

RESEARCH ARTICLE

Open Access

# OPTIMIZATION OF ENGLISH LANGUAGE TEACHING IN MEDICAL UNIVERSITIES: FORMATION OF LEXICAL, GRAMMATICAL AND COMMUNICATION SKILLS

**Dilafroz Buranova**

PhD, associate professor, Head of Foreign Languages Department, Tashkent Pediatric Medical Institute, Uzbekistan

## Abstract

This article analyzes the issues of formation of lexical, grammatical and communicative skills in the process of teaching English at a medical university. The objectives of the study are to review the existing methods of teaching English in medicine, and to identify the main stages of learning that contribute to effective language acquisition. The result of the study is due to the need to optimize the educational process, where English plays a key role in the training of medical specialists. Research methods imply the development of a structured teaching methodology that can significantly increase the level of students' training and their readiness for international practice. Proper assimilation of medical terminology and the ability to communicate in English are important factors for the successful practice of future doctors.

**Keywords** English, medical universities, lexical skills, grammatical skills, communication skills, teaching methods, medical terminology, international practice, active teaching methods.

## INTRODUCTION

In the context of globalization and integration of medical education, the importance of learning English as the international language of science and medicine is increasing. So, the effective teaching methodology is required in medical universities, that would ensure the formation of lexica, grammatical skills, as well as communicative competence of students preparing for professional activity.

Teaching methods in non-philological universities are becoming more and more priority in the field of teaching English, and, as a result, the methodology itself is becoming richer due to the emergence of new manifestations. Modernization

of the system of continuing professional education, involving the effective use of the principles of variability, mobility and flexibility, improvement of the activities of teachers of foreign languages, purposeful implementation of solutions to various methodological tasks requires regular coordination of methods of teaching English for the medical profession [1].

## LITERATURE REVIEW

Increasing literacy in foreign languages is an important manifestation of the further development of intellectual potential based on modern standards. The strategy of teaching modern English is not only an important direction

in educational policy, but also a reality that is manifested as significant topic of scientific research by many experts. Scientists believe that in the process of globalization, along with the fact that English is universal language, it is natural that many problems are faced with its teaching, in which educators from all over the world seek to find a teaching strategy that is appropriate and correct in the process of solving this problem [12]. At the same time, in the process of teaching foreign languages, it is noted that the formation of the necessary motivation for Khamma is not homogeneous, in which the development and improvement of the necessary methods and methods of teaching is particularly noted in order to meet the needs of the specialty and taking into account the field requirements[7; 2; 3].

It is known that the issues of the correct organization of the scientific and methodological base of teaching of English, taking into account modern standards and requirements, is among the relevant topics of various scientific works. In the interpretation of these studies, it is important that English language is adapted to meet their specific academic and professional needs when teaching medical students[5; 6; 8; 10]. Some advance the view that certain approaches should be followed in this regard, such as relying on the sum of styles based on a certain agreement between the teacher and the learner, and not on concrete rules. In this, the integration of the various skills of acquiring a foreign language is interpreted as an important factor in achieving such a specific goal as communicative competence. According to this idea, on the basis of negotiations between the teacher and the learner, the definition of goals and objectives, on the basis of which language learning is manifested as a dynamic and interactive process, and a significant manifestation of its formation based on the needs of the learner [11]. Another view is that on the basis of the integralization of language and content goals, the method of

transmitting knowledge to the learner is purposeful, putting into discussion the correct development of a communicative strategy based on a balanced synthesis of vocabulary, experience, content and grammar[9].

The process of comparing different techniques and methods of teaching languages is always a phenomenon of great interest, since it is natural that different points of view and contradictions arise in this, as interaction and connection between the teacher and the learner arises. This, in turn, induces intersubjectivity. The emergence of human experience independently of personal characteristics and situations, and the identification of a solution to an intersubjective problem through the means of individual consciousness assumes a reliance on another set of ideas about the ability to intersubjectivity. Here, with the importance of human interaction, mutual attention and interaction, the theory of mind occupies a primary place[4].

Based on this, it can be argued that over the past decades, many methods of teaching English in medical universities have been developed that take into account the specifics of medical terminology and the needs of students. These methods are aimed at improving language proficiency and preparing students for future professional activities.

