Frequency of Use and Perceived Usefulness of Vocabulary Learning Strategies in EFL

Raič, Tea

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J.J. Strossmayer University of Osijek

Faculty of Humanities and Social Sciences

Study Programme: Double Major MA Study Programme in English Language and Literature – Teaching English as a Foreign Language and German Language and Literature

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U Osijeku, datum 16.9.2021.

Tea Raic 0122224031

ime i prezime studenta, JMBAG

ABSTRACT

Vocabulary acquisition is the process of learning words of a language. A learner needs to acquire a large number of vocabulary so that s/he could successfully communicate in a foreign language. The use of vocabulary learning strategies (VLS) helps the learners discover and consolidate the meaning of new words. Since the 1980's many researchers have researched the use and effectiveness of vocabulary learning strategies. Some of them have made their own taxonomies. The most well-known taxonomy is Schmitt's (1997) taxonomy which contains five different strategy categories: determination, social, memory, cognitive and metacognitive. An adapted version of this taxonomy was used for this study. This paper aims to investigate and compare the frequency of use and the perceived usefulness of vocabulary learning strategies in EFL of English and non-English majors in Croatia. The paper consists of two parts. The first part gives a theoretical overview of vocabulary and its acquisition, language learning strategies, vocabulary learning strategies and previous research on VLS. The second part shows the results of the research. 118 students participated in the research, 40 English majors and 78 non-English majors. A questionnaire with 46 strategies was administered among the participants. The results provide insight into the most used and most useful, as well as the least used and least useful strategies of English and non-English majors. The results show that both groups frequently use VLS and that they find them very useful.

Keywords: vocabulary acquisition, vocabulary learning strategies, strategy categories, frequency of use, perceived usefulness

SAŽETAK

Usvajanje vokabulara je proces učenja riječi nekog jezika. Učenik treba usvojiti velik broj vokabulara kako bi mogao uspješno komunicirati na stranom jeziku. Korištenje strategija učenja vokabulara pomaže učenicima u otkrivanju i učvršćivanju značenja novih riječi. Od 1980-ih mnogi su istraživači istraživali upotrebu i učinkovitost strategija učenja vokabulara. Neki od njih su napravili vlastite taksonomije. Najpoznatija taksonomija je Schmittova (1997) taksonomija koja sadrži pet različitih kategorija strategija: strategije samostalnog određivanja značenja, društvene strategije, strategije pamćenja, kognitivne strategije i metakognitivne strategije. Prilagođena verzija ove taksonomije je korištena za ovo istraživanje. Cilj ovog rada je istražiti i usporediti čestotnost uporabe i percipiranu korisnost strategija učenja vokabulara u engleskom kao stranom jeziku među hrvatskim studentima engleskog jezika i studentima drugih studija. Rad se sastoji od dva dijela. Prvi dio daje teorijski pregled vokabulara i njegovog stjecanja, strategija učenja jezika, strategija učenja vokabulara i prethodnih istraživanja o strategijama učenja vokabulara. Drugi dio prikazuje rezultate istraživanja. U istraživanju je sudjelovalo 118 studenata, 40 studenata engleskog jezika i 78 studenata drugih studija. Studentima je dan upitnik koji je sadržavao 46 strategija, a njihov zadatak je bio označiti koliko često koriste određenu strategiju i označiti koliko je po njihovom mišljenju određena strategija korisna. Rezultati daju uvid u najčešće korištene i najkorisnije, kao i u najmanje korištene i najmanje korisne strategije studenata Engleskog jezika i studenata drugih smjerova. Rezultati pokazuju da obje grupe često koriste strategije učenja vokabulara i da ih smatraju vrlo korisnima.

Ključne riječi: usvajanje vokabulara, strategije učenja vokabulara, kategorije strategija, čestotnost uporabe, percipirana korisnost

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1. INTRODUCTION

Studying a new language can be time consuming and as a person grows older it gets harder and harder to learn because of various factors like the lack of time, motivation, or simply because the memory capacity gets weaker. This is the reason why it is encouraged to teach a new language to children while they are still young. Children will first start memorizing vocabulary and its meaning and later they will learn about the grammar rules of the target language they are studying. To be able to understand a language, one needs to have a decent amount of vocabulary acquired.

Because learners have different interests and purposes of learning English, vocabulary acquisition will vary from person to person. According to Goulden et al. (1990), the average university graduate possesses a wide vocabulary repertoire with roughly17 000 base words, which indicates that the student acquires about 1 000 new words every year. Previous knowledge and different learning strategies can help the learners understand the meaning of a large number of unknown words when they first come into contact with them. Students use vocabulary learning strategies, whether they are aware of it or not. A student may use multiple vocabulary learning strategies instead of just one. Using the same strategies might not be as effective as the student gets older. Therefore, it is useful that the students get acquainted with different vocabulary learning strategies so that they can identify which ones they use and which work the best for them. This is also useful for foreign language teachers. Learning about the students' preferred vocabulary learning strategies might help adjust the teacher's teaching of vocabulary and make it more effective. Of course, vocabulary learning strategies will vary from student to student, but some of these strategies might overlap and they could be useful for future vocabulary teaching in the classroom.

The aim of this paper is to collect information on the most and least used vocabulary learning strategies among English and non-English majors, as well as to find out which vocabulary learning strategies they find the most and the least useful. This paper consists of two parts. The first part consists of a theoretical background about vocabulary and its acquisition, vocabulary learning strategies (VLS), and the previous research on VLS. The second part of the paper is empirical and consists of the aim, participants, instruments, procedure, and results.

2. VOCABULARY AND ITS ACQUISITION

The term "vocabulary" describes the unity of words and their meanings. It is a necessary element of learning a language. Possessing an adequate amount of vocabulary knowledge will help the learners understand others and express their ideas and opinions better. A wide vocabulary knowledge will also help the learners improve their productive and receptive skills. Words are of fundamental importance because they carry the meaning of languages and serve as the basis of communication. Wilkins has noted that "without grammar very little can be conveyed; without vocabulary nothing can be conveyed" (1972: 11, as cited in Lessard-Clouston, 1996). What Wilkins is trying to say is that we are more likely to be understood with the few words that we use to communicate something even though the grammar structure we use is not good, than trying to communicate with perfect grammar structure but with the lack of words we need to express ourselves. Hedge (2000) also implies that the lack of vocabulary knowledge.

Some research has been done in order to establish how many words a learner needs to learn so that he can receive input and give an output without many problems. Nation (2006:60) has noted that learners need to possess a lexicon of "around $8\ 000 - 9\ 000$ word families in order to be able to understand something", e.g. a text. Nation (2001) thinks that the most important knowledge that is necessary for successful vocabulary learning consists of the aspects of the three different sub-areas: the form, the meaning, and the use. A word's form relates to the pronunciation and spelling of the word, as well as to any word part that makes up that particular word (prefix, root, suffix). The meaning of a word refers to its definition that is given by the dictionary, as well as its synonyms. The knowledge of use refers to "the understanding of a word's grammar, collocations, and frequency of use" (Nation, 2001:181). Schmitt (2008: 333) emphasizes the importance of the "form-meaning link" and states that it is "the first and most essential lexical aspect which must be acquired". Nation (1990:31) wrote that a person needs to possess "both receptive and productive knowledge" to be able to fully comprehend a word. With receptive knowledge, we are able to receive a word's meaning through listening or reading. With productive knowledge, we are able to express and produce a word's meaning through speaking or writing. According to Laufer and Goldstein (2004:406), vocabulary can be categorized into four different levels: "active recall, passive recall, active recognition, and passive recognition. "When the learner manages to correctly use the target word, we say that he is using active recall.

When the learner is capable of understanding the meaning of the target word, we say that he is using passive recall. When a learner recognizes a word after he has been given its meaning, he is using active recognition. When a learner recognizes the meaning of a word after his analyzation of the given options, he is using passive recognition. Passive recall seems to be the most successful in L2 classrooms because the classroom practice often revolves around listening and reading tasks which promote passive and receptive activities (Webb, 2005).

Learning vocabulary can happen incidentally or intentionally. The incidental acquisition of vocabulary happens when the learner is doing an activity without the purpose of learning vocabulary, for example watching a movie in the target language. The intentional acquisition of vocabulary involves the learner doing activities with the purpose of learning new words, for example memorizing word lists. Acquiring wider vocabulary knowledge is necessary if one wants to become a proficient foreign language speaker. The way vocabulary is learned varies from person to person, because we all have different studying styles and preferences. Something that helps one person remember a word and its meaning may not work for another. This is why it is important that learners get acquainted with different vocabulary learning strategies. Once the learners are aware that there are different strategies they can try and use for learning vocabulary it will help them choose strategies that fit them the best and it will help them learn more efficiently.

Many researchers have established that VLS help learners build their vocabulary knowledge. Researchers like Nation, Oxford and Schmitt have written taxonomies for VLS which are very helpful for learning about the different types of learning strategies. Marttinen (2008:5) claims that "VLS push the learners to take more accountability for their own learning". Vocabulary acquisition is an ongoing process. By encountering the same words repeatedly, the learners will more likely be able to memorize them. Various studies have shown that a person needs to encounter the same word multiple times in order to retain it. It is natural for the learners to forget certain words they do not encounter or use frequently. If the learned vocabulary is not repeated, it will eventually be forgotten. It is assumed that up to 4/5 of the information learned is forgotten again during the first 24 hours (Thornbury, 2002). According to Schmitt (2000), words should be reviewed as soon as possible after they have been first learned and then more frequently in order to be remembered. Since the forgetting rate of newly learned words is relatively high, it can cause demotivation in learners. Some learners might get frustrated by the slow process of vocabulary acquisition. They might find it boring and monotonous which can easily lead them to give up learning. This is why learners should get familiar with different VLS.

They can try new VLS and see what works best for them. Using VLS can lead the learners to better language performances, which could, in turn, create higher self-esteem in the learners. With higher self-esteem comes a higher level of motivation for studying new vocabulary. Motivated learners will be able to achieve higher levels of proficiency than unmotivated learners.

Vocabulary can be learned in a classroom with the guidance of the teacher, as well as outside the classroom where the learner is more autonomous and looks for new words and their meaning by himself. Learning vocabulary in school in most cases leads to the teacher introducing new words and explaining their meaning as well as giving sentences that contain the new words. The learners are then expected to review the new words at home. During the next class, the teacher might give the students a short quiz to check if the students have reviewed the new vocabulary. After that, it is up to the learners to continue reviewing and using the new vocabulary so that they do not forget it. Learning vocabulary is not limited to the classroom and textbooks. The teacher can and should encourage learners' autonomy by introducing them to different vocabulary learning strategies. Autonomous learning means that the learners have the opportunity and freedom to determine their own learning goals, as well as ways they are learning. The teacher should pay attention to the difficulties learners have while studying vocabulary and then help them overcome those difficulties. The teacher can recommend different vocabulary learning strategies that he/she thinks could be suitable for the learners.

Once the learners start acquiring more and more words, they will be able to use different vocabulary learning strategies to help them acquire new words. Laufer (1997) has concluded that once the learners acquire the threshold vocabulary, which consists of around 4 800 lexical items, they will be capable of applying strategies such as context guessing which will help them understand new words. Learners that don't possess enough vocabulary might struggle to comprehend the meaning of a text they are reading or they might not understand a message while listening. They won't be able to express their opinions and thoughts while speaking or writing just because they lack vocabulary. Carter (2012) states that rote learning, bilingual translation, and glossing can assist beginners in learning new vocabulary. The difficulty of learning a word depends on its specific "learning burden" (Nation, 2001:11). The learning burden is understood as the "effort that is necessary to learn a new word" (Nation, 2001:36). According to Nation (2001:37), the learning burden will get lighter "when words start to represent patterns and knowledge that the learners are already familiar with. These patterns and knowledge of the second language".

