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Z. A. Tanana
Institution of Education "Baranavichy State University",
Baranavichy, the Republic of Belarus, ztanana02@gmail.com

DIGITAL TECHNOLOGIES FOR VOCABULARY MASTERY

The article discusses various digital technologies for improving lexical skills in learning foreign languages. The acquisition of vocabulary in a second language is a multifaceted process involving a series of cognitive operations that extend beyond simple memorization. Effective vocabulary mastery necessitates a robust engagement with various stages, including initial exposure, semantic encoding, retrieval practice, and ultimately, productive application. This paper proposes a framework for selecting digital platforms for English vocabulary acquisition based on their alignment with the different stages of this lexical processing pathway. The importance of motivation, personalization and active use of the learned vocabulary by students is emphasized. The article substantiates the need to integrate modern digital technologies to create a special digital educational environment that contributes to improving the effectiveness of learning a foreign language, expanding vocabulary and developing students' communicative competence (using the potential of various online tools and resources).

Key words: digital technologies; digital platforms; vocabulary.

З. А. Танана
Учреждение образования «Барановичский государственный университет»,
Барановичи, Республика Беларусь, ztanana02@gmail.com

ЦИФРОВЫЕ ТЕХНОЛОГИИ ДЛЯ СОВЕРШЕНСТВОВАНИЯ ЛЕКСИЧЕСКИХ НАВЫКОВ

В статье рассматриваются различные цифровые технологии для совершенствование лексических навыков при изучении иностранных языков. Приобретение словарного запаса на втором языке — это многогранный процесс, включающий ряд когнитивных операций, которые выходят за рамки простого запоминания. Эффективное овладение словарным запасом требует активного участия на различных этапах, включая первоначальное ознакомление, семантическое кодирование, практику извлечения и, в конечном счете, продуктивное применение. В данной статье предлагается схема выбора цифровых платформ для приобретения словарного запаса английского языка, основанная на их соответствии различным этапам этого процесса обработки лексики. Подчеркивается важность мотивации, персонализации и активного использования обучающимися изученной лексики. Обосновывается необходимость интеграции современных цифровых технологий для создания особой цифровой образовательной среды, которая способствует повышению эффективности изучения иностранного языка, расширению словарного запаса и развития коммуникативной компетенции студентов (с использованием потенциала разнообразных онлайн-инструментов и ресурсов).

Ключевые слова: цифровые технологии; цифровые платформы; словарный запас.

Introduction. In today's world, where digital technologies permeate all spheres of life, education is not left out. The impact of digital tools on learning foreign languages, and in particular on mastering lexical skills, is particularly noticeable. Vocabulary expansion is one of the key aspects of successful communication in a foreign language, and digital technologies offer a wide range of opportunities for its effective development. In this article, we will look at the main advantages, methods and tools that the digital educational environment provides for improving lexical skills.

Nowadays teachers hold a responsibility to prepare younger generations to acquire essential skills such as digital competency, problem-solving skills, and creative and critical thinking, as well as instill a sense of ownership in their learning [1].

Main part. To begin with, it is important to define what the digital educational environment is. The digital educational environment (hereinafter referred to as DEE) is not just a set of technical tools, but a complex ecosystem that radically changes the way students learn and interact with teachers. The environment is fundamentally different from the system in that it includes completely different elements.: both coordinated with each other, as well as duplicative, competing, and even antagonistic. This allows the environment to develop more dynamically. It is never possible to predict which of the elements of the environment will turn out to be more effective, which will eventually be eliminated, which will be able to interact effectively in the future, and which, on the contrary, will split up [2].

The digital educational environment (DEE) for vocabulary teaching is, first of all, a set of information technologies, digital resources and organizational and pedagogical conditions that ensure effective and flexible mastery of the vocabulary of a foreign language. It is important to understand that DEE is not just a computer class or the use of the Internet in the classroom. This is an entire ecosystem that supports all stages of vocabulary learning, from initial familiarization with a new word to its active use in speech.

