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Exploring Vocabulary Acquisition: Strategies Employed By Polish Efl University Students At Different Proficiency Levels

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Abstract:
This study investigates vocabulary learning strategies used by Polish students majoring in English as a Foreign Language (EFL) at the university level. A questionnaire was administered to 215 participants from three universities in Poland. Prior to the questionnaire, participants completed the LexTale lexical test to assess their vocabulary knowledge and proficiency level. Research questions addressed the types of strategies employed, potential associations with proficiency levels, and strategies characteristic of different proficiency groups. Findings revealed that various strategies were employed, with technology-based sources, synonyms, keywords, and word repetition being among the most used. However, semantic mapping was less prevalent, particularly among lower proficiency learners. While no significant overall association between strategy use and proficiency levels was found, certain strategies were favoured by specific proficiency groups. Advanced learners demonstrated a preference for word structure analysis and interacting with native speakers. Future research directions include investigating strategies in specific language learning contexts and exploring relationships with other factors like learning styles. This study contributes to understanding learners' vocabulary acquisition processes and informs the development of effective teaching materials and tasks.

Keywords: Language learning contexts, Polish EFL students, Proficiency levels, Strategy preference, Vocabulary learning strategies.

1. Introduction

Acquiring a solid vocabulary is fundamental to language learning and effective communication. Proficiency in a foreign language necessitates developing a substantial repertoire of words, with incidental reading being a highly effective means of vocabulary acquisition. Unlike the natural progression of vocabulary acquisition in one's native language, foreign language learners often face conscious and demanding processes to expand their lexical knowledge. Limited vocabulary is frequently identified as a significant obstacle for learners, impacting receptive and productive language skills.

Despite its critical importance, vocabulary learning has not always received the attention it deserves from researchers and language educators. Even at advanced levels of language competence, learners acknowledge tangible limitations in their second language vocabulary, experiencing lexical gaps that hinder effective communication.

The communicative approach to language teaching, emerging as a response to the grammar-translation approach, recognises the importance of vocabulary in preparing learners for real-world communicative scenarios. While the neglect of teaching vocabulary has persisted, recent progress in linguistic studies, psycholinguistic inquiries, and the ascendancy of the communicative approach have prompted a re-evaluation of the role of vocabulary in language pedagogy.

Addressing the need to enhance learners' vocabulary learning methods spans various levels, including developing personal approaches and strategies. The establishment of vocabulary learning strategies (VLS) as a sub-discipline within second language acquisition (SLA) reflects the growing acknowledgement of the crucial role vocabulary plays in foreign language (FL) or second language (L2) attainment.

Vocabulary learning strategies, defined as methods that enhance the efficiency of vocabulary acquisition and use, have been a subject of increasing attention since the late 1970s. The investigation of VLS helps understand the processes learners employ to develop and expand their vocabulary in a second language. This growing interest in VLS aligns with the heightened importance attributed to vocabulary in applied linguistics.

This study seeks to advance vocabulary learning at university level by examining the use and evaluation of vocabulary learning strategies among Polish students majoring in English as a Foreign Language (EFL). Understanding learners' strengths and limitations in vocabulary acquisition and their strategies will inform the development of appropriate materials and tasks to enhance their lexical competence.

This study aims to answer the following research questions:

1) What vocabulary learning strategies do learners employ?
2) Is there any relationship between the use of learning strategies and the learner's proficiency level?
3) What strategies are characteristic of learners at different proficiency levels?

2. Literature Review

Teaching and learning vocabulary pose ongoing challenges for educators and students, which stem mainly from a historical lack of emphasis on vocabulary instruction in the EFL classroom. Recognising this, an increased focus on vocabulary development becomes essential for the language acquisition journey of English language learners. According to Boers and Lindstromberg (2008), numerous theorists consider the acquisition of vocabulary a crucial component in attaining a high level of proficiency in the target language.

As per Adger's (2002) perspective, vocabulary extends beyond mere word meanings; it encompasses the organisational aspects of language, delving into how words are structured within a language. This involves examining how individuals employ and store words, the mechanisms of learning new words,

and the intricate connections between words, phrases, and the broader categories of language elements.

