

VI International Forum on Teacher Education

## Modern Problems of Defectology: The Basis of special Education and Upