

## DEVELOPMENT OF FOREIGN LANGUAGE LEXICAL COMPETENCE IN MIDDLE SCHOOL STUDENTS THROUGH THE USE OF DIGITAL TECHNOLOGIES

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**Abstract.** *The article explores the issue of developing foreign language lexical competence in middle school students through the use of digital technologies. The relevance of the topic is driven by the transformation of the educational process in the context of digitalization, the needs of modern learners, and the requirements of updated educational standards that emphasize the development of communicative, digital, and critical competencies. The essence of lexical competence as a fundamental component of foreign language communicative competence is revealed, and the stages of its formation are defined: familiarization with lexical units, automatization of speech skills, and communicative practice. The article focuses on the potential of digital resources in foreign language teaching, including online platforms (LearningApps, Wordwall, Quizlet), mobile applications (Duolingo), interactive exercises with video and audio materials, gamification, and augmented reality. The advantages of digital tools are outlined, such as individualized learning, increased motivation, development of self-monitoring skills, and access to an authentic language environment. The article provides theoretical justification and methodological recommendations that can be applied in the professional practice of foreign language teachers.*

**Key words:** *lexical competence, digital technologies, foreign language, middle school, educational innovations.*

## ФОРМУВАННЯ ІНШОМОВНОЇ ЛЕКСИЧНОЇ КОМПЕТЕНЦІЇ В УЧНІВ СЕРЕДНЬОЇ ШКОЛИ ІЗ ЗАСТОСУВАННЯМ ЦИФРОВИХ ТЕХНОЛОГІЙ

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**Анотація.** У статті досліджено проблему формування іношомовної лексичної компетенції в учнів середньої школи із застосуванням цифрових технологій. Актуальність теми зумовлена трансформацією освітнього процесу в умовах цифровізації, потребами сучасних учнів і вимогами оновлених освітніх стандартів, які акцентують увагу на розвитку комунікативної, цифрової та критичної компетентностей. Розкрито сутність лексичної компетентності як базового компонента іношомовної комунікативної компетенції й визначено етапи її формування: ознайомлення з лексичними одиницями, автоматизація мовленнєвих навичок і комунікативна практика. Увагу зосереджено на можливостях використання цифрових ресурсів у процесі навчання іноземної мови, а саме: онлайн-платформ (LearningApps, Wordwall, Quizlet), мобільних застосунків (Duolingo), інтерактивних вправ із використанням відео й аудіо, гейміфікації та доповненої реальності. Визначено переваги використання цифрових інструментів, серед яких – індивідуалізація навчання, підвищення мотивації, розвиток навичок самоконтролю, забезпечення доступу до автентичного мовного середовища. Стаття містить теоретичне обґрунтування й методичні рекомендації, що можуть бути використані в професійній діяльності вчителя іноземної мови.

**Ключові слова:** лексична компетентність, цифрові технології, іноземна мова, середня школа, інновації в освіті.

**Problem Statement.** In the context of the modern transformation of the educational space, driven by both globalization challenges and the development of digital technologies, the issue of forming foreign language lexical competence in middle school students becomes particularly relevant. Lexical competence, as a component of communicative competence, is a fundamental condition for effective foreign language acquisition and a means of implementing speech activity. However, traditional teaching methods often do not meet the needs of the generation of digital natives or the requirements of updated educational standards, which emphasize the development of critical thinking, learner autonomy, flexibility, and creativity.

One of the effective ways to update the practice of developing lexical competence is the integration of digital educational technologies into the learning process. Various digital tools (mobile apps, online platforms, gamification, artificial intelligence, augmented reality, etc.) promote individualized learning, enhance students' motivation, enrich the language environment, and develop skills in working with authentic lexical units. Nevertheless, the issue of pedagogically appropriate, systematic, and effective use of digital technologies for developing lexical competence in middle school students remains problematic, which underscores the relevance of this study.

**Analysis of Recent Research and Publications.** The topic of forming foreign language

lexical competence in middle school students is actively covered in both domestic and international methodological literature. Specifically, the methodology of teaching English, the development of speaking skills, and the competency-based approach to learning are examined in the works of scholars such as O. B. Biych [3], O. I. Vovk [4] and L. V. Kravchuk [10]. These researchers emphasize the importance of considering students' age-related psychological characteristics and applying effective lexical learning strategies.

Particular attention to the formation of lexical competence through digital technologies is paid by O. O. Barvynska [1; 2], Y. A. Zapolska [7], L. V. Kozachyner [8] and N. V. Olefirenko [12], who demonstrate the effectiveness of using multimedia tools, educational online platforms, mobile applications, and interactive exercises. These authors highlight the need to rethink the teacher's role as a facilitator of learning in the context of digital educational transformation.

The **aim** of this article is to justify the pedagogical feasibility and determine effective methods for forming foreign language lexical competence in middle school students using digital technologies; to explore the potential of digital resources in developing lexical skills; and to offer practical recommendations for their integration into foreign language education.