3. LANGUAGE LEARNING STRATEGIES

Since the 1970's different researchers have conducted studies to determine what LLS are, what strategies learners use and how effective those strategies are. Many researchers have defined LLS in their own way. One of the earliest definitions of LLS is that of Ellis. Ellis (1985) described learning strategies as mental processes of acquiring and using the L2. Oxford (1990: 8) described learning strategies as "specific actions taken by the learner to make learning easier, faster, more enjoyable, more self-directed, more effective, and more transferrable to new situations". Pavičić Takač (2008: 52) combined the existing definitions of LLS and defined them as "specific actions, behaviors, steps or techniques that learners use (often deliberately) to improve their progress in the development of their competence in the target language". From the late 1980s onwards, several works on LLS appeared. Many researchers have tried to classify language learning strategies. The O'Malley & Chamot (1990) and Oxford (1990) taxonomies are two of the most famous classification systems of learning strategies. O'Malley & Chamot (1990:46) classified LLS into the following categories: "metacognitive, cognitive, and social/affective". Oxford (1990:14) divided LLS into two categories: "direct and indirect". The direct category includes "memory, cognitive, and compensation strategies" (Oxford, 1990:14). The indirect category includes "metacognitive, affective, and social strategies" (Oxford, 1990:14). Oxford's (1990:279) helped create the "Strategy Inventory for Language Learning (SILL)", which is a tool that helps the learners measure the frequency of language learning strategies that they use themselves. SILL is often used to raise awareness of learning strategies. Being aware of the different language learning strategies and using them will help the learners become more "independent, efficient, and successful" (O'Malley & Chamot, 1990:190). The number of LLS used is not decisive for the learning success. In order to achieve it, one needs to combine and use the appropriate strategies for the learning situation at hand (Oxford, 1994). Research has shown that "successful learners tend to combine and use different types of language learning strategies more often than unsuccessful learners" (Schmitt, 1997:3). Since every learner is different and has different study habits and needs, he/she will choose strategies that fit him/her the best and that are adequate for their learning situation. According to Ellis (1994:529), there are different elements, such as "individual learner differences and various situational factors "that can affect a learner's selection of learning strategies.

It is believed that "learning strategies can be taught" (Oxford, 1990:9). It is recommended that the teachers introduce as many learning strategies as they can to the learners. This is

important because not every learning strategy is equally suitable for every learner. It has been proven that the theoretical presentation of new strategies by the teacher is ineffective (Rubin et al., 2007). Learning strategies should be introduced by using practical examples. Once the learners have gone through those practical examples, they will be able to choose the learning strategies they think were the most efficient for them. This is only one of many features of language learning strategies that were pointed out by Oxford.

3.1. VOCABULARY LEARNING STRATEGIES

Vocabulary learning strategies (VLS) are seen as "a subclass of language learning strategies" (Nation, 2001:352). Pavičić Takač (2008: 106) described as "activities, behaviors, steps or techniques used by learners (often deliberately) to facilitate vocabulary learning". According to Pavičić Takač (2008: 106), VLS "can help learners discover lexical items (both their meaning and form), and to internalize, store, retrieve and actively use these in language production". Since the 1980's different researchers have conducted studies on VLS (e.g. Nation 2001, Rubin & Thompson 1994). The most popular and widely used VLS classification is Schmitt's (1997) taxonomy of VLS. Schmitt used Oxford's (1990) taxonomy to develop his own. Schmitt (1997) distinguishes between the following vocabulary learning strategy categories: social strategies (SOC) that relate to the interaction with other learners while learning a foreign language, memory strategies (MEM) that are used to link new material with existing knowledge, *cognitive strategies* (COG) that are aimed at manipulating or transforming the target language, and metacognitive strategies (MET) that help the learner control, plan, monitor or evaluate his learning process. Schmitt (1997) added another category to these four, the determination strategies (DET), which summarize vocabulary learning strategies that relate to how the learner deals with unknown words. Schmitt (1997:7) decided to divide those categories into: "discovery and consolidation strategies". Discovery strategies help the learners discover new vocabulary and its meaning. They consist of "determination and social strategies" (Schmitt, 1997:7). Consolidation strategies help learners recognize, remember as well as use vocabulary that they have already acquired. They are separated into four strategy categories: "social, memory, cognitive and metacognitive strategies" (Schmitt, 1997:7). According to Schmitt (1997:7), "some strategies can be found under both discovery and consolidation strategies", depending on the context or situation in which they are used.

With the help of a questionnaire, Horowitz (1988) found out that a lot of English language learners think of vocabulary learning as the most significant aspect of language learning. Schmitt (1997) concluded that a learner's language proficiency changes his usage of vocabulary learning strategies. Because beginners cannot use strategies that require higher levels of L2 knowledge, they opt "for mechanical strategies such as memorization or repetition" (Cohen & Aphek, 1981:223). More advanced learners use more complex strategies such as "making associations or the keyword method", which are said to result in longer retention of vocabulary (Cohen & Aphek, 1980:229). Ahmed (1989, as cited in Pavičić Takač, 2008) categorized learners into two categories based on their strategy use: successful and unsuccessful learners. Successful learners are described as learners who are conscious of their learning process. They combine different learning strategies and obtain information from other learners. Unsuccessful learners use fewer learning strategies and avoid active practice (Ahmed, 1989, as cited in Pavičić Takač, 2008). During the years, different research methods of vocabulary learning strategies have been conducted. McDonough (1995) has categorized the methods into indirect and direct methods. In the indirect methods, the learners are presented with statements and their task is to express their agreement level of each statement (e.g. questionnaire). In the direct method, the learners are expected to report the things they do while doing a language task (e.g. diary).

3.1.1. DETERMINATION STRATEGIES

Determination strategies are used when the learners want to find out the meaning of a newly encountered word by themselves, i.e. without the help of someone else. (Schmitt, 1997). Schmitt (1997) created the determination strategies category because Oxford's taxonomy had no category that describes strategies used by learners when they confronted with a new word's meaning and when they have no access to another person that could help them. Schmitt (1997:7) points out, that learners need to use "their knowledge of the language, contextual clues, or reference materials to figure out the meaning of the word they have encountered for the first time".

The roots and affixes of words can give the learners hints about the possible meaning of the new word, but that's not seen as always reliable (Schmitt, 1997). Clarke and Nation (1980) recommend that guessing from roots and affixes of words gets used only to confirm guesses from context or else it could lead to erroneous meanings. Cognates are words from different languages that "share the same origin", so they look or sound similar (Schmitt, 1997:10). They can help predict the meaning of and memorize new words "if the target language is closely linked to the learner's L1" (Schmitt, 1997:10). Guessing from context is a strategy frequently used by learners. Most of the time it means "inferring a word's meaning from the surrounding words in a written text" (Schmitt, 1997: 10) however, learners can also guess the meaning of an unknown word through pictures, gestures, or intonation. In order to successfully guess an unknown word's meaning, "a learner needs to possess a specific proficiency level, sufficient background knowledge of the subject and the context itself must contain enough hints to enable guessing" (Schmitt, 1997:11). Using dictionaries is another method for determining the meaning of a newly encountered word. The learners can choose between bilingual and monolingual dictionaries. According to Schmitt (1997:11) L2 learners seem to use "bilingual dictionaries more than monolingual dictionaries" The reason for this might be that the learners find it easier to understand the meaning of new words if it is explained in their L1. Word lists and flashcards are usually used for the revision of words. However, after some research, Nation (1982:24) concluded that "the average learner is able to learn a large number of words by using word lists and flashcards". According to Nation (1982:21), word lists can be useful for "initial exposures to a new word", but after that, those word lists should be filled in with more information which will then help the learner retain the new words.

3.1.2. SOCIAL STRATEGIES

Social strategies involve the interaction with "a teacher, classmate, friend, or a native speaker in order to determine the meaning of a word" (Schmitt, 1997:6). These strategies push the learners to engage and learn from one another. The learner might "ask a teacher or classmate for a translation, synonym, paraphrase or sentence that contains the new word" (Schmitt, 1997:11). According to Schmitt (1997) learners are able to easily comprehend a word's meaning when they are given an L1 translation. However, this can result in erroneous meanings since "some words do not have equivalents in another language" (Schmitt, 2000:81). The effectiveness of the transmission of the meaning of a word relies on "the skill of the teacher, the proficiency of

the learner, and the presentation of the definition" (Nation, 2001:122). According to Nation (2001:125), "teachers may use an action, object, picture, translation, or definition" when teaching new words. The definitions should be short, clear, and simple when taught.

Social strategies are made up of "asking questions, cooperating with others, and empathizing with others" (Oxford, 1990:146). Learners can ask questions for "clarification or verification of information" (Oxford, 1990:146). Either way, "asking questions helps the learners get closer to the intended meaning and it aids their understanding" (Oxford, 1990:145). Learners can also ask someone for correction. This often occurs during a conversation but it can also occur in writing (Oxford, 1990:147). Cooperating with others creates positive interdependence and mutual support (Oxford, 1990). Cooperation in language learning offers advantages such as "stronger language learning motivation, more language practice opportunities, more feedback about language errors, and greater use of different language functions" (Oxford, 1990:146). Therefore, pair and group work are very useful for the discovery of the meaning of new words. Communicating with a native speaker of the target language also promotes social strategies and enhances the learners' vocabulary acquisition (Schmitt, 1997). According to Oxford (1990), social strategies can enhance the learners' ability to empathize with others. Developing empathy while learning another language can be difficult but not impossible. This can be done by "developing cultural understanding and by becoming aware of other people's thoughts and feelings" (Oxford, 1990:147).

3.1.3. MEMORY STRATEGIES

Memory strategies are used when a learner wants to retain and recall information (Schmitt, 1997). They involve "mental processing that facilitates the recall of words" (Schmitt, 2000:135). According to Schmitt (1997), a learner can integrate a new word into already existing knowledge or create images for retrieval of information. Memory strategies include imagery, word association, grouping, collocation, the keyword method, and many more. Among the 27 memory strategies that Schmitt (1997) listed, he identified imagery as the possibly most effective vocabulary learning strategy. Learners can learn new words by "pairing them with their corresponding pictures, by creating their own mental images of a word's meaning, or by associating the new words with a personal experience" (Schmitt, 1997:13). Learners can also "link or group new words to already known L2 words" to help word retention (Schmitt,

1997:13). A word's orthographical and phonological form, as well as the knowledge of a word's parts, can be helpful for the recall of words (Schmitt, 1997).

3.1.4. COGNITIVE STRATEGIES

Cognitive strategies refer to the "manipulation or transformation of the target language by the learner" (Oxford, 1990: 43). Those strategies involve "repetition and mechanical means to study vocabulary" (Schmitt, 1997:16). Schmitt (1997:136) pointed out that "cognitive strategies resemble memory strategies, but they do not focus on manipulative mental processing". Word lists, for example, can be used for the interpretation of the meaning of a word, as well as for later reviewing of words. According to Oxford (1990), learners prefer using cognitive strategies. By using cognitive strategies, the learners can understand the subject matter better and apply it in practice. Some cognitive strategies are written and verbal repetition, word lists, flashcards, taking notes, labelling etc. The most commonly used cognitive strategies are written and verbal repetition (Schmitt, 1997). Repeating the words orally or in written form will help the learners remember them. Cognitive strategies are important for vocabulary acquisition because they involve practice. Strategies that promote practice are repetition, recognizing patterns, and recombining (Oxford, 1990).

