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The impact of the mnemonic keyword method on English lexical learning process

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Abstract. One of the innovative methods of learning a foreign language is the use of mnemonics to memorize words. Cognitive processes, such as the formation of associative connections, play an important role in memorizing information. When memorizing words using the Mnemonic Keyword Method, the creation of mental images and connections is essential. Furthermore, this process activates the visual and creative aspects of cognitive functions. The conducted experimental research is aimed at understanding to what extent students, who were taught to use this method, find it useful and want to continue using it in the future. This article examines the use of the Mnemonic Keyword Method for memorizing English vocabulary. The use of mnemonics increases the motivation of students and allows them to significantly expand their vocabulary. This study aimed to identify the students' opinions regarding this method. To achieve this goal, a survey (questionnaire) was conducted among first-year bachelor students of the L.N. Gumilyov Eurasian National University. This study revealed the students' perspectives regarding the effectiveness of this method, the students' intentions to use this method in the future, the factors that influence their choice, and the difficulties that arise in the process of applying the method.

Keywords: vocabulary, language, mnemonic, Mnemonic Keyword Method, keyword, memory.

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Introduction

In today's rapidly changing world, due to globalization and the development of information technology, English language proficiency is becoming a great advantage for any person. In Kazakhstan, there is a strong emphasis on learning the English language and developing competitive professionals who will contribute to the development of the country and its economy.

However, in the process of learning any language, there is always a concern about how to make the process of memorizing vocabulary straightforward and effective. This is because memorizing vocabulary is often a complex and time-consuming process that is associated with various difficulties.

The main problems faced by learners during this process are the following:

Information overload: Today, there are plenty of resources online and on social media. Because of an excessive amount of information, it is difficult to choose what to focus on, and this consequently leads to low productivity. The constant need to process information can cause fatigue and stress, making it difficult to identify keywords and expressions for memorization.

Insufficient practice: One of the common misconceptions is the belief that simply familiarizing with new words is enough. Consequently, the lack of practice and use of the vocabulary in a context can significantly slow down the process of vocabulary acquisition.

Inconsistent memorization: There are some stages in memorizing vocabulary that should be followed. Such as familiarizing and understanding, building associations and connections, contextualization, repetition, testing, feedback, and correction. However, sometimes some of them are omitted.

Lack of interest: if students have no interest, the process of learning any language can become extremely difficult.

Tendency to forget: The method that most students use to memorize words is cramming. This can provide short-term memorization, but without the active use of words in real situations and connections between words that are memorized, the words are forgotten in a short time.

Considering all of the problems associated with learning foreign vocabulary, there is a high need to utilize effective methods of memorization. In this context, the method of Mnemonic Keyword associations stands out as an innovative and effective method. Numerous surveys and research on this topic were conducted, and many of them proved the effectiveness of these techniques. This is because psychologists believe that words that refer to bright mental imagery are much better remembered and conversely, those that are not associated with anything are remembered worse [1, 27].

Leontiev A. A. considers mnemonic techniques as building connections between memorized and well-known objects [2, 113]. While mnemonic techniques come in various forms, this particular research focuses on the «Keyword Method» of mnemonic, characterized by the creation of mental imagery. Despite being a relatively new term in the field, the concept it represents has been employed before in the works of Atkinson, R., and Raugh, M. According to them with the aid of Keyword Mnemonic, students can learn the required words in a short time, and minimum lack of retention and recognition is obtained [3].

According to Richard C. Atkinson and Michael R. Raugh, the Mnemonic Keyword Method involves a two-stage approach to learning a vocabulary item. In the initial stage, the learner associates the spoken foreign word with an English word, referred to as the keyword, which phonetically resembles some part of the foreign word. In the subsequent stage, the learner

creates a mental image of the keyword interacting with the English translation. Therefore, a keyword is linked with its translation. Their experiment proves the effectiveness of this method. Richard C. Atkinson and Michael R. stated that this method may not be appropriate for all learners, but there is the possibility that some, especially those who have difficulty with foreign languages, will receive particular benefits [3].

M. Amiryousefi and S. Ketabi demonstrated that including mnemonic techniques in classes is a useful way of enhancing vocabulary learning and recall. According to them, there are certain considerations that teachers should keep in mind when teaching vocabulary using the Mnemonic Keyword Method.

1. Learners should be encouraged to discover their own mnemonic devices. In cases where they are unable to do so, teachers can provide assistance by suggesting suitable mnemonic devices.

2. It may not always be feasible to apply specific mnemonic devices to every word. Some words may cause challenges in finding appropriate keyword associations.

3. Additionally, students exhibit varying abilities, with imagery techniques proving more effective for some, while others may benefit more from verbal strategies. [4].