**Main Issues.** In today's world, proficiency in a foreign language is an essential component of personal and professional development. One of the key components of successful language learning is the development of lexical competence, which is understood as [4, p. 147–148]:

- a) knowledge of the lexical structure of a foreign language;
- b) the ability to recognize and understand lexical units in the flow of speech;
- c) skills in forming lexical units from word-building elements;
- d) the ability to use lexical units appropriately in speech according to the context and the norms and usage of the target language;
- e) the ability to determine the contextual meaning of words, compare it across languages, and identify culturally specific meanings;
- f) the ability to conceptually model foreign lexical material.

Lexical competence develops in three stages. The first stage is the introduction of new vocabulary, which involves forming a theoretical

understanding of the lexical system of the foreign language, rules for its use, semanticizing lexical units, and demonstrating their use in real contexts. The second stage involves the automation of new lexical units (i.e., skill formation) at the levels of: a) word forms, phrases, and sentences; b) supra-phrasal units (dialogues or monologues) and mini-texts. The third stage is communicative practice. Here, learners develop the ability to solve communicative tasks using learned vocabulary, perform speech exercises, and assess word retention [3, p. 23]. This step-by-step approach ensures a deep and systematic acquisition of vocabulary.

Lexical competence is supported by a special lexical strategy with two aspects. The first involves organizing and memorizing vocabulary using techniques based on students' cognitive characteristics. The second supports the acquisition of lexical items, semantic information, and the automation of practical usage at various complexity levels, as well as the development of skills to combine vocabulary items in diverse communication situations [3, p. 147–148]. Thus, lexical competence serves not only as a component of language competence but also as a foundation for developing broader communicative competence.

Modern educational realities in Ukraine require the implementation of innovative approaches, particularly digital technologies. According to the Law of Ukraine "On Education" [6] and the "New Ukrainian School" concept [9], digital competence is defined as a key component of the modern educational process.

This is driven by the globalization of the information space and the rapid development of digital technologies, which are transforming traditional learning methods and setting new demands for the content, forms, and teaching methods.

According to the State Standard of Basic and Complete Secondary Education [5], information and communication competence is understood as the student's ability to effectively use Information and Communication Technologies as well as digital tools for completing both personally meaningful and socially useful tasks.

In this context, the issue of developing foreign language lexical competence through digital technologies becomes especially relevant, as they enable the individualization of learning, maintain student motivation, and ensure a flexible learning environment.

Digital technologies refer to any tools that allow the creation, viewing, modification, storage, and transmission of information in digital form. They include computer networks, software, digital content, and online services. Their application in education opens new opportunities for organizing learning – from anytime, anywhere access to resources to building personalized educational trajectories [1].

Y. A. Zapolska defines digital technologies in language learning as a set of modern pedagogical tools and methods based on active use of computer and network resources in distance, blended, group, or individual learning formats. These are aimed at creating conditions that simulate real foreign-language communication and foster students' cognitive, academic, and creative development in today's digital environment [7, p. 44–48].

The use of digital environments not only expands access to information but also fundamentally changes the teacher's role. The modern teacher is no longer merely a knowledge transmitter but a guide in the digital world who helps develop students' critical thinking, digital literacy, and learning autonomy. Therefore, a high level of digital competence among teachers is essential for effective teaching and the development of students' lexical competence [1].

One of the priorities in modern foreign language teaching methodology is integrating digital technologies into the process of forming lexical com-

petence. Combining traditional teaching with innovative technologies makes vocabulary acquisition more effective, dynamic, and personalized [10].

A leading direction is multimedia learning, including videos, audio files, interactive presentations, and virtual flashcards (e.g., Quizlet), which enhance students' visual and auditory memory and support better vocabulary retention through stronger associative links [12, p. 45–50].

The Quizlet online platform is an interactive service for vocabulary learning through word-definition flashcard sets grouped into modules, folders, or courses. Students can engage in different study modes, which diversify and enhance vocabulary memorization and allow them to track their learning progress. Quizlet features include translation, listening, writing, and game-based vocabulary learning [2]. Figure 1 shows a sample flashcard set created using the Quizlet platform.

As illustrated in Figure 1, Quizlet enables the creation of customizable vocabulary sets, which supports individualized learning and progress tracking.

Other important tools include platforms like Duolingo, LearningApps, Kahoot, and Wordwall, which offer interactive games, quizzes, and exercises with immediate feedback. This promotes student motivation, self-control skills, and personalized learning [8, p. 28–34]. The interactive exercise developed with LearningApps is presented in Figure 2.