According to Nation (2001), there are two distinct forms of knowledge which engage distinct cognitive processes: receptive knowledge and productive knowledge. Receptive vocabulary utilisation relies on one grasping the form of a word during listening or reading and retrieving its meaning. On the other hand, productive vocabulary utilisation entails the desire to convey meaning through speech or writing, involving the retrieval and expression of the suitable spoken or written word form.

This differentiation extends to every facet of word knowledge, encompassing word form, meaning, and usage. Nation (2001) contends that understanding a word goes beyond its meaning, constituting a highly intricate process that requires mastery of various linguistic attributes. Given that each aspect necessitates distinct forms of knowledge, Nation (2001) suggests that some aspects should be acquired implicitly—by paying attention to them without a conscious, deliberate effort—while others require explicit instruction.

Schmitt (1997) emphasised that the significance lies not only in the size of one's vocabulary but in the comprehensive understanding of all facets related to knowing each word, referred to as the "depth of knowledge." Additionally, they contend that learners acquire certain aspects incrementally, progressing through stages of learning. Early stages primarily concentrate on establishing connections between the form and meaning of words, with a gradual expansion to address other linguistic nuances.

Nation (2001) proposes a cognitive learning framework for foreign language vocabulary acquisition consisting of three integral phases. The initial phase, "Noticing," entails giving attention to an item, forming the fundamental premise for word learning by emphasising the significance of learner engagement. This phase involves decontextualisation, that is focusing on isolated words independently of contextual messages. The "Retrieval" phase follows, which is crucial for anchoring terms in memory. It involves both receptive and productive retrieval, requiring learners to comprehend the form and extract meaning during listening or reading, as well as express meaning by retrieving spoken or written form during speaking or writing. Understanding the intricacies of short-term and long-term memory processes is emphasised, including the organisational efficiency of the mental lexicon. Nation (2001) advocates strategies for memory retention, such as repeated encounters and spaced repetitions, incorporating the "Depth of processing hypothesis" for optimal memory retrieval. The final stage, "Creative or Generative Use," involves employing a word receptively or productively in novel contexts, which marks the culmination of the vocabulary learning process (Nation, 2001).

The discussion of language learning strategies (LLS) is prioritised before vocabulary learning strategies (VLS) to better comprehend the theoretical and empirical background, especially regarding metacognitive strategies for learning foreign language vocabulary.

The concept of LLS varies among researchers. For instance, Wenden and Rubin (1987) define LLS as the strategies contributing to developing the learner's language system, directly influencing learning.

The investigation into LLSs dates back to Rubin's pivotal 1975 research, which aimed to identify the steps taken by successful Foreign Language (FL) learners. The study of Rubin (1975) highlighted the challenge of pinpointing these strategies due to their often mental and unobservable nature. Through observation and self-reports, Rubin (1975) outlined seven critical characteristics of a "good" language learner: willingness and accuracy in guessing, a solid inclination to communicate, uninhibited language use, attention to linguistic form, active participation in conversations through practice-seeking behaviour, self-monitoring of speech, and commitment to understanding language meaning. These characteristics offer insights into both observable and mental aspects of effective language learning.

O'Malley and Chamot (1990) define learning strategies as "special thoughts or behaviours that individuals use to learn, or retain new information". Their classification of LLS includes cognitive, meta-cognitive, and affective or social strategies. Their research has contributed to understanding how learners can acquire a second language more efficiently and effectively.

Oxford (2001) offers an alternative perspective, defining LLS as students' deliberate and conscious actions to augment their learning. It serves as an instrument for active, self-directed engagement in the language learning process. These strategies are categorised into two primary types: direct and indirect.

- Direct strategies are further subdivided into memory, cognitive, and compensation strategies, which require mental language processing (Oxford, 2001).
- Indirect strategies are the processes that support language learning and include the affective and social aspects of language use (Oxford, 2001).

As per Oxford (2001), LLS is geared towards fostering the development of communicative competence. These strategies consist of the learners' consciously selected activities to self-regulate their language learning. Research indicates that employing LLS enhances performance and increases confidence among language learners.