Problem Statement. The Keyword Method as a sub-title of mnemonic has been experimentally proven to be influential in improving vocabulary learning. As evidenced by the findings of a study conducted by Bruning, R., Schraw, G., and Ronning, R., individuals instructed through the mnemonic approach not only saved time but also sustained their motivation to acquire new information. Additionally, the mnemonic technique assists learners in retrieving words when needed later on, distinguishing it from the more mechanical process of rote learning [5, 17].

Undoubtedly, recognizing the significance of employing specialized techniques is crucial when introducing new vocabulary to students. By exploring various mnemonic approaches, educators can enhance the effectiveness of language learning and provide valuable insights into optimal vocabulary retention strategies.

This article aims to analyze the perspectives of the students concerning the efficacy of this method. It is particularly worth noticing, as the success of this method lies in active student engagement and their intrinsic motivation to apply this method.

This study aims to answer the following research questions:

1. How often do students use the Mnemonic Keyword Method?
2. To what extent do students perceive the Mnemonic Keyword Method as beneficial in facilitating their language acquisition?
3. What factors influence students' preferences for or against the usage of the Mnemonic Keyword Method in English lexical learning?

The article examines the important role of mnemonics in the effective formation of a lexical stock. Special attention is paid to the opinion of students who, as part of a scientific experiment, were trained to use mnemonics to learn foreign words in the context of the Mnemonic Keyword Method.

The scientific significance of the work: The study of students' opinions on the Mnemonic Keyword Method can provide an immersion into the cognitive processes underlying the use of mnemonics for memorizing words. This contributes to a better understanding of how students perceive and apply this method. The results of the study can lead to the improvement of English language teaching methodologies. The understanding of how students perceive mnemonics can help teachers adapt their methods to teach more effectively.

Practical significance of the work: The results of the study provide practical value for teachers, enriching their understanding of how students can effectively use mnemonics. This may lead to the development of specific strategies to better adapt this method in curricula. The study can stimulate conversations about how to increase students' motivation and success in learning English vocabulary. Practical findings can be used to create more effective motivation strategies.

Methodology

This research employed a quantitative research methodology, utilizing an online survey as the primary instrument for data collection. The survey, administered anonymously, took the form of a carefully crafted questionnaire. Its purpose was to delve into the perspectives of students at L.N. Gumilyov Eurasian National University regarding the efficacy of the Mnemonic Keyword Method in enhancing the acquisition of foreign language vocabulary.

The participants of the survey were 15 students who attended the General English course. The students memorized new vocabulary by the use of Mnemonic Keyword Method. They were first-year bachelor students majoring in foreign languages. During the semester, the students learnt how to use this method by building important skills such as developing visual memory and associating and connecting objects. After completing the academic term, they were asked to participate in a questionnaire to share their insights and opinions about using the Mnemonic Keyword Method.

A variety of materials and methods aimed at developing students' lexical skills were used to conduct the research. All materials were carefully selected, taking into account their psychological, pedagogical, and methodological significance. The components were chosen according to their role in the effective acquisition of lexical material and the development of language skills.

To develop the theoretical basis for this survey, the works on the methodology of language teaching, the psychology of learning foreign languages and memorizing words, fundamental theories of cognitive science, as well as the theory of the formation of associative connections in the brain using mnemonics were studied. This includes the works of the following authors: Zimnaya, I. A., Leontiev A. A., R. C. Atkinson and M. R. Raugh, M. Amiryousefi and S. Ketabi, S.S.Kunanbaeva, Bruning, R., Vygotsky L.S., and others.

The participants of this survey were first-year students of the specialty Foreign Language: two foreign languages of the Eurasian National University. Those were 15 students who actively used the Mnemonic Keyword Method for memorizing English words during one academic semester. At the end of the semester, they were offered a questionnaire including questions about their opinion on this method.

15 students took part in the survey, 14 of them are female and 1 is male. Since they are first-year students, 14 of them are between the ages of 16 and 18 and one student is between the ages of 19 and 20. As can be seen in Figure 1, all the students who took part in the survey were well acquainted with the method and were able to choose its exact description. This indicates that they have a complete understanding of the Mnemonic Keyword Method.

During the scientific experiment, the following materials were used:

- Lexical materials from various sources, in particular from the English file textbook used during the course, to form a database of words.

- Textbooks aimed at developing the skills of using the Mnemonic Keyword Method for memorizing foreign vocabulary.

- Video tutorials aimed at using mnemonics in learning vocabulary, as well as illustrative examples of their use.

The content of the research material:

The research material covers various aspects of mnemonics used to improve the memorization of lexical material. This includes association techniques, image creation, and the use of visual and sound associations.

The methods used:

- Analysis of the methodology of mnemonics and its application in the process of learning vocabulary.

- Development and testing of special exercises for training mnemonic skills.

- Conducting a survey with students to assess the effectiveness of using mnemonics in learning vocabulary.

