



## MEDICAL AND TECHNICAL DEVICES AND NEW MEDICAL TECHNOLOGIES USED IN ENGLISH PRACTICAL TRAINING OF HIGHER MEDICAL EDUCATIONAL INSTITUTIONS

*Hamroyeva Sanobar Hasan qizi*

*Tarix va filologiya kafedrası Osiyo Xalqaro Universiteti Buxoro, Uzbekistan*

*Email:hamroyevasanobar1@gmail.com*

**Annotatsiya:** *Ushbu maqolada ingliz tili amaliy mashg'ulotlarida qo'llaniladigan zamonaviy tibbiy-texnik asboblari va yangi tibbiy texnologiyalarni o'rganishga bag'ishlangan. Tadqiqotda ingliz tili o'qituvchilari va talabalari tomonidan foydalaniladigan turli tibbiy texnologiyalar, platformalar tahlil qilinadi. Yangi tibbiy texnologiyalar, ayniqsa, sun'iy intellekt, telemeditsina va tibbiy ma'lumotlar bazalari ingliz tilini o'rganishda qanday samarali qo'llanishi mumkinligi ko'rsatiladi. Shuningdek, ingliz tilini o'qitishda tibbiy terminologiyani o'rganish va tushunishni yaxshilash maqsadida foydalaniladigan usullar hamda metodikalar ham ko'rib chiqiladi. Tadqiqot natijalari tibbiy ta'limni rivojlantirishda innovatsion yondashuvlar va zamonaviy texnologiyalarni qo'llashning muhimligini ta'kidlaydi.*

**Kalit so'zlar:** *Tibbiy-Texnik asboblari, Yangi tibbiy texnologiyalar, Uskunalarining ingliz tilidagi nomlarining tasnifi, Virtual va masofaviy o'qitish vositalari, Tibbiy apparatlar, Telemeditsina, Virtual reallik (VR), simulyatsiya qurilmalari, tibbiy apparatlar (ultrasonografiya, rentgen, EKG tizimlari) va diagnostik uskunalar.*



# CLASSIFICATION OF MEDICAL AND TECHNICAL DEVICES AND NEW MEDICAL TECHNOLOGIES USED IN ENGLISH PRACTICAL TRAINING OF HIGHER MEDICAL EDUCATIONAL INSTITUTIONS

*Hamroyeva Sanobar Hasan qizi*

*Department of history and philology Asian International University Bukhara,  
Uzbekistan*

*Email:hamroyevasanobar1@gmail.com*

**Abstract:** *This article is dedicated to the study of modern medical and technical devices and new medical technologies used in practical English classes. The study analyzes various medical technologies used by English language teachers and students, including virtual and distance learning tools, medical devices, and online platforms. Also, methods and methodologies used in teaching English to improve understanding and learning of medical terminology are considered. The results of the research emphasize the importance of using innovative approaches and modern technologies in the development of medical education.*

**Key words:** *Medical-Technical devices, New medical technologies, Classification of English names of equipment, Virtual and distance learning tools, Medical devices, Telemedicine, Virtual reality (VR), simulation devices, medical devices (ultrasonography, X-ray, ECG systems) and diagnostic equipment.*

## КЛАССИФИКАЦИЯ МЕДИКО-ТЕХНИЧЕСКИХ УСТРОЙСТВ И НОВЫХ МЕДИЦИНСКИХ ТЕХНОЛОГИЙ, ИСПОЛЬЗУЕМЫХ В АНГЛИЙСКОЙ ПРАКТИКЕ ВЫСШИХ МЕДИЦИНСКИХ УЧЕБНЫХ ЗАВЕДЕНИЙ



*Hamroyeva Sanobar Hasan qizi*

*Кафедра истории и филологии Азиатский международный университет Бухара,  
Узбекистан*

Email:hamroyevasanobar1@gmail.com

**Аннотация:** Данная статья посвящена изучению современных медико-технических приборов и новых медицинских технологий, используемых на практических занятиях по английскому языку. В исследовании анализируются различные медицинские технологии, используемые преподавателями английского языка и студентами, включая инструменты виртуального и дистанционного обучения, медицинские устройства и онлайн-платформы. Будет показано, как новые медицинские технологии, особенно искусственный интеллект, телемедицина и медицинские базы данных, можно эффективно использовать в изучении английского языка. Также рассмотрены методы и методики, используемые при обучении английскому языку для улучшения понимания и усвоения медицинской терминологии. Результаты исследования подчеркивают важность использования инновационных подходов и современных технологий в развитии медицинского образования.

**Ключевые слова:** Медико-технические приборы, Новые медицинские технологии, Классификация английских названий оборудования, Инструменты виртуального и дистанционного обучения, Медицинские приборы, Телемедицина, Виртуальная реальность (VR), устройства моделирования, медицинские приборы (УЗИ, рентген, системы ЭКГ). ) и диагностическое оборудование.

In the era of rapid development in the twenty-first century, education and its role are of decisive importance. Today's youth is the main source of development of society. The main goal of education and upbringing is to form a well-rounded person. Teaching a foreign language to young people from the point of view of human growth, that is,



adaptability to the multicultural and multilingual environment of the modern world, it creates favorable conditions for learning a new language. The language barrier is becoming a necessary element of institutional education not only in academic institutions and schools, but also in several other preschools. Modern technologies, online resources and educational programs are used in language teaching. It helps students learn independently and develop their skills. Integration, practice, and cultural context-based approaches are important in language teaching.