During the categorisation of LLS, certain studies indirectly encompass strategies relevant to vocabulary acquisition. Research on VLS is rooted in applied linguistics, specifically vocabulary acquisition and LLS, and has witnessed increased attention since 1990 (Schmitt, 2000).

VLS can be considered a subset of broader learning strategies within second language acquisition. Examining learning strategies became more prominent in the 1970s, mainly through research focused on delineating the characteristics of successful language learners, as evidenced by the work of Rubin (1975).

Brown and Payne (1994) outline a five-step procedure for acquiring vocabulary in a foreign language: (a) seeking out sources for encountering new words, (b) creating a distinct mental representation, whether visual, auditory, or a combination, of the structures of the new words, (c) grasping the meanings of the words, (d) establishing a solid memory linkage between the forms and meanings of the words, and (e) integrating the words into practical usage. As a result, all vocabulary-learning strategies should, to varying degrees, align with these five steps (Fan, 2003).

Schmitt (1997), in his delineation of VLS, defines learning as "the process by which information is

obtained, stored, retrieved, and used therefore vocabulary learning strategies could be any which affect this broadly defined process."

The definition prompts a discussion on the nature of vocabulary learning—whether it occurs incidentally or intentionally—an extensively debated topic in the field. Notably, Nation (2001) underscores the intentional aspect of vocabulary learning, intriguingly basing his portrayal on the characteristics a strategy must possess to warrant attention from a teacher.

Subsequently, Nation (2001) refrains from presenting a precise definition of VLS but delineates several features characterising this category of strategies, perceived as an integral component of LLS. In his view, a VLS should encompass the following attributes: (a) entail choice, indicating the presence of multiple strategies to select from; (b) possess complexity, implying the existence of several steps in the learning process; (c) necessitate knowledge and derive benefits from training; and (d) enhance the effectiveness of both vocabulary acquisition and utilisation.

According to Nation (2001), acquiring a substantial vocabulary can be facilitated through applying VLS, which he deems beneficial for students across various language proficiency levels. In contrast, Cameron (2001) contends that children may not naturally employ vocabulary-learning strategies and advocates for explicit training in their use. In his perspective, Nation (1990; 2001) highlights the paramount importance of learners autonomously employing strategies independent of direct teacher guidance as the most effective approach to vocabulary learning.

As per Schmitt and Schmitt (1995), a practical teaching approach might involve presenting students with diverse learning strategies, allowing them the autonomy to determine the strategies that resonate best with their individual preferences.

Defining VLS has proven challenging, and their classification is equally contentious. Various researchers have put forth different categorisations of VLS, each based on their unique set of criteria, which led Fan (2003) to conclude, "No classification is perfect and any individual strategy may fall into one category or another, depending on the aspect in focus".

Researchers have categorised VLS in various ways. Some of the standard categorisations include O'Malley and Chamot (1990), Gu & Johnson (1996), Schmitt (1997) and Nation (2001).

This study deals only with the categorisation of Schmitt (1997) since it stands out the most. Schmitt (1997) builds upon Oxford's (1990) taxonomy, introducing adjustments and additions to address perceived shortcomings in the original framework. Specifically, he criticises Oxford's taxonomy for lacking a specific category that adequately describes strategies for independent word meaning determination. To address this gap, Schmitt (1997) introduces "Determination Strategies," which learners use to work out the meaning of new words without seeking help from someone else.

Furthermore, Schmitt (1997) critiques Oxford's (1990) taxonomy, pointing out that it includes strategies like interacting with native speakers, which can fall into more than one category based on the diverse purposes for which the strategy might be employed.

Schmitt's (1997) taxonomy enriches the understanding of vocabulary learning by explicitly addressing the independent determination of word meanings. The taxonomy recognises the dynamic nature of strategies, acknowledging that some strategies may overlap across categories based on the

learner's intent and situation.

Schmitt's (1997) taxonomy of VLS includes two main types: discovery and consolidation strategies. Discovery strategies encompass determination strategies and social strategies. Learners employ determination strategies to uncover the meanings of words, whereas social strategies entail interacting with others to acquire new vocabulary. Examples of determination strategies include guessing words from context, using a bilingual dictionary, and analysing parts of speech (Pratami & Margana, 2020). Examples of social strategies include asking classmates or teachers for synonyms, paraphrases, or L1 translations of unknown words and interacting with native speakers (Thiendathong & Sukying, 2021). Social strategies can also be used to learn new words through group activities and discussions (Hamzah et al., 2009).

