
PEDAGOGICAL METHODS IN TEACHING "COMPUTER NETWORKS"

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Abstract.

This article describes the science of "Computer Networks", its tasks and purpose, as well as pedagogical methods in teaching.

Key words.

Computer, computer systems, computer networks, structural organization of networks, transmission channels.

He purpose of teaching science is to form skills on how computers, computer systems and networks are structured, how they work and are used, as well as how to eliminate malfunctions that occur in the process of working in computer systems and networks. The task of the science is to provide knowledge about modern computers, functional and structural structures of computer systems and networks, construction foundations of computer systems and networks, modern network technologies and their indicators. Currently, in the use of computers, it is a unified information space for many users. organization of reef networks is important. This can be clearly seen in the example of the Internet, which is the worldwide computer network. A set of computers interconnected through transmission channels is called a computer network. This network provides its users with the means of information exchange and the collective use of hardware, software, and information network resources. allows you to have information. Thanks to global networks, the hardware resources of distant computers can be used. Such networks have reached millions of people and completely changed the process of information distribution and reception, the most common service network is the exchange of information through e-mail.

The main task of the network is to organize the collective use of information in a simple, convenient and reliably protected manner to the distributed public network resources of the user. Also, providing a convenient and reliable means of data transfer between user networks. Large amounts of information are stored,

processed and transmitted in local and global computer networks. A common data base is created for user operation in local networks.

There are many tasks in remote access to the database: data centralization, data transmission over a certain distance, data distribution and processing. Several examples can be given:

banking and other financial institutions commercial system reflecting the state of the market ("supply and demand"); social security system; tax; various types of services; remote computer education; air ticket reservation system; remote medical diagnosis election system.

All such additional information specified must be collected, stored and accessed (accessed) in a way that is accurate and protected from unauthorized access. Facilities are being created for many people from the fields of scientific, service, education, social and cultural life.

The word "Method" is a Greek word that means research, a way to achieve a goal, a method. The etymology (origin) of this word is also reflected in its interpretation as a scientific category. "Method - in the most general sense - a method of achieving a goal, an activity organized in a certain way." Educational methods mean the teacher's teaching work on solving various didactic tasks aimed at mastering the studied material and methods of organizing students' learning activities.

Educational method is a component or a separate aspect of the educational method. The relationship between methods and methods is interconnected. Method and method are connected to each other as whole and part. Only a part of the pedagogical or educational task is solved with the help of methods. The same methodological methods may be used in different methods. And on the contrary, the same method can be revealed by different teachers in different ways.

Currently, the educational methods used in practice are diverse and numerous, and each of them has its own characteristics, educational opportunities, suitability for certain goals, conditions, and other qualities. different from each other. It can be seen that each of these methods is suitable for certain educational purposes, and it is not appropriate to use another method instead. Because it is known that another method is not suitable for this purpose.

Therefore, it is important to know which of the educational methods will give the intended effect. But this issue has not been fully studied yet. This issue requires, first of all, to divide educational methods into types according to certain characteristics and to determine their main characteristics. Taking this into account,

it is an urgent issue to divide modern educational methods into types. In order to solve this problem, it is necessary to determine the main characteristics necessary for the classification of modern educational methods. These signs can be:

The tasks to be performed, the intended result, educational and educational goals, pedagogical and psychological directions, appropriateness of the age of learners, teaching of certain subjects (social, languages, natural, concrete, practical and other subjects), theoretical and practical knowledge, related to teaching skills and competences, mastering control and other signs.

According to these characteristics, educational methods can be divided into the following types:

Methods of imparting theoretical knowledge.

Methods of teaching practical skills and competencies.

Methods of teaching practical exercises.

Methods of strengthening knowledge, skills and abilities.

Methods of controlling the acquisition of knowledge, skills and competencies, etc.

2. Educational methods can be divided into the following types according to their characteristics related to the intended result:

Improving the quality and efficiency of training.

Developing learning abilities of learners.

Determining the directions of the students' talents.

Development of creative abilities.

To achieve higher mastery:

Achieving mastery of knowledge.

Acquiring practical skills and qualifications.

Achieving increased activity.

Achieving interest.

3. Educational methods can be divided into the following types according to their characteristics related to educational and educational goals:

Teaching independent thinking.

Teaching to make independent decisions.

Teaching to perform tasks independently.

Activation of the participants of the educational process.

Teaching critical thinking.

4. Educational methods can be divided into the following types according to their pedagogical and psychological features:

Interactive educational methods

Methods of didactic homes

Problem-based learning methods

Educational methods focused on the personality of the student

Differential education methods

Individual (individual) education methods

Heuristic education methods

Dogmatic teaching methods

Reproductive education methods

Productive education methods

Creative educational methods.

Art education methods.

Aesthetic education and educational methods.

Methods of physical education and sports education.

Methods of labor education and upbringing.

Special education methods.

Methods of adult education, etc.

5. Educational methods can be divided into the following types according to the age appropriateness of learners:

Appropriate methods for higher education institutions.

Methods suitable for secondary special, vocational education institutions.

Methods suitable for general secondary educational institutions.

Appropriate methods for preschool educational institutions.

Methods suitable for non-school educational institutions.

Appropriate methods for training and retraining educational institutions.

Methods suitable for special educational institutions.

6. Educational methods can be divided into the following types according to the characteristics of teaching certain subjects (social, linguistic, natural, concrete, applied and other subjects):

Methods suitable for teaching social sciences.

Methods suitable for teaching languages.

Methods suitable for teaching natural sciences.

Methods suitable for teaching specific subjects.

Methods suitable for teaching applied sciences.

Methods suitable for teaching technical sciences, etc.

7. According to the characteristics of teaching theoretical and practical knowledge, skills and competencies, educational methods can be divided into the following types:

Methods suitable for teaching theoretical knowledge.

Methods suitable for teaching practical knowledge, skills and abilities.

Methods suitable for teaching the use of various technical tools and their management.

Methods suitable for teaching the use of information and communication technologies.

Methods suitable for teaching professions and others.

8. Educational methods can be divided into the following types according to their features related to mastering control:

Writing works: dictation, statement, essay, etc.

Performing control work: current, intermediate, final control work.

Doing exercises.

Solving problems.

Doing independent work.

Oral inquiry (questions and answers), exam, test.

Tests and more.

The types of educational methods listed above are conditional to a certain extent, which is due to the fact that each educational method has several qualities and characteristics at the same time. The following are the most common signs of these qualities and characteristics:

Methods based on speaking and listening.

Methods based on speaking, explaining and listening.

Methods based on speaking, explaining using visual aids and seeing, listening.

Monological lecture method.

Interview method.

Question-and-answer method.

Debate, discussion method.

The method of business games.

Method of role-playing games.

Method of didactic games.

Collaborative method and others.

These common signs of educational methods consist of the processes of speaking-listening, showing-observing, explaining-thinking, strengthening-

repeating, and these signs are actually typical for each method. It is natural that such generality gives wide opportunities in practical application of educational methods. This is a factor that must be taken into account when choosing educational methods for a specific purpose.

Conclusion:

The main goal of teaching "Computer networks" is to provide students with theoretical and scientific knowledge on the methodology and technology of network technologies, network management, and network structure design. Its task is to form students' knowledge, skills and abilities in modern methods of network technologies, creation of network technologies and its software, work in network management systems.

It is necessary to provide more modern theoretical information and enrich its content in the lectures of "Computer Networks". The selection of educational materials can be used in the following context: all-round development of the personality of the future specialist; high scientific and practicality; in terms of complexity, compatibility with the real educational opportunities of specialists; to comply with the established hours and time in studying a given subject.

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