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INTERACTIVE TECHNOLOGIES: PART OF TRAINING

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For vocational training specialists is necessary to use modern technologies. Interactive technologies referred to in the article allows to provide students with practical and theoretical values and skills. The approach in the use of information technologies in educational process, improves the quality of education and to put it to a higher competitive level.

In this article, the term «interactive learning technology» is characterized by an integrated approach to the creation, application, determination of the entire educational process and mastery of knowledge in the system of human-machine which are interrelated.

Analyzing material articles can be determined that the term «interactive» talking about the ability to interact and be in the mode of dialogue with anyone (man-man system) or something (human-machine system) of the above-said material in the article, it follows that interactive learning – especially learning dialogue, during which there is an interaction of the teacher and the student.

The author notes that the use of interactive technologies in teaching, the teacher can influence the students directly in direct contact, or virtually, is frequently used in distance learning.

The article stresses that the innovative technologies being introduced in higher education are just one of the tools of the educational process, especially in the educational process is the teacher, whose duty is appropriate, successfully apply modern information technology.

Key words: interactivity, information technology, computer dialogue, self-learning, learning process.

Science, computing and telecommunications technologies over the past two decades had a significant impact on the development of educational technology. Radical change requires not only quality but also quantity of training. Acute own questions

students. One of the tools to solve this problem is to introduce in the educational space of modern teaching aids and interactive computer technology.

At this stage we can note a high enough interest among scientists in the use of interactive technologies in the training of future professionals in various industries, among them labor to note I. Dychkivskoyi, M. Karajan, S. Osipenko, M. Trachuk, G. Pike, O. Pometun, N. Pobirchenko,G. Shukhy, A. Komar, O. Pometun, L. Pyrozhenko, A. Starayevoyi, G. Gurevich, M. Kademiyan, L. Shevchenko and other scientists. Visual materials are used on various aspects including innovative interactive technology in the professional training of future specialists.

The purpose of this article is to determine the nature and elements of interactive technology as integral part of the educational process.

In psychological and educational literature there is no clear definition of "interactive learning technologies". UNESCO Documents technology in education is seen as a systematic method of creation, application and determination of the whole process of teaching and learning, technical, human resources and their interaction.

With the teacher's computer technology is a powerful tool to significantly change teaching methods, increase their potential through automated ordering, storage and processing, in addition to design e-learning materials.

Traditional technical training (various projectors, audio and video equipment). Designed mainly for training, demonstration and simulation didactic materials, less control and information. Computer technology allows the complete range. Program can create interactive development, which can not only simulate specific task and predict response to a specific action.

It allows students to develop the best strategies and tactics to self-esteem.

The most promising, in our opinion, the property of computer technology in the classroom is interactive. The term «interactivity» came from computers. Today the phrase «interactive technology» education is a very broad concept:

- of individual and group role-playing games;

- computer simulation and program;

- technical training (multimedia equipment, interactive whiteboards, using tablets).

The definition of the term "interactive" from the Latin. between – mutually between + Activus – active, energetic. Interaction (English) – interact, influence each other.

The best, in our opinion, the definition of interactive given in "Wikipedia" (free encyclopedia): interactivity – a concept that reveals the nature and extent of interaction between objects. Used in the fields: Information Theory, Computer science and programming, telecommunications, sociology, industrial design; interactivity – a principle the system is achieved in which the information exchange system elements [1].

In the dictionary presented pedagogical concept: "interactive dialogue" – active exchange of messages between the user and the information system in real time interaction gradually included in the turnover of teachers is particularly important for distance learning. Interactive mode – "interactive mode" [2, p. 106].
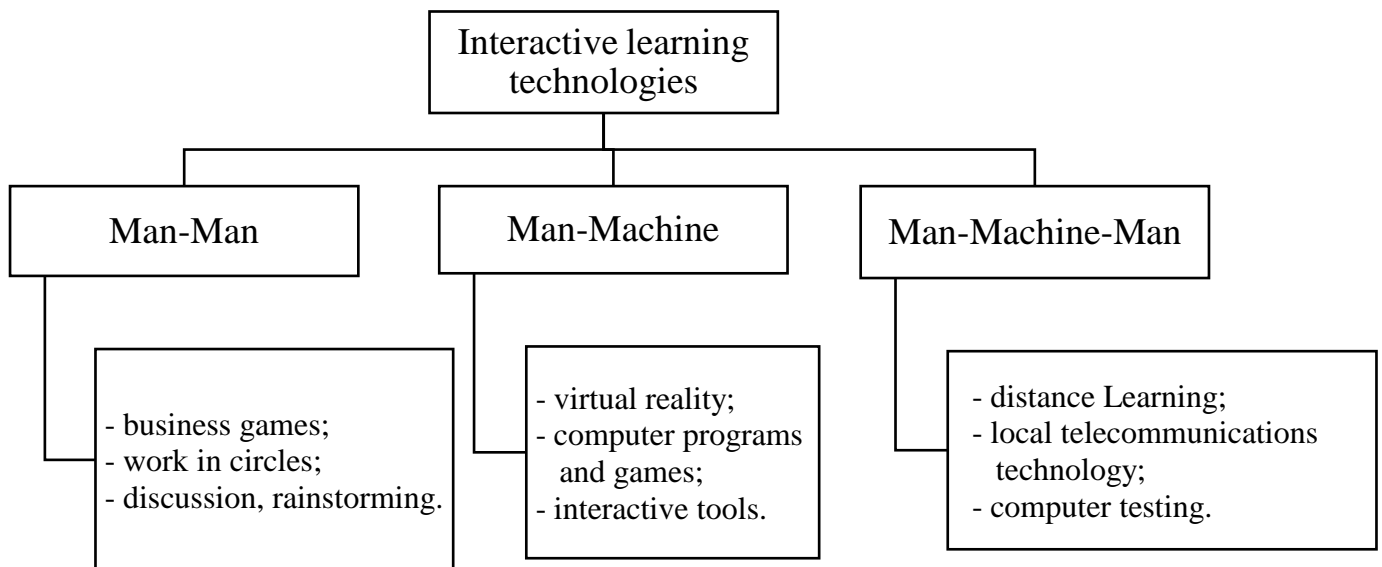
Internet is often called online learning technology training organization in which students participate in a collective, complementary, based on the interaction of all participants in the educational process knowledge required [3].

"Glossary conceptual apparatus of informatization of education" [4] interactive dialogue understood as interaction with a program (software and hardware) system, which is characterized (as opposed to a dialogue involving the exchange of text commands, requests and responses, the invitation) carrying out more sophisticated means of communication (eg, the ability to ask questions in any form with a limited set of characters). This provides the ability to select the content of educational material, its mode. Interactive mode user interaction with computers, characterized by the fact that his every request in response to the action program and, conversely, a replica of the latter reaction requires the user [4].

Analyzing the above we can conclude that "interactive" means the ability to interact or be talk, dialogue with anyone (man) or something (like a computer). Thus, online training – isprimarily a dialogue of learning in which interaction between teacher and student.

It should be noted that in terms of the assigned teachers can directly influence the student in direct contact, possibly virtual, often used in distance learning. In addition, the role of the teacher can be both active and passive.

Interactive learning technologies can be categorized participants in the dialogue (Pict. 1).

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                    ┌─────────────────────┐
                    │ Interactive learning│
                    │    technologies     │
                    └─────────────────────┘
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└───────────────┘  └───────────────┘  └──────────────────┘
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- business games;
- work in circles;
- discussion, rainstorming.

- virtual reality;
- computer programs and games;
- interactive tools.

- distance Learning;
- local telecommunications technology;
- computer testing.

Pict. 1. Classification of interactive learning technologies

Today, the national teachers have accumulated a lot of scientific and theoretical and practical experience of interactive teaching methods Dialogue "man – man". In our opinion, such a relationship already implies a dialogue. Interactivity also includes not only the interaction between the participants of the dialogue and communications.

The term «interactive dialogue» is not entirely accurate, since the concept of "dialogue" (Gr. Diálogos – Talk) already implies a conversation (oral interaction) between two or more persons [5]. Therefore, in view of the above, we believe that interactive technologies in the study should realize two-way communication with the teacher taught with the help of technical training (computer technology) using special software. In this connection it is necessary to distinguish the following main elements:

- of personal communication «teacher – student», the teacher may be virtual;

- the presence of special software to make the learning process, taking into account the specific teaching methods, individual characteristics of the student;

- interactive technologies do not replace the teacher and help students fill in the correct knowledge or discipline.

Telecommunications and Internet technologies used in education from around 1994 with the advent of Web-browsers, but broad and massive use in education for a number of technical and subjective reasons they did not get. The main reasons were the quality of communication, lack of appropriate technology development certainly does not take into account the psychological perception of electronic material.

Virtual reality (simulators, computer games). Mainly used in professional education to develop practical skills (drive vehicles, modeling and simulation of real situations). These technologies include a number of special professional educational software products such as Electronics Workbench – simulation of digital and analog electronic circuits; Model ChemLab – simulation of various chemical processes; Matlab – virtual seminar exact sciences and others.

Computer interactive didactic materials allow to fully help students gain knowledge and skills. Teacher training material can not only images, but also give examples that simulate the projected situation.

The most promising students for self-development, in our view, interactive computer technology with elements of the game. Ironically, computer games have mass distribution among all sections of the population, but also in the educational

environment of wide application not received. Now developed a range sufficient volume of strategic gaming computer simulators that can be used in education to develop practical skills from different disciplines (restaurant business, economics, management, technology).

Given the attractiveness of the game, their capacity for self-development, we have noted psychological and pedagogical characteristics that can be considered as a contribution to the development of motivating learning process:

- the satisfaction demonstrate its capabilities as a player;

- unexpected excitement of waiting for game situations and crucial sequence in the game;

- on the need to make decisions in difficult conditions and uncertain situations;

- early detection consequences of decisions;

- the satisfaction of success – intermediate or final.

Democratization and availability of information and computer technology allows the teacher to create e-learning materials.

Using previous professional development provided the institution is not always convenient and appropriate, since they do not take into account the specific classrooms and the students.

Teachers must fully learn the principles of computer interactive technologies to use them in class to know the principles of development and use of e-learning materials.

The basic principles of the use of electronic training materials can be considered, in our opinion, the following:

- visibility illustrating the process or phenomenon can most firmly consolidate the theoretical knowledge, increases the effectiveness of its educational material issues;

- of problematic, study, specific tasks in practice to apply existing knowledge and learn new independently. Explore the diverse educational material;

- individual focus: material, selected on the basis of differentiated students achieved their complexity, pace of learning and amount;

- the availability, didactic material should not be too difficult or too simplistic, otherwise, it reduces the motivation to learn;

- about structuring material not only illustrates and defines the uniqueness of the solution, but also allows optimal variants of behavior strategies depending on the initial conditions.

Based on the principles of the use of electronic training materials, as follows:

- of cognitive activity;

- an increase learning motivation;

- create optimal (comfortable) conditions of government;

- on demonstration and simulation of several options, depending on the set of initial conditions;

- on the self-test feedback and results of operations;

- formation of information culture;

- to reduce the training and work opportunities through labor-intensive computer processing and thorough analysis of the results of the students.

It should be noted that some teachers evaluate ambiguous role of the computer in the classroom. There is a negative impact on their health and psyche of the student, the excess reduces the appearance of abstract thinking, interest in the game (virtual) process provides insight into the reality of events and their consequences, etc. This again emphasizes that computer-inculcation technology is just a tool of the educational process, is the main teacher, you want to competently and appropriate to use modern information [6] technology.

With this in mind, we believe it possible to design any game situation. In the practice of teaching the teacher can develop small December interactivity on specific topics classes or training modules that can be used both in the classroom and distance

learning systems. Existing software program that lets you design and create interactive learning materials to improve the learning process.

Based above does not purport to finally solve the problem of implementation and use of modern interactive technologies in the educational process. The next step of our future research is the development stages of the implementation of interactive technologies in the system of distance education specialists in maintenance.

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Безрученков Ю. В.

Інтерактивні технології: складова навчального процесу

Для професійної освіти фахівців необхідне застосування сучасних технологій. Інтерактивні технології, про які йдеться в статті, дозволяють надати студентам практичні та теоретичні знання і навички. Підхід у використанні інформаційних технологій в навчальному процесі, дозволяє поліпшити якість освіти і поставити його на більш високий конкурентоспроможної рівень.

У статті термін «інтерактивна технологія навчання» характеризується комплексним підходом до створення, застосування, визначення всього освітнього процесу і оволодіння знаннями в системі людина-машина, які взаємопов'язані між собою.

Аналізуючи матеріал статті можна визначити, що термін «інтерактивний» говорить про здатність взаємодіяти і перебувати в режимі діалогу з будь-ким (система людина-людина) або чим-небудь (система людина-машина). В статті зазначається, що інтерактивне навчання – перш за все діалогове навчання, в процесі якого відбувається взаємодія викладача і студента.

Автором відзначається, що при використанні інтерактивних технологій при навчанні, викладач може впливати на студента як безпосередньо в прямому контакті, так і віртуально, що часто використовується при дистанційних формах навчання.

У статті підкреслюється, що інноваційні технології, що впроваджуються у вищій школі, є всього лише одним з інструментів навчального процесу, головним же в навчальному процесі залишається викладач, в обов'язки якого входить доцільно та грамотно застосовувати сучасні інформаційні технології.

Ключові слова: інтерактивність, інформаційні технології, комп'ютерний діалог, самонавчання, навчальний процес.

Безрученков Ю. В.

Интерактивные технологии: составляющая учебного процесса

Для профессионального образования специалистов необходимо применение современных технологий. Интерактивные технологии, о которых говорится в статье, позволяют предоставить студентам практические и теоретические знания и навыки. Подход в использовании информационных технологий в учебном процессе, позволяет улучшить качество образования и поставить его на более высокий конкурентоспособный уровень.

В статье термин «интерактивная технология обучения» характеризуется комплексным подходом к созданию, применению, определению всего образовательного процесса и овладения знаниями в системе человек-машина, которые взаимосвязаны между собой.

Анализируя материал статьи можно определить, что термин «интерактивный» говорит о способности взаимодействовать и находиться в режимедиа лога с кем-либо (система человек-человек) или чем-либо (система

человек-машина). Автор указывает, что интерактивное обучение – прежде всего диалоговое обучение, в процессе которого происходит взаимодействие преподавателя и студента.

Автором отмечается, что при использовании интерактивных технологий при обучении, преподаватель может влиять на студента как непосредственно в прямом контакте, так и виртуально, что часто используется при дистанционных формах обучения.

В статье подчеркивается, что инновационные технологии, внедряемые в высшей школе, являются всего лишь одним из инструментов учебного процесса, главным же в учебном процессе остается преподаватель, в обязанности которого входит целесообразно, грамотно применять современные информационные технологии.

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