Consolidation strategies include four types: social, cognitive, memory, and metacognitive (Schmitt, 1997). Learners utilise these strategies to solidify and strengthen their understanding of already familiar words.

- Social strategies: involve interacting with others to learn new words, such as asking classmates or teachers for synonyms, paraphrases, or L1 translations of unknown words, and interacting with native speakers (Schmitt, 1997)
- Cognitive strategies involve using mental processes to learn new words, such as organising words into categories, using imagery, and using context clues (Schmitt, 1997).
- Memory strategies: involve using memory techniques to remember new words, such as repetition, association, and visualisation (Schmitt, 1997)
- Metacognitive strategies involve planning, monitoring, and evaluating one's learning, such as setting goals, self-testing, and reflecting on one's learning (Schmitt, 1997)

Language learners must recognise that an incubation period exists in EFL vocabulary learning wherein learners may need exposure to a vocabulary item multiple times in various contexts before incorporating it naturally into speech and writing.

Previous studies related to vocabulary learning strategies (VLS) offer valuable insights into the preferences and effectiveness of these strategies among language learners across various contexts.

Tılfarlıoğlu and Bozgeyik (2012) investigated Turkish L2 learners and found that participants utilized a diverse range of VLSs, with a notable overlap between their perceived usefulness of strategies and their actual frequency of use. They also observed a positive correlation between memory strategies and participants' academic and general vocabulary proficiency levels. However, specific VLS did not predict vocabulary proficiency levels in their regression analysis, indicating complexities in the relationship between strategy use and proficiency.

Similarly, Okyar (2021) explored VLS use among Turkish EFL learners and reported a moderate frequency of strategy utilization. Their analysis revealed that memory, cognitive, compensation, and social strategies were employed at a medium frequency level, while metacognitive and affective strategies were used more frequently. This highlights the varying degrees of emphasis placed on different types of strategies among language learners.

Chumworatayee and Pitakpong (2017) focused on English major students of a Thai university and

found that overall VLS usage was moderate, with a perception of high usefulness. Their study demonstrated a positive correlation between the use and perceived usefulness of VLS, indicating a recognition among learners of the effectiveness of these strategies. Additionally, certain strategies, such as utilizing English-language media, were identified as both frequently used and highly useful, while others, like asking for L1 translation, were less commonly employed.

Further insights come from Lee (2007), who studied EFL students of two Korean universities. Their research revealed a preference among students for less cognitively demanding strategies over those requiring deeper processing. Strategies such as using a bilingual dictionary and saying words aloud during study sessions were among the most frequently employed, while activities like practicing words using flashcards or studying with pictorial representations were less commonly utilized. Additionally, students with higher vocabulary sizes tended to use memory strategies more frequently than those with lower vocabulary sizes, highlighting the relationship between strategy use and proficiency level.

3. Methodology

To answer the research questions, a questionnaire was prepared to elicit responses from students about how frequent they use learning strategies. Prior to the questionnaire, the students had been asked to sit LexTale (Lemhöfer and Broersma 2011), a lexical test that estimated their vocabulary knowledge and, indirectly, proficiency level.

3.1. Participants

215 students participated in the research. They were students of English Philology at three universities in Poland: University of Applied Sciences in Nysa (68 subjects), University of Wroclaw (73), and Czestochowa University of Technology (74). The results of LexTale were provided on a percentage scale, where higher scores represented learners' broader vocabulary sizes and higher proficiency levels. The scores between 91 and 100 corresponded to level C2 of the CEFR, and the other levels were as follows: 81-90 (C1), 60-80 (B2), less than 59 (A1-B1). The test showed that approximately half of the participants (104 subjects) demonstrated level B2, 59 subjects were at level C1, 32 at C2, and 20 at B1 and less (Table 1). The rather uneven distribution of participants' proficiency levels does not breach the assumptions underlying the statistical tests performed in this paper.

Table 1. Distribution of participants' proficiency levels in the sample.