Results and Discussions

This part of the article provides a discussion regarding the results of the study that were presented in the previous section. According to the answers of the students, they have a general idea of this method and its basic principles. For this study, it was extremely important to find out how often students use the Mnemonic Keyword Method now and whether they intend to use it in the future. It was established from the results that all the recipients are already actively using the method and are going to continue applying this method in the future.

The majority of the students, 60%, indicate that the reason for their desire to continue using this method lies in the fact that during the past academic semester, when they memorized words using this method, they noticed a significant improvement in their vocabulary retention. One possible reason is that by using both aural and visual imageries, the keyword emerges as a highly efficient method for learning vocabulary. The fundamental principle underlying this technique is that enhancing the retention of a foreign word is achievable by simultaneously incorporating auditory and visual associations. As a result, this contributes to establishing stronger connections between the new words and pre-existing cognitive frameworks [6].

As established from the survey, students believe that using Mnemonics makes the process of memorizing vocabulary more enjoyable and engaging. When creating associations, students have the opportunity to use their creativity and imagination by creating vivid and memorable images in their brains. Creating vivid associations is a key aspect of successful memorization and effective learning. Vivid associations include visual images that activate visual memory and they are often accompanied by emotional reactions. The words and associations that trigger a strong emotional response are more easily recalled than ones that don't [7].

Some students answered that the Mnemonic Keyword Method helps them relate new words to real-life experiences and situations. According to cognitive science, the Mnemonic Keyword Method promotes associative memorization by linking new information with previously known facts or the experience of students. This method is based on the use of associative links between new material and existing representations of the students. Information is better remembered when it is associated with some semantic context or with existing knowledge. Due to this process, the formation of neural connections is enhanced. Therefore, in the future, the information will

be more effectively remembered and recalled. Keywords can be viewed as anchors that help students recall and associate new words with various situations from their own lives. When using this method, various parts of the brain are activated, such as the hippocampus and cortex, which are responsible for processing and storing information. Based on the above, the Mnemonic Keyword Method can be considered effective in terms of cognitive mechanisms of memory and associative learning [8].

It is important to note that using any method may be followed by some challenges. Half of the students who participated in the study say that the main difficulty for them is staying focused while coming up with mnemonics. The process of creating associative connections requires strong concentration and attention, which can be difficult for some students. Focusing on creating visual images and associations improves the student's attention to the material being studied. Based on this, it can be suggested that while teaching vocabulary using the Mnemonic Keyword Method, it is also necessary to introduce exercises for the development of attention and concentration, for example, Memory Games, Visualization, Jigsaw Puzzles, etc.

One of the reasons that students also pointed out is running out of time because creating mnemonics takes longer than expected. When using the Mnemonic Keyword Method, it is important to keep in mind that the process of selecting keywords may be time-consuming. It is believed that the first months of using this method are the most difficult since students do not yet have a database of their own keywords. Over time, when many words are memorized using this method, students' own dictionary of associations is formed. For example, the keyword for «con» can be «конь» (horse), and for «sw», for example, «свинья» (pig). Thus, in the future, students will need less time to select keywords.

Another challenge for students is that they believe some words don't seem to fit the mnemonic approach, making it less effective. This may be due to the individual characteristics of some words or abstractness. Also, some words are easier to remember without creating associations.

Memorizing abstract concepts poses a challenge, as visualizing such ideas can be intricate. These are words such as: noble, admirable or honorable. A possible solution here would be to create associations with a situation described by the word, which is memorized. To illustrate: the word "admirable" sounds like the Russian word "адмирал" (admiral). The association can be: «An admiral is professionally practicing with swords, and his soldiers admire him, saying how admirable he is.»

It is important to take into account that the use of mnemonics is individual and a student should decide for themselves which words to remember using associations or without them. This is because the effectiveness of this method can vary greatly from student to student and it is very important that everyone finds their optimal approach.

By using the Mnemonic Keyword Method, the learning process can become more interesting and engaging. However, as with any mnemonics, its effectiveness may vary depending on the individual preferences of the student and the nature of the material being studied.

Conclusion

The acquisition of vocabulary is an integral aspect of language learning. Nowadays, many students face challenges in mastering a wide range of vocabulary items, whether for examination purposes or to enhance their communication skills. While a minority may achieve success, a majority often encounters difficulties memorizing and applying the words in real-life conversational contexts.

The general investigation on the implementation of mnemonics in FLT has a long history and has been explored by many scientists. These techniques are memory aids that help learners retain and recall new words and their meanings more effectively. Mnemonics capitalize on the brain's natural ability to associate new information with familiar or easily remembered information, making the learning process more efficient and enjoyable.

One of the main features of mnemonic techniques is that new information is integrated with known and this provides better memorization and recall. Therefore, mnemonic techniques are effective for learners of various age groups and proficiency levels.