In an effort to effectively use the maximum of suggested digital tools and create DEE, educational organizations often develop their own digital platforms or use the adaptation of existing solutions, such as LMS (learning management systems, such as Canvas, designed to organize the learning process and assess academic performance). All modern tools that are needed in the process of education are actively used in these types of systems: animated presentations, videos and audios, mental maps, video calls, online games and tests, etc. Taking into account the peculiarities of information perception by the modern generation, the emphasis is on visualization of educational material using infographics (graphs, diagrams, illustrations, etc.). Moreover, improving the English language learning process involves the use of digital tools aimed at optimizing the assimilation and systematization of educational material. For example, online services such as Miro and Genially allow you to create intelligence maps and interactive posters that facilitate the memorization of large blocks of information, its structuring, as well as provide an opportunity to concisely present the studied material.

The use of scribing techniques (transformation of the educational text into a visual form [3, p. 130]) helps to activate the cognitive activity of students. Specialized services such as PowToon and GoAnimate, which offer a wide range of templates and effects, allow you to simplify the process of creating "scribe presentations".

Interactive online exercises that use WordWall, Quiz, Quizlet, Kahoot and Onlinetestpad services, could help to increase students' motivation and develop their information and communication competencies, critical and creative thinking, as well as communication skills. The organization of exercises in the form of a competition enhances the competitive effect and stimulates students' activity.

Technology such as the "word cloud" is an effective tool for visualizing educational material at various stages of learning a foreign language. Visual representation of the key aspects of the topic, the basic vocabulary and related terms helps to increase the concentration of students' attention. It is recommended to use the online services Mentimeter, WordArt and WordCloud to create so-called "word clouds".

The formation and development of lexical skills is carried out using specialized applications, for example, Duolingo, Babbel, Memrise and HelloTalk. The choice of the application is determined by the learning objectives, the level of language proficiency and the preferences of the students. Thus, these tools provide personalization of the educational process. At the stage of formation of initial skills, the most effective are Duolingo or Memrise, which offer the opportunity to choose the level of language proficiency and track learning outcomes through a scoring system. This system is an effective tool for monitoring learning activities and subsequent assessment of students' knowledge.

If it is necessary to study language material in depth, it is advisable to use the Babbel application, which offers structured and detailed courses developed by qualified linguists. The HelloTalk app is recommended for developing spontaneous speech skills, and ELSA Speak, which uses artificial intelligence technologies for personalized training, is recommended for pronunciation correction, in particular, articulation of complex sounds.

The use of software in the process of teaching English makes it possible to implement the following didactic tasks: increasing the cognitive activity of students, systematizing the repetition of educational material, effective monitoring of learning outcomes, and the formation and development of various types of mental activity. Within the framework of the digital educational environment, a modern teacher of a foreign language should have competencies in the field of searching, evaluating, selecting and demonstrating information from electronic educational resources and the Internet, focusing on the set educational goals. This process involves converting and presenting information in a format that is optimal for solving educational tasks, using appropriate software, including text and tabular editors, as well as tools for creating websites and presentations. In addition, it is advisable to use technological solutions for the effective organization and control of students' learning activities, in particular, testing programs and electronic workbooks.

Current psycholinguistic models of lexical acquisition delineate a sequential process involving several key stages:

Exposure. That is the initial encounter with a novel word in a naturalistic context (e.g., reading, listening). This stage is characterized by contextual understanding, implicit learning, and the establishment of initial lexical representations [4]. Exposure to authentic language use enhances the ecological validity of the learning process. Considering this stage, it is preferred to choose the platform that offers a wide range of reading and listening materials (articles, stories, videos, podcasts) and present words in meaningful sentences and paragraphs. As an example of digital tools, teachers could use news websites and apps (such as BBC Learning English) for exposure to current events and formal vocabulary, streaming services (such as Netflix, YouTube) for exposure to conversational English and cultural context, online libraries (such as Open Library, The Universal Digital Library) for access to classic literature.