CEFR level	N
A1 – B1	20
B2	104
C1	59
C2	32

3.2. Materials

The questionnaire consisted of 19 questions, each asking participants about how often they used a certain learning strategy (see Appendix 1). Students responded using a 5-point Likert scale (never, rarely, sometimes, often, always). The questionnaire was designed based on Schmitt's taxonomy (1997). The questionnaire also contained questions about participants' profiles, such as their score on LexTale and the university they attended.

3.3. Procedure

The survey was administered online during participants' class time. Participants received a hyperlink to do LexTale and were instructed to perform the test and remember the score. Following the test, they received a password to access the questionnaire, which was available as a Goggle Form. Before the administration of the survey, a pilot study was performed to determine the efficiency and usefulness of the research tools, as well as to determine if respondents were also interested in the subject researchers were attempting to investigate. The pilot study was done with two random students in order to check for clarity, and after their feedback, the questionnaire was corrected again and sent to the test group. The data collection procedure took place during the period of January till March 2024.

4. Results and Analysis

This section provides answers to the research questions. In order to see which learning strategies were most frequently used by participants, the questionnaire data were first converted into a contingency matrix, which involved a cross-tabulation of two variables: students' proficiency levels (CEFR) and learning strategies. Then the associations between the variables were visualised in a biplot, and finally subjected to a chi-square test and a series of binomial tests.

4.1. Total Frequency Ratings

In order to answer the first research question, students' responses were gathered together in a table. Since the responses were ordinal data recorded on a Likert scale, they were converted into numerical frequency ratings (never = 0, rarely = 1, sometimes = 2, often = 3, always = 4). These values were then summed up according to learning strategy and CEFR level. The resulting data are shown in Table 2. It is a contingency table in which each cell (for a CEFR level) represents a total of the frequency ratings given for a particular learning strategy by a particular proficiency level group. In other words, the higher the frequency value, the more frequent a strategy is used by a group of learners.

Table 2. Total frequency ratings for different strategies and proficiency level groups.

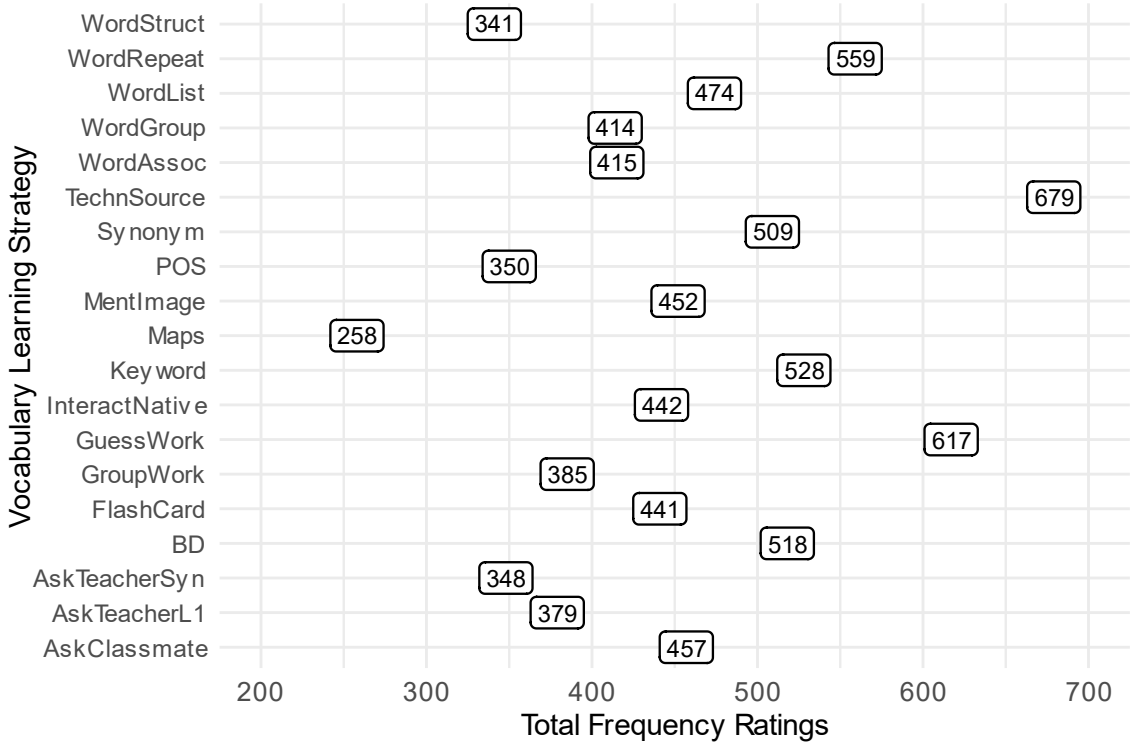
Strategy	**CEFR Level**					
	B1	**B2**	**C1**	**C2**	**Total**	**p-**

