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METHODICAL SUPPORT OF INFORMATICS TEACHERS

IN CONDITIONS OF INCLUSIVE EDUCATION

The changes that have taken place in the special education system are aimed at increasing its flexibility. Diversification of the education system is aimed at variability in meeting the needs of all students, including those with special needs, creating optimal conditions for them to receive a quality education. In this situation, there are special requirements for the readiness of teachers to work in new conditions. Teaching staff should be ready to organize the educational process in their professional activities in a new environment – an inclusive educational space of an educational institution, where the usual pedagogical skills and abilities are not enough. The teacher is the person who ensures the quality of inclusion of students with special needs in inclusive education. New conditions cause a change in teachers' professional competence in the training and upbringing of all students. In this regard, the teacher should be able to adapt and modify the program material freely, determine the method of its presentation acceptable to all students, evaluate completed tasks taking into account their variability, be methodically and didactically prepared to work with different categories of students.

In modern conditions, it is of particular importance to support the professional growth and development of informatics teachers working at the II stage of general secondary education in classes of integrated training and education. The article presents the results of a study of difficulties in the activity of a teacher and a program for the formation of methodical competence of informatics teachers working in inclusive education.

In scientific practice, various scientists (N. G. Bityanova, O. S. Gazman, L. M. Mitina, E. I. Kazakova, etc.) addressed the issues of teachers' support. Essential features of support are a) assistance in decision-making; b) resolution of actual problems of professional activity for teachers; c) creating conditions for the development of interaction subjects. The subjects of support are a teacher who need a support and an experienced teacher (mentor), it may be the head of an educational institution, and a research supervisor (accompanying).

Support is individualized. It flexibly responds to professional and personal requests and needs of the teacher, taking into account the dynamics of professional development. It is multidimensional and has a permanent character.

In order to determine the difficulties and opportunities of informatics teachers in teaching students with special needs, including those with mild intellectual disability, we conducted a survey of teachers.

The research used the questionnaire «Self-Analysis of difficulties in the work of a teacher» (authors L. N. Gorbunova, I. P. Tsvelyukh) and the questionnaire «Inclusive education and I» [1, c. 7–9]. Questionnaire «Self-analysis of difficulties in the work of the teacher» consisted of 5 blocks of open-ended questions (thematic planning for academic subject matter, lesson activities (modeling training, project implementation training, reflection), extracurricular activities on the subject, outclass work). The questions of these blocks made it possible to determine the main difficulties encountered by teachers during the preparation for lessons and teaching of computer science in educational institutions that created conditions for individuals with special needs. The survey of informatics teachers using the questionnaire «Inclusive education and I» allowed us to study the level of training and

qualifications, the specifics and experience of work, the peculiarities of understanding and personal attitude of teachers to inclusive education.

The research involved 60 teachers working in educational institutions in Minsk and Brest regions, as well as 26 young professionals who have started work and have work experience at least six months. The quantitative analysis of the participants is heterogeneous. The largest number of teachers who work with students with mild intellectual disabilities in the conditions of inclusive education have either a fairly large professional experience: 24 respondents with more than 15 years of experience and 24 respondents with the work experience from 0 to 5 years (40.0% each).

Based on the analysis of the questionnaire «Inclusive education and I», we can conclude that the system of general secondary education is doing some work to develop an understanding of the essence and ideas of inclusive education. At the same time, the majority of informatics teachers at the first stage of general secondary education organize the educational process for students with special needs without special training. Only 25% of the teachers have completed professional development related to inclusive education in the last 5 years. However, more than 60% of young professionals and almost 70% of teaching staff are ready or willing to work with students with special needs if they have sufficient knowledge.

The analysis of the respondents' answers allowed us to establish the dependence of the degree and nature of professional difficulties on teaching experience; experience of interaction with children with special needs (positive or negative); training (advanced training) on the problem of education and upbringing of children with special needs.

The results obtained in the course of an empirical study made it possible to determine the needs and difficulties in the activities of informatics teachers when working with students with mild intellectual disabilities in conditions of the inclusive education. When modeling a lesson in goal-setting issues, it is necessary to provide methodical support in choosing the method of motivating students. The lack of sufficient knowledge about the characteristics of students with mild intellectual disability creates difficulties in the appropriate selection of methods and tools used in

the implementation of the educational process. When implementing the project of a lesson, it is difficult to organize forms of work with students with mild intellectual disabilities, and to carry out control and evaluation activities. Inaccurate modeling and definition of the goals and objectives of the lesson lead to difficulties in determining the indicators of its effectiveness.

These difficulties indicate the need for systematic and differentiated work in the formation of methodological competence of teachers of computer science classes of integrated training and education.

Analysis of the results allowed us to determine the directions of support for informatics teachers: 1) expanding the knowledge of teachers about the psychological and pedagogical features of students with special needs, including those with mild intellectual disability; 2) clarifying the knowledge and skills of informatics teachers on the use of methods and techniques in working with students with mild intellectual disability; 3) improving the inclusive culture of teachers who work with students with special needs in an inclusive education environment.

The elimination of individual educational deficits during the training of informatics teachers will help their professional development. This process involves enriching the knowledge and skills of the teacher on the identified difficulties. The support program combines interrelated and interdependent stages: diagnostic, procedural, and reflexive.

1. The purpose of the diagnostic stage is the identification of support based on individual teacher requests. To do this, it is necessary to diagnose the professional needs and difficulties of a teacher in organizing the educational process with students with intellectual disabilities. One of the forms of analysis is a self-analysis map of professional activity, which allows determining the strengths and weaknesses of the educational process, difficulties experienced, and identify points of further development. The questionnaire «Self-analysis of difficulties in the work of the teacher» allows seeing the level of professional training of a teacher both in the training of students with and without special needs.

Questionnaires, analysis of documents, observation, and conversation are used for diagnostics. Aspects for studying can be planning, designing and implementing the educational process in conditions of simultaneous training and upbringing of different categories of students.

Conversations with teachers and monitoring the implementation of professional activities are the sources for determining the content of support and the basis for creating target groups. The selection of the target groups based on various criteria (the length of teaching experience, the degree or nature of professional needs and difficulties, the experience of interacting with children with intellectual disabilities and etc.).

2. The procedural stage is aimed at organizing the activities of subjects of education in order to increase methodological competence in teaching and educating students with intellectual disabilities.

3. The reflexive stage involves an external assessment and self-assessment of the results of the formation of methodical competence of the informatics teacher, making adjustments to the support program.

The result of the implementation of the support program is a reduction in the degree or number of difficulties for teachers in planning, modeling and implementing lessons with children with intellectual disabilities in the context of educational inclusion, the adoption of the principles of inclusive education, and an increase in the level of inclusive culture of teachers.

Analysis of the data showed that after the implementation of the program, noted the following trends: a) reduction in the degree of difficulty high and medium on medium and low in all of the functional components of the methodical competence of teachers in educational inclusion; b) improving methodical competence of teachers in the organization of the educational process with students with special needs; c) changes in the professional and personal position of teachers' and children' with special needs relations.

The literature list

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