Meaning negotiation. This stage is a deliberate engagement with the word's form-meaning mapping. This often involves consulting dictionaries, analyzing contextual cues, and seeking clarification on nuanced usages [5]. Access to varied definitions and usage examples promotes deeper understanding and nuanced comprehension.

As this stage provides enhancement of semantic encoding by providing learners with multiple perspectives on word meaning, it is advantageous to use integrated dictionaries and thesauruses with contextualized definitions, or translation tools, which should be used with caution. As an example, Linguee provides bilingual definitions and example sentences from translated texts, Vocabulary.com offers contextual definitions and adaptive learning features, and such digital platform as Merriam-Webster Online and Oxford Learner's Dictionaries provide detailed definitions of words, usage examples, and audio pronunciation. Thesauri such as Thesaurus.com can help students find synonyms and antonyms, which helps them to expand their vocabulary and improve their phrasing skills.

Storage and consolidation. Which is the process of encoding the new word into long-term memory. This stage necessitates the creation of strong associative links between the word's form, meaning, and contextual usage. Spaced repetition is a mnemonic technique based on repeating words at intervals. The method was developed by the American linguist Paul Pimsleur in 1967, and it is based on the scientific principles of memorization, allowing you to effectively learn new vocabulary. In modern conditions of digitalization of all spheres of life, including education, this method is still relevant and has only undergone changes, since you can now spend much less time creating flashcards using a variety of digital tools and applications. This makes it possible to diversify the material, expand the possibilities of visualization and motivate students to self-education. For example, Tinycards has a simple and accessible interface. In it, as in applications such as Anki, Memrise and Quizlet, the user can create their own collections of words. An application like LinguaLeo, for example, requires a special browser plug-in for the card system to start working. The feature is in demand because LinguaLeo allows you to save everything to a personal dictionary, which students can return to at any time. Flashcards+ is also a good application that allows you to add pictures and create double-sided flashcards. The application has the ability to work with pre-created sets of cards, which will save time. Another advantage is that the application synchronizes devices, so after starting training using a desktop computer, you can continue working using your phone in the future. All these applications allow you to create your own flashcards with images, audio and video, as well as use ready-made courses developed by other users, so they all are suitable during the process of encoding.

Retrieval and production. This stage is characterized as the ability to actively recall and use the word in both receptive (reading and listening) and productive (speaking and writing) contexts. This stage requires fluent access to the lexical representation and the ability to integrate the word into appropriate grammatical and discourse structures. At this stage it is preferable to use authentic materials (articles, videos, podcasts) to learn to use the vocabulary in context. Browser extensions such as Language Reactor help students to learn languages by watching movies and TV series on Netflix and YouTube with interactive subtitles. It can help with the development of lexical density, which is a measure of the proportion of content words used by a person, and lexical variety, which is a measure of the different words used in the certain context [6, p. 136]. Italki, an online-platform that connects students with native speakers for online tutoring and conversation practice is a powerful and effective tool that can be used during this stage. Another example of a useful digital tool is HelloTalk: a language exchange application where people can chat with native speakers and correct each other's language. It allows users to practice languages and immerse in culture with livestreams hosted by expert teachers and creators. Online games such as Vocabulary Spelling City and ESL Games Plus make the vocabulary learning process fun and interactive. Another example, quizzes created with the help of Kahoot and Quizizz, allow students to quickly and effectively check the assimilation of new words and expressions. These platforms use gamification and personalization to increase motivation and learning effectiveness. Thus, at this stage it is necessary to introduce the studied vocabulary into use as actively as possible in order to switch it from a passive vocabulary to an active one.

Reinforcement and automatization. That is continued exposure and use of the word over time, leading to its integration into the learner's active lexicon and effortless access. Continued engagement with the vocabulary in diverse contexts strengthens lexical connections and promotes automaticity in language use [7]. The focus on a combined skill is valuable for remembering the words and for understanding and utilizing vocabulary items.