						values
InteractNative	31	212	136	63	442	0.67
GroupWork	38	195	100	52	385	1
Maps	30	139	63	26	258	1
Synonym	42	247	137	83	509	< 0.05
MentImage	43	220	127	62	452	0.48
WordAssoc	41	209	105	60	415	0.96
WordGroup	36	206	107	65	414	0.97
Keyword	49	255	140	84	528	< 0.05
WordRepeat	43	265	165	86	559	< 0.05
WordList	39	241	131	63	474	0.14
FlashCard	41	228	123	49	441	0.69
TechnSource	46	324	202	107	679	< 0.05
POS	31	168	98	53	350	1
WordStruct	33	151	94	63	341	1
GuessWork	45	284	189	99	617	< 0.05
BD	50	252	155	61	518	< 0.05
AskTeacherL1	39	201	96	43	379	1
AskTeacherSyn	34	179	96	39	348	1
AskClassmate	44	232	135	46	457	0.39

Figure 1 shows total frequency ratings for strategy use after ignoring CEFR levels. The values in the plot come from the column 'Total' in Table 2. The figure shows that the most frequently used strategies include technology-based sources (679), guesswork (617), word repetition (559), and keywords (528). By contrast, semantic mapping appears to be the least common strategy.

The final column in Table 2 provides results of a series of binomial tests conducted to identify the strategies that occur significantly more frequently than others. These include using technology-based sources, synonyms, keywords, bilingual dictionaries, word repetition, and guesswork (p-values less than 0.05).

Figure 1. Total frequency ratings for strategy use.