The progress is characterized by modern research methods and new pedagogical technologies, diagnostic methods and modern computerized medicine entering all departments. All of this requires doctors to further improve their theoretical and practical knowledge in physics, mathematics, English and technical sciences, especially in "Medical Electronics". Taking this into account, this thesis has been developed in accordance with the model program of the subject "Medical equipment and new medical technology", and its function, name in English, technical characteristics, structure and principle of operation of the device in working with medical equipment and apparatus. preparation and use and what technical safety measures to follow in all devices will be shown individually. English teaching practices in medical higher education institutions play a major role in the development of medical knowledge and strengthening of scientific communication. Taking into account that the English language plays an important role in the field of global medicine today, the need to use modern medical and technical tools and new technologies in the process of learning English is increasing day by day, and English is used in practical training in medical institutions of higher education. is to classify the used medical and technical devices and new medical technologies and study their effective use. New medical technologies and their use in English are carried out as follows: information, articles and videos about medical technologies are often available in English. Communication and exchange of experience between medical specialists is carried out in English.



These processes facilitate the widespread diffusion and use of new technologies. Technology companies provide detailed information, manuals and videos in English to help users understand easily. Medical professionals can improve their knowledge of new technologies through online courses and educational materials available in English. International teams communicating in English in the field of medicine provide an opportunity to jointly develop and apply new technologies.

Artificial intelligence technologies, such as computed tomography (CT) and magnetic resonance imaging (MRI), can easily perform the analysis. They provide convenience for radiologists by analyzing comprehensive data in the diagnosis and evaluation of various diseases.

Robotics: SI-based robots are used to perform surgical procedures, such as robotic surgery. This method increases the precision of surgeons and causes less trauma to patients, as well as speeds up the recovery process. With its high accuracy, artificial intelligence can quickly identify medical problems, which speeds up the treatment process and improves efficiency. Thanks to the well-known algorithms, it saves a lot of time during the experiment, which allows to quickly provide medical care to patients. By collecting and analyzing data, artificial intelligence offers a treatment method tailored to the individual needs of each patient. Easily analyzed, it allows medical facilities to utilize resources efficiently, which also benefits economically. Also, artificial intelligence opens up new horizons in medicine and provides better quality and Below is a detailed description of the main equipment in medicine and their names in English, their classification and their functions.

#### 1. Diagnostic equipment (Diagnostic equipment):

Stethoscope (stethoscope): Used to listen to heartbeat, breathing and other internal sounds.

Thermometer: Used to measure the temperature of the patient.

Sphygmomanometer (sphygmomanometer): Used to measure blood pressure.



Ophthalmoscope: Used to examine the internal parts of the eye (retina, optic nerve).

Otoscope: Used to examine the ear canal.

Electrocardiogram (ECG or EKG) machine: Checks heart rhythm and electrical activity.

X-ray machine: Used to image internal organs, bones, and tissues.

Ultrasound machine: Examines organs and tissues using newly acquired images.

Telemedicine (English: Telemedicine) is a system that provides remote medical practice, usually via the Internet. Telemedicine technologies allow patients and medical professionals to access medical services even if they are geographically distant. It is mainly used for medical consultation, diagnosis, treatment and exchange of medical information. Through telemedicine, patients can receive medical care remotely. This can be done via video calls, chats, or over the phone.

**Conclusion .** Patients can measure their medical parameters (for example, blood pressure, heart rate, respiratory rate) remotely and send this information to the doctor. Patients can use various devices to remotely monitor their condition. For example, diabetic patients can measure their blood sugar and send the results to medical professionals. Doctors review this information and adjust treatment if necessary. Psychological counseling and therapy sessions can be conducted via telemedicine. Patients can receive help from psychologists via video conference, telephone or online chat. Telemedicine, in particular, offers great opportunities for improving the presentation of medical services, ensuring patient comfort and efficient use of medical resources. However, it requires addressing issues related to sustainable development and privacy. Such initiatives underscore the importance of interdisciplinary learning, blending medical science, technology, and language education to prepare students for





the increasingly interconnected and technologically advanced landscape of global healthcare.

### References

1. Brown, H. D. (2001). *Teaching by Principles: An Interactive Approach to Language Pedagogy*. New York: Pearson Education.
2. British Council. (2023). *Teaching Technical English: Strategies and Resources*. Retrieved from <https://www.britishcouncil.org>
3. Kasimova Sh .B. “Ingliz tilini o’qitishning zamonaviy usullari”
4. Longman Dictionary of Contemporary English. (2021). Longman Pearson Education.
5. M.X.To’xtaxodjaevaning umumiy tahriri ostida. *Pedagogika darslik*.T.: O‘zbekiston faylasuflari Milliy jamiyati, 2010.
6. Macmillan English for Engineers Dictionary. (2018). Macmillan Education.
7. Tibbiy texnika va yangi tibbiyot texnologiyasi: O'quv qollanm a / S.U m arov, E .B ozorov, O .Jabborova; —T.: “Iqtisod-M oliya”, 2018. - 216 b.