CORRECTIONAL AND EDUCATIONAL OPPORTUNITIES FOR THE USE OF INFORMATION TECHNOLOGIES IN TEACHING STUDENTS AT HOME

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Abstract. *In recent years, as a result of the intensive use of information technologies and telecommunications in special education, the expression "information and Communication Technologies" has been widely used.*

Information and communication technologies (ICT) - a set of combined methods, production processes, software and technical means for the purpose of collecting, processing, storing, distributing, displaying information and using it in the interest of users.

When we use the word communication in terms of "information transmission", communication technologies are part of Information Technology. Analysis of existing approaches to the main definitions in the field of information and communication technologies in distance and open education, we are guided by modern technical means (computers and computer networks), including traditional means of communication (mail, speech and media – television, radio, press, etc.) is a term that covers various aspects of the use of various technologies that include the expression information and communication technologies, which in a broad sense refers to the totality of systematic methods, means and operations of working with information.

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The information and educational environment of an educational institution should include

A set of technological means (computers, databases, communication channels, software products created taking into account the special educational needs of children with disabilities, including the formation of life competence, socialization, etc.);

Cultural and organizational forms of information interaction taking into account special educational needs children with disabilities;

Competence of participants in the educational process in solving developmental and correctional tasks of teaching children with disabilities using information and communication technologies (ICT);

Availability of support services for the use of ICT.

In the education system of all categories of children with disabilities, educational computer programs of a general educational nature are used for preschoolers and schoolchildren. The method of using most of them needs special adaptation.

On the way of development and implementation of ICT in the system of special education, there are difficulties associated with overcoming various barriers:

Social, manifested in misunderstanding and underestimation of the importance of the use of ICT in special education;

Competence-based, manifested in the absence or lack of special knowledge and skills of teachers necessary for the use of modern ICT in education for people with special needs;

Economic, caused by insufficient financial resources for the purchase of sufficiently expensive special computer;

Software and hardware.

The main directions of using ICT in teaching children with disabilities:

1) Presenting new material — visualization of knowledge (encyclopedic programs; Power Point presentation program);

2) Conducting virtual laboratory work using training programs;

3) Consolidation of the presented material (training — various training programs, laboratory work);

4) Control and verification system (testing with evaluation, control programs);

5) Independent work of students (educational programs such as "Repetitor", encyclopedias, educational programs);

6) Avoidance the classroom-based system: conducting integrated lessons using the project method, the result of which will be the creation of Web pages, teleconferences, the use of modern Internet technologies;

7) Training of specific cognitive abilities of the student (attention, memory, thinking, etc.).

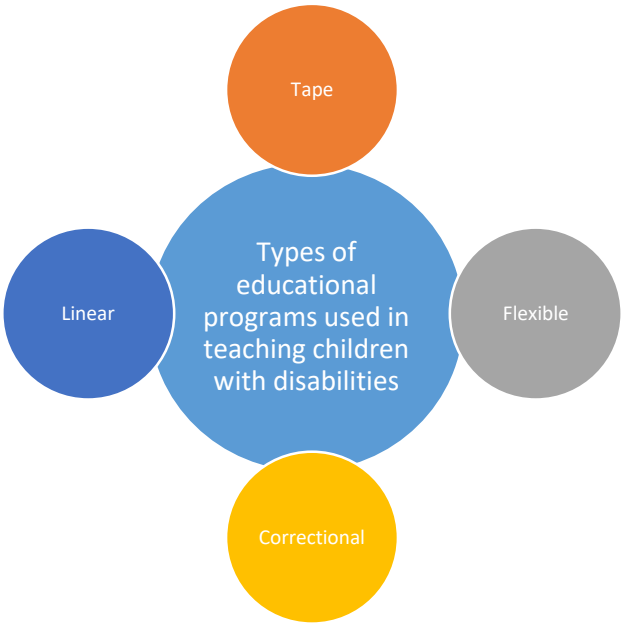
One of the important components of the use of information technology in special education is programmed teaching.

Programmed teaching is the controlled assimilation of educational material with the help of a training device (computer, programmed textbook, movie trainer, etc.).

Programmed teaching material is a series of relatively small portions of educational information (frames, files, steps), submitted in a certain logical sequence.

There are three types of training programs that can be used in special education of children with disabilities: linear, branched and adaptive, with the help of which the process of programmed learning in modern school is built.

Figure No. 1



Linear EP is a training program in which the entire educational material is divided into a sequence of semantic units ("portions") that logically cover the entire subject. These "portions"

should be small enough so that a student with special educational needs makes as few mistakes as possible. At the end of each "portion", control tasks are performed, but the order of studying the "portions" does not depend on the results of these tasks.

The branched EP differs from the linear one in that a trainee with limited health capabilities, in case of an incorrect answer when performing control tasks, may be provided with additional information that will allow him to complete the control task.

The construction of an adaptive OP is based on the hypothesis that a certain number of mistakes are necessary for successful learning, i.e. if a student with limited health does everything without mistakes, then the learning effect will be less.

The number of mistakes made is used as follows:

1) If the percentage of errors falls below a certain level, the degree of difficulty of learning automatically increases;

2) When the percentage of errors increases above a certain level, the degree of difficulty automatically decreases.

Currently, it is customary to distinguish the following main directions of the introduction of computer technology into the education of persons with disabilities:

The use of computer technology as a means of teaching children with disabilities, improving the teaching process, increasing its quality and efficiency;

The use of computer technologies as tools of education, self-knowledge and reality in an inclusive education;

Consideration of the computer and other modern means of information technology as objects of study;

The use of new information technologies as a means of creative development of students with disabilities;

The use of computer technology as a means of automating the processes of control, correction, testing and psychodiagnostics;

Organization of communications based on the use of information technologies for the purpose of transferring and acquiring pedagogical experience, methodological and educational literature;

The use of modern information technologies for the organization of leisure of persons with disabilities;

Intensification and improvement of the management of the educational organization and the educational process based on the use of a system of modern information technologies.

The capabilities of modern computing technology are largely adequate to the organizational, pedagogical and methodological needs of school education:

Computational - fast and accurate conversion of any types of information (numeric, text, graphic, sound, etc.);

Transducer — the ability of a computer to receive and issue information in a variety of forms (if appropriate devices are available);

Combinatorial — the ability to memorize, save, structure, sort large amounts of information, quickly find the necessary information;

Graphic — presentation of the results of their work in a clear visual form (text, sound, in the form of drawings, etc.);

Modeling — construction of information models (including dynamic) of real objects and phenomena.

The listed computer capabilities can contribute not only to ensuring the initial formation of the personality of a child with disabilities, but also to the identification, development of his abilities, formation of skills and desire to learn, creation of the necessary conditions for the full assimilation of knowledge and skills.

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