

VII International Forum on Teacher Education

Transformation of the Content and Technologies of Training of Persons with Special Needs of Psychophysical Development in the Conditions of Modern Special Education

Tatyana V. Lisovskaya (a), Natalya V. Kryukovskaya* (b)

(a) Belarusian State Pedagogical University Named Maxim Tank, 220030, Minsk (Belarus), 18 Sovetskaya street

(b) Grodno State University Named Yanka Kupala, 230023, Grodno (Belarus), 22 Ozheshko street, nimta@mail.ru

Abstract

The article presents modern views on the education of people with special psychophysical development from the point of view of the formation of personal meanings and the absence of human capabilities limits on the basis of interdisciplinary research. Typical features of the modern transformation of the education of people with special features of psychophysical development are revealed. The article deals with the organization of early comprehensive care for children, the implementation of the educational process for students with special psychophysical development, as well as the process of providing assistance to the adult population. Much attention is paid to the implementation of practice-oriented education, which is based on the competence approach and involves the formation of students 'life competencies and provided by the level-variable training.

The process of education of children with special needs of psychophysical development is considered from the point of view of the implementation of the ethno-cultural approach. The achievements of the scientific, methodological and educational support of the existing special education focus on the socialization of students, the assimilation of the typical experience inherent in the Belarusian people and the ability to use and reproduce it.

As one of the ways to improve the quality of life and improve the content of teaching children with special needs of mental development, the authors suggest the organization of training based on the continuous formation of life competencies.

Great importance is also given to the transformation of existing training technologies and content taking into account the needs of students with special psychophysical development. All technologies contain a health-saving component, taking into account a practice-oriented approach that ensures the formation of the necessary system of competencies. In the conditions of special education the full implementation of learning technologies is possible based on an interdisciplinary approach that ensures the modification and consistency of knowledge and achievements of various psychological, pedagogical and medical sciences.

Keywords: people with special psychophysical development, diversification of the content of education, level-variant training, inclusive education, life needs, activity, competence-based training.

^{*} Corresponding author. E-mail: nim-ta@mail.ru

© 2021 Tatyana V. Lisovskaya, Natalya V. Kryukovskaya

This is an open access article distributed under the terms of the Creative Commons Attribution License (CC BY 4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Published by Kazan federal university and peer-reviewed under responsibility of IFTE-2021 (VII International Forum on Teacher Education)

Introduction

The world practice of teaching people with special needs of psychophysical development, modern achievements of medicine, psychology, and correctional pedagogy allow us to see somewhat different semantic dominants of the education of people with special needs of psychophysical development. Education is considered in the aspect of the formation of a system of personal meanings, which implies an individualized reflection of the meaning of a cognizable phenomenon both at the level of rational (reflexive) consciousness and at the level of practical (pre-reflexive) consciousness formed in the process of life experience (Konopleva & Leshchinskaya, 2018).

The diversification of education creates the basis for improving the quality of life, raising an independent, viable personality. Modern views on special education allow us to reconsider approaches to the construction of the educational process with children with special psychophysical development and change the guidelines for the preparation of a life-capable person.

Purpose and objectives of the study

The purpose of the study: to identify and describe the main directions of the transformation of modern special education of people with special psychophysical development, including them in the process of socialization, interaction with other people and ensuring the satisfaction of their basic life needs.

Literature review

The development of the education of people with special needs of psychophysical development is a priority task of the state policy of the Republic of Belarus. The achievements of the Republic in the field of special education are increasingly recognized. The number of persons with special psychophysical development covered by universal education is 98%. About 70% of students are included in joint (integrated, inclusive) training.

Educational and methodological support for continuing special education (at the level of general secondary education and habilitation, including the provision of early correctional and developmental assistance, improving the quality of life, and training adults in psychoneurological boarding schools) has been created. For children under the age of three, a training manual "Learning from diapers", "Learning the world in games, sounds and colors", "Developing emotions" and a number of others have been created. For all categories of students with special psychophysical development, textbooks have been published at the level of general secondary education and general secondary education for persons with intellectual disabilities.

Programs, methodological recommendations and textbooks for adults of psychoneurological boarding schools have been developed: "A cozy home and my place in it", "ABC for adults", "The emotional world of a person", "Practical mathematics", "Man and the world", "Organization of adult labor activity" (Leshchinskaya & Lisovskaya, 2015). These manuals made possible the functioning of the educational cluster, which was introduced on September 1, 2016 and guarantees every adult satisfaction of their educational needs.

Preparing students with special features of psychophysical development for life in the modern information society makes it necessary to rely on the principle of using information and communication technologies in the educational process. Therefore, the use of electronic means of teaching students with special psychophysical development is one of the promising directions for the development of special education (Varenova, 2001; Kukushkina, 2005; Malofeev, 1991; Nikolskaya, 2004). Information technologies expand the arsenal of the teacher's tools, helping to "complete" those learning conditions that are necessary for solving developmental and correctional tasks, but cannot be created with the help of traditionally used tools.

The main idea of special education in the Republic of Belarus at the present stage is practice-oriented education. It is implemented by relying on a competence-based approach, which focuses on the formation of practical skills of the students with special psychophysical development associated with the use of acquired knowledge, the accumulation of practical experience to solve practical and mental problems in real situations. At the same time, in the learning process, the activity-practical component of the educational process of students with special features of psychophysical development becomes of great importance (Konopleva, 2009; Lisovskaya, 2007; Zmushko, 2008).

Methodology

The research is based on the use of theoretical methods of scientific research, including axiomatic and general logical methods.

The axiomatic method involves the derivation of an axiomatically constructed theory based on a set of basic propositions that do not require any proof. General pedagogical methods include the analysis of scientific and methodological literature, which provides the identification and discussion of specific aspects, features that distinguish modern special education, and generalization, which allows us to draw conclusions, formulate the main provisions based on the identification of features of the educational process of persons with special psychophysical development.

Results

The conceptual idea of the development of education for people with special needs is to provide early comprehensive assistance and ensure continuous psychological, pedagogical, medical and social support for a person with special psychophysical development at all levels of education, regardless of their abilities and achievements, which contributes to obtaining a quality education. Learning should be characterized by continuity: wherever a person is, he or she should be able to learn throughout his or her life. The lack of educational space leads to a very rapid loss of the developing, correctional and educational environment, the extinction of vital skills that were formed over a long period of time with huge human and economic costs. Unused by a person, various social skills cease to be in a constant active state, which ultimately leads to the loss of the meaning of life of a person with special psychophysical development and the disintegration of the formed personality (Leshchinskaya & Lisovskaya, 2016).

Achievements in the field of special education will be more significant if there is a transition from reflective-prescription training to activity-creative training. It will be possible to help many people with special features of psychophysical development, which were previously considered unpromising. With this in mind, the priority is not to focus on the knowledge component of the educational process, but on the practice-oriented content, which ensures the formation of a system of competencies for students for subsequent independent life in society. This is ensured by the implementation of the transition from reflective-prescription training to motivational-activity training, which explains the relevance of revising both the content and the technologies used in the educational process.

Great importance in the Republic of Belarus is given to the organization of early comprehensive care for children with special psychophysical development. Early comprehensive care is organized as part of the special education system and is aimed at activating the potential of children with disabilities, as well as with a certain risk factor in development. Work with young children is focused on taking into account a systematic approach to the examination and identification of both disturbed aspects of mental development and difficulties in the process of assimilation of social experience and interaction with others.

One of the most significant approaches in providing early comprehensive care is the ontogenetic approach, which focuses on taking into account the patterns of mental development in the norm, studying the content of the zone of actual and immediate development, identifying the leading type of activity and the social situation of the child's development. Correctional and pedagogical assistance to children under the age of 3 years is organized in the following areas: physical development, social and emotional development, speech and mental development. The analysis of the results of the child examination in these areas allows you to make an individual child development program. In the implementation of this program great importance is attached to working with parents who are active participants in correctional and pedagogical work. To ensure the effectiveness of early comprehensive care, the process of psychological and pedagogical support is carried out for both children under the age of three and their parents in order to educate and form the necessary system of skills and abilities for organizing interaction with their own children.

One of the significant tasks of special education in the Republic of Belarus is the implementation of practice-oriented education based on a competence-based approach, which involves the formation of students' life competencies and it is provided by level-variable training. This determines the value meanings of modern education and the content of the process of providing assistance in socialization to students with specific difficulties. The implementation of this provision is carried out on the basis of the use of a level-differentiated approach in the process of training students with special features of psychophysical development, focusing on the cognitive and personal characteristics of students in the course of correctional and pedagogical work and determining the amount of knowledge, skills and abilities possible for assimilation. The level-differentiated approach involves the analysis of the cognitive activity of students, the correlation of the results obtained with their special educational needs, the allocation of the content of the zones of actual and immediate development and the differentiation of students taking into account the listed information to determine the list of correctional and developmental tasks solved in the course of correctional and pedagogical activities.

The differentiated approach is generally associated with the concept of "multi-level differentiation". Multi-level differentiation involves the use of tasks of various levels of complexity in the process of correctional and pedagogical work, focused on the level of both current and immediate development, as well as the performing tasks to students in accordance with their educational needs. Multi-level differentiation involves the allocation of several levels of assimilation of knowledge, skills and abilities adapted to the capabilities of students.

The level-based organization of the educational process involves relying on: features of the personal and semantic sphere of students; features of mental development (features of memory, thinking, perception, speech, imagination, etc.); the level of training within a certain subject (formed knowledge, methods of activity). The organization of the learning process is based on the identification of learnability as an individual ability to identify knowledge.

The differentiated approach focuses on the initial diagnosis of the general mental development of students, the identification of existing difficulties in the learning process and the analysis of their causes, on taking into account general and specific patterns of mental development of normal and impaired development in the course of correctional and pedagogical work (Lubovsky, 1971) and individual characteristics inherent in each student with special features of psychophysical development (Kuchmanova & Ryapolova, 2015; Yakimanskaya, 1996; Kryukovskaya, 2016). The use of a differentiated approach is considered as an effective condition for organizing the learning process of children with special features of psychophysical development (Kryukovskaya, 2019; Lisovskaya, 2020). The use of level-variable training allows to focus on the special educational needs of each student, create a full-fledged basis for mastering the system of knowledge, skills and abilities necessary for him or her, and organize the process of including him or her in the system of social relations for successful socialization and adaptation in society.

Due to the orientation on the idea of the continuity of education in the Republic of Belarus, the process of providing assistance to the adult population is organized. A survey of adults living in psychoneurological boarding schools for the elderly and disabled revealed a high motivation for teaching (Lisovskaya, 2015). When determining the content of educational areas, we recognized the heterogeneity of the composition of residents, taking into account the results of the survey. For example, the study found that 19 % of adults with intellectual disabilities between the ages of 18 and 45 do not know how to read and write. Many educational skills were lost due to lack of demand. When conducting the study, it was taken into account that adults are used to being objects of boarding school life, so basic social skills (independence, responsibility, etc.), as a rule, remain not in demand. While selecting adult education content the emphasis is placed on helping residents to master the norms of socially demanded and acceptable behavior, cultural traditions of the Belarusian people. Thus, the idea of continuous education of persons with disabilities is realized. The ingenuity of the authors is admired, which ensures the originality of the content and technology. All the manuals are written with great love for people and the desire to make their studies and life more interesting and productive.

Innovative software, methodological and educational support of the educational process solves the problems of improving the life activity and preparing for independent life of adults living in psychoneurological boarding schools. The efforts of three ministries have been combined: the Ministry of Education, the Ministry of Labor and Social Protection, and the Ministry of Health. The latest achievements of a number of sciences are taken into service. The correctional and pedagogical work is diverse and variable. Education that is accessible and meets the needs and interests of students is organized. Adults from psychoneurological boarding schools are included in the general education system, as far as possible, and at the same time, training in boarding schools is organized for them, which ensures the formation, upbringing and development of viable people who are able to work, earn money and live independently. The use of technologies of humanistic life activity and universal optimism, the creation of contradictory intrigue has led to successes that are impossible not to recognize (Lisovskaya, 2016).

Based on the consideration of the main issues of special education, we will turn to the typical features of modern diversified education of persons with special psychophysical development.

The semantic dominant of the education of children with special psychophysical development is the implementation of the ethno-cultural approach. Modern education is built taking into account world achievements in this field. The modern period of development of special education is characterized by inconsistency. Knowledge of global trends becomes available, and conditions are created for mastering the positive things that can enrich the national education system. The processes of globalization create a chance to move forward. At the same time, conditions are created for the introduction of innovations that dehumanize education due to haste, ill-thought and insufficient scientific justification. In modern conditions, the role of critical reflection is increasing. A value-based rethinking of new developments is required in order to preserve the vital, valuable things that were present in the national experience and distinguished regional educational practices.

Corporate competence in special psychology and correctional pedagogy was recognized as valuable. In modern society, there is a rapid process of modernization and in this regard, a free-thinking, predicting the results of their activities and modeling the educational process, the teacher is the guarantor of achieving the goals.

In modern conditions, it can be stated that the unambiguity of the normative criteria is blurred. Inclusive education is increasingly being extrapolated as universal, equal education. Of course, the advantage of inclusion is that it overcomes the marginalization of special children, enriches their social experience, and creates conditions for social hardening. But this is a different education for people with intellectual disabilities, and this is not identical to the one that ordinary students receive.

Without taking into account the existing life experience of the trainees, the need and demand for what is being taught, inclusion loses its purpose in the future life. An improperly used chance becomes a danger of losing the positive that was gradually formed, which is laid down in special and correctional pedagogy, in the national experience of special education. We need a dialogue between the past and the present, between the world and domestic experience, based on the recognition that the main system-forming factor of learning is a child with special psychophysical development, his or her capabilities and needs. In the organization of education of children with special psychophysical development, it is important to take into account the national culture and civilizational and world culture (universal values). The education of students in accordance with the Belarusian mentality is achieved by turning to reality, everyday life. The dialogues use speech instructions that are typical of the Belarusian way of life, which is used by people living in Belarus. At the same time, the cultural and ideological values of this society and world culture are included in the educational process. The theme of peace, empathy, and friendship occupies a large place in the lessons. Studying the works of foreign authors creates respect for the culture of other peoples and countries, understanding that there are common value orientations. Defining the lessons is the formation of generalized ways of practical activity on the basis of vitagenic (drawn from experience and formed on practically significant material) knowledge. Students in the classroom demonstrate their skills to conduct socially significant dialogues and monologues, exercise in establishing relationships with other people in everyday life. In the conditions of co-education, correctional education is carried out.

The achievements of the scientific, methodological and educational support of the existing special education focus on the socialization of students, the assimilation of the typical experience inherent in the Belarusian people and the ability to use and reproduce it. Scientists, modeling and designing special education, did not try to make it one-dimensional and the same for all students. In the general secondary education the knowledge component is a strong point and a close connection is established between knowledge, skills and methods of activity. The education of people with special needs of psychophysical development is activity-based, building on a competence-based basis. Students, first of all, master skills and methods of activities, as well as generalized and universal knowledge. Simplified, practical knowledge is formed to meet the needs of such individuals. We believe that working as a cleaner, janitor, and junior medical staff (nurses) requires not only and not so much knowledge of grammar, but also the ability to communicate, conduct everyday business conversations, and interact with peers and adults. The headings "We are with Sveta for advice", "School of politeness", "School of boys and girls", "School of life", "School of professional orientation" create an idea of the nature of the activity in the lesson. The activity "Students feel lost in a life situation" allows you to form those personality qualities that are in demand in life.

The attitude to the student with special psychophysical development is of the highest value. Achievements in the field of special education in Belarus are a testament to the recognition of its humanitarian mission. Society does not have the right, cannot be indifferent to the fate of an individual, regardless of his or her usefulness at this stage of the society development. In pedagogy, there is an attempt to transfer technocratic approaches, a fascination with mass testing, and the use of complex methods of mathematical processing of the information in order to prove the credibility of the study (Gordeev & Alexandrovich, 2001). Testing of educational and teaching aids for providing correctional assistance to children with autistic disorders, the interpretation of certain facts and phenomena of their life, the use of manuals for children with intellectual disabilities confirm that generally accepted technologies and techniques do not always work. This is even more true for children with severe multiple disabilities. This category of children is very variable. Children are characterized by several disorders, which in the general structure of mutual influence, leading to the aggravation of their manifestations, difficulties of social inclusion. Belarusian scientists, Konopleva & Leshchinskaya (2018), emphasize the need to avoid linear, single-level technologies in teaching children with special psychophysical development and the importance of implementing interdisciplinary methods in their education. Researchers consider that it is important to improve the quality of life of children, to form their meta-subject learning outcomes, skills and abilities aimed at solving practical problems and the formation of social relations. One of the ways to improve the quality of life and improve the content of education for this category of children is the organization of training based on the continuous formation of life competencies. This formation of vital competencies is the pedagogical basis for the individualization and personalization of teaching children with severe multiple disabilities (Leshchinskaya & Lisovskaya, 2015).

Discussion

Prospects for further development of special education: meeting the needs of all students, creating conditions for their personal realization, and inclusion in joint (integrated, inclusive) education. In the conditions of inclusion different students with special features of psychophysical development cannot study according to the same content. The minimum number of levels is two. The levels reflect the different complexity of the program material, the differences in the methodological foundations in the training. Level-based training can be presented as additional programmes' modules and special sections of textbooks. It is illiterate to teach the blind and the deaf alike. It is unacceptable to teach a blind student at the place of residence in an ordinary educational institution in the absence of a typhlopedagogue teacher, a Braille device and textbooks of the appropriate format. If the level-variable content is ignored, textbooks will not meet the task of rethinking the goals and results of education of persons with special psychophysical development, taking into account modern challenges and requirements.

The content of general and special education of today and tomorrow is multi-level and variable. Students with special psychophysical development, their parents and teachers should have the right to choose: to receive an education that is close to general, or aimed at acquiring life, practical skills, ways of activity, simplified knowledge that ensures social inclusion, interaction and the performance of certain, simple or complicated activities.

The priority forms of organization of training and correction are frontal, group, and individual. Without the combination, organization of inclusion education remains incomplete. Persons with special psychophysical development need a different education, including medical, social, psychological and pedagogical support, providing correctional assistance, and there is a need to prepare them for independent life.

In modern education, the status of knowledge is changing. They become an indicative basis of activity, rather than formal knowledge. Training is carried out in such a way that knowledge is remembered, understood, applied, analyzed, evaluated, and created.

The content of special education should not be a hindrance to progress and further education. The new content is objectively necessary and follows from the following pedagogical realities:

- a) recognition of the possibility of changing the functional status of individuals with special psychophysical development, refuting medical and psychological diagnosis and moving into the category of ordinary children and adults;
- b) the need for further social and medical, psychological and pedagogical support for people with special needs of psychophysical development, the creation of additional textbooks for students and methodological recommendations for the teacher;
- c) the necessity of creating special tasks to enable students' social interaction in microsocium and later in the macro-society, teaching other students and change their functions: learning and training;
- d) the inclusion of symbolic and symbolic activity in the educational process, through which images and concepts are objectified, the consciousness of the studied material increases, as well as the possibility of abstraction and distraction from the secondary and specified;
- e) the inclusion of information and communication technologies in order to support the exercises;
- f) recognition of the importance of performing creative tasks that express students' position, their own view of the studied phenomena, and require the introduction of non-standard solutions;

g) ensuring the activity-based training on a competence-based basis, including role-playing, art therapy elements and visual activities in the correctional and educational process.