3.1.5. METACOGNITIVE STRATEGIES

Metacognitive strategies give the learners a general overview of their learning process (Schmitt, 1997). They help the learners control, monitor, and plan their learning process (Schmitt, 2000). According to Oxford (1990:136), metacognitive strategies are of great importance because they "help learners stay focused on their language learning and they help them control their learning process and progress". Schmitt (1997:9) listed 5 metacognitive strategies in his taxonomy: "using English language media, testing oneself with word tests, using spaced word practice, skipping or passing new words, and continuing to study the new word over time". Using English language media is a strategy that is very effective for vocabulary learning. It is important that the learners are constantly exposed to the L2 to efficiently acquire it (Schmitt, 1997). This can be done by reading books, magazines, or by watching movies in the target language. To check their learning progress, the learners can test themselves with word tests.

Testing oneself with word tests will show the learners how effective their choice of learning strategies is. Based on that, the learners can decide to continue using the same strategies or to switch strategies (Schmitt, 1997). Using spaced word practice is important for vocabulary acquisition. Majority of forgetting occurs right after the end of a learning session, which is why it is recommended that the learners space out their studying and practice sessions. Learners should review new words "soon after the initial encounter and then at gradually increasing intervals" (Schmitt, 1997:17). It is not possible for L2 learners to memorize all words of their target language. The learners need to decide for themselves which words they want to skip or pass. The learners usually skip or pass low-frequency words because there is a probability that they will not encounter those for a very long time (Schmitt, 1997).

3.2. PREVIOUS RESEARCH ON VOCABULARY LEARNING STRATEGIES

Three kinds of studies on vocabulary learning strategies have been conducted in previous research. The first type of study describes the differences between successful and unsuccessful language learners. The second type of study analyses the use and perceived usefulness of vocabulary learning strategies. The third type of study monitors the changes in strategy use over time.

Sanaoui (1995) conducted a study in which she observed FLE learners. Sanaoui (1995) divided the learners into two groups according to their approach to vocabulary learning. The two approaches are *the structured approach* and *the unstructured approach*. Sanaoui (1995) found out that learners that use the structured approach tend to look for opportunities for independent vocabulary learning in and outside the classroom, they possess an extensive range of self-initiated activities, they tend to extensively record vocabulary and they review vocabulary every chance they get. Learners that use the unstructured approach rely more on the course and they do minimal independent learning, their self-initiated activities are restricted, they do minimal vocabulary recording and they do little or no reviewing of vocabulary. Sanaoui (1995:26) concluded that "learners who had a structured learning approach".

Lessard Clouston (1996) conducted a study with ESL learners. He used a modified version of Sanaoui's (1995) questionnaire that Lessard Clouston (1996) added a third vocabulary

learning approach, i.e. *the semi-structured approach* to the two that Sanaoui (1995) had mentioned in her study. He used a slightly modified version of Sanaoui's (1995) points for classification to order the learners into the three groups. If the students met all five criteria they were classified as structured vocabulary learners. If the students met four out of the five criteria they were classified as semi-structured vocabulary learners. And if the students met less than four criteria they were classified as unstructured vocabulary learners. Lessard Clouston (1996:114) concluded that "a learner's vocabulary learning approach cannot predict his or her performance on a vocabulary test and it is not an indicator of his or her language proficiency".

Schmitt (1997) did a research with 600 Japanese EFL learners in order to find out which VLS they use and how helpful they think those strategies are. A survey was given to four groups of learners: junior high school students, high school students, university students, and adult learners. The survey that was used consisted of explanations of strategies and the students were asked to indicate whether they used a particular strategy or not and whether they thought the strategy was useful or not. In case a learner did not use a certain vocabulary learning strategy he could still give feedback by indicating if he or she found the strategy useful. The results showed that the learners preferred using dictionaries, guessing meaning from context, focusing on word forms, and verbal and written repetition. Schmitt's (1997:25) study confirmed that "the pattern of strategy use changes over time", e.g. the use of written repetition decreases as Japanese learners mature. Schmitt (1997) notes that strategies that involve deeper processing become more important as learners mature. Schmitt (1997:25) pointed out that his study does not explain why the patterns of strategy usage change, but according to previous research, "language proficiency, the type of task being done, and culture" could play an important part in the selection of strategies.

Fan (2003) conducted a study to collect data on the strategy use of 1067 Hong Kong students. She used a vocabulary test and a vocabulary learning strategy questionnaire for data collection. With the vocabulary test Fan (2003:225) wanted to "identify students who were proficient in English vocabulary". With the vocabulary learning strategy questionnaire Fan (2003:226) wanted to "investigate which strategies the students use while studying and to identify strategies that may lead to success in learning L2 vocabulary". Fan (2003:228 discovered through her study "that students used and considered useful strategies for reviewing and consolidating their knowledge of known words and that they preferred using strategies that involve a dictionary". The research showed that the keyword technique was used the least by students and that the students perceived that strategy as not useful. Fan (2003) concluded that

teachers should help learners understand the importance of strategy use and expose them to strategies that are often used by proficient vocabulary learners, as well as encourage them to implement strategies that will be effective for their own learning.

Bennett (2006) conducted a study with students of an intensive English teaching program that were intending to enter universities in the United States. With this study, Bennett (2006) wanted to find out if there are any changes in the study behavior of the students over a threemonth period. According to Bennett (2006), the usage of vocabulary learning strategies is an indication of the learners becoming more independent and successful learners. Bennett (2006) decided to give the students a simple survey that was based on the previous work by Fan (2003) and Schmitt (1997), both at the beginning and the end of their course to see if there are any changes in their study behavior. He adopted the five-point Likert scales from Fan and Schmitt's taxonomy of vocabulary strategies. The study showed that determination strategies were used the most, both at the beginning and at the end of the course. At the beginning of the course the learners did not perceive determination strategies as more useful than social or cognitive strategies, but the second survey showed that the learners saw determination strategies as the most useful. Bennett (2006:34) notes that this might be the result of "the course requiring the students to use determination strategies as they progress into more challenging levels". The second survey showed an increase in using pictures or gestures for guessing, guessing from context, checking the form of the word, and dictionary usage. The first survey showed that social strategies are sometimes used by the learners but the results of the second survey revealed that the usage of social strategies has drastically dropped. According to Bennett (2006), the learners are encouraged to be independent, i.e. to first try to guess the meaning by themselves or to use a monolingual dictionary. Only if that fails should the learners ask a classmate or the teacher for the meaning of the unknown word. Memory strategies remained consistent during the research period. Studying the sound of a word and saying the word aloud when it is first encountered were most frequently used by the students and seen as the most useful strategies among the memory strategies. The research showed that the students regarded memory strategies as quite useful but they still obtained the lowest usefulness rating among the other strategies. The results for cognitive strategies have stayed consistent. Cognitive strategies have shown the highest results of all consolidation strategies, both in their usage and perceived usefulness. Metacognitive strategies were the least used strategies in both surveys but at the same time, they were perceived as being among the most useful strategies. Bennett (2006) also surveyed teachers to determine the characteristics of successful vocabulary learners. According to the teachers that were surveyed, "successful vocabulary learners have an introspective attitude toward learning, find opportunities for vocabulary enhancement on their own, and are organized and methodical about learning vocabulary" (Bennett, 2006:49). This study has shown some evidence of learners' change in study behaviour, but further research is still encouraged.

4. RESEARCH ABOUT THE FREQUENCY OF USE AND PERCEIVED USEFULNESS OF VOCABULARY LEARNING STRATEGIES IN EFL

4.1. AIM

The aim of this study was to investigate the relationship between the frequency of use and the perceived usefulness of vocabulary learning strategies of English and non-English majors. This study was conducted by following the example of Schmitt's (1997) and Bennet's (2006) study. Both of the studies researched the use and perceived usefulness of vocabulary learning strategies by Japanese learners. This study aimed to answer the following three questions:

- 1. What vocabulary learning strategies do English and non-English majors use the most and which do they perceive to be the most useful?
- 2. What vocabulary learning strategies do English and non-English majors use the least and which do they perceive to be the least useful?
- 3. What discrepancies are there between the two groups' use of vocabulary learning strategies and the perceived usefulness?

4.2. PARTICIPANTS

The participants of this research were 118 Croatian students ranging in age from 19 to 26. The students that participated in the research attend different universities. One hundred thirteen students attend a university in Osijek, three in Slavonski Brod, and 2 in Vukovar. The students were asked about their English proficiency level. The two most common proficiency levels among the participants were B2 and C1. Forty-seven out of one hundred thirteen students

(39.8%) chose B2 as their proficiency level, thirty-eight of them (32.2%) chose C1, fifteen of them (12.7%) chose B1, nine of them (7.6%) chose C2, seven of them (5.9%) chose A2 and two of them (1.7%) chose A1 (*Figure 1*).

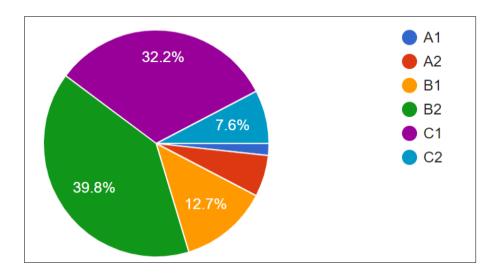


Figure 1: Proficiency level of the participants

The students were also asked to write the number of years they have been studying English. Ninety-seven students (82.2%) wrote that they have been studying English for ten or more years. Twenty-one students (17.8%) wrote that they have been studying English for nine or less than nine years. For this study, the participants are grouped into English majors and non-English majors. Thirty-seven students (31.4%) that have participated in this study are English majors. Eighty-one students (68.6%) are non-English majors from various study fields. This study will compare the use and perceived usefulness of vocabulary learning strategies of English and non-English majors.

4.3. INSTRUMENTS AND PROCEDURE

The participants of this study were sent a Google form questionnaire that was adopted from Bennet (2006). Bennet's (2006) questionnaire was based on the previous research work from Schmitt (1997) and Fan (2003). The questionnaire questioned students on their use and perceived usefulness of vocabulary learning strategies that were listed. It contained 46 strategies (7 determination, 8 social, 19 memory, 9 cognitive, 3 metacognitive) that were presented in

English. A five-point Likert scale was used to mark how often a vocabulary learning strategy is used and to mark how useful a vocabulary learning strategy is. Both the questionnaire and the Likert scale that was used in this research were chosen for their comprehensiveness. The questionnaire was made up of three parts: writing general information, marking how often a strategy is used, and marking the perceived usefulness of a strategy. At the beginning of the questionnaire, the students were asked to report their gender, age, the university they attend, their university major, the number of years they have been studying English for, and their English proficiency level. In the next part, the students were asked to mark how often they use a certain strategy when they encounter a new word that they don't know, when they want to remember new words, and when they want to build their vocabulary. For this they were given five choices: *never, seldom, sometimes, often,* and *very often.* In the next part, the students were required to mark how useful they perceived a strategy to be. For this they had five choices: *not useful, not sure if it is useful, quite useful, very useful,* and *extremely useful.*

5. RESULTS AND DISCUSSION

The following section will present and comment on the data that was gathered through the questionnaire. The strategies that the 118 students use the most and find the most useful, as well as the strategies that the students use the least and find the least useful will be presented first. The later sections of this paper will show the individual findings of the two researched groups of students, as well as any discrepancies between the two groups.

