



**THEORETICAL FUNDAMENTALS OF INTRODUCTION OF ELECTRONIC
EDUCATIONAL TOOLS TO THE EDUCATIONAL PROCESS**

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Abstract - The article discusses the pedagogical conditions for the introduction of electronic information tools in the educational process, the role and importance of innovative technologies in education. It is also argued that the important aspects of the use of e-learning tools in the teaching process serve to the effective assimilation of knowledge by students.

Keywords: *e-learning tools, lifelong learning, need, software, textbook, multimedia, activity.*

I. INTRODUCTION

Social and economic reforms in the education system of the Republic of Uzbekistan are aimed at training highly qualified specialists. And the main goal of higher education institutions is to ensure the quality of higher education, i.e the training of quality, competitive personnel. In the era of rapid updating of information, the issue of quality of education in each higher education institution, the enrichment of education with the latest innovations, technical means and technologies, the integration of education with modern production is becoming increasingly important. Therefore, today the technology sets high standards for the quality of training in higher education institutions, which have the necessary knowledge in the field of their professional activities and can use them in an integrated manner. These requirements, in turn, require the development of the integration of our country into the world economic system, the introduction of e-learning tools in the educational process of future engineers in the process of entering the world labor market.

Resolutions of the President of the Republic of Uzbekistan No. PF 4947 of February 7, 2019 “On the Strategy for further development of the Republic of Uzbekistan” and “On improving the activities of the Center for Secondary Special Vocational Education of the Ministry of Higher and Secondary Special Education of the Republic of Uzbekistan” ,Decree PF-5847 “On approval of the Concept of development of the higher education system of the Republic of Uzbekistan until 2030”, Decree PF-5812 “On additional measures to further improve the system of vocational education” dated June 6, 2019, June 5, 2018 Resolution No. PP-3775 “On additional measures to improve the quality of education in higher education institutions and ensure their active participation in the ongoing comprehensive reforms in the country”

and the implementation of the tasks set out in other regulations related to this activity current to a certain extent [1,2].

Materials and methods. Ensuring the student's activity in the teaching process in higher education requires responsibility from the professor-teachers. One of the requirements of today is that professors and teachers in the learning process should organize the lesson project in accordance with the purpose and seek to achieve the desired result, enter the lesson with new ideas, organize each lesson as a new work.

However, the spiritual maturity, intellectual potential, all-round formation of students is certainly ensured on the basis of the material base and the availability of spiritual conditions.

Nowadays, it is becoming increasingly difficult to imagine advanced innovative pedagogical technologies without modern e-learning tools. In this regard, the resource, personnel and information bases of educational institutions are being further strengthened, the educational process is being provided with new teaching materials and laboratory equipment.

Practical work is underway to informatize the education system, to provide it with a computer information network that connects to the global information network, the widespread introduction of e-learning tools and the Internet in the educational process. The main tasks in this direction are:

- radical improvement of the quality of teaching in higher education institutions of the country through the widespread introduction of new electronic teaching aids and pedagogical technologies, electronic textbooks, multimedia tools in the educational process;
- strengthening the educational and laboratory base of educational institutions with modern types of teaching and laboratory equipment, computer equipment;
- further development of modern e-learning tools, digital and wide-format telecommunications and the Internet, their introduction and widespread adoption in the life of every family.

As a result of e-learning tools and their introduction into the educational process, the following can be achieved:

Firstly, there is an opportunity to constantly update and enrich the content of electronic textbooks, lecture notes and training laboratory databases. In particular, at present Jizzakh Polytechnic Institute has 37 educational areas, as well as electronic textbooks and electronic equipment for laboratory classes on the subject "Technology". Regular Wi-Fi zone on the territory of the institute allows all professors and students to regularly review the literature and work with the news.

Secondly, the constant updating of e-learning tools in the institutes allows students to get acquainted with and use the latest technologies in the country, to update their knowledge in the educational process. During the period of study at the institute, the process of continuous qualification internships for technical students is inseparable from production.

The following are the e-learning tools that can be used by students in higher education institutions in the classroom and online (Figure 1) [6].

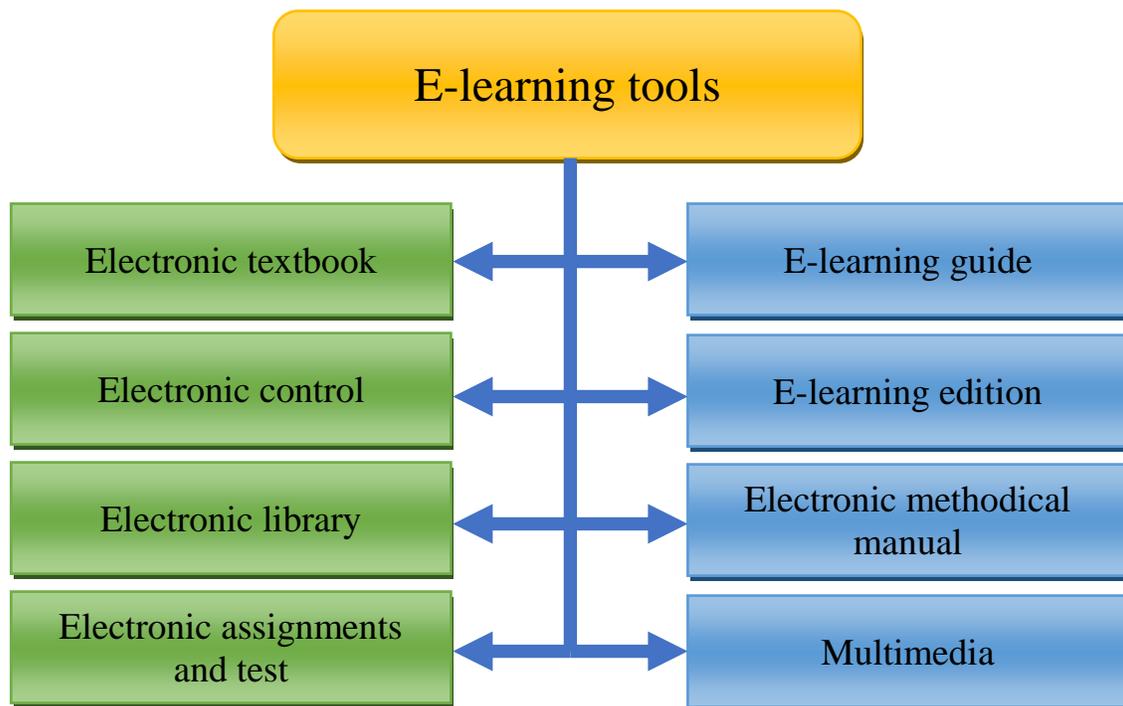


Figure 1. Types of e-learning tools.

Thirdly, the preparation of textbooks in electronic form is a labor-intensive process, but once they are prepared, they can be used indefinitely in the educational process. This, in turn, provides great economic benefits. With the regular operation of the Internet, libraries in institutes will also be able to update their e-learning databases and become e-libraries.

One of the theoretical foundations of the discipline is the formation of theoretical and practical skills of students in the system of higher education using e-learning tools.

Results and discussion. E-learning tools should be introduced to students from the time they start studying at the institute, because during this period students' interest and skills in science are quickly formed. Because the teaching process is a complex creative activity, its effectiveness largely depends on the skill and creativity of the faculty. The use of e-learning tools, advanced pedagogical technologies in the classroom to activate students is a modern requirement.

Appropriate use of e-learning tools in the educational process, along with the interesting organization of lessons, provides ample opportunities for in-depth study of teaching materials.

Organizing the educational process with e-learning tools certainly shows positive results. One of the advantages of e-learning tools applications is the ability to use hyperlinks to themed animations. By enriching the animations with action and sound, the content of the learning materials can be illuminated more broadly and clearly.

We consider traditional and innovative forms of organization of the teaching process as teaching aids in higher education institutions (Figure 2) [7].

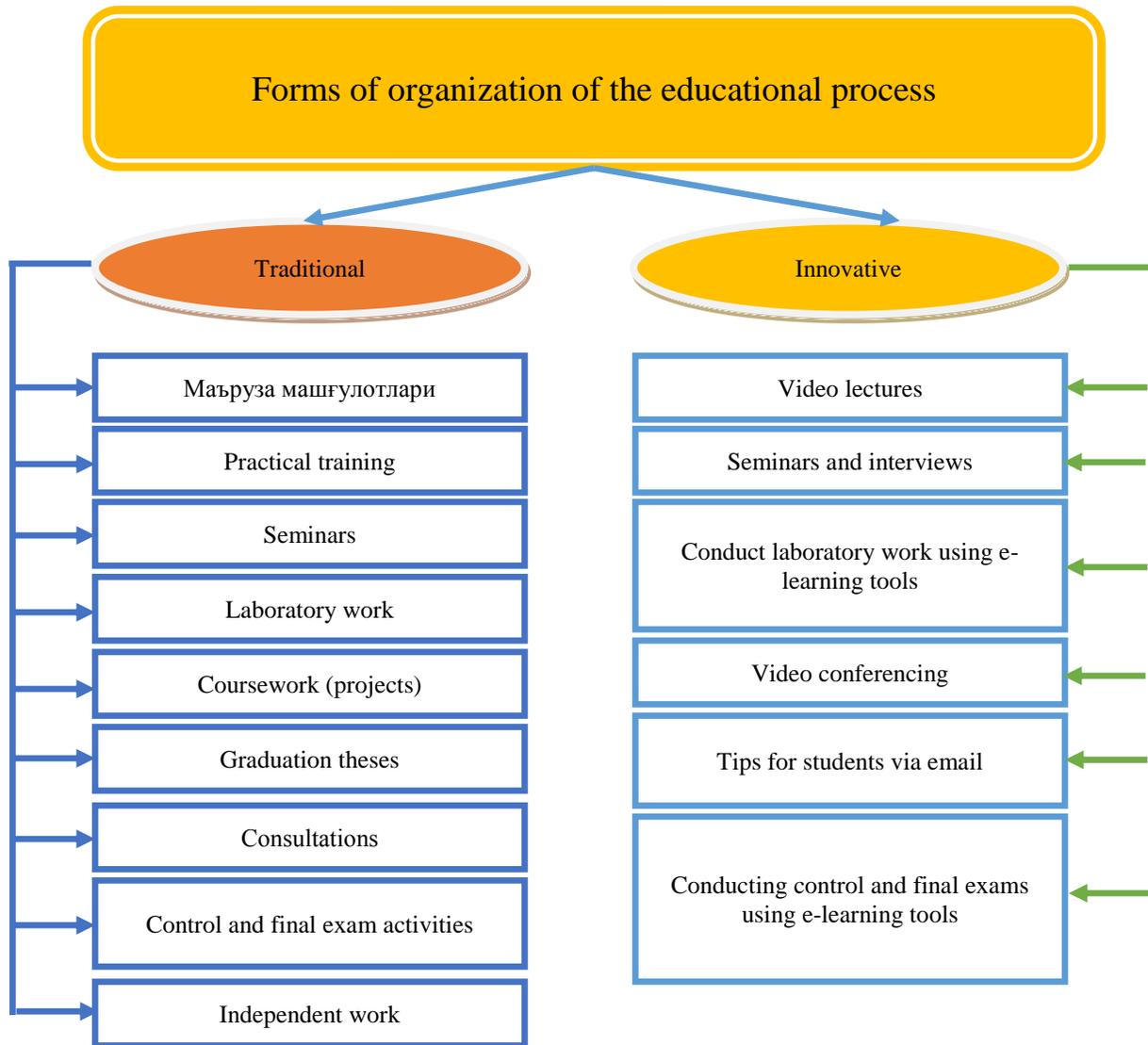


Figure 2. Forms of organizing the learning process using e-learning tools.

Appropriate use of e-learning tools in the classroom enriches the content of the lesson. In particular, the organization of lessons by professors and teachers using electronic textbooks, the Internet, multimedia products will further increase the intellectual potential of students, no student will be left indifferent to the lesson. Student activity in the classroom increases slightly. The teacher-teacher will be satisfied with books, textbooks and teaching aids in the teaching process, in the lessons based on e-learning tools, the professor-teacher will refer to several sources. In particular, the e-methodical and e-learning manual is an auxiliary and leading material for the professor, while electronic assignments and tests, multimedia products are the main material for independent work of students.

At present, the use of the following e-learning tools as teaching aids in lectures, practical and laboratory classes in higher education institutions serves to increase the activity of students in the classroom and improve the performance of the subject (Figure 3) [5].