Conclusion

Great importance is given to the transformation of existing training technologies and inclusion of the content taking into account the needs of students with special psychophysical development. All technologies contain a health-saving component, taking into account a practice-oriented approach that ensures the formation of the necessary system of competencies. In compliance with all the presented provisions, it is possible to fully solve the problems of special education and prepare people with special psychophysical development for independent life in society and meet their basic requirements of modern society.

References

- Gordeev, V. I., & Alexandrovich, Yu. S. (2001). *Methods of research of child development: quality of life* (QOL) a new tool for assessing the development of children. Saint Petersburg: Rech.
- Konopleva, A. N., & Leshchinskaya, T. L. (2018). Transdisciplinary methodology of advanced research of problems of special pedagogy. *Pedagogical science and education*, *1*(22), 27-35.
- Konopleva, A. N. (2009). Implementation of modern approaches in the organization of special education. *Spetsyalnaya adukatsia*, 6, 9-13.
- Kryukovskaya, N. V. (2016). The use of an individual approach in the formation of spatial representations in children with mental retardation in inclusive education. In A. V. Gluzman, E. Yu. Ponomareva, Yu. V. Boginskaya, T. A. Yaraya (Eds.), *Social and pedagogical support for persons with disabilities: theory and practice: proceedings of the II All-Russian Scientific and Practical Conference* (pp. 137-141). Yalta: Humanities and Education Science Academy.
- Kryukovskaya, N. V. (2019). The use of a differentiated approach as a condition for teaching mathematics to students with mental retardation in the conditions of educational integration. *Proceedings of the Volgograd State Pedagogical University*, 9(142), 72-76.

- Kuchmanova, E. G., & Ryapolova, M. V. (2015). Psychological and pedagogical foundations of the implementation of an individual approach to younger schoolchildren. The essence of an individual approach. In G. D. Akhmetova (Ed.), Actual issues of modern pedagogy: proceedings of the VI International Scientific Conference (pp. 10-13). Ufa: Leto.
- Kukushkina, O. I. (2005). *Information technologies in the context of the national tradition of special education*. Moscow: Polygraph-service.
- Leshchinskaya, T. L., & Lisovskaya, T. V. (2015). Mechanisms of social inclusion of children with severe multiple psychophysical disorders. *Special education*, 2(38), 127-137.
- Leshchinskaya, T. L., & Lisovskaya, T. V. (2016). Education of adults with disabilities living in psychoneurological boarding schools of the Republic of Belarus. *Defectology*, *1*, 62-99.
- Lisovskaya, T. V. (2020) .Multilevel content of education as a condition for successful inclusive education. Bulletin of the Leningrad State University named after A. S. Pushkin, 2, 57-68.
- Lisovskaya, T. V. (2016). Pedagogical system of continuous education in the Republic of Belarus of persons with severe multiple developmental disorders: monograph. Minsk: Four Quarters Publishing House.
- Lisovskaya, T. V. (2015). The study of the educational needs of people with disabilities in psychoneurological boarding schools (based on the results of the survey). *Bulletin of the Leningrad State University named after A. S. Pushkin, 2*, 113-126.
- Lisovskaya, T. V. (2007). Competence-based approach in the conditions of inclusive education. Minsk: National Institute of Education.
- Lubovsky, V. I. (1971). General and specific patterns of development of the psyche of abnormal children. *Defectology*, 6, 15-19.
- Malofeev, N. N. (1991). New information technologies in special education: the project "Disabled children and disabled people". *Defectology*, 5, 5-9.
- Nikolskaya, I. A. (2004). Information technologies in special education. *Correctional pedagogy*, 2(4), 47-50.

Varenova, T. V. (2001). The use of computer games in the correction of disorders of psychophysical development. In *Defectological education in the Republic of Belarus: state and prospects:* proceedings of the Republic scientific and practical conference (pp. 22-24). Minsk: Belarusian State Pedagogical University named after Maxim Tank.

Yakimanskaya, I. S. (1996). Personality-oriented training in a modern school. Moscow: Sentyabr.

Zmushko, A. M. (2008). Social adaptation of persons with special features of psychophysical development in a socio-cultural context. *Spetsyalnaya adukatsia*, *1*, 4-9.