5.1. OVERALL RESULTS

118 students were given a questionnaire in which they had to rate how often they used and how useful they thought certain strategies were. The results were then enlisted for easier overview.

| Most Used | Most Useful |
|---|---|
| 1. Guess from context | 1. Use English language media |
| 2. Use English language media | 2. Interact with native speakers |
| 3. Say the new word aloud when studying | 3. Use Croatian-English dictionary |
| 4. Make a word list of new words | 4. Guess from context |
| 5. Study new words many times | 5. Use new words in sentences |
| 6. Ask a classmate for the meaning | 6. Say the new word aloud when studying |
| 7. Connect the word to a personal | 7. Make a word list of new words |
| experience | 8. Test myself with word tests |
| 8. Make a mental picture of the word's | 9. Write the words many times |
| meaning | 10. Study new words many times |
| 9. Connect the word to other words with | |
| similar or opposite meanings | |
| 10. Use new words in sentences | |

Table 4.1 Overall: Most used and most useful strategies

Overall results show that students often use vocabulary learning strategies and that they find them to be very useful. Among the top ten most used and most useful strategies, six strategies were both rated as most used and most useful. Those are: *guessing from context, using English language media, saying the new word aloud when studying, making a world list of new words, studying new words many times,* and *using new words in sentences*. The strategy that was rated as the most used strategy by the students was *guessing from context,* which belongs to the determination category. This strategy was also ranked as one of the most useful strategies by the students. The strategy that was perceived as the most useful strategy among the students is *using English language media,* which belongs to the metacognitive category. This is not surprising because the young generation today enjoys watching movies, reading articles, etc. in other languages, and because it is something that people usually do to enjoy themselves it can be used as an enjoyable study process. This also shows that the students think that listening to someone talk in English or reading something written in English can help them improve their vocabulary skills. *Interacting with native speakers* was therefore also ranked as one of the most useful strategies. This shows that the students think that it is important to practice their English skills by

speaking with somebody that could also teach them how to appropriately use new words and in what contexts to use them. Saying the new word aloud was perceived as more useful than it was actually used but it still ranked in the top five most used strategies. Making a word list of new words is a strategy that the students are most probably conscious of. They use it knowing that it will help them review the words later on. It can also be combined with the *studying new words* many times strategy, which was ranked as the fifth most used and tenth most useful strategy. This shows that the students value revision when it comes to learning new words. Using new words in sentences has been perceived as one of the most useful strategies, but it got the same frequency of use rating as making a mental picture of the word's meaning and connecting the word to other words with similar or opposite meanings. Interestingly enough the use of dictionaries was not ranked as the most used strategy but the use of Croatian-English dictionary ranked at the third place of the most useful strategies. This might be because students today rarely use dictionaries at schools and universities because all the new words get explained by the teachers and professors in class. Even though the students are not using dictionaries that often, they still perceive them as one of the most useful strategies for discovering a word's meaning. Other most used strategies include: asking a classmate for the meaning and connecting the word to a personal experience. Other most useful strategies include: testing myself with word tests and writing the words many times.

| Least Used | Least useful |
|---|---|
| 1. Put English labels on physical objects | 1. Underline the initial letter of the word |
| 2. Listen to a tape of word lists | 2. Use physical action when learning a |
| 3. Underline the initial letter of the word | new word |
| 4. Ask the teacher to check my definition | 3. Remember the word using its parts |
| 5. Ask the teacher for an L1 translation | 4. Check if the word is also a Croatian |
| 6. Ask the teacher to give me a sentence | word |
| using the new word | 5. Remember the words that follow or |
| 7. Study and practice the meaning in a | precede the new word |
| group | 6. Remember the words in scales |
| 8. Use physical action when learning a | 7. Put English labels on physical objects |
| new word | 8. Listen to a tape of word lists |
| 9. Ask the teacher for a definition or a | 9. Study and practice the meaning in a |

| synonym of the new word | group |
|---------------------------------------|---------------------------------|
| 10. Remember the word using its parts | 10. Remember the part of speech |

Six strategies can be found in table 4.2 that are rated as both the least used and least useful. These are: putting English labels on physical objects, listening to a tape of word lists, underlining the initial letter of the word, studying and practicing the meaning in a group, using physical action when learning a new word, and remembering the word using its parts. The strategy that is least used by the students is putting English labels on physical objects. This strategy might seem like a tedious task or something inconvenient to the students, which could be the reason why the students do not use this strategy. Listening to a tape of word lists is also a strategy that is the least used and perceived as not so useful. This could be because the students focus more on the written form of words while studying them, rather than on their spoken form. This could be attributed to the fact that most students get tested through written vocabulary exams. The strategy that was rated as the least useful is underlining the initial letter of the word. This strategy was also ranked as the third least used strategy. This is probably due to the fact that students do not understand that by underlining the first letter of a word they are focusing on word recognition. Using physical action when learning a new word was also rated as the least useful strategy, and as one of the least used strategies. Even though this strategy can be used as a way to recall newly learned words, it might not be that effective for more advanced students. The results also show that the students do not see how *remembering the word using its parts* could be useful, and therefore they do not use it that often. Studying and practicing the meaning in a group is both one of the least used and least useful strategies of the surveyed students. This can mean that the students prefer studying alone and that they find studying and practicing in a group distracting. Other strategies that were rated as the least useful belong to the social category, those are: asking the teacher to check my definition, asking the teacher for an L1 translation, asking the teacher to give me a sentence using the new word, and asking the teacher for a definition or a synonym of the new word. Seeing that the students do not use these strategies that often, it seems that they prefer studying new words by themselves and without the help of a teacher. Other strategies that were rated as the least useful are: checking if the word is also a Croatian word, remembering the words that follow or precede the new word, remembering the words in scales, and remembering the part of speech.

The results have shown that the students mostly use one determination and one social strategy for determining a word's meaning. For consolidating the meaning of a word the students

mostly use five memory, one cognitive, and two metacognitive strategies. The students rated two determination, one social, two memory, two cognitive, and three metacognitive strategies as the most useful. There are no determination or metacognitive strategies among the least used strategies, but there are five social, three memory, and two cognitive strategies. No social or metacognitive strategies can be found among the least useful strategies, but there is one determination, one social, six memory, and two cognitive strategies. Based on these findings it is visible that the students prefer using memory strategies and that they find metacognitive strategies the most useful strategies.

5.2 ENGLISH MAJORS RESULTS

English majors use vocabulary learning strategies often and they perceive them as very useful. Among the forty-six listed strategies, two strategies were reported to be used either very often or often and one strategy was reported to be either extremely useful or very useful. It seems that English majors are very aware of their strategy use and that they have the motivation to try many of them out to find the strategies that work the best for them.

| Most Used | Most Useful |
|---|--|
| 1. Guess from context | 1. Use English language media |
| 2. Use English language media | 2. Use new words in sentences |
| 3. Connect the word to a personal | 3. Use Croatian-English dictionary |
| experience | 4. Use an English-English dictionary |
| 4. Use new words in sentences | 5. Interact with native speakers |
| 5. Make a word list of new words | 6. Test myself with word tests |
| 6. Use an English-English dictionary | 7. Guess from context |
| 7. Connect the word to other words with | 8. Ask the teacher for a definition or a |
| similar or opposite meanings | synonym of the new word |
| 8. Say the new word aloud when studying | 9. Connect the word to a personal |
| 9. Make a mental picture of the word's | experience |
| meaning | 10. Ask a classmate for the meaning |

Table 4.3 English majors: Most used and most useful strategies

| 10. Make my own definition | 11. Connect the word to other words with |
|--------------------------------|--|
| 11. Study new words many times | similar or opposite meanings |
| | 12. Say the new word aloud when studying |

There are eleven strategies in table 4.3 that are listed as the most used and twelve strategies that are listed as the most useful. This is because some strategies got the same rating so all of them were included in the list. Seven strategies were rated as being both the most used and most useful by English majors. Those are: guessing from context, using English language media, connecting the word to a personal experience, using new words in sentences, using an English-English dictionary, connecting the word to other words with similar or opposite meanings, and saying the new word aloud when studying.

The two most used strategies by English majors are guessing from context and using *English language media.* The students claim to use these two strategies either very often or often. Using English language media was also rated as the most useful strategy. This is not surprising because English majors are obviously highly interested in the English language and they are motivated to learn more about it. They expose themselves to different types of English language media more than to Croatian language media. Because of their higher level of vocabulary knowledge, they are able to guess the meaning of unknown words just by looking at the context. Using new words in sentences is the second most useful and fourth most used strategy. English majors have participated in classes where their vocabulary was often tested. Instead of simply writing the definitions of some words they also had to use the words in sentences to show that they also understand in which context the words can be used. The students might have discovered that this strategy works well for them and that is why they have rated it as very useful. Surprisingly English majors rated using Croatian-English dictionaries as more useful than using English-English dictionaries; however, the results show that they prefer using an English-English dictionary. Connecting the word to other words with similar or opposite meanings has also been often used by English majors and seen as one of the most useful strategies. This strategy has gotten the same rating as asking a classmate for the meaning and saying the new word aloud when studying in terms of the perceived usefulness. Saying the new word aloud when studying is a strategy often used by English majors. This strategy helps the students focus on the spoken form of the word and it can help their retention if the word gets repeatedly spoken aloud. Connecting the word to a personal experience was also rated as one of the most used and most useful strategies. It seems that English majors find it easier to remember

new words when they are able to associate them with their life. Other most used strategies are: *making a word list of new words, making a mental picture of the word's meaning, making my own definition,* and *studying new words many times.* Other most useful strategies are: *using Croatian-English dictionary, interacting with native speakers, testing myself with word tests, asking the teacher for a definition or a synonym of the new word, and asking a classmate for the meaning.*

According to table 4.3, the students rated two determination, six memory, one cognitive, and two metacognitive strategies as the most used strategies. Furthermore, the students rated three determination, three social, four memory, and two metacognitive strategies as the most useful strategies. Even though three social strategies were listed among the most useful strategies, they were not one of the most used strategies by English majors. The most useful strategies also lack strategies from the cognitive category.

| Least Used | Least Useful |
|---|---|
| 1. Underline the initial letter of the word | 1. Underline the initial letter of the word |
| 2. Put English labels on physical objects | 2. Check if the word is also a Croatian |
| 3. Ask the teacher to check my definition | word |
| 4. Listen to a tape of word lists | 3. Remember the words that follow or |
| 5. Ask the teacher to give me a sentence | precede the new word |
| using the new word | 4. Remember the word using its parts |
| 6. Study and practice the meaning in a | 5. Remember the words in scales |
| group | 6. Listen to a tape of word lists |
| 7. Use physical action when learning a | 7. Use physical action when learning a |
| new word | new word |
| 8. Ask the teacher for an L1 translation | 8. Put English labels on physical objects |
| 9. Ask the teacher for a definition or a | 9. Discover the new meaning through |
| synonym of the new word | group work activity |
| 10. Interact with native speakers | 10. Group words together to study them |

Table 4.4 English majors: Least used and least useful strategies

Table 4.4 shows the least used and least useful strategies of English majors. Among the top ten strategies, four strategies were rated as both the least used and the least useful strategies. Those are: underlining the initial letter of the word, putting English labels on physical objects, listening to a tape of word lists, and using physical action when learning a new word. The least used, as well as the least useful strategy that was rated by English majors, is underlining the initial letter of the word. Even though this strategy helps with word recognition, the students probably do not consider it as effective as highlighting the words. Putting English labels on physical objects got the same frequency of use rating as underlining the initial letter of the word. This is probably due to the fact that English majors already possess a high vocabulary level so they already know the English terms for the objects they see and use in their everyday life. The results also show that English majors do not listen to a tape of word lists that often and that they do not find it useful. This could be because students like to see the written form of the word and say the word aloud when studying it, rather than just listen to a tape. The students also rarely use physical action when learning a new word and they do not see how it could be useful. This is a strategy that is mostly used by beginners, so it is not a surprise that it is not used by English majors. Surprisingly six social strategies were found among the least used strategies. Because these students study English, it would be expected that they look for any opportunity where they could use their English skills. Since four of the social strategies involve a teacher, it seems that English majors prefer autonomous learning. The fourth social strategy is interacting with native speakers. The surveyed students do not have native English speakers as professors but they are exposed to social media and other platforms where they could potentially find someone to communicate in English, but it seems like the students are not interested in that type of communication. One social strategy can be found among the least useful strategies, which is discovering the new meaning through group work activity. English majors have lots of opportunities at university to work in groups or pairs. It seems like this strategy was either not so helpful for the students or that they simply prefer working alone when it comes to learning the meaning of new words. Other strategies that are considered least useful by English majors are: checking if the word is also a Croatian word, remembering the words that follow or precede the new word, remembering the word using its parts, remembering the words in scales, and grouping words together to study them. No determination and metacognitive strategies were among the least used strategies by English majors, and no metacognitive strategies were among the least useful strategies.