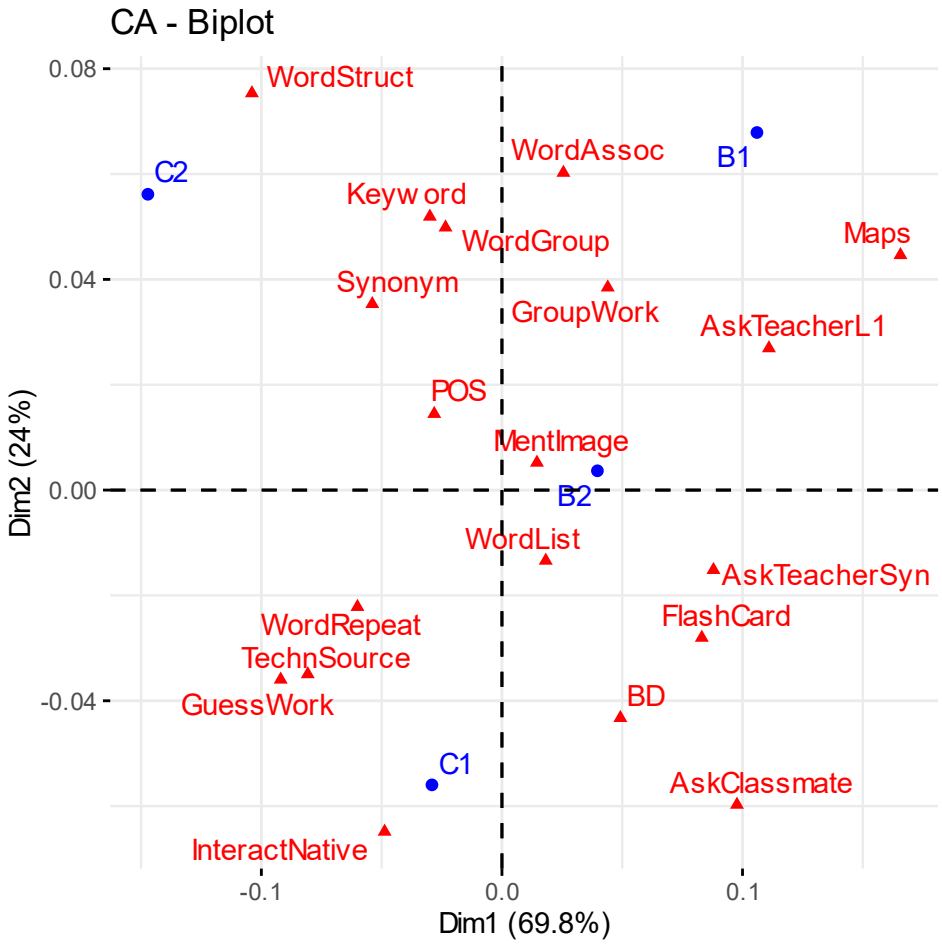


The final column in Table 2 provides p-values for binomial tests

4.2. Learners' proficiency levels and learning strategies

This subsection provides answers to the second and third research questions. To obtain a better view of the data in Table 2, they were visualised using a correspondence analysis. This analysis is a statistical method used to identify patterns in multivariate data. Figure 2 shows results of the correspondence analysis. In this biplot, the distances between different data points are meaningful, as they indicate degrees of associations between learning strategies and learners' proficiency levels. The closer the points are to each other, the stronger the association between them is. The association is strong for those data points that are located away from the centre of the plot rather than close to it. Thus, from Figure 2 it transpires that high-proficiency learners (C2) are more willing to analyse word structure, use keywords and synonyms; they (C1) also tend to interact with native speakers. Other strategies that seem to be employed by proficient learners, though to a lesser extent, include using technology-based sources (TV, radio, newscast, etc), guessing from context and asking classmates. On the other hand, less proficient learners (B1) are more likely to create semantic maps and ask teachers for help. This is not to say that these associations are significant and can be generalized to a larger population. In order to verify whether this is really the case, statistical analysis was performed (see below). When it comes to B2 learners, they do not seem to show a preference for specific strategies since the data point is located close to the centre.

Figure 2. A plot showing associations between learners' proficiency levels (from B1 to C2) and different learning strategies.[1]



To address the second research question, a chi-square test for independence was performed. The test did not show any relation between learners' use of strategies and their proficiency levels ($\chi 2 = 61.8$, $p > 0.05$).

The third research question was verified by a series of binomial tests. They were performed to check whether a given strategy was used by a specific group of learners significantly more frequently than would have been expected by chance. The test was conducted on each cell in Table 2. It was a one-

[1] The plot was created in R, which is a programming language (R Core Team 2021).

sided test, which computed the probability that the observed value was equal to chance probability.[2] The results are shown in Table 3. The values less than 0.05 indicate a statistically significant association between a certain proficiency level and a learning strategy. As can be seen, this association is observed only between C2 level and the strategy of analysing word structure (p = 0.02). Marginally significant associations are found between C2 level and synonym use (p = 0.09), and between B1 level and mapping (p = 0.08).

Table 3. p-values for the binomial tests measuring the strength of relationship between participants' proficiency levels (CEFR) and learning strategies.

Strategy	CEFR level			
	B1	**B2**	**C1**	**C2**
InteractNative	0.92	0.65	0.14	0.47
GroupWork	0.26	0.34	0.79	0.63
Maps	**0.08**	0.14	0.88	0.97
Synonym	0.69	0.59	0.7	**0.09**
MentImage	0.33	0.57	0.5	0.6
WordAssoc	0.25	0.37	0.87	0.43
WordGroup	0.56	0.44	0.82	0.2
Keyword	0.38	0.62	0.76	0.13
WordRepeat	0.84	0.73	0.25	0.21
WordList	0.69	0.3	0.57	0.69
FlashCard	0.39	0.22	0.53	0.96
TechnSource	0.98	0.72	0.19	0.12
POS	0.51	0.63	0.52	0.31
WordStruct	0.32	0.91	0.58	**0.02**
GuessWork	0.92	0.88	0.11	0.1
BD	0.27	0.57	0.21	0.93
AskTeacherL1	0.18	0.14	0.86	0.94
AskTeacherSyn	0.29	0.28	0.57	0.94
AskClassmate	0.29	0.31	0.27	0.99

5. Discussion and conclusions

The following are the answers to the research questions:

[2] The test was conducted in R using the following formula: binom.test(A, B, p=E/B, alternative="greater"), where A represents the observed value in a particular cell in Table 1, B is the sum of cells in the column, and E is the expected value in the cell. The test checks how likely it is to obtain the observed value (A) given that the probability of success in a single trial is p=E/B.

