

Date: 13<sup>th</sup> December-2025

INCREASING THE ENGLISH VOCABULARY OF MEDICAL STUDENTS  
THROUGH BLENDED LEARNING BASED ON THE MOODLE LMS  
PLATFORM

Jonzaqova Nigora Nizamiddin qizi

[nigorajonzoqova@gmail.com](mailto:nigorajonzoqova@gmail.com)

**Abstract:** This study investigates the effectiveness of blended learning based on the Moodle Learning Management System (LMS) in developing the English lexical competence of medical students. In the context of the growing role of English as the primary language of medical science and professional communication, the improvement of medical students' vocabulary acquisition has become a priority in higher medical education in Uzbekistan. The research analyzes the didactic potential of the Moodle platform, develops interactive learning modules for medical English, and implements synchronous and asynchronous learning activities within a blended learning model. An experimental study was conducted among second-year medical students, divided into experimental and control groups. The results of pre-tests and post-tests demonstrated that students in the experimental group achieved significantly higher vocabulary development (by 23–28%) compared to those taught through traditional methods. The findings confirm that Moodle-based blended learning enhances students' motivation, independent learning skills, and professional language competence. The results of the study can be effectively applied in modernizing foreign language education in higher medical institutions.

**Keywords:** Moodle LMS, blended learning, medical English, lexical competence, interactive learning, digital education, higher medical education, vocabulary development.

**Introduction.**

Today, English is considered the primary language of information in the field of medicine. Most modern medical literature, clinical protocols, international scientific articles, online courses, and symposiums are conducted in English. Therefore, developing English lexical competence among students studying at higher medical educational institutions in Uzbekistan is regarded as one of the most important strategic tasks.

In recent years, based on the decrees of the President of the Republic of Uzbekistan aimed at developing digital education, distance and blended learning technologies have been actively introduced into the higher education system. In particular, platforms such as Moodle LMS, Google Classroom, and Microsoft Teams have become an integral part of the educational process.

The experience gained during the pandemic period showed that the blended learning model, which combines traditional classroom lessons with online learning elements, contributes to increasing students' activity, independent learning skills, and the quality of knowledge. Especially in teaching English, the Moodle platform provides opportunities to develop vocabulary in an interactive, automated, and flexible way.



Date: 13<sup>th</sup> December-2025

Therefore, this thesis is devoted to highlighting modern pedagogical solutions for organizing blended learning based on Moodle LMS in order to improve the English vocabulary of medical students.

The main purpose of the study was to identify effective methods and technologies for developing the English lexical competence of medical students through blended learning based on the Moodle LMS platform and to substantiate their practical effectiveness. In the process of achieving this goal, such tasks as analyzing the didactic possibilities of the Moodle platform in improving English vocabulary, developing interactive lesson modules for medical English, effectively organizing synchronous and asynchronous classes, determining the experimental effectiveness of the methodology, and developing practical recommendations for higher medical educational institutions of Uzbekistan were carried out.

During the research, the following methods were widely used: analysis of scientific and pedagogical literature, design of electronic learning modules on the Moodle platform, pedagogical experimental work, pre-tests and post-tests for knowledge assessment, surveys and interviews among students, as well as statistical analysis methods. These methods ensured the reliability and scientific validity of the research results.

The Moodle LMS platform stands out for its rich functional capabilities in teaching English. In particular, the platform allows for creating interactive tasks, automatic testing and assessment, organizing discussions through forums, real-time communication through chat and video conferencing, creating convenient conditions for independent learning, as well as continuous access via mobile devices. Especially in teaching medical English, the use of electronic dictionaries, audio and video materials, exercises based on clinical situations, tests and quizzes, and group work through Wiki projects ensures high effectiveness in developing students' lexical competence.

In the study, classes were organized based on a blended learning model. Synchronous classes were conducted through face-to-face classroom lessons or online video lessons with the direct participation of the teacher. Asynchronous classes were organized in the form of independent tasks, online tests, participation in forums, and the use of electronic resources via the Moodle platform. According to the weekly schedule, students worked with medical terms, translated texts, completed tests and tasks, and actively participated in scientific discussions.

Experimental and trial work was carried out among second-year students at a higher medical educational institution in Uzbekistan. A total of 60 students participated in the study and were divided into experimental and control groups. According to the results of the initial tests, the level of English vocabulary in both groups was almost the same. During one semester, the experimental group studied under blended learning conditions based on Moodle, while the control group was taught using traditional methods.

The results of the final tests showed that the experimental group achieved 23–28% higher results in English vocabulary indicators compared to the control group. In addition, during the experiment, it was found that students' learning motivation, interest in independent learning, competence in using information technologies, and readiness for



**Date: 13<sup>th</sup>December-2025**

professional communication increased significantly. This confirms that the Moodle LMS platform has high didactic effectiveness in teaching medical English.

The results of this study are of practical importance for modernizing the teaching of English in higher medical educational institutions, introducing professional foreign language modules on the Moodle platform, developing methodological manuals for teachers, and forming students' independent learning skills. Furthermore, the research outcomes contribute to the development of digital education in the higher medical education system of Uzbekistan.

#### **REFERENCES:**

1. Bonk, C. J., & Graham, C. R. (2006). *The Handbook of Blended Learning: Global Perspectives, Local Designs*. San Francisco: Pfeiffer.
2. Nation, I. S. P. (2013). *Learning Vocabulary in Another Language*. Cambridge: Cambridge University Press.
3. Dudeney, G., Hockly, N., & Pegrum, M. (2014). *Digital Literacies*. London: Pearson Education.
4. Al-Qahtani, M. (2015). The effectiveness of using Moodle in teaching English vocabulary. *International Journal of Education and Development using ICT*, 11(3), 50–65.
5. Allen, I. E., & Seaman, J. (2017). *Digital Learning Compass: Distance Education Enrollment Report*. Babson Survey Research Group.
6. O'zbekiston Respublikasi Prezidentining "Raqamli ta'limni rivojlantirish chora-tadbirlari to'g'risida"gi qarori. Toshkent, 2020.
7. Bates, A. W. (2015). *Teaching in a Digital Age: Guidelines for Designing Teaching and Learning*. Vancouver: BCcampus.
8. Richards, J. C., & Rodgers, T. S. (2014). *Approaches and Methods in Language Teaching*. Cambridge: Cambridge University Press.