The results have shown that English majors, probably consciously, use a variety of VLS. Most of the students have shown a preference for the same VLS. This is not a surprise since they all have a big interest in common which is the English language. English majors have the same goal and that is to either work as EFL teachers or translators and therefore they are motivated to expand their vocabulary knowledge. They make a lot of effort during their classes as well as in their free time to learn more. They are also constantly exposed to the English language since their classes are all held in English. Even in their free time, English majors like to read articles, books, watch movies or series in English. All of this exposure to the English language can naturally lead the students to explore new ways to discover the meaning of unknown vocabulary. Certain university classes introduce different VLS to the students which they can then try out and decide to use in the future if they find them effective. The results also show that English majors rarely use VLS that involve interaction with another person, which means that they prefer autonomous learning. Not a single social strategy has made it on to the list of the most used strategies. This is a little bit unexpected because most classes that English majors take encourage the use of social strategies and social interaction will be a part of their future work if they have chosen teaching as their career path. Since English majors are advanced English learners it is not a surprise that they tend to guess the meaning of words through context or that they learn new vocabulary through English media. Even though they have stated that they guess the meaning of words from context very often, it is surprising that most of them have rated bilingual dictionaries as more useful than monolingual dictionaries. If they have no problems with guessing from context, then they also should not have problems with using a monolingual dictionary to find out the meaning of a word. Looking at the results, only one cognitive strategy has made it on to the most used strategies list, but none have made it on to the most useful strategies list. This shows that English majors do not like to use strategies that involve repetition to study new vocabulary. They rely more on memory strategies and they find those very useful.

5.3. NON-ENGLISH MAJORS RESULTS

Non-English majors often use vocabulary learning strategies and they perceive them as useful. Most of them have been studying English for more than five years and they rated themselves mostly as intermediate learners.

| Most Used | Most Useful |
|--------------------------------------|---|
| 1. Guess from context | 1. Use English language media |
| 2. Use English language media | 2. Interact with native speakers |
| 3. Say the new word aloud when | 3. Guess from context |
| studying | 4. Use Croatian-English dictionary |
| 4. Ask a classmate for the meaning | 5. Say the new word aloud when studying |
| 5. Make a word list of new words | 6. Write the words many times |
| 6. Study new words many times | 7. Make a word list of new words |
| 7. Make a mental picture of the | 8. Take notes or highlight new words in |
| word's meaning | class |
| 8. Take notes or highlight new words | 9. Use new words in sentences |
| in class | 10. Study the sound of a word |
| 9. Write the words many times | 11. Repeat the words aloud many times |
| 10. Use Croatian-English dictionary | 12. Study new words many times |

 Table 4.5 Non-English majors: Most used and most useful strategies

Eight strategies were rated as both most used and most useful by non-English students. Those are: guessing from context, using English language media, saying the new word aloud when studying, making a word list of new words, studying new words many times, taking notes or highlighting new words in class, writing the words many times, and using a Croatian-English dictionary.

The most used strategy among non-English majors is *guessing from context*. This is not a surprise since the students that were surveyed identified themselves to be mostly intermediate and upper-intermediate learners. *Using English language media* is the second most used, and first most useful strategy. This strategy allows the students to discover new words by themselves and since today almost everyone has access to the Internet, it is not hard for non-English majors to access any type of English media. The students can also combine this strategy with *guessing from context. Saying the new word aloud* when studying is another strategy that was rated as both most used and most useful. With this strategy, the learners are concentrating on the pronunciation of the word. The students have probably used this strategy in their former English classes where they had to repeat the words after their teacher. *Using a Croatian-English dictionary* is another strategy that was perceived as one of the most useful strategies, but the

students used it less than they perceived it as useful. The reason for this could be that the students find it easier to ask someone else to explain the meaning of a word to them or to guess from context, rather than looking it up in a dictionary. The students also rated *studying new words many times* and *writing the words many times* as the most used and most useful strategies. This shows that non-English students rely on repetition for word retention. *Making a word list of new words* is another frequently used strategy by non-English majors. Word lists can be used for rote learning which is a popular way of learning words for students that are not interested in the English language, so they just learn the words they need to know for an exam. Non-English students of review. Other strategies that were rated as most used are: *asking a classmate for the meaning* and *making a mental picture of the word's meaning*. Some other strategies that were rated as most useful are: *interacting with native speakers, using new words in sentences, studying the sound of a word,* and *repeating the words aloud many times*.

| Least Used | Least Useful |
|---|---|
| 1. Put English labels on physical objects | 1. Underline the initial letter of the word |
| 2. Listen to a tape of word lists | 2. Use physical action when learning a |
| 3. Ask the teacher to check my definition | new word |
| 4. Underline the initial letter of the word | 3. Remember the word using its parts |
| 5. Ask the teacher for an L1 translation | 4. Check if the word is also a Croatian |
| 6. Use physical action when learning a | word |
| new word | 5. Remember the words in scales |
| 7. Ask the teacher for a definition or a | 6. Remember the words that follow or |
| synonym of the new word | precede the new word |
| 8. Ask the teacher to give me a sentence | 7. Put English labels on physical objects |
| using the new word | 8. Study and practice the meaning in a |
| 9. Study and practice the meaning in a | group |
| group | 9. Remember the part of speech |
| 10. Remember the word using its parts | 10. Analyze word parts in order to guess |
| | the meaning of a word |
| | 11. Use new words to make a story |

Table 4.6 Non-English majors: Least used and least useful strategies

Five strategies can be found in table 4.6 that are both in the least used and least useful category. These are: *putting English labels on physical objects, underlining the initial letter of the word, using physical action when learning a new word, studying and practicing the meaning in a group,* and *remembering the word using its parts.*

The strategy that is the least used by non-English majors is *putting English labels on* physical objects. Since most of the students that participated in the research are not beginners, this strategy would not be that useful to them because they probably already know the names of everyday objects they encounter during their day. The strategy that is perceived as the least useful by non-English majors is underlining the initial letter of the word. This strategy is also one of the least used strategies. Non-English majors also find that remembering the word using its parts is not that useful and they do not use it often. Using physical action when learning a new word was rated as the second least useful and sixth least used strategy. The students might see this strategy as unnecessary because they can use other strategies to remember and recall words. The results also show that the students do not understand how remembering the word using its parts could be useful. Five social strategies can be found under the least used strategies category, those are: asking the teacher to check my definition, asking the teacher for an L1 translation, asking the teacher for a definition or a synonym of the new word, asking the teacher to give me a sentence using the new word and studying and practicing the meaning in a group. This indicates that non-English majors prefer autonomous learning and they might think that studying in groups is distracting. Meanwhile, only one social strategy was rated as one of the least useful strategies, and that is studying and practicing the meaning in a group. One other strategy that was rated as one of the least used ones is *listening to a tape of word lists*. Other strategies that were perceived as the least useful are: checking if the word is also a Croatian word, remembering the words in scales, remembering the words that follow or precede the new word, remembering the part of speech, analyzing word parts in order to guess the meaning of a word and using new words to make a story. No determination and metacognitive strategies can be found in the least used strategies category. The least used strategies category also does not contain any metacognitive strategies.

The results of the questionnaire show that non-English majors are fully aware of the usefulness of VLS. Non-English majors have rated most VLS as more useful than they actually used them. This is not surprising since English is not a priority of non-English majors. Because of this a lot of non-English majors prefer using repetition strategies or simply guess from context. Using English language media was rated as one of the most used and most useful

strategies among non-English majors. This seems plausible since most of the participants rated themselves to be on the pre-intermediate or intermediate English proficiency level. This also shows that the students are able to find new learning opportunities on their own. The student's proficiency level could also be the reason why strategies such as labeling physical objects and using a physical action to learn a new word have been placed under the least useful strategies category. The results also show that non-English majors prefer asking a classmate to explain a meaning of a word, rather than asking the teacher. Social strategies that involve student and teacher interaction have been voted as the least used strategies by non-English majors. This could be because they are afraid to speak out in class. They might be afraid to ask about something that everybody else already knows. Another reason can be that they were not encouraged to participate in their English high school or elementary class, or that their previous English classes were more teacher centered so they did not have many pair or group work tasks which resulted in them being more comfortable with working on their own. The students have rated the use of a bilingual dictionary as one of the most useful strategies but they do not use it as much as they have rated it to be useful. Most of them would rather guess a word's meaning from context than use a dictionary. It can be recommended to teachers to encourage pair and group work in English class to promote social strategies, as well as to introduce the strategies that are not often used by non-English majors just to make the students aware of new ways to learn vocabulary.

5.4. DISCREPANCIES

This chapter will look into the differences in the results of the most used and most useful, as well as the least used and least useful strategies by English majors and non-English majors.

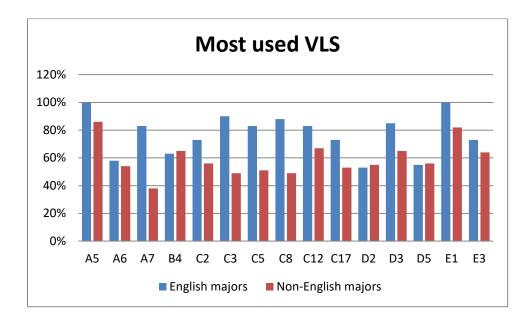


Figure 1: Discrepancies in most used strategies

Comparing the most used strategies category in table 4.3 and table 4.5, one can see that there are six strategies that appear in both tables. Those are strategies A5 (Guessing from context), C2 (Making a mental picture of the word's meaning), C12 (Saying the new word aloud when studying), D3 (Making a word list of new words), E1 (Using English language media) and E3 (Studying new words many times). Figure 1 shows that these strategies were used more by English majors, than by non-English majors. However, there is not a big gap in the frequency of use of these strategies between the two groups. Figure 1 also shows other strategies that were rated as the most used by the two groups. There are fifteen strategies in total portrayed (see Figure 1). The biggest gap in the frequency of use can be seen in strategies A7 (Using an English-English dictionary), C3 (Connecting the word to a personal experience), C5 (Connecting the word to other words with similar or opposite meanings), and C8 (Using new words in sentences). These strategies have gotten higher percentage ratings by English majors than by non-English majors. Strategies B4 (Asking a classmate for the meaning), D2 (Writing the words many times), and D5 (Taking notes or highlighting new words in class) are used more by non-English majors but the difference in the frequency of use is not big. There are some differences in the strategy categories that were ranked as most used by the two groups. English majors have ranked six memory strategies as most used, whereas non-English majors have ranked three. However, English majors have no social strategies ranked as most used, but non-English majors have one. Non-English majors also ranked three metacognitive strategies as most used, whereas English majors only ranked one (see *table 4.3* and *table 4.5*).

