

Effectiveness of Using Interactive Educational Technologies in a Modern University

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Abstract: The article is devoted to considering the problem of using interactive educational technologies in the educational practice of a modern university, in particular when teaching the Russian language in non-linguistic universities. In this regard, an attempt was made to reveal and substantiate such concepts as interactive learning, interactive educational environment of a university, interactive educational environment of a specialist in various fields and others, which underlie the educational space of Russian as a foreign language. The article concludes that in the process of joint creativity, stable cognitive motivation for solving educational and research problems develops. This is only possible if the electronic resource meets the criteria for a high level of interactivity, which implies full interaction between students and teachers in the educational environment based on modeling objects and processes of the real world.

INTRODUCTION

Introduction. In educational practice, various goals are achieved, many problems are solved using various technologies. It is known that to achieve a goal they use different technologies, methods, means, the use of which can give different effects.

In the large encyclopedia, technology is defined as art, skill, skill in combination with methods of processing, manufacturing, changing the state, properties, form, raw materials, materials or semi-finished products carried out in the process of production. The concept of technology was initially associated to a greater extent with the production of material assets; later the term acquired a philosophical interpretation and began to be used in the field of human activity. According to E. De Bono, technology is the process of producing something useful based on the use of knowledge [1].

The term technology in science and education is associated with the peculiarities of using a technological approach to solving problems of training, education and development of subjects of the pedagogical process. There is still no common

point of view regarding the term technology in relation to education. So N.K. Olimov in [3] defines the term technology as the procedural embodiment of the components of a process organized by a teacher in the form of a system of actions;

- algorithms of actions of subjects of the educational process;

- the possibility of building a pedagogical system based on a certain set of techniques; - reduction of educational goals to the goals of the activities of a specific teacher to implement the state educational standard at the level of a specific academic discipline, organized for the implementation of the educational program and its successful development to solve no less important educational problems;

- a method of implementing a specific process in educational practice by dividing it into a system of sequential, interconnected procedures and operations that are carried out uniquely by the subjects of this process;

- design and assessment of educational processes taking into account human, time and other resources in achieving the effectiveness of education and its goals.

Further, by analyzing different interpretations of the term technology in education, one can detect trends in changes in their content, which, in fact, is represented by different aspects, reflecting the directions of development and semantic enrichment of the category under consideration [2]:

- technical and instrumental, which in content is reduced to technical means that are used in the educational process;

- functional-procedural - technological approach to building a university educational process, in which methods, means and conditions can perform different functions in achieving the same educational goal.

Currently, the term technology is actively expanding its geography in different areas of educational practice. Therefore, it is necessary to clarify its various meanings and meanings, as well as the most general concepts associated with this term, such as “pedagogical technology”, “learning technology”, “interactive learning”, “educational technology”, “interactive educational technology”, which constitute the foundation of the conceptual apparatus of the technological approach in education.

I.V. Blauberger V.I. Zagvyazinsky, P.B. Kornetov, Yu.S. Manuilov, V.L. Nazarov, T.A. Pankova, O.Yu. Strelova, E.P. Yudin and others believe that the development of the theory of any approach begins with comprehension, justification and meaningful filling of the conceptual apparatus. Its units are existing terms and new ones specifically introduced during the development of the approach. “The objects of modern scientific knowledge require not just an expansion of the existing conceptual apparatus, but precisely a new categorical system, a new system of concepts” [3]. By increasing the number of new concepts and enriching their content, this kind of categorical conceptual apparatus is being improved. The conceptual apparatus denotes a new approach, the justification of the “ideal” model of educational technology.

RESULTS AND DISCUSSION

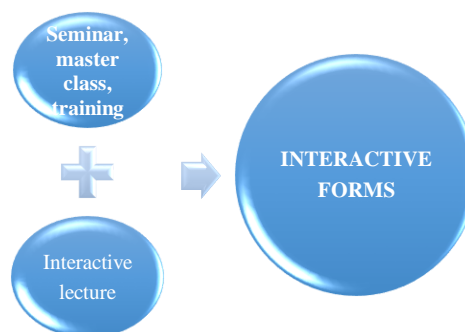
In this regard, we will try to reveal and substantiate modern concepts that underlie the educational space of a student in Russian language lessons. Such concepts include “Interactive learning”, “Interactive educational environment of a medical university”, “Interactive educational environment of a doctor”, etc.

Interactive learning is aimed at optimizing active cognitive activity, developing their value orientations and motivation to learn, developing independence in searching and comprehending educational information, subject-subject communication skills

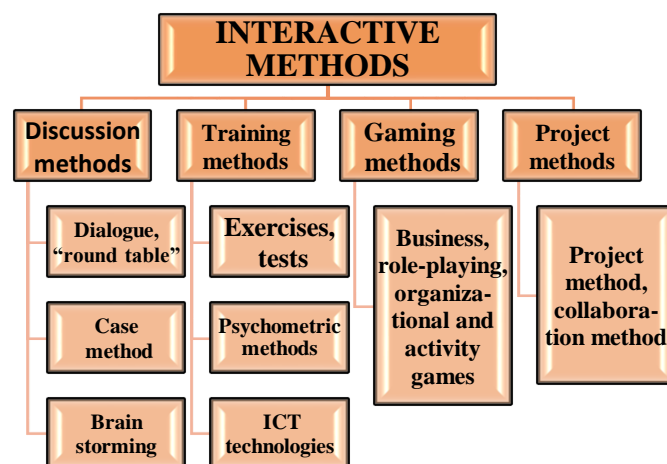
based on dialogue, stimulating the research position of specific practice-oriented actions related to future professional activities student.

Interactive learning using interactive mechanisms, the formation of a professional worldview at a university involves the organization of the educational process by the following means:

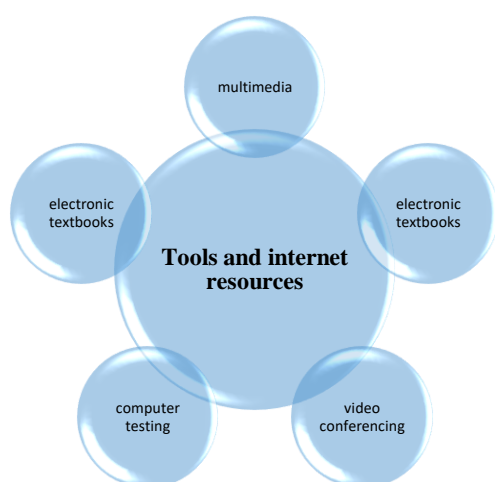
➤ Interactive forms



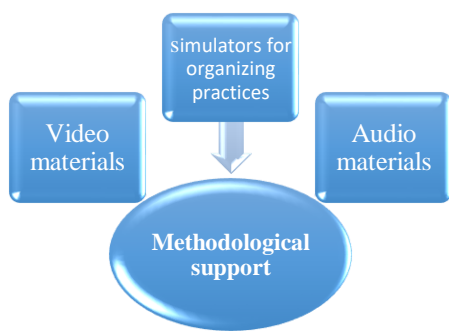
➤ Interactive methods



➤ Tools and internet resources



➤ **Methodological support**



➤ **PC technologies:**

- modular-local (joint creative activities),
- macro-technologies (distance learning),
- meta-technologies (social education technologies, network, telecommunication).

All of the above funds are collectively aimed at implementing a simulated interactive educational environment, which includes the student's educational and independent activities.

Despite the fact that the concept of "interactive environment" has thoroughly entered the vocabulary of modern education, its definition in the sources we studied is not reflected clearly enough, especially for university education in Russian language lessons for non-linguistic students. At the same time, the analysis of the meaning-forming dominants listed above: environment, educational environment, interaction, interactivity, interactive learning, etc., which underlie the definition of "interactive environment" and are its constituent elements, which allowed us to formulate the concept of "Interactive educational environment of a non-philological university" is an integrative system that includes a set of specially organized pedagogical conditions for the development of a specialist's personality, interactive forms, methods

and technologies that ensure the interaction of all subjects of the educational process, independence, the ability of corporate culture in various types of activities, aimed at the formation of the professional worldview of the future specialist [5].

Based on a discussion of the definitions of literary sources, we formed another concept "Interactive educational environment of a specialist based on a foreign language, in our case Russian" - a system of interpersonal, information, educational and computer interaction that allows you to develop the ability to exchange business information using modern information and telecommunications means and technologies, navigate the specialty information flows in the surrounding world, master practical work skills aimed at developing the professional qualities of a specialist and his worldview.

Let us reveal the named interactive forms of interaction of a student of a non-philological profile:

- interpersonal interactivity of the student, we understand how bidirectional correspondence between the student and the teacher and, vice versa, during which the recipient and sender of messages can change places and create genuine interaction. This kind of interaction occurs if both parties are interested in e-mail or discussion lists on a certain topic, if the subject is in an active position;

- the student's information interactivity is limited by the possibilities of interaction previously provided for in the design of electronic publications in the specialty. It is aimed at presenting information, navigating through the content and posting any information on the specialty, includes the use of hyperlinks, filling out forms, searching for information in Russian databases, keywords and other forms of information on the specialty;

- educational-computer interaction - an area related to the interaction between the user and computer hardware and software based on the Internet (telelearning, web conference, Skype, etc.). This system provides feedback between the subjects of this interaction (student and teacher, student and classmates, student and tutor).

Today, computer technologies have been actively used both in the educational process and in teaching various disciplines. Many computer programs are being created in various areas of specialty. There are various computer tools aimed at developing various functions, such as visual and auditory perception, attention, memory, verbal thinking and others, which are successfully used in training future specialists.

