

## **FEATURES OF TEACHING INFORMATICS TO STUDENTS WITH SPECIAL EDUCATIONAL NEEDS IN THE CONTEXT OF INCLUSIVE EDUCATION**

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The implementation of inclusive education demonstrates the state's desire to be guided by international standards and universal values in matters of creating a system of assistance to persons with health disabilities, providing them with equal rights and opportunities. The most important thing that inclusion can provide is the elimination of any manifestations of social isolation of children and adolescents who have disabilities in psychophysical development.

However, most Ukrainian schools today lack specialists who could solve the issue of including children with psychophysical disabilities in the environment of healthy peers. Traditionally, the educational process is focused on a child who develops normally.

Thus, today there is an acute social problem: students with special educational needs in educational institutions do not receive the necessary psychological and pedagogical assistance due to the fact that teachers do not know how to teach them. Working with such a child, the teacher, in addition to educational and educational work, must develop and correct his attention, perception, memory, thinking, speech, visual-spatial representations, motor and sensory spheres, and help correct character and behavioral defects. The teacher must also provide a protective and gentle regime, in which all loads are clearly dosed, there is an alternation of types of activity, and an individual approach is implemented.

The relevance of this topic also lies in the fact that students with special educational needs constitute an important part of society, and their successful learning and social integration are crucial for creating an inclusive society. However, these students face various barriers to learning that hinder their access to quality education and the opportunity to develop their abilities.

Ukrainian and foreign scientists have studied various aspects of the outlined problem, including the following issues: the main aspects of organizing inclusive education for children with special educational needs; developing inclusive competence of pedagogical workers; creating appropriate conditions for inclusive education, and others.

An important direction is also the study of innovative pedagogical strategies and methods aimed at integrating students with special needs into the general education process, in particular, through the use of adaptive educational materials and technologies.

Modern scientists N. Kravchenko, Z. Ryabova, H. Kossova-Silina, S. Zamojskyj, D. Holovko [1, 2], Z. Fang [3] investigate the role of digital technologies in ensuring equal access to education for students with special needs; analyze barriers that hinder the effective use of digital resources in the process of inclusive education; consider the issues of developing and implementing adaptive educational materials focused on students with special

These areas of research reflect current trends in the field of inclusive education and provide an important theoretical and practical basis for the further development of this field.

In the context of inclusive education in general secondary education, teaching computer science takes on special importance, as this subject prepares students for successful integration into the digital society. This is especially important given the rapid development of technologies and their impact on all areas of life.

The main principles of inclusive education in computer science are:

1) equality and non-discrimination: this principle involves creating equal opportunities for all students, regardless of their physical, intellectual, social, emotional, linguistic or other characteristics. In the context of computer science, this means that every student should have access to the necessary equipment and software, as well as receive the support necessary for successful mastery of the discipline.

2) Universal Design Learning (UDL): This principle, developed by the Center for Applied Special Technology (CAST), involves creating a flexible

In computer science teaching, UDL may include:

- using a variety of formats for presenting information (text, audio, video, graphics, etc.);
- providing alternative methods of interacting with the computer;
- providing different ways to demonstrate knowledge and skills (written assignments, oral presentations, practical projects).

3) individualization and differentiation of learning: this principle involves taking into account the individual characteristics of each student and adapting the educational process according to their needs.

In the context of computer science, this may include:

- developing individual learning plans;
- providing additional time for completing tasks;
- adapting the difficulty of tasks to the student's level of preparation.

4) collaboration and support: this principle involves the involvement of various stakeholders in the process of planning and implementing inclusive education.

In the context of teaching computer science, this may include:

- collaborating with special education professionals to develop adapted learning materials;
- involving parents in supporting children's learning at home;
- creating a system of mutual assistance between students.

5) gender inclusiveness: this principle is especially important in teaching computer science, where gender imbalance has historically been observed.

It involves:

- creating an environment that encourages girls to participate in computer science;
- using gender-neutral examples and tasks;
- presenting diverse role models in the field of computer science.

6) project-based learning: it involves the use of methods that allow students to work on real projects.

Implementing these principles in computer science teaching creates an environment where every student can develop their abilities, regardless of their initial level of knowledge or the presence of special educational needs. This not only improves the quality of education, but also contributes to the formation of a more inclusive and equal society as a whole.

### References

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