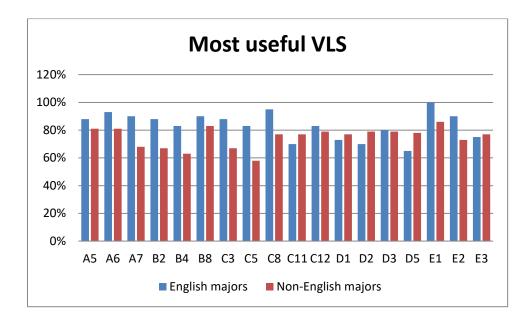


Figure 2: Discrepancies in most useful strategies

Comparing the most useful strategies category in table 4.3 and table 4.5, one can see that there are six strategies that appear in both tables. Those are strategies A5 (Guessing from context), A6 (Using a Croatian-English dictionary), B8 (Interacting with native speakers), C8 (Using new words in sentences), C12 (Saying the new word aloud when studying), and E1 (Using English language media). Figure 2 shows that these strategies have been perceived as slightly more useful by English majors than by non-English majors. Eighteen strategies can be found in Figure 2 that have been rated as the most useful strategies by the two researched groups. The biggest gap of perceived usefulness can be seen in strategies A7 (Using an English-English dictionary), B2 (Asking the teacher for a definition or a synonym of the new word), B4 (Asking a classmate for the meaning), C3 (Connecting the word to a personal experience), C5 (Connecting the word to other words with similar or opposite meanings), C8 (Using new words in sentences), E1 (Using English language media), and E2 (Testing myself with word tests). All of these strategies were perceived as more useful by English majors than by non-English majors. There are some strategies that were perceived more useful by non-English majors than by English majors, those are C11 (Studying the sound of a word), D1 (Repeating the words aloud many times), D2 (Writing the words many times), D5 (Taking notes or highlighting new words in class) and E3 (Studying new words many times). Both English and non-English majors ranked twelve strategies as most useful. English majors rated three determination, three social, four memory, and two metacognitive strategies as most useful. Non-English majors rated two determination, one social, three memory, four cognitive, and two metacognitive strategies as most useful (see *table 4.3* and *table 4.5*). English majors have ranked more determination, social, and memory strategies than non-English majors as the most useful strategies, but no cognitive strategies have made it on the list. Non-English majors, however, have four cognitive strategies on their list of strategies perceived as the most useful (see *table 4.3* and *table 4.5*).

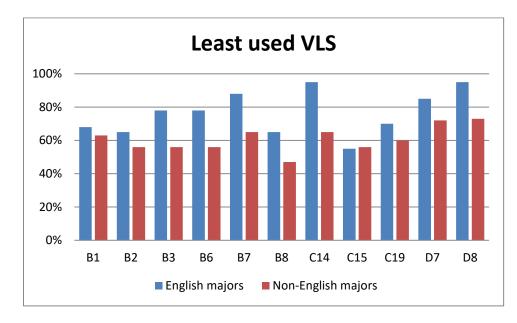


Figure 3: Discrepancies in least used strategies

Surprisingly both English and non-English students ranked nine same strategies as the least used strategies (see table 4.4 and table 4.6). Those strategies are B1 (Asking the teacher for an L1 translation), B2 (Asking the teacher for a definition or a synonym of the new word), B3 (Asking the teacher to give me a sentence using the new word), B6 (Studying and practicing the meaning in a group), B7 (Asking the teacher to check my definition), C14 (Underlining the initial letter of a word), C19 (Using physical action when learning a new word), D7 (Listening to a tape of word lists) and D8 (Putting English labels on physical objects). Even though these strategies were rated as the least used by the two researched groups, Figure 3 shows that English majors use these strategies less than non-English majors. Eleven strategies were rated as the least used strategies by the two researched groups (see *Figure 3*). The biggest gap in the frequency of use can be seen in strategies B3 (Asking the teacher to give me a sentence using the new word), B6 (Studying and practicing the meaning in a group), B7 (Asking the teacher to check my definition), B8 (Interacting with native speakers), C14 (Underlining the initial letter of the word) and D8 (Putting English labels on physical objects). All of these strategies were less used by English majors. The only strategy that was less used by non-English majors than by English majors is strategy C15 (Remembering the word using its parts), however, the difference is only 1%. Since the two groups rated nine same strategies to be the least used, the only difference is in the remaining strategy each group has rated as being one of the least used strategies. English

majors have ranked one social strategy more than non-English students as being the least used strategy and that is B8 (Interacting with native speakers). Non-English majors have ranked one memory strategy more than non-English students as being the least used strategy and that is C15 (Remembering the word using its parts). Both groups rated two memory and two cognitive strategies as being one of the least used strategies. There were no determination or metacognitive strategies on the list of the least used strategies (see *table 4.4* and *table 4.6*).

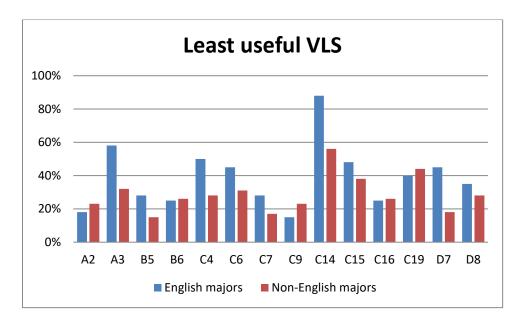


Figure 4: Discrepancies in least useful strategies

Comparing the least useful strategies category in table 4.4 and table 4.6, one can see that there are seven strategies that appear in both tables. Those are strategies A3 (Checking if the word is also a Croatian word), C4 (Remembering the words that follow or precede the new word), C6 (Remembering the words in scales), C14 (Underlining the initial letter of the word), C15 (Remembering the word using its parts), C19 (Using physical action when learning a new word) and D8 (Putting English labels on physical objects). *Figure 4* shows that English majors have rated six out of the seven previously mentioned strategies as far less useful than they were rated by non-English majors. Only one of the seven previously mentioned strategies in total can be found in *Figure 4*. Those are all strategies that were listed as the least useful strategies by the two researched groups. The biggest gap in the perceived usefulness can be seen in strategies A3 (Checking if the word), C14 (Underlining the initial letter of the word), C4 (Remembering the word), C4 (Remembering the word). Fourteen strategies that follow or precede the new word). These strategies were rated as the least useful strategies by the two researched groups. The biggest gap in the perceived usefulness can be seen in strategies A3 (Checking if the word is also a Croatian word), C4 (Remembering the word), and D7 (Listening to a tape of word lists). These strategies were rated as less useful by English majors more than by

non-English majors. However, non-English majors have rated five strategies as less useful than English majors. Those are strategies A2 (Analyzing word parts in order to guess the meaning of a word), B6 (Studying and practicing the meaning in a group), C9 (Using new words to make a story), C16 (Remembering the part of speech) and C19 (Using physical action when learning a new word). English majors rated ten strategies as the least useful, whereas non-English majors rated eleven. A slight difference can be seen in the strategy categories. The list of the least useful strategies perceived by English majors contains one cognitive strategy more than that of non-English majors. The list of the least useful strategies perceived by non-English majors contains one determination and one memory strategy more than that of English majors.

The results show that there are similarities in the use and perceived usefulness of VLS between English and non-English majors, but it is still visible that English majors use more VLS than non-English majors. This can be contributed to the learning environment, as well as motivation. Since English majors are highly interested in the English language and since they are preparing to work in an English field they are more motivated to learn new vocabulary and their learning environment offers them a lot of practice opportunities. Therefore, it is only natural that English majors use more VLS than non-English majors. Non-English majors are more restricted in their English learning environment. English classes of non-English majors are not their priority because they are not studying to work in the English field. The goal of some non-English majors is just to pass their English class, regardless of their grade and this is why they are not motivated to learn about new strategies and to try them out. Based on the results of the research it seems like both groups prefer autonomous studying rather than working and practicing in groups or asking a teacher for help. The frequent use of English language media proves that both groups of students are able to find opportunities to study new vocabulary outside the classroom. The comparison of tables 4.3 and 4.5, which portray the most used, as well as the most useful strategies of the two researched groups, shows that the groups have rated six same strategies as the most used, and six same strategies as the most useful VLS. An even bigger similarity is seen in the comparison of tables 4.4 and 4.6 which portray the least used and the least useful strategies of the two researched groups. Both groups listed nine same strategies as the least used, and seven same strategies as the least useful. Such similarity could be connected with the learners' proficiency level. Even though some students do not major in the English language they still have a high proficiency level so they use a lot of the same VLS as English majors. Maybe if there had been more participants in the research that were beginners in English the results would have shown a big difference at least in the most used strategies list.

6. CONCLUSION

The aim of this research was to investigate and compare the frequency of use and the perceived usefulness of vocabulary learning strategies of English and non-English majors.

The results of this study show that both English and non-English majors frequently use vocabulary learning strategies and that they find them useful. The results have shown similarities in the frequency of use and the perceived usefulness of VLS between the two researched groups. There are six strategies that have made it on to the most used strategies list of both English and non-English majors. The results show that those strategies are used more by English majors than by non-English majors but only by a small percentage. By comparing the two lists of the most useful strategies, one can see that there are again six strategies have made it both on to the most used and most useful strategies list. Nine strategies have made it on to the least used strategies are less used by English majors than by non-English majors. The results have shown that those strategies are less used by English and non-English majors. The results have made it on to the least used strategies list of both English and non-English majors. The results have made it on to the least used strategies list of both English and non-English majors. The results have shown that those strategies are less used by English majors than by non-English majors. By comparing the two lists of the least useful strategies, one can see that there are seven strategies that were rated as the least useful by both English and non-English majors. The comparison of the results shows no significant difference in the frequency of use and the perceived usefulness of VLS between English and non-English majors. Both groups showed a similar preference of VLS.

Knowing which VLS certain groups of learners prefer using will help English teachers and professors design their lectures and tasks in which they introduce new vocabulary in a way which will make it easier for students to learn and possibly maximize their learning success.

This research has given only a small look into the frequency of use and the perceived usefulness of VLS of Croatian English and non-English majors. Because of the COVID-19 situation, the questionnaire was done online which has led to a small number of participants. Therefore, this cannot be taken as a generalization of all English and non-English majors and further research should be conducted to expand the results of this study.

The recommendations for further research are to include more participants from various majors, give the students a questionnaire annually at the end of their school year which will make the students aware of the existence of different VLS and introduce new strategies that they could try to implement in the new semester, and do interviews with students and teachers of English and ask them about VLS they use in class and think are the most efficient.

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8. APPENDICES

Appendix A: Background questionnaire

- 1. Spol
 - Muško
 - Žensko
- 2. Dob
- 3. Fakultet
- 4. Studij
- 5. Godine učenja engleskog jezika

.....

- 6. Jezična razina engleskog jezika
 - A1
 - A2
 - B1
 - B2
 - C1
 - C2

Appendix B: Vocabulary learning strategy questionnaire

Sljedeće tvrdnje odnose se na ono što radite kada prvi puta naiđete na nepoznatu riječ. Molim Vas da navedenet vrdnje procijenite tako da označite razinu slaganja s određenom tvrdnjom.

Razine slaganja su:

- 1-Never
- 2-Seldom
- 3-Sometimes
- 4-Often
- 5 Very often

When I find a new English word that I don't know, I do this ...

| | r | r | 1 | r | 1 1 |
|---|---|---|---|---|-----|
| A1 Check the new word's form (verb, | 1 | 2 | 3 | 4 | 5 |
| noun, adjective, adverb) | | | | | |
| | | | | | |
| A2 Analyze word parts in order to guess | 1 | 2 | 3 | 4 | 5 |
| the meaning of a word (prefix, suffix, | | | | | |
| etc.) | | | | | |
| A3 Check if the word is also a Croatian | 1 | 2 | 3 | 4 | 5 |
| word | | | | | |
| A4 Use any pictures or gestures to help | 1 | 2 | 3 | 4 | 5 |
| me guess | | | | | |
| A5 Guess from context | 1 | 2 | 3 | 4 | 5 |
| A6 Use a Croatian-English dictionary | 1 | 2 | 3 | 4 | 5 |
| A7 Use an English-English dictionary | 1 | 2 | 3 | 4 | 5 |
| B1 Ask the teacher for an L1 translation | 1 | 2 | 3 | 4 | 5 |
| B2 Ask the teacher for a definition or a | 1 | 2 | 3 | 4 | 5 |
| synonym of the new word | | | | | |
| B3 Ask theteacher to give me a sentence | 1 | 2 | 3 | 4 | 5 |

| using the new word | | | | | |
|--|---|---|---|---|---|
| B4 Ask a classmate for the meaning | 1 | 2 | 3 | 4 | 5 |
| B5 Discover the new meaning through | 1 | 2 | 3 | 4 | 5 |
| groupwork activity | | | | | |

Molim Vas da sada ocijenite korisnost tvrdnji koje se odnose na ono što radite kada prvi puta naiđete na nepoznatu riječ.