The use of multimedia technologies (colors, graphics, sound, animation, modern video equipment) makes it possible to make Russian

language lessons more effective for students in various fields. It is important that the gaming components included in multimedia programs activate the cognitive activity of students and enhance the assimilation and acquisition of new knowledge. The use of computers in joint and independent activities is one of the effective ways to increase motivation and individualize their learning, develop creative abilities and create a favorable emotional background. From which it follows that it is obvious that information and communication technologies (ICT) are used in training in the process of forming the professional worldview of future specialists.

In the context of the modern digital revolution, characterized by the enormous speed of introduction of new technologies, changes in methods of receiving and transmitting information and accompanied by powerful professional competition, it seems possible to improve the educational process based on the rational use of ICT technologies, strengthening network interaction and academic mobility. At the same time, information inequality persists, manifested in the unequal distribution of information resources, in the inequality of the quality of information translators and information repositories [4], which means unequal access of students to knowledge. In such conditions, the principle of interactivity is implemented in the ideology of the Internet.

CONCLUSION

Thus, the technological effectiveness of the educational process is a description of standardization in the form of a prescriptive constructive scheme for the activities of subjects with information, communication or interaction in certain, given conditions with oneself in the role of a subject of educational or professional activity.

Understanding educational technology as a system of actions of subjects related to the achievement of a set educational goal by one of them or someone else expands the possibilities of their application - not necessarily in a learning environment, but perhaps in a library, laboratory, or industrial practice.

So, it should be noted that the concept of technology in relation to educational practice can be defined [2] as:

- the empirical aspect of procedural characteristics in the activities of a university teacher;
- theoretical aspect of prognostic characteristics;
- unity of theoretical and practical aspects.
- regulatory aspect. Represents transformed theoretical information into prescriptive information

for the subject about specific content-procedural actions.

As an innovative educational activity focused on personnel training, modern education requires the introduction of new educational interactive technologies into the educational process and is one of the strategic directions of university development that meets the needs of a post-industrial society. In the modern world, close attention is paid to the informatization of education, as young people strive to develop interactive forms and methods of learning.

In the educational process, the use of personal computers has led to the emergence of a new generation of interactive educational technologies, which have improved the quality of education, created new means of teaching and educational influence, and more effectively interacted with computer technology for teachers and students. The introduction of computers into the education sector was the beginning of a revolutionary transformation of traditional and non-traditional teaching methods and technologies throughout the entire education sector. Communication technologies played an important role at this stage: telephone communications, television, space communications, telemedicine, which were mainly used to manage the learning process in additional and distance learning systems. The development of modern society involves the widespread use of interactive educational technologies in the learning process at universities in Uzbekistan.

In the conditions of informatization of the education system, professional training of a future specialist is impossible without developing his skills to skillfully select and apply interactive educational technologies in educational and future professional activities. The use of interactive educational technologies in the educational process inevitably leads to a change in the nature of the interaction between subject and object. This interaction ceases to be direct in nature, which, while the content of training and its goals remains unchanged, requires, on the one hand, the development of new teaching technologies, and, on the other hand, requires the learner to have new motivational attitudes and a revision of the organization of cognitive activity.

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motivational attitudes and a revision of the organization of cognitive activity. In this case, we can talk about the formation of a new didactic concept of teaching, which is based on the following guidelines [5]:

1. The learning process is based mainly on the student's independent cognitive activity.
2. The student's cognitive activity must be active.
3. Training should be student-centered.

Within the framework of this concept, the personal computer acts as the main didactic teaching tool and, in fact, is the basis for building a new person-centered education. The main feature of the use of a computer by a student in educational activities is the redefinition of information flows - the dialogue between subject and object occurs through the computer, which acts as the third component of learning, individual (independent) for each student.

Achieving new educational results depends to a large extent on the level of provision in educational areas and the availability of interactive multimedia technologies for a wide range of students.

In the process of joint creativity, stable cognitive motivation to solve educational and research problems develops. This is only possible if the electronic resource meets the criteria for a high level of interactivity, which implies full interaction of students with the educational environment that simulates objects and processes of the real world.

REFERENCES

- [1] Abdulgalimov R. M. Educational process in shaping the worldview of future specialists. Problems of modern teacher education. Series: Pedagogy and psychology. Tula: 2022; Vol. 63; Part 2: 34 - 36.
- [2] De Bono Edward. The birth of a new idea. Per. from English Under the general editorship and with an afterword by Dr. psycho. science prof. OK. Tikhomirov. Moscow: Progress, 2021.
- [3] Olimov N.K. New generation electronic educational resources: questions and answers // Bulletin of Science and Education. No. 3. 2022. P. 217.
- [4] O'Reilly Tim. What Is Web 2.0. Available at: <http://www.oreillynet.com/pub/a/oreilly/tim/news/2005/09/30/what-is-web-20.html>
- [5] Komilova N.N. Methods of using electronic textbooks in the educational process. – M.: LUCH, 2022.