1) The experiment showed that all the strategies under study were used by learners to a lesser or greater degree. In total numbers, the most widely used techniques involved technology-based sources, synonyms, keywords, bilingual dictionaries, word repetition, and guesswork. In contrast, semantic mapping was least used, apparently because it was associated with B1 learners who constituted only 10% of all participants.

2) In general terms, the study did not show evidence for significant association between the overall use of strategies and learners' proficiency levels. In other words, we cannot claim that there is a clear trend in strategy use across proficiency levels.

3) Yet, considering particular strategies, we find that some of them were found to be used more frequently than others by specific proficiency groups. Thus, learners at C2 level declared to employ word structure analysis significantly more often than other techniques. The study also revealed marginally significant preferences for synonym use among C2 learners, and for mapping among B1 learners. C1 learners favoured interacting with native speakers and guessing words from context over other techniques (though not significantly so). B2 learners showed no clear strategy preferences.

Compared to low-proficiency students, advanced learners are more independent and autonomous since they rely more on their skills and intelligence. Both interacting with native speakers and inferring words from context are demanding activities that many advanced learners are willing to engage in, as indicated by the study. Learning new words either through word structure analysis or through synonyms requires a good knowledge of English vocabulary.

The results of this study show both similarities and differences when compared to the findings of the other studies. Firstly, regarding the overall usage of vocabulary learning strategies (VLS), the results of our study align with the results of Okyar (2021) on Turkish EFL learners, which indicates metacognitive and affective strategies were used at a high frequency. This suggests a common trend of moderate VLS utilization among language learners across different contexts (since technology-based sources is a result of globalization)

However, when considering specific strategies, our study diverges from the study by Tilfarlioglu and Bozgeyik (2012) on Turkish L2 learners in terms of the relationship between memory strategies and vocabulary proficiency levels. While Tilfarlioglu and Bozgeyik (2012) found a positive correlation between memory strategies and vocabulary proficiency, our study did not provide evidence for such a relationship. This disparity could stem from differences in learner populations, methodologies, or other contextual factors.

Furthermore, in contrast to the findings of the study by Chumworatayee and Pitakpong (2017) on English major students in a Thai university, where the overall use of VLS was moderate and the perception of usefulness was high, "our study" does not directly address the perceived usefulness of strategies. This variation suggests potential differences in learners' attitudes or beliefs regarding the effectiveness of VLS across different educational settings.

To conclude, while this study shares some commonalities with the other studies, such as the moderate frequency of VLS use, there are also notable differences in terms of the relationship between specific strategies and proficiency levels, as well as the perception of strategy usefulness.

These distinctions underscore the importance of considering contextual factors when interpreting and comparing research findings in the field of language learning strategies.

This study has a few limitations. The first one is the fact that we cannot be certain that participants gave truthful answers, a shortcoming that is not unique to this study but can be attributed to data collection through questionnaires in general. Furthermore, although participants were provided with brief and clear descriptions of learning strategies, one cannot rule out the possibility that the descriptions were insufficient for some students to explain a given technique. Some learners might have failed to understand what the strategies were, and how they could be used in EFL. For example, bilingual dictionaries could be confused with monolingual ones or any kind of dictionaries, even though the question was accompanied by an example of a bilingual entry.

In future studies it would interesting to interrogate learners about vocabulary learning strategies in a particular language learning situation, for example reading. Such a study would probably give a clearer picture of strategies taken by students. Another direction for future research would be to explore a relationship between learning strategies and other relevant factors, such as learning styles.

Conflict of Interest:

We declare that we have no conflict of interest.

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