Razine su:

- 1 Not useful
- 2 Not sure if it is useful
- 3 Quite useful
- $4-Very \, useful$
- 5 Extremely useful

When I find a new English word that I don't know, I think this is ...

| A1 Check the new word's form (verb, | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| noun, adjective, adverb) | | | | | |
| A2 Analyze word parts in order to guess | 1 | 2 | 3 | 4 | 5 |
| the meaning of a word (prefix, suffix, | | | | | |
| etc.) | | | | | |
| A3 Check if the word is also a Croatian | 1 | 2 | 3 | 4 | 5 |
| word | | | | | |
| A4 Use any pictures or gestures to help | 1 | 2 | 3 | 4 | 5 |
| me guess | | | | | |
| A5 Guessfrom context | 1 | 2 | 3 | 4 | 5 |
| A6 Use a Croatian-English dictionary | 1 | 2 | 3 | 4 | 5 |
| A7 Use an English-English dictionary | 1 | 2 | 3 | 4 | 5 |
| B1 Ask the teacher for an L1 translation | 1 | 2 | 3 | 4 | 5 |

| B2 Ask the teacher for a definition or a | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| synonym of the new word | | | | | |
| B3 Ask theteacher to give me a sentence | | 2 | 3 | 4 | 5 |
| using the new word | | | | | |
| B4 Ask a classmate for themeaning | 1 | 2 | 3 | 4 | 5 |
| B5 Discover the new meaning through | 1 | 2 | 3 | 4 | 5 |
| groupwork activity | | | | | |

Sljedeće tvrdnje odnose se na ono što radite kako biste zapamtili nove riječi i proširili svoj vokabular. Molim Vas da navedene tvrdnje procijenite tako da označite razinu slaganja s određenom tvrdnjom.

Razine slaganja su:

- 1-Never
- 2-Seldom
- 3 Sometimes
- 4-Often
- 5 Very often

When I want to remember new words and build my vocabulary, I do this ...

| B6 Study and practice the meaning in a group | 1 | 2 | 3 | 4 | 5 |
|--|---|---|---|---|---|
| B7 Ask the teacher to check my definition | 1 | 2 | 3 | 4 | 5 |
| B8 Interact with native speakers | 1 | 2 | 3 | 4 | 5 |
| C1 Use a picture of the word to help remember it | 1 | 2 | 3 | 4 | 5 |
| C2 Make a mental picture of the word's meaning | 1 | 2 | 3 | 4 | 5 |
| C3 Connect the word to a personal experience | 1 | 2 | 3 | 4 | 5 |
| C4 Remember the words that follow or precede the new | 1 | 2 | 3 | 4 | 5 |
| word | | | | | |
| C5 Connect the word to other words with similar or | 1 | 2 | 3 | 4 | 5 |

| opposite meanings | | | | | |
|---|---|---|---|---|---|
| C6 Remember the words in scales (e.g. always – often – sometimes - never) | 1 | 2 | 3 | 4 | 5 |
| C7 Group words together to study them | 1 | 2 | 3 | 4 | 5 |
| C8 Use new words in sentences | 1 | 2 | 3 | 4 | 5 |
| C9 Use new words to make a story | 1 | 2 | 3 | 4 | 5 |
| C10 Study the spelling of a word | 1 | 2 | 3 | 4 | 5 |
| C11 Study the sound of a word | 1 | 2 | 3 | 4 | 5 |
| C12 Say the new word aloud when studying | 1 | 2 | 3 | 4 | 5 |
| C13 Make a mental image of the word's form | 1 | 2 | 3 | 4 | 5 |
| C14 Underline the initial letter of the word | 1 | 2 | 3 | 4 | 5 |
| C15 Remember the word using its parts (e.g. im-, un-, -ful) | 1 | 2 | 3 | 4 | 5 |
| C16 Remember the part of speech (verb, noun, adjective) | 1 | 2 | 3 | 4 | 5 |
| C17 Make my own definition | 1 | 2 | 3 | 4 | 5 |
| C18 Learn the words of an idiom together | 1 | 2 | 3 | 4 | 5 |
| C19 Use physical action when learning a new word | 1 | 2 | 3 | 4 | 5 |
| D1 Repeat the words aloud many times | 1 | 2 | 3 | 4 | 5 |
| D2 Write the words many times | 1 | 2 | 3 | 4 | 5 |
| D3 Make a word list of new words | 1 | 2 | 3 | 4 | 5 |
| D4 Make flashcards | 1 | 2 | 3 | 4 | 5 |
| D5 Take notes or highlight new words in class | 1 | 2 | 3 | 4 | 5 |
| D6 Use the vocabulary section in my textbook or handout | 1 | 2 | 3 | 4 | 5 |
| D7 Listen to a tape of word lists | 1 | 2 | 3 | 4 | 5 |
| D8 Put English labels on physical objects | 1 | 2 | 3 | 4 | 5 |
| D9 Keep a vocabulary notebook | 1 | 2 | 3 | 4 | 5 |
| E1 Use English langauge media (songs, movies, books) | 1 | 2 | 3 | 4 | 5 |
| E2 Test myself with word tests | 1 | 2 | 3 | 4 | 5 |
| E3 Study new words many times | 1 | 2 | 3 | 4 | 5 |

Molim Vas da sada ocijenite korisnost tvrdnji koje se odnose na ono što radite kako biste zapamtili nove riječi i proširili svoj vokabular.

Razine su:

- 1 Not useful
- 2 Not sure if it is useful
- 3 Quite useful
- 4 Very useful
- 5 Extremely useful

When I want to remember new words and build my vocabulary, I think this is ...

| | 1 | 1 | 1 | 1 | |
|---|---|---|---|---|---|
| B6 Study and practice the meaning in a group | 1 | 2 | 3 | 4 | 5 |
| B7 Ask the teacher to check my definition | 1 | 2 | 3 | 4 | 5 |
| B8 Interact with native speakers | 1 | 2 | 3 | 4 | 5 |
| C1 Use a picture of the word to help remember it | 1 | 2 | 3 | 4 | 5 |
| C2 Make a mental picture of the word's meaning | 1 | 2 | 3 | 4 | 5 |
| C3 Connect the word to a personal experience | 1 | 2 | 3 | 4 | 5 |
| C4 Remember the words that follow or precede the new | 1 | 2 | 3 | 4 | 5 |
| word | | | | | |
| C5 Connect the word to other words with similar or | 1 | 2 | 3 | 4 | 5 |
| opposite meanings | | | | | |
| C6 Remember the words in scales (e.g. always - often - | 1 | 2 | 3 | 4 | 5 |
| sometimes - never) | | | | | |
| C7 Group words together to study them | 1 | 2 | 3 | 4 | 5 |
| C8 Use new words in sentences | 1 | 2 | 3 | 4 | 5 |
| C9 Use new words to make a story | 1 | 2 | 3 | 4 | 5 |
| C10 Study the spelling of a word | 1 | 2 | 3 | 4 | 5 |
| C11 Study the sound of a word | 1 | 2 | 3 | 4 | 5 |
| C12 Say the new word aloud when studying | 1 | 2 | 3 | 4 | 5 |
| C13 Make a mental image of the word's form | | 2 | 3 | 4 | 5 |
| C14 Underline the initial letterof the word | | 2 | 3 | 4 | 5 |
| C15 Remember the word using its parts (e.g. im-, un-, -ful) | 1 | 2 | 3 | 4 | 5 |
| C16 Remember the part of speech (verb, noun, adjective) | 1 | 2 | 3 | 4 | 5 |
| | 1 | 1 | 1 | L | 1 |

| C17 Make my own definition | 1 | 2 | 3 | 4 | 5 |
|--|---|---|---|---|---|
| C18 Learn the words of an idiom together | 1 | 2 | 3 | 4 | 5 |
| C19 Use physical action when learning a new word | 1 | 2 | 3 | 4 | 5 |
| D1 Repeat the words aloud many times | 1 | 2 | 3 | 4 | 5 |
| D2 Write the words many times | 1 | 2 | 3 | 4 | 5 |
| D3 Make a word list of new words | 1 | 2 | 3 | 4 | 5 |
| D4 Make flashcards | 1 | 2 | 3 | 4 | 5 |
| D5 Take notes or highlight new words in class | 1 | 2 | 3 | 4 | 5 |
| D6 Use the vocabulary section in my textbook or handout | 1 | 2 | 3 | 4 | 5 |
| D7 Listen to a tape of word lists | 1 | 2 | 3 | 4 | 5 |
| D8 Put English labels on physical objects | 1 | 2 | 3 | 4 | 5 |
| D9 Keep a vocabularynotebook | 1 | 2 | 3 | 4 | 5 |
| E1 Use English langauge media (songs, movies, books) | 1 | 2 | 3 | 4 | 5 |
| E2 Test myself with word tests | 1 | 2 | 3 | 4 | 5 |
| E3 Study new words many times | 1 | 2 | 3 | 4 | 5 |

Appendix C: Overall results

| Determination | Frequency of use | Frequency of use | Perceived | Perceived |
|---------------|------------------|------------------|-------------------|-------------------|
| strategies | (rated as most | (rated as least | usefulness (rated | usefulness (rated |
| | used) | used) | as most useful) | as least useful) |
| A1 | 46,61% | 28,81% | 55,93% | 9,32% |
| A2 | 35,59% | 27,11% | 50,84% | 21,18% |
| A3 | 33,89% | 45,76% | 39,83% | 40,67% |
| A4 | 28,81% | 18,64% | 66,94% | 11,01% |
| A5 | 90,67% | 2,54% | 83,05% | 3,38% |
| A6 | 55,08% | 25,42% | 84,74% | 1,69% |
| A7 | 53,38% | 21,18% | 75,42% | 7,62% |

| Social strategies | Frequency of use | Frequency of use | Perceived | Perceived |
|-------------------|------------------|------------------|-------------------|-------------------|
| | (rated as most | (rated as least | usefulness (rated | usefulness (rated |
| | used) | used) | as most useful) | as least useful) |

| B1 | 22,88% | 64,40% | 67,79% | 12,71% |
|----|--------|--------|--------|--------|
| B2 | 16,10% | 59,32% | 73,72% | 7,62% |
| B3 | 18,64% | 63,55% | 69,49% | 7,62% |
| B4 | 64,40% | 11,01% | 69,49% | 15,25% |
| B5 | 33,05% | 38,98% | 50,84% | 19,49% |
| B6 | 12,71% | 63,55% | 38,98% | 25,42% |
| B7 | 9,32% | 72,88% | 54,23% | 16,10% |
| B8 | 17,79% | 53,38% | 85,59% | 7,62% |