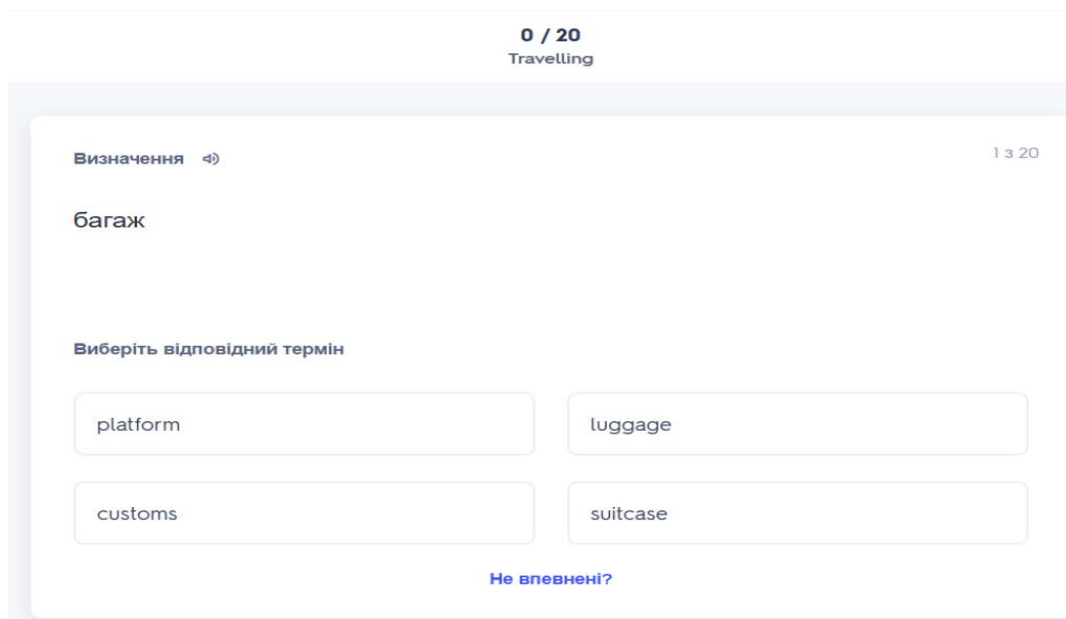
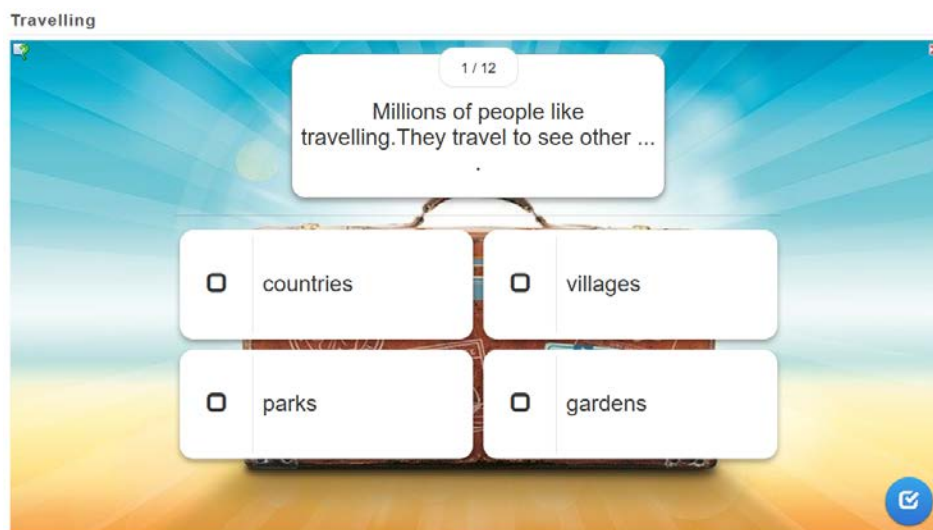


Fig. 1. Screenshot of a flashcard set created on the Quizlet platform





**Fig. 2. Screenshot of an interactive exercise created on the LearningApps platform**

Special attention should be paid to Duolingo, a mobile app offering language courses in various foreign languages. It allows users to set goals, take placement tests, and choose personalized learning paths. Duolingo combines listening to correct pronunciation, word ordering, sentence construction, word-image matching, and recording user pronunciation for evaluation [11, p. 54]. The creative design, gamified approach, and systematic task completion contribute to successful lexical competence development using mobile technology.

**Conclusion.** The development of foreign language lexical competence in middle school students within the digitalized educational environment is a necessary step toward the successful implementation of a competency-based approach in language learning. Digital technologies provide a powerful means of enhancing student engagement, supporting individualized learning paths, and fostering learner autonomy.

The integration of digital tools into the process of vocabulary acquisition contributes to

more effective memorization and to the formation of sustainable lexical skills applicable in real-life communication. Digital platforms, mobile applications, and gamified resources offer flexible learning opportunities that meet the needs of today's learners and create authentic language experiences.

The step-by-step approach to lexical competence formation (comprising vocabulary introduction, skill automatization, and communicative practice) proves to be more efficient when supported by modern technological resources. This synergy of traditional methodology and digital innovation enhances the quality of foreign language instruction, promotes the development of critical and digital competencies, and prepares students for successful communication in a globalized world.

The findings of this study emphasize the pedagogical value of incorporating digital technologies in foreign language teaching and offer practical recommendations for their systematic application in classroom practice.

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