). Future research could explore students' actual learning habits and how these tools are integrated into their vocabulary development strategies.

Effectiveness of environmentally friendly vocabulary tools on vocabulary acquisition

The study demonstrates that environmentally friendly vocabulary tools are perceived as effective by the majority of students. This suggests that these tools can play a valuable role in supporting language learning and enhancing vocabulary acquisition. However, the effectiveness of these tools may vary depending on individual factors, such as learning styles and the specific features of the tools. As highlighted in the theoretical background, repeated exposure to new words in varied contexts (Laufer & Hulstijn, 2001) is essential for long-term retention. Future research could investigate specific features of the digital tools used by the participants and how these features contribute to vocabulary learning outcomes.

While this study provides valuable insights, it is important to acknowledge certain limitations. The sample size may be relatively small, and the results may not be generalizable to a larger population. Additionally, the study focused on the perceptions of students and did not directly measure the impact of these tools on language proficiency.

Future research could explore the long-term impact of environmentally friendly vocabulary tools on language learning outcomes. Additionally, investigating factors that influence students' engagement with these tools could help identify strategies for promoting their wider adoption. Further research could also delve into the specific features of these tools that contribute to their effectiveness and explore ways to optimize their design and implementation, potentially examining how these tools can provide instant feedback, track progress, and adapt to the learner's individual pace (as discussed in the theoretical background on digital tools by Godwin-Jones, 2011).

6. Conclusion

In conclusion, this study highlights the positive perceptions and growing engagement of students at the University of Danang with environmentally friendly vocabulary tools. While the majority of students find these tools beneficial, there is still room for improvement in terms of their integration into daily learning routines and the development of more effective and accessible tools. The findings suggest that higher education institutions can play a key role in promoting sustainable education practices by adopting and integrating digital tools into language learning curricula. By encouraging the use of eco-friendly tools, institutions can reduce paper waste, enhance learning flexibility, and foster a sustainable learning environment. Furthermore, future research should focus on addressing these areas to fully realize the potential of environmentally friendly vocabulary tools in supporting language learning and promoting sustainable education. Universities could consider providing more training for both students and instructors to optimize the use of these tools, ensuring their widespread adoption and greater impact on learning outcomes.

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Thái độ, mức độ tham gia, và hiệu quả cảm nhận của sinh viên đối với các công cụ từ vựng thân thiện với môi trường trong việc học ngoại ngữ

TÓM TẮT: Nghiên cứu này đánh giá ý kiến và sự tham gia của sinh viên tại Đại học Đà Nẵng với các công cụ học từ vựng thân thiện với môi trường trong việc học ngoại ngữ. Sử dụng phương pháp định lượng, một cuộc khảo sát đã được thực hiện để thu thập dữ liệu về thái độ, tần suất sử dụng và tác động của các công cụ này đối với việc tiếp thu từ vựng. Kết quả cho thấy thái độ tích cực, với phần lớn sinh viên công nhận hiệu quả của các công cụ này. Tuy nhiên, nghiên cứu cũng chỉ ra cần cải thiện việc tích hợp các công cụ vào thói quen học tập hàng ngày. Các công cụ số được ưa chuộng hơn tài liệu truyền thống, và có tiềm năng lớn trong việc nâng cao hiệu quả học từ vựng. Tuy nhiên, cần nghiên cứu thêm để đánh giá tác động lâu dài và tối ưu hóa việc triển khai trong môi trường giáo dục.

TỪ KHÓA: Thân thiện với môi trường; công cụ từ vựng; học ngoại ngữ; sự hứng thú của sinh viên; giáo dục bền vững.