| Memory | Frequency of use | Frequency of use | Perceived | Perceived |
|------------|------------------|------------------|-------------------|-------------------|
| strategies | (rated as most | (rated as least | usefulness (rated | usefulness (rated |
| | used) | used) | as most useful) | as least useful) |
| C1 | 39,83% | 33,89% | 64,40% | 5,08% |
| C2 | 61,86% | 16,10% | 73,72% | 2,54% |
| C3 | 62,71% | 12,71% | 73,72% | 6,77% |
| C4 | 27,96% | 33,89% | 33,89% | 35,59% |
| C5 | 61,86% | 11,86% | 66,10% | 10,16% |
| C6 | 24,57% | 52,54% | 34,74% | 35,59% |
| C7 | 26,27% | 50% | 50,84% | 20,33% |
| C8 | 61,86% | 20,33% | 83,05% | 1,69% |
| C9 | 20,33% | 54,23% | 60,16% | 20,33% |
| C10 | 44,91% | 27,96% | 65,25% | 17,79% |
| C11 | 45,76% | 30,50% | 74,57% | 11,86% |
| C12 | 72,03% | 11,01% | 80,50% | 5,08% |
| C13 | 55,08% | 16,10% | 61,01% | 16,10% |
| C14 | 11,86% | 75,42% | 18,64% | 66,94% |
| C15 | 16,94% | 55,93% | 27,96% | 41,52% |
| C16 | 28,81% | 38,13% | 43,22% | 25,42% |
| C17 | 59,32% | 19,49% | 66,10% | 14,40% |
| C18 | 38,98% | 21,18% | 60,16% | 12,71% |
| C19 | 20,33% | 63,55% | 40,67% | 42,37% |

| Cognitive | Frequency of use | Frequency of use | Perceived | Perceived |
|------------|------------------|------------------|-------------------|-------------------|
| strategies | (rated as most | (rated as least | usefulness (rated | usefulness (rated |
| | used) | used) | as most useful) | as least useful) |
| D1 | 56,77% | 13,55% | 75,42% | 5,93% |
| D2 | 54,23% | 26,27% | 76,27% | 9,32% |
| D3 | 72,03% | 19,49% | 79,66% | 6,77% |
| D4 | 27,11% | 46,61% | 69,49% | 11,01% |
| D5 | 55,93% | 22,03% | 73,72% | 9,32% |
| D6 | 45,76% | 25,42% | 71,18% | 14,40% |
| D7 | 11,06% | 76,27% | 51,69% | 27,11% |
| D8 | 8,47% | 80,50% | 49,15% | 30,50% |
| D9 | 27,96% | 41,52% | 72,03% | 5,08% |

| Metacognitive | Frequency of use | Frequency of use | Perceived | Perceived |
|---------------|------------------|------------------|-------------------|-------------------|
| strategies | (rated as most | (rated as least | usefulness (rated | usefulness (rated |
| | used) | used) | as most useful) | as least useful) |
| E1 | 88,13% | 2,54% | 90,67% | 4,23% |
| E2 | 50% | 30,50% | 78,81% | 6,77% |
| E3 | 66,94% | 11,86% | 76,27% | 5,08% |

Appendix D: English majors results

| Determination | Frequency of use | Frequency of use | Perceived | Perceived |
|---------------|------------------|------------------|-------------------|-------------------|
| strategies | (rated as most | (rated as least | usefulness (rated | usefulness (rated |
| | used) | used) | as most useful) | as least useful) |
| A1 | 67,5% | 10% | 47,5% | 7,50% |
| A2 | 37,5% | 27,50% | 55% | 17,50% |
| A3 | 40% | 55% | 37,5% | 57,50% |
| A4 | 55% | 10% | 57,5% | 0% |
| A5 | 100% | 0% | 87,5% | 10% |
| A6 | 57,5% | 35% | 92,5% | 0% |
| A7 | 82,5% | 0% | 90% | 0% |

| Socialstrategies | Frequencyof | Frequencyof | Perceivedusefulness | Perceivedusefulness |
|------------------|---------------|---------------|---------------------|---------------------|
| | use (rated as | use (rated as | (rated as most | (rated as |
| | most used) | leastused) | useful) | leastuseful) |
| B1 | 22,5% | 67,50% | 75% | 10% |
| B2 | 12,5% | 65% | 87,5% | 5% |
| B3 | 12,5% | 77,50% | 77,5% | 5% |
| B4 | 62,5% | 2,50% | 82,5% | 12,50% |
| B5 | 25% | 52,50% | 37,5% | 27,50% |
| B6 | 2,5% | 77,50% | 12,5% | 25% |
| B7 | 0% | 87,50% | 55% | 10% |
| B8 | 25% | 65% | 90% | 0% |

| Memory | Frequency of use | Frequency of use | Perceived | Perceived |
|------------|------------------|------------------|-------------------|-------------------|
| strategies | (rated as most | (rated as least | usefulness (rated | usefulness (rated |
| | used) | used) | as most useful) | as least useful) |
| C1 | 37,5% | 45% | 72,5% | 0% |
| C2 | 72,5% | 15% | 75% | 0% |
| C3 | 90% | 7,50% | 87,5% | 2,50% |
| C4 | 35% | 35% | 25% | 50% |
| C5 | 82,5% | 7,50% | 82,5% | 7,50% |
| C6 | 25% | 50% | 22,5% | 45% |
| C7 | 20% | 42,50% | 40% | 27,50% |
| C8 | 87,5% | 10% | 95% | 2,50% |
| С9 | 27,5% | 52,50% | 65% | 15% |
| C10 | 60% | 15% | 72,5% | 10% |
| C11 | 55% | 30% | 70% | 20% |
| C12 | 82,5% | 2,50% | 82,5% | 5% |
| C13 | 67,5% | 15% | 70% | 7,50% |
| C14 | 5% | 95% | 7,5% | 87,50% |
| C15 | 10% | 55% | 22,5% | 47,50% |
| C16 | 32,5% | 32,50% | 37,5% | 25% |
| C17 | 72,5% | 5% | 70% | 7,50% |

| C18 | 42,5% | 10% | 52,5% | 15% |
|-----|-------|-----|-------|-----|
| C19 | 22,5% | 70% | 37,5% | 40% |

| Cognitive | Frequency of use | Frequency of use | Perceived | Perceived |
|------------|------------------|------------------|-------------------|-------------------|
| strategies | (rated as most | (rated as least | usefulness (rated | usefulness (rated |
| | used) | used) | as most useful) | as least useful) |
| D1 | 65% | 5% | 72,5% | 5% |
| D2 | 52,5% | 27,50% | 70% | 10% |
| D3 | 85% | 10% | 80% | 0% |
| D4 | 27,5% | 45% | 75% | 0% |
| D5 | 55% | 22,50% | 65% | 5% |
| D6 | 35% | 30% | 65% | 15% |
| D7 | 2,5% | 85% | 37,5% | 45% |
| D8 | 5% | 95% | 35% | 35% |
| D9 | 27,5% | 37,50% | 80% | 0% |

| Metacognitive | Frequency of use | Frequency of use | Perceived | Perceived |
|---------------|------------------|------------------|-------------------|-------------------|
| strategies | (rated as most | (rated as least | usefulness (rated | usefulness (rated |
| | used) | used) | as most useful) | as least useful) |
| E1 | 100% | 0% | 100% | 0% |
| E2 | 52,5% | 22,50% | 90% | 0% |
| E3 | 72,5% | 2,50% | 75% | 0% |

Appendix E: Non-English majors results

| Determination | Frequency of use | Frequency of use | Perceived | Perceived |
|---------------|------------------|------------------|-------------------|-------------------|
| strategies | (rated as most | (rated as least | usefulness (rated | usefulness (rated |
| | used) | used) | as most useful) | as least useful) |
| A1 | 35,89% | 38,46% | 60,25% | 10,25% |
| A2 | 34,61% | 26,92% | 48,71% | 23,07% |
| A3 | 30,76% | 41,02% | 41,02% | 32,05% |
| A4 | 15,38% | 23,07% | 71,79% | 16,66% |
| A5 | 85,89% | 3,84% | 80,76% | 0% |

| A6 | 53,84% | 20,51% | 80,76% | 2,56% |
|----|--------|--------|--------|--------|
| A7 | 38,46% | 32,05% | 67,94% | 11,53% |

| Social strategies | Frequency of use | Frequency of use | Perceived | Perceived |
|-------------------|------------------|------------------|-------------------|-------------------|
| | (rated as most | (rated as least | usefulness (rated | usefulness (rated |
| | used) | used) | as most useful) | as least useful) |
| B1 | 23,07% | 62,82% | 64,10% | 14,10% |
| B2 | 17,94% | 56,41% | 66,66% | 8,97% |
| B3 | 21,79% | 56,41% | 65,38% | 8,97% |
| B4 | 65,38% | 15,38% | 62,82% | 16,66% |
| B5 | 37,17% | 32,05% | 57,69% | 15,38% |
| B6 | 17,94% | 56,41% | 52,56% | 25,64% |
| B7 | 14,10% | 65,38% | 53,84% | 19,23% |
| B8 | 14,10% | 47,43% | 83,33% | 11,53% |

| Memorys | Frequency of use | Frequency of use | Perceived | Perceived |
|-----------|------------------|------------------|-------------------|-------------------|
| trategies | (rated as most | (rated as least | usefulness (rated | usefulness (rated |
| | used) | used) | as most useful) | as least useful) |
| C1 | 41,02% | 28,20% | 60,25% | 7,69% |
| C2 | 56,41% | 16,66% | 73,07% | 3,84% |
| C3 | 48,71% | 15,38% | 66,66% | 8,97% |
| C4 | 24,35% | 33,33% | 38,46% | 28,20% |
| C5 | 51,28% | 14,10% | 57,69% | 11,53% |
| C6 | 24,35% | 53,84% | 41,02% | 30,76% |
| C7 | 29,48% | 53,84% | 56,41% | 16,66% |
| C8 | 48,71% | 25,64% | 76,92% | 1,28% |
| С9 | 16,66% | 55,12% | 57,69% | 23,07% |
| C10 | 37,17% | 34,61% | 61,53% | 21,79% |
| C11 | 41,02% | 30,76% | 76,92% | 7,69% |
| C12 | 66,66% | 15,38% | 79,48% | 5,12% |
| C13 | 48,71% | 16,66% | 56,41% | 20,51% |
| C14 | 15,38% | 65,38% | 24,35% | 56,41% |

| C15 | 20,51% | 56,41% | 30,76% | 38,46% | |
|-----|--------|--------|--------|--------|--|
| C16 | 26,92% | 41,02% | 46,15% | 25,64% | |
| C17 | 52,56% | 26,92% | 64,10% | 17,94% | |
| C18 | 37,17% | 26,92% | 64,10% | 11,53% | |
| C19 | 19,23% | 60,25% | 42,30% | 43,58% | |

| Cognitive | Frequency of use | Frequency of use | Perceived | Perceived |
|------------|------------------|------------------|-------------------|-------------------|
| strategies | (rated as most | (rated as least | usefulness (rated | usefulness (rated |
| | used) | used) | as most useful) | as least useful) |
| D1 | 52,56% | 17,94% | 76,92% | 6,41% |
| D2 | 55,12% | 25,64% | 79,48% | 8,97% |
| D3 | 65,38% | 24,35% | 79,48% | 10,25% |
| D4 | 26,92% | 47,43% | 66,66% | 16,66% |
| D5 | 56,41% | 21,79% | 78,20% | 11,53% |
| D6 | 51,28% | 23,07% | 74,35% | 14,10% |
| D7 | 15,38% | 71,79% | 58,97% | 17,94% |
| D8 | 10,25% | 73,07% | 56,41% | 28,20% |
| D9 | 28,20% | 43,58% | 67,94% | 7,69% |

| Metacognitive | Frequency of use | Frequency of use | Perceived | Perceived |
|---------------|------------------|------------------|-------------------|-------------------|
| strategies | (rated as most | (rated as least | usefulness (rated | usefulness (rated |
| | used) | used) | as most useful) | as least useful) |
| E1 | 82,05% | 3,84% | 85,89% | 6,41% |
| E2 | 48,71% | 34,61% | 73,07% | 10,25% |
| E3 | 64,10% | 16,66% | 76,92% | 7,69% |