These stages are not necessarily discrete and may overlap, but they provide a useful framework for understanding the cognitive processes involved. The advantages of using digital technologies to learn vocabulary on each of those stages are diverse. First, as we already mentioned, the individualization of learning. Digital platforms and applications allow to adapt content and exercises to the individual level and needs of each student. Adaptive tests, progress tracking systems, and personalized curricula allow students to focus on those words and topics that require special attention. Secondly, interactivity and engagement. Digital tools such as online games, quizzes, and multimedia resources make the learning process more exciting and motivating. Interactivity promotes active learning of the material and better memorization of words. Third, accessibility and flexibility. Digital technologies are available anytime and anywhere with internet access. This allows students to learn vocabulary at their own pace and according to their schedule. Fourth, multimedia content, which is especially important nowadays, given the needs and teaching style of the current generation of students. Digital platforms allow the use of various types of multimedia content, such as images, audio and video, to visualize and contextualize new words and expressions. This makes it much easier to memorize and understand vocabulary.

And finally, instant feedback. Digital tools provide instant feedback on the correctness of assignments, which allows students to quickly adjust their knowledge and avoid mistakes.

Despite the numerous advantages, the use of digital technologies for the development of lexical skills is also fraught with certain problems. The problem of the digital divide, when not all students have equal access to digital technologies and the Internet, remains relevant. It is also important to consider the need to develop digital literacy skills among both students and teachers in order to use digital tools effectively. There is also a risk of distraction, as digital devices can be a source of distraction, which can negatively affect the learning process. Finally, the issue of authenticity and quality of content is important: not all content available on the Internet is of high quality and reliable.

Nevertheless, the prospects for using digital technologies to improve lexical skills are enormous. With the development of artificial intelligence and machine learning, more intelligent and personalized tools will appear that will allow students to achieve even better results in learning foreign languages.

It is important that teachers use digital technologies consciously and purposefully, integrating them into the learning process and taking into account the individual needs and characteristics of their students.

Conclusion. In conclusion, digital technologies open up new opportunities for improving lexical skills. Customization, interactivity, accessibility, and multimedia are just some of the advantages that digital platforms, applications, and tools offer. The selection of appropriate digital platforms for English vocabulary acquisition should be guided by a comprehensive understanding of the cognitive processes involved in lexical acquisition. By aligning platform features with the distinct stages of vocabulary mastery, educators and learners can optimize the effectiveness of their vocabulary acquisition strategies and achieve long-term mastery. Further research is needed to evaluate the efficacy of different digital platforms in supporting these specific stages and to develop evidence-based guidelines for their implementation in foreign learning contexts, but we can already say that the skillful use of these tools makes the learning process more exciting and motivating. With the development of technology and the accumulation of experience in this field, we can expect even more significant progress in the future.

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S. Yu. Tyurina[1], E. B. Staroverova[2], N. V. Dokuchaeva[3], I. I. Lyubanets[4]

Federal State Financed Educational Institution of Higher Education "Ivanovo State Power Engineering University named after V. I. Lenin", Ivanovo, the Russian Federation, [1]tsu1999@mail.ru, [2]katestaroverova@mail.ru

[3]Karaganda Technical University named after Abylkas Saginov, Karaganda, the Republic of Kazakhstan, dokuchaeva_natali@inbox.ru

[4]Institution of Education "Baranavichy State University", Baranavichy, the Republic of Belarus, irina_lubanetz@inbox.ru

INTRODUCTION OF CONNECTIVIST LEARNING THEORY INTO THE CLASSROOM

The paper examines the issues of learning theories. The definition of notion *learning* is discussed. The key ideas of behaviorism and cognitive approaches are highlighted. The authors point out that evolution of these approaches was the development of connectivism theory. The paper studies the theory of connectivism. Different ways to apply the basic principles of connectivism in the education process using digital technologies are analyzed. The authors conclude that though connectivism theory is popular approach in methodology, it requires further implementation and testing.

Key words: learning theories; behaviorism; cognitive approach; connectivism.