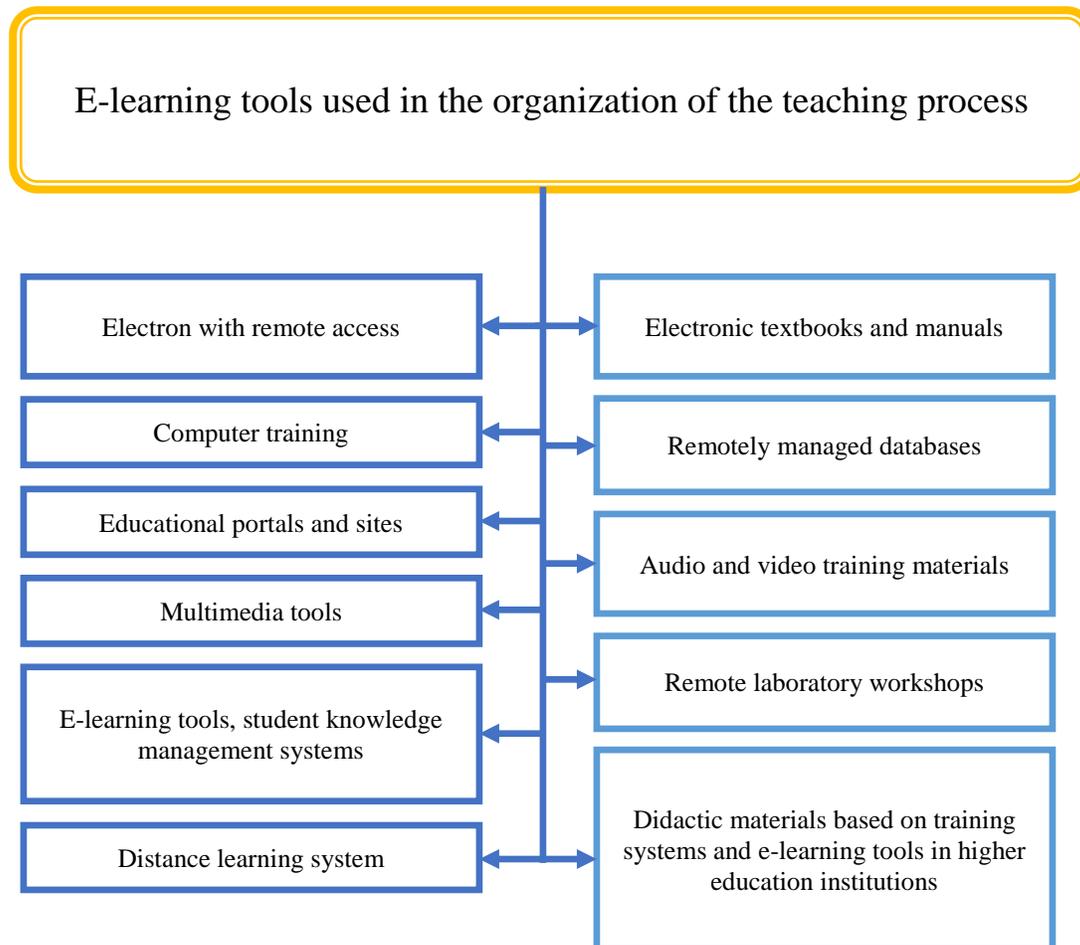


Figure 3. E-learning tools used in the organization of the teaching process as teaching aids in higher education institutions.

If a professor organizes lessons with e-learning tools:

- student activity increases in the classroom;
- the student's verbal communication skills are formed;
- increased interest and attention to the subject;
- feels like a lesson in every lesson;
- learn to work with information, search for information, distinguish what is needed, process, organize, understand the content of information, distinguish logical relatives. Based on this, a culture of receiving information is formed.

The professor-teacher is the perfect person in the eyes of the student, keeping pace with the technological process, enriching the lessons with several sources and the latest news.

Conclusion. In summary, the use of e-learning tools in the teaching process in many observations allows for a focus on the problematic aspects of the lesson topic.

At Jizzakh Polytechnic Institute, all students defend their "Graduation thesis" in the process of defense of "Graduation thesis" based on the theoretical and practical skills on selected topics. In particular, graduate students with the help of electronic interactive teaching aids of the institute carry out their "Graduation thesis" in connection with practice. This is, of course, evidence that students have the skills and competencies to work with modern e-interactive learning tools. Students will improve their computer literacy, Internet skills, and e-interactive learning tools, and use these skills in the defense process.

The growth of intellectual potential of students of higher education institutions requires them to strive to penetrate deeper into the content of education, to live with world news using e-learning tools, and to keep abreast of the latest developments in education.

In the introduction of e-learning tools in the classroom, professors and teachers of higher education institutions can improve their skills and knowledge by connecting to the existing electronic systems on the basis of the existing information technology center of the institute and keep abreast of innovations through the center and other educational sites. is the demand of the day. The introduction of modern educational technologies in pedagogical processes, teaching young people to work independently, to think freely, to ensure its integration with education is the task of today to form e-learning tools and theoretical and methodological aspects of their introduction into the educational process.

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