### **Research Questions**

Lexical and grammatical skills ensure the understanding and use of professional terminology, which is critically important for the accurate transmission of information in medicine. Communication skills allow doctors to interact with patients, colleagues and representatives of the international community. English language proficiency provides access to relevant scientific research, allows you to participate in international conferences and share experiences. Thus, the integration of all three types of skills into the

educational process contributes to the training of highly qualified specialists ready for the global challenges of medicine.

The formation of language skills can be divided into several key stages:

1. The stage of knowledge transfer is to provide students with thematic material, including texts, audio and video related to medical topics.
2. The stage of familiarization with the topic is working with the main idea and structure of the material, understanding its content and significance.
3. The stage of terminology acquisition is the study of specific vocabulary and phraseology necessary for professional communication.
4. The stage of practical application is the involvement of students in the language environment through role—playing games, simulations and communication in English.

This classification allows you to organize the learning process so that students can gradually deepen their knowledge and skills.

### **METHODOLOGY**

Taking into account the classification of the stages of formation of lexical, grammatical and communicative skills related to the methodology of teaching English at a medical university, we found it necessary to clarify the following main stages:

1. Transfer of knowledge by providing thematic material.
2. Familiarization with the essence and composition of the thematic topic.
3. Understanding new terminology and lexical units.
4. Involvement in the language environment through communicative communication.

In order to evaluate the effectiveness of the

proposed methodology of teaching English to medical students, based on a clear structuring of the stages of formation of lexical, grammatical and communicative skills, experimental training was organized at the Tashkent Pediatric Medical Institute. The study involved 60 students studying English at a basic level. The participants were divided into two groups: an experimental group (30 people), where the proposed methodology was used, and a control group (30 people), who studied according to the traditional program.

The stages of the experiment were carried out in the following order:

1. Knowledge transfer:

- A thematic material on the topic “In the hospital” was prepared for both groups. In the experimental group, the emphasis was placed on the use of multimedia resources (video, audio, interactive tasks), whereas the control group used only text materials.

2. Familiarization with the essence and composition of the topic: Lectures and seminars were held in both groups, but the experimental group used active learning methods (discussions, group projects), which contributed to a deeper understanding of the topic.

3. Understanding new terminology and lexical units: In the experimental group, image cards and video recordings were used to visualize new words, while the control group used traditional vocabulary tasks. Both groups were tested for understanding the new vocabulary a week after the introduction of the terms.

4. Involvement in the language environment: Role-playing games and simulation tasks aimed at using new material in conversational practice were conducted in the experimental group. The control group was engaged in traditional translation and repetition exercises.

### **RESULTS**

To assess the effectiveness of the methodology, the following methods were used: vocabulary and grammar tests before and after the experiment; questionnaires for self-assessment of communication skills; monitoring the activity and involvement of students in the learning process.

The results of the tests and surveys were processed using statistical methods (t-test for independent samples) to determine the significance of the differences between the groups. The initial level of knowledge (preliminary testing) in the experimental group has made up an average score of 45/100 (standard deviation — 8.5); in the control group the average score has made up 46/100 (standard deviation — 9.0). The final level of knowledge (after the experiment) in the experimental group has made up an average score of 78/100 (standard deviation — 7.2); in the control group - 62/100 (standard deviation — 8.1). The test results were analyzed using a t-test for independent samples (see Formula 1). This

indicates a statistically significant difference between the groups.