This article analyzes the use of the Mnemonic Keyword Method for memorizing English words. This study aimed to find out the students' opinions about the method. A survey prepared in Google Forms was used to collect the data.

According to the results of the survey, we can conclude that students find this method effective and are going to use it in the future. Students appreciate the creativity required in this method and how the process of selecting keywords is correlated with their real-life experience.

Nevertheless, there is still room for further exploration in employing Keyword Mnemonic for learning foreign language vocabulary. This is due to the fact that in order to effectively use the method, a teacher should help students develop the ability to visualize and focus when coming up with mnemonics. We suggest that teachers using this method to memorize English words need to pay attention to these difficulties and offer students exercises to overcome them.

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Contribution of the authors. In this research L.Zh. Beisenbayeva worked on conceptualization and design, A.K. Akhmedova made the literature review and collection of materials.

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Влияние метода мнемонических ключевых слов на процесс лексического обучения английскому языку

Аннотация. Одним из инновационных методов изучения иностранного языка является использование мнемотехники для запоминания слов. Мнемотехника ключевых слов основана на создании ассоциаций между новым словом и уже знакомым ключевым словом или изображением. Когнитивные процессы, такие, как формирование ассоциативных связей, играют важную роль в запоминании информации. При запоминании слов с использованием мнемонического метода ключевых слов важно создавать мысленные образы и связи. Кроме того, этот процесс активизирует визуальные и творческие аспекты когнитивных функций. Проведенное экспериментальное исследование направлено на то, чтобы понять, в какой степени студенты, которых научили пользоваться этим методом, находят его полезным и хотят продолжать использовать в будущем.

В данной статье рассматривается использование мнемонического метода ключевых слов для запоминания английской лексики. Использование мнемоники повышает мотивацию учащихся и позволяет им значительно расширить свой словарный запас. Целью данного исследования было выявление мнений учащихся относительно этого метода. Для достижения этой цели был проведен опрос (questionnaire) среди студентов первого курса бакалавриата Евразийского национального университета имени Л.Н. Гумилева. Это были студенты, которые использовали метод мнемонических ключевых слов на уроках английского языка в течение одного академического семестра. Это исследование выявило взгляды студентов относительно эффективности данного метода, намерения студентов использовать этот метод в будущем, факторы, влияющие на их выбор, и трудности, возникающие в процессе применения метода.

Ключевые слова: лексика, язык, мнемоника, метод мнемонических ключевых слов, ключевое слово, память.

**Мнемоникалық тірек сөз әдісінің ағылшын тілінің
лексикалық оқыту процесіне әсері**

Аңдатпа. Шет тілін үйренудің инновациялық әдістерінің бірі-сөздерді есте сақтау үшін мнемотехниканы қолдану. Когнитивті ғылым және есте сақтаудың негізгі принциптері тұрғысынан бұл әдіс оқытудың ең тиімді әдістерінің бірі болып саналады. Ассоциативті байланыстарды қалыптастыру сияқты когнитивті процестер ақпаратты есте сақтауда маңызды рөл атқарады. Тірек сөздердің мнемоникалық әдісін қолдана отырып, сөздерді жаттау кезінде психикалық бейнелер мен байланыстар жасау маңызды. Сонымен қатар, бұл процесс когнитивті функциялардың визуалды және шығармашылық аспектілерін белсендіреді. Жүргізілген эксперименттік зерттеу осы әдісті қолдануға үйретілген студенттердің оны қаншалықты пайдалы деп санайтынын және болашақта қолдануды жалғастырығысы келетінін түсінуге бағытталған.

Бұл мақалада ағылшын лексикасын есте сақтау үшін мнемоникалық тірек сөз әдісін қолдану қарастырылады. Мнемотехниканы қолдану оқушылардың ынтасын арттырады және олардың сөздік қорын едәуір кеңейтуге мүмкіндік береді. Зерттеудің мақсаты студенттердің осы әдіске қатысты пікірлерін анықтау болды. Осы мақсатқа жету үшін Л. Н.Гумилев атындағы Еуразия ұлттық университеті бакалавриатының бірінші курс студенттері арасында сауалнама (questionnaire) жүргізілді. Сауалнамаға бір академиялық семестрде ағылшын тілі сабақтарында мнемоникалық тірек сөзі әдісін қолданған студенттер қатысты. Зерттеу нәтижесінде студенттердің берілген әдістің тиімділігіне, студенттердің болашақта осы әдісті қолдану ниетіне, олардың таңдауына әсер ететін факторларға және әдісті қолдану процесінде туындайтын қиындықтарға қатысты көзқарастары анықталды.

Түйін сөздер: сөздік қор, тіл, мнемотехника, мнемоникалық тірек сөзі әдісі, тірек сөз, жады.

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