TECHNOLOGY FOR CREATING VIRTUAL RESOURCES BASED ON COMPUTER IMITATION MODELS

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Abstract: This article presents an analysis of research works of foreign and CIS countries and Uzbekistan on the use of information and communication technologies (ICT) in education, as well as the effectiveness of the use of computer modeling technology in the educational process.

Key words: information and communication technologies, mass media, inclusive education, computer technologies, modeling technologies.

Today, in the public education system, there are 86 specialized schools and 21 boarding schools for students with disabilities in physical or mental development, where more than 20,610 students receive education. In addition, more than 13,437 students with physical or mental disabilities and need long-term treatment are receiving education at home [1].

Education of children and adolescents in need of special assistance in our republic, taking into account their types of disabilities and their degrees, in the following 8 areas of special education:

➢ blind children;

➢ visually impaired;

➢ children with hearing impairment;

➢ hearing impaired children;

➢ children with intellectual disabilities;

➢ children with damage to the supporting organs;

➢ children with speech defects;

➢ activities are being conducted on children with severe behavior.

At this point, the decision PQ-5218 of the President of the Republic of Uzbekistan dated August 9, 2021 "On measures to introduce a fundamentally updated system of raising orphans and children deprived of parental care" also shows that young people with limited opportunities are highly valued in our country. According to the President's decision, "Mehribonlik" houses, Children's towns, family orphanages and Children's houses (educational institutions) of the Ministry of Health system were attached to the National Guard.

In the conducted scientific research, the condition of education of children with damage to the 8 categories of basic movement organs and children with hearing impairment was studied. As the first basis for the education of youth with disabilities in Uzbekistan, the Republican Education Center developed the "Measure-Measure Plan for the Development of the Open Education System for Children with Special Needs in the Republic of Uzbekistan". In this plan, the following organizational principles of inclusion of children with special needs in the special system are highlighted in the program:

➢ preparing public consciousness for inclusive education through public information;

➢ creation of an information bank about children in need of special assistance in the republic;

➢ issues of development and provision of various educational methodical literatures, didactic tools for children with all types of disabilities, specially and individually in families.

Main part: In the concept of development of the system of public education of the Republic of Uzbekistan until 2030, priority tasks such as "creating information and

communication technologies for modern textbooks, educational manuals, and multimedia applications" have been defined.

Information communication technologies are methods of information processing with various technical and software devices. It is primarily computers with the necessary software and telecommunications equipment on which data is stored.

The introduction of information and communication technologies in the education of young people with disabilities leads to a more effective learning of students.

It would not be a mistake to say that the introduction of computer technologies not only into the field of production, but also into the education system has brought significant achievements in science. The introduction of software tools of computer technologies into the education of young people with disabilities creates an opportunity to learn from existing subjects.

According to studies, the diseases of children who need individual education at home are listed below and they are:

1. Rheumatism (active phase).

2. Pancorditis and endomyocarditis.

3. Congenital heart disease (level of subcompensation and decompensation).

4. Severe tetrad Fallo's disease.

5. Chronic pneumonia, with bronchial deformation, severe form of bronchiectasis.

6. Chronic pneumonia is a severe type of bronchiectasis disease, complicated by bronchial enlargement and right-sided heart failure.

7. Severe form of bronchial asthma (if there are attacks several times a week or every day).

8. Chronic nephritis (nephrotic syndrome)

9. Chronic diffuse glomerulonephritis

10. Chronic pyelonephritis (exacerbation)

11. Myopathy

12. Support after remission of poliomyelitis - impairment of locomotor organs.

13. Celiac disease, severe type, with complications.

14. Liver cirrhosis is divided into types.

Development of education of disabled youth is one of the priority tasks facing our country. Today, scientists from foreign and CIS countries and Uzbekistan have conducted scientific research on the content, perspective, and application of information and communication technologies (ICT) to education of disabled youth.

For example, Wozniak Irina Vladimirovna in her dissertation "Formirovanie gotovnosti pedagogov k inklyuzivnomu obrazovaniyu detey v sisteme povyshenia qualificatsii" expressed an opinion on the formation of teachers' preparation for special education of children in the continuous education system [2].

In this dissertation, the study of the effectiveness of experimental technologies on the formation of children for special education in the continuous education system of teachers is discussed [2].

"Inklyuzivnoe obrazovanie" by T.N. Guseva. In the manual "Vypusk 1" the issues of practical work in the field of special education are considered. Initial experiences on promotion of educational processes of disabled youth directly in different administrative districts of Moscow city [3].

T. V. Lisovskaya drew attention to the need to teach and identify not only the "negative" but also the "positive" aspects of a child with special needs, based on them and take into account potential abilities, and organize educational activities. He left a great legacy in the field of correctional pedagogy [5].

In the article "Problema otkrytosti v inklyuzivnom obrazovanii" by D.V. Bukharov, he analyzes the problem of designing the educational system of disabled youth, taking into account the implementation of the principles of flexibility, freedom and openness. At the same time, a description of the author's technology in designing a mixed-type inclusive education model is given [4].

A.V. Voronov, T.I. Moroz, S.I. Pugach, Y.L. Zagumenov's educational manual entitled "Scientific-methodical and personnel support development of inclusive education" about the existence of youth education (self-improvement, self-development) and the continuous process of educational development that takes into account that all children are individuals with different educational needs is reflected [11].

Based on the above ideas, it is necessary to pay attention to the following in order to develop the education of young people with limited opportunities:

➢ to support the decisions of UNESCO and other international organizations to ensure social integration;

➢ to contribute to the improvement of national legislation in accordance with international standards in order to create equal conditions for quality education;

➢ preparation for obtaining the status of equality of children regardless of the characteristics of the society;

➢ passing through a skill-oriented approach to the development of the potential of each person;

➢ diversifying the content of school education that meets the requirements of all categories of students;

➢ the use of information technologies and the development of distance education to ensure equal access to quality education for everyone;

➢ training teachers to work in special education.

Organization of distance learning of young people with disabilities in physical movement provides a comprehensive service in acquiring knowledge from subjects. A number of works have been carried out by MDX and Uzbek scientists regarding the wide implementation of distance education in the education of young people with limited opportunities.

A.A. Andreev's research work is devoted to the organization of distance education in higher educational institutions and their didactic foundations, and it contains scientific

conclusions about what should be the didactic materials provided to students during distance education [8].

In the monograph "Theory and practice of distance education" created by A.A.Abduqadirov, A.Kh.Pardaevlar, the emergence, formation, implementation, perspectives and teaching-methodical tools of distance education are described in detail. It contains practical recommendations on the creation of educational and methodological materials and its implementation in the organization of distance education [6].

D. Saifurov's research work is devoted to the scientific and methodological foundations of distance education in the system of vocational college teachers' training and retraining, and issues of distance education organization and management are described in the system [10].

E. S. Polat's research work is focused on the pedagogical issues of organizing distance education, and the contents of didactic systems and pedagogical technologies used in distance education are covered [9].

N.N. Gorbachev expressed his opinion on the development of the elements of the program complex of the automated information system in distance education in the scientific research work entitled "Model and method of management of electronic educational information resources for distance learning of the disabled", and the three main functions of information communication technologies: compensatory, didactic, communicative brought up The main types of ICT tools serve to fulfill several functions in the educational process of young people with disabilities. They are: standard technologies, existing data formats, auxiliary technologies [12].

Taking these considerations into account, remote teaching of existing presentations and lectures using computer technologies will allow students to repeat lessons for students who did not complete them on time.

Foreign scholars Mudite Reigase in the project work "ICT - an effective tool in building an inclusive society" shows that ICT has a great impact on many aspects of social

life, including education, training and employment. At the same time, it is an important tool especially for people who have special needs and face various limitations due to their health...

Mark C. Weber, J.D. In the scientific article "Inclusive Education in the United States and Internationally: Challenges and Response", it is a difficult task to attract young people with damage to the supporting organs to independent home education, it is said about the research conducted in the United States of America on the introduction of education of disabled youth in special schools. The research paper concludes that integrated education and inclusion are the main goals, and more attention should be paid to the implementation of the education of young people with disabilities.

Abdyvasieva A.A., Barsanaeva Dj.S., Zadorozhnaya N.P. and others in the training manual for teachers on "Together School: Managing the Educational Environment in a Multicultural Society" discussed inclusion and diversity, safe learning, strengthening friendships with the school and neighborhood, classroom management strategies, working with individual students.

B.V. Selyuk's scientific article "Ispolzovanie computera na lektsiyax po fizike" examines the use of computer technology as a technical means of teaching in physics class. In the educational process, the opinions about the incomparable role of interactive whiteboards, computers and projectors and the ability to create text and graphics, animations and video clips, and presentations in Microsoft Office Power Point were expressed.

Computer-based modeling technology improves the quality of the educational process. With the help of technical means, it is possible to increase the volume of educational materials given to students, to introduce modern science achievements. Until recently, film and television as technical teaching tools were considered a major breakthrough in the educational system. But now computer-based modeling is gaining importance in the educational process. Similarly, computer-based simulation modeling is

important in the educational system. In terms of application, computer-based modeling and simulation modeling perform similar tasks. That is, the manifestation of the internal and external properties of the object (the educational process is meant) is shown by means of imitation.

Conclusion. From the above points, it is advisable to create the possibility of computer modeling in the creation of computer imitation models in Physics for specialized boarding schools, using step by step three directions of the methodology of computer modeling. In this regard, the use of technical means, the creation of computer imitation models and the effective application to the educational process is an urgent task. In this regard, it is advisable to carry out the creation of a new generation of educational and methodological materials for educational institutions, electronic textbooks, didactic materials based on innovative technologies.

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