Formula 1

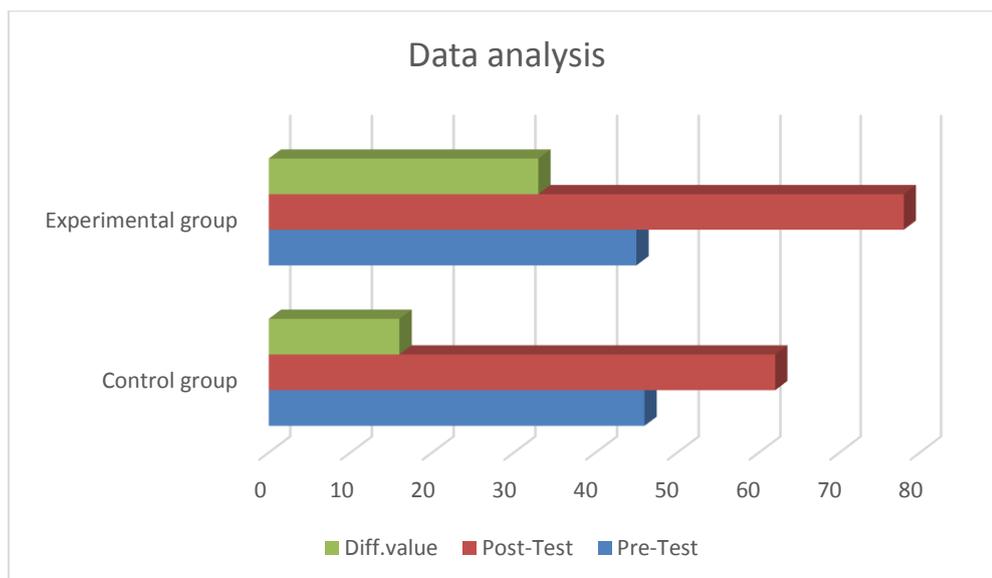
$$- t(58) = 6.72, p < 0.001.$$

Self-assessment questionnaires of communication skills showed an initial level (1-5 points): in the experimental group — 2.5 (standard deviation - 0.6); in the control group — 2.6 (standard deviation - 0.5). The final level in the experimental group was 4.2 (standard deviation — 0.5), in the control group - 3.0 (standard deviation — 0.7). This also indicates a statistically significant difference (see Formula 2).

Formula 2

$$- t(58) = 8.34, p < 0.001.$$

The students of the experimental group showed higher results in vocabulary and grammar tests, as well as more active participation in communication tasks compared to the control group (see Figure 1).



**Figure 1. Results on vocabulary, grammar, and participation in communication classes**

This experiment is designed to demonstrate the

effectiveness of the proposed methodology based on a clear classification of learning stages, which,

in turn, can contribute to modern approaches to teaching English. The obtained statistical data confirm the effectiveness of the proposed methodology of teaching English. The experimental group showed significantly better results in both knowledge testing and self-assessment of communication skills compared to the control group.

## **DISCUSSION**

### **The effectiveness of multimedia resources**

During the transfer of knowledge, the experimental group was given the opportunity to interact with multimedia resources. This not only contributed to a deeper assimilation of the topic "In the hospital", but also provided students with a variety of ways of perceiving information. Observations of student engagement showed that the use of video, audio and interactive tasks significantly increased the interest and motivation of students. This is consistent with the findings of other studies that claim that multimedia technologies can improve learning outcomes by offering a variety of formats, making the process more fun and accessible.

### **Methods of active learning**

The use of active learning methods in an experimental group (discussions, group projects) contributed not only to a better understanding of new material, but also to the development of critical thinking skills. Students actively discussed new terms and concepts, which, according to many teachers, is a key element of successful language learning. This is confirmed by a significant increase in scores on tests and in self-assessment questionnaires of communication skills.

### **Visualization and role-playing games**

The use of image cards and videos to explain the new terminology, as well as role-playing games and simulation tasks in the experimental group, contributed to a deeper understanding and

practical application of the studied material. Unlike the control group, where students worked with traditional vocabulary tasks, the experimental group showed better results in testing for understanding new vocabulary.

### **Statistical significance of the results**

Statistical analysis conducted using the t-test for independent samples confirmed the significance of the results obtained. An increase in average scores both in vocabulary and grammar tests and in self-assessment surveys of communication skills indicates a clear advantage of the experimental group. Significant differences between the groups emphasize the importance of introducing active teaching methods and multimedia resources into the process of teaching English.

### **Practical application of the results**

The results of our research are important for teaching practice. They emphasize the need to integrate active teaching methods and modern technologies into the educational process. Teachers can use the data obtained to optimize their curricula aimed at improving students' language skills.

## **CONCLUSION**

The results of our research have confirmed the effectiveness of the use of active teaching methods and multimedia resources in the process of teaching English. The students of the experimental group showed significantly better results both in testing their knowledge of vocabulary and grammar, and in self-assessment of their communication skills compared to the control group.

