



## THE ROLE OF INFORMATION TECHNOLOGY IN THE PREPARATION OF HEARING IMPAIRED CHILDREN FOR SCHOOL EDUCATION

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<https://doi.org/10.5281/zenodo.8062671>

### Abstract

Updated educational programs in our country today have been adopted, and at the same time, Uzbekistan sets high requirements for special education. This article proposes an educational model for disadvantaged general and secondary schools. Updating educational content aimed at deaf and hard-of-hearing children and the effectiveness and quality of the educational process. The structure of the educational model is given, its main content is considered. Implementation scenarios with the help of information technology in this approach. Analysis of conditions is necessary for successful application in the modern education system of our country.

**Key words:** innovative technologies, Adobe Flash, innovative methods, information technologies, educational efficiency, 3D glasses.

### Аннотация

В нашей стране сегодня приняты обновленные образовательные программы, и в то же время в Узбекистане предъявляются высокие требования к специальному образованию. В данной статье предлагается образовательная модель для неблагополучных общеобразовательных и средних школ. Актуализация образовательного содержания, направленного на глухих и слабослышащих детей, а также повышение эффективности и качества образовательного процесса. Приведена структура образовательной модели, рассмотрено ее основное содержание. Сценарии реализации с помощью информационных технологий в этом подходе. Анализ условий необходим для успешного применения в современной системе образования нашей страны.

**Ключевые слова:** инновационные технологии, Adobe Flash, инновационные методы, информационные технологии, эффективность обучения, 3D-очки.

### Introduction

Modernization of the education system in our country is a natural and inevitable process characteristic of all stages of development. Its necessity is determined by the technological development, social and cultural changes taking place in each country.

hearing - impaired students have equal opportunities with all other citizens, to eliminate limitations in their life activities, to lead a fulfilling life, to actively participate in the social, economic, and political life of society, as well as Creating favorable conditions that allow them to fulfill their civic duties is the main content of the humanitarian policy of our country. The decree of the President of the Republic of Uzbekistan on August 1, 2017 " On

measures to further improve the system of state support for the disabled " It aims to improve the measures related to their education, support by the society , their integration into the society among healthy people, and adaptation in social life . In 2017-2021 , the fourth priority direction of the "Strategy of Actions" under the five priority directions for the further development of the Republic of Uzbekistan is " social protection of the population, the provision of the disabled and other needy categories of the population by the state Special attention was paid to strengthening "support" [1].

The implementation of an inclusive education program, which involves the inclusion of a disabled child with the active assimilation of world experience, determines effective education for children with disabilities today [2]. Hearing children in a barrier-free environment that gives them equal opportunities to learn, develop and communicate. However, this fact does not change, the need for the activities of special schools is not provided only by inclusion education [3].

In our opinion, the primary task of reforming the pedagogical system of special education is to revise the existing teaching methods, taking into account modern scientific and technical approaches, to make maximum use of information. Technology at all stages of the educational process, introduction of effective methods of assessment of the child's psychophysical development, moderation of methods of corrective actions [4].

The content analysis of the specialized literature showed that foreign defectologists and teachers of the deaf (V.V.Voronkova, T.S. Zykova, A.R.Maller, M.M.Semago, L.M.Shipitsina) currently describe new approaches. teaching hearing impaired children, correcting and compensating their physiological characteristics. European and American scientists and pedagogues (M. Doherty, D.Lackner, D.Urbach), methods of effective training of deaf and hard of hearing children, their inclusion in the system of general and vocational education were developed by the above-mentioned scientists [5, 6].

Task assignment. Thus, using the experience of the above-mentioned authors as a theoretical basis, it is possible to create an effective and practical educational model that can provide modern conditions for the development of deaf and hard-of-hearing children [7].

Presentation of the main material of the study with full justification of the obtained results. The educational model we offer for the school is a structure consisting of modules formed on the basis of the tasks set for teaching hearing impaired children (continuity of the educational process, systematic correction work, practical orientation, use of modern technical teaching tools) is considered This model reveals opportunities for adaptation and integration of deaf and hard-of-hearing children into society by increasing the quality of education and expanding self-awareness, communication opportunities in the professional sphere.

The modules in the structure of the developed model are sequentially interconnected and include the following areas: forecasting and evaluation, system planning, implementation of educational and corrective components, and pedagogical interaction. loneliness

psychological, medical and pedagogical studies of the child is the main stage of special education. Thus, the "Assessment and forecasting" module systematically consists of the following blocks:

- I. collecting preliminary information about the student;
- II. multi-vector analysis of developmental characteristics cognitive and personal activity of a child with hearing impairment;

- III. conduct a systematic assessment of the child's capabilities within the framework of the implementation of educational and work skills;
- IV. predicting the prospects of the student's development, making plans and recommendations for everyone, participants of the educational process (teachers of subjects, teachers of the deaf, psychologists, pedagogues, etc.);
- V. of results , pedagogical activity with the support of information and communication technologies (speech simulators, digital audiometers, school database management systems, educational process automation systems) [8].



Figure 1. Assistive Technology

offer in-depth and comprehensive planning of educational work in addition to general education for special schools. Preservation and practical implementation of the principle of metasubjectivity. Therefore, the second module of our educational model defines the complex "System planning and pedagogical implementation".

For all stages of the educational process, individual adaptation of the curriculum and the development of approaches and its successful development, the module with the structural name consists of the following parts:

- I. comprehensive school-wide planning based on the results obtained in the previous module (thematic, calendar, daily);
- II. creating opportunities for interdisciplinary and cross-disciplinary communication, knowledge and skills acquired by students, equal access to information and resources;
- III. development of a differentiated scheme of providing pedagogical assistance to a disabled child and hearing within the educational process;
- IV. educational activities, including computer modeling, includes visualizations [9].

Study material, use of multimedia opportunities), extracurricular (distance learning technologies, digital educational resources, communication , participation in science Internet Olympiads) and individual work (hearing hardware and software complexes for disabled children);

- I. formation of the need for continuous education (vocational orientation, social adjustment), preparation for further education;
- II. psychological, medical and pedagogical support for a child in need of special education (remote monitoring, online communication with parents);
- III. gathering a methodological base, testing and introducing new methodologies, techniques and technologies for training, research, development and development of hearing-impaired children;

#### IV. relevant computer software products [10, 11].

The module described above is the main one, so how it covers all subjects of the educational process (teachers, teachers of the deaf and defectologists, teachers, psychologists, additional teachers, educational, administrative and medical staff, children, parents). Coordinated work will help this module work effectively. Teaching staff, consistent and comprehensive implementation and correction of the educational plan, relevance methods, continuous information supply are the basis of educational efficiency.

Practice shows that compliance with the described recommendations leads to significant growth, and due to the combination of advanced and reasonable, the effectiveness of the work of a special school is noticeable.

#### Conclusion

Provide a differentiated approach to education, meeting the educational needs of deaf and hard-of-hearing students based on the high requirements of the model educational standard developed by us. An important role is to focus on interdisciplinary, practical best practices. Not only for children, school activities play an important role, but also include their parents (feedback, advice, information provision) and teachers (community, work, professional development). Each stage corresponds to a selected, adapted or developed software and methodological set, offering local and remote work. Taking this into account, we can conclude that education includes a comprehensive approach to children with disabilities.

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