



## THE EFFECTIVENESS OF DEVELOPING STUDENTS' PROFESSIONAL COMPETENCIES IN MEDICAL EDUCATION

**Juraeva Mastura**

Assistant of the Department of Latin Language,  
Pedagogy and Psychology of the Fergana  
Medical Institute of Public Health  
<https://doi.org/10.5281/zenodo.18141442>

### ARTICLE INFO

Received: 29<sup>th</sup> December 2025

Accepted: 30<sup>th</sup> December 2025

Online: 31<sup>st</sup> December 2025

### KEYWORDS

*medical education, professional competence, clinical thinking, communication skills, innovative technologies, interactive methods, simulation, learning efficiency, information and communication technologies.*

### ABSTRACT

*This article examines the effectiveness of developing students' professional competencies in the process of medical education. The modern healthcare system requires the training of highly qualified and competent specialists. The development of professional competencies involves the integration of theoretical knowledge with practical skills. The article highlights key components of professional competence, including clinical thinking, communication skills, the use of information and communication technologies, and adherence to ethical standards. In addition, it discusses methods to improve the efficiency of medical education through the application of innovative pedagogical technologies, interactive methods, simulations, and practical training sessions..*

### Introduction

At present, the teaching of a professionally oriented foreign language to students of medical higher education institutions in our country is defined as a process that includes clearly planned strategies and methods, as well as the development of professional foreign language comprehension. The complexity of adequately mastering a professional foreign language by medical university students, as well as working with medical scientific articles and specialty-related texts written on the basis of medical terminology, requires instructors conducting practical classes to develop new teaching methods, continuously improve their professional skills, and effectively deliver knowledge to students. These tasks constitute the primary responsibilities of foreign language teachers in medical education.

Therefore, the research conducted in the form of an applied study focuses on a professionally oriented foreign language course—specifically English—for medical purposes, aimed at first-year students majoring in *General Medicine* at medical higher education institutions. The study seeks to analyze students' needs for developing professional English competencies and to assess their level of language proficiency.

The third chapter of our research examines the process and main results of experimentally testing the methodology for developing receptive terminological competence in a professional foreign language. The experimental work was conducted in two stages:

**Stage 1 – Preparatory stage**

**Stage 2 – Instructional experiment**

A total of 140 first-year students majoring in 60910200 – *General Medicine* participated in the experimental study. The experiment conducted in accordance with the thematic content meets all the methodological requirements established in the scientific works of E. A. Shtulman, P. B. Gurvich, and M. V. Lyakhovitsky, and the obtained results are valid and reliable.

The analysis of the experimental work demonstrates the necessity of developing a textbook for first-year *General Medicine* students aimed at enhancing their professional foreign language competencies by supplementing existing teaching materials with receptive terminological systems based on Latin and Greek. The proposed textbook includes activities designed to develop reading and translation skills of professionally oriented English texts through Latin and Greek receptive terminology, as well as exercises, procedures, and methodological guidelines. These materials enable students to quickly and effectively comprehend English medical terms for academic and professional purposes.

When students are provided with opportunities to read and comprehend texts, process relevant vocabulary, and apply acquired knowledge within the studied context, the textbook supports and expands the existing curriculum and enables learners to study within the scope of their future profession.

Students studying a professional foreign language are primarily required to develop academic reading comprehension skills that enable them to acquire high-level academic and professional knowledge. The conducted research focuses on examining how professional foreign languages are taught in *General Medicine* programs at medical higher education institutions. Professional foreign language classes play a crucial role for *General Medicine* students, as they are required to study authentic medical texts written in English, correspond with international colleagues, read about modern medical advancements and practices abroad, and develop fundamental research skills during scientific investigations.

Furthermore, medical students need to master professional English to meet the requirements of their future careers. For instance, students in *General Medicine* must read and understand new medical terms related to emerging diagnostic methods. In many cases, professional guidelines and instructions are written primarily in English, making advanced knowledge of professional English essential.

Next, we will describe each stage of the experimental work conducted in this study.

Before initiating the instructional experiment, thorough preparation was carried out during the preparatory stage. The main objectives were defined as follows:

- to identify medical students' attitudes toward learning professional English and mastering receptive terminological competence;
- to determine students' awareness of the practical importance of medical Latin in the process of learning professional English;
- to assess the level of students' receptive terminological competence in a professional foreign language;
- to identify the linguodidactic potential of Latin and Greek terminological elements in teaching medical English;
- to analyze the effectiveness of various approaches to explaining the meanings of medical terms.

To achieve these objectives, a questionnaire survey was conducted among students of Fergana Medical Institute of Public Health. A total of 140 first-year students majoring in *General Medicine* participated in the survey. The questionnaire consisted of nine questions.

The first question of the survey was: *“What is your attitude toward the course ‘Foreign Language in Medicine’ taught at your university?”*

The analysis of students’ responses showed that the majority of students study professional English with interest (52%), 34% of respondents are indifferent toward professional English, and 14% selected the option *“I have not thought about it.”*

Prior to conducting the survey, we did not expect such a high level of interest in learning professional English. At the same time, the obtained data highlight existing problems in teaching professional foreign languages at medical universities, as nearly half of the respondents (48%) showed no interest in developing professional foreign language competencies.

The second question—*“How much time per week do you spend independently studying professional English?”*—yielded the following results:

17% of respondents spend 6–7 hours per week (approximately one hour per day); 29.4% spend 2 hours per week; 18% spend 3 hours; 9% spend 4 hours; and 12.4% reported spending time on independent study without specifying duration. Approximately 10% of respondents study for 5–6 hours per week, while only 4.2% reported studying professional English for more than 10 hours per week.

Calculations showed that students who claimed to study professional English for less than one hour per week actually spend approximately 6.5 minutes per day. For those studying more than one hour per week, the average daily study time was only about 17 minutes. Only students who studied three or more hours per week spent approximately 30 minutes per day.

These findings objectively reflect the current state of independent foreign language learning in medical higher education institutions and indicate that medical students do not devote sufficient time to independently studying professional English.

Analysis of students’ responses regarding their preferred type of professional foreign language activity revealed that communicative speaking skills are considered a priority. A majority of students (54%) identified speaking as the main component of professional foreign language activity; 32% preferred reading professional texts and articles; only 9% considered correspondence with international colleagues important; and 5% emphasized listening comprehension.

Despite the fact that future physicians will work extensively with scientific articles, disease descriptions, and medical documentation, nearly 68% of students did not recognize reading as an important form of professional foreign language activity. Individual interviews with participants revealed that students experience difficulties in reading and comprehending professional medical texts due to unfamiliar terminology. They reported that excessive reliance on dictionaries makes reading time-consuming, monotonous, and unengaging.

Another survey question aimed to identify difficulties encountered while reading professional texts in English. Analysis showed that 43% of students find comprehension difficult due to lack of knowledge of specialized terminology; 29% reported difficulties caused by insufficient grammar knowledge; and 28% stated that understanding the content of the

text itself is challenging. The results indicate that the primary difficulty lies in unfamiliar medical terminology. Additionally, 60% of respondents did not understand the potential role of Latin in teaching professional English.

In response to the question “*Do you know how to infer the meaning of English medical terms derived from Latin and Greek?*”, 89% of students stated that they could not understand English terms based on Latin or Greek elements. According to M. N. Chernyavsky, approximately 75% of modern medical English terminology is derived from Latin and Greek. To assess students’ awareness, they were asked whether English medical terms originate from Latin and Greek.

### Conclusion

The responses indicate that only 11% of participants believe that most English medical terms are derived from Latin and Greek. Only 50% responded positively to the question of whether Latin can facilitate learning English. However, 15% believed that Latin complicates the process of learning English, while 35% found it difficult to answer the question.

### References:

1. Жураева, М. (2025). Lotin tilida tibbiyot ta’limida talabalarni klinik terminlar orqali professional ko’nikmalarini rivojlantirish. *Лингвоспектр*, 1(1), 222-227.
2. Mastura, J. R. (2022). The use of social forms in improving the effectiveness of the lesson. *Eurasian Journal of Learning and Academic Teaching*, 9, 118-122.
3. Juraeva, M. (2025). PERSONNEL TRAINING BASED ON INNOVATIVE DEVELOPMENT: PEDAGOGICAL APPROACHES AND EDUCATIONAL EFFECTIVENESS. *AMERICAN JOURNAL OF SOCIAL SCIENCE*, 3(10), 53-64.
4. Mastura, J. (2023). Brief historical background of Latin. *O‘zbekistonda Fanlararo Innovatsiyalar va Ilmiy Tadqiqotlar Jurnal*, 2(20), 471-473.
5. Jurayeva, M. T. K. (2022). Some opinions about social forms in teaching German. *Oriental renaissance: Innovative, educational, natural and social sciences*, 2(5-2), 372-376.
6. Mastura, J. (2021). Applying social forms: The project method in teaching foreign languages. *Бюллетень науки и практики*, 7(11), 354-358.
7. Жўраева, М. (2020). Немис тилини ўқитишда ижтимоий шакллардан фойдаланиш. *Science and Education*, 1(2), 520-526.
8. Mastura, J. (2023). Medicine of ancient Asian peoples. *European Journal of Interdisciplinary Research and Development*, 16, 405-411.
9. Kizi, M. T. (2020). Applying the social forms of education in teaching foreign languages. *Вопросы науки и образования*, (41 (125)), 56-60.
10. Kizi, T., & Mastura, J. (2023). Hippocrates is the father of medicine.
11. Qizi, J. M. T. (2021). The use of social forms to increase lesson effectiveness. *ACADEMICIA: An International Multidisciplinary Research Journal*, 11(3), 103-109.
12. Komilova, M. (2023). O ‘ZBEK TILIGA XITOIY TILIDAN O ‘ZLASHGAN OZIQ-OVQAT NOMLARI TAHLILI. *Oriental renaissance: Innovative, educational, natural and social sciences*, 3(20), 54-56.