The use of interactive materials, role-playing games and active learning methods contributed to a deeper assimilation of educational material, increased motivation and involvement of students. Statistical analysis showed significant differences between the groups, which confirms the

hypothesis that a variety of teaching methods and approaches can significantly affect educational outcomes.

The data obtained emphasize the importance of introducing innovative technologies and active teaching methods into the educational process, which can significantly improve the quality of teaching and mastering language skills. In the future, it is recommended to continue research in this area in order to identify additional aspects and opportunities for optimizing the learning process.

### REFERENCES

1. Anthony, L. (1997). English for Specific Purposes: What does it mean? Why is it different? *On-CUE*, 5(3), 9–10. Available online at: [www.antlab.sci.waseda.ac.jp/abstracts/ESParticle.html](http://www.antlab.sci.waseda.ac.jp/abstracts/ESParticle.html)
2. Arnó-Macià, E. (2012). The Role of Technology in Teaching Languages for Specific Purposes Courses. *The Modern Language Journal*, 96/Focus Issue, 89–104.
3. Askari-Arani, J. (2004). Internet-based Medical Articles in EMP. *ESP World Journal*, 3(2), 6. Available online at: [http://esworld.7p.com/Articles\\_8/Medical\\_A%20.htm](http://esworld.7p.com/Articles_8/Medical_A%20.htm)
4. Harrison, A., & Tronik, E. (2021). Intersubjectivity. Conceptual Considerations in Meaning-Making with a Clinical Illustration. *Frontiers in Psychology*, 12, 1-8.
5. Pavel, E. (2014). Teaching English for Medical Purposes. *Bulletin of the Transilvania University of Braşov. Series VII*, 7(56), № 2. Available at: [https://www.researchgate.net/publication/287184164\\_Teaching\\_English\\_for\\_medical\\_purposes](https://www.researchgate.net/publication/287184164_Teaching_English_for_medical_purposes)
6. Peacock, M. (2001). Pre-service ESL teachers' beliefs about second language learning: A longitudinal study. *System*, 29(2), 177-195. [https://doi.org/10.1016/S0346-251X\(01\)00010-0](https://doi.org/10.1016/S0346-251X(01)00010-0)
7. Peralta Castro, F.E., & Acosta Dias, R. (2011). Towards a methodology to deliver English language lessons that foster different competencies in computer science students. *Global Engineering Education Conference, EDUCON*, 826-830. <https://doi.org/10.1109/EDUCON.2011.5773238>
8. Prescott, D., El-Sakran, T., Albasha, L., Aloul, F., & Al-Assaf, Y. (2011). Engineering Communication Interface: An Engineering Multi-disciplinary Project. *US-China Education Review, A* 7, 936-945. Available at: [https://www.researchgate.net/publication/263272459\\_Engineering\\_Communication\\_Interface\\_An\\_Engineering\\_Multi-disciplinary\\_Project](https://www.researchgate.net/publication/263272459_Engineering_Communication_Interface_An_Engineering_Multi-disciplinary_Project)
9. Richards, J. C., & Rodgers, T. S. (2001). *Approaches and methods in language teaching* (2nd ed.). New York, NY: Cambridge University Press.
10. Sattarov, T.K. (2000). Формирование профессиональных умений будущего учителя иностранного языка на практических занятиях по специальности (на материале английского языка): Автореф. дис...д-ра пед. наук.-Ташкент, 32с.
11. Scarcella, R. C., & Oxford, R. L. (1992). *The tapestry of language learning: The individual in the communicative classroom*. Boston, MA: Heinle & Heinle.
12. Zhao, Y. (2020). A Personalized English Teaching Design Based on Multimedia Computer Technology. *International Journal of Emerging Technologies in Learning*, 15(8), 210-222.

**THE USA JOURNALS**

THE AMERICAN JOURNAL OF SOCIAL SCIENCE AND EDUCATION INNOVATIONS (ISSN- 2689-100X)

**VOLUME 06 ISSUE09**

<https://doi.org/10.3991/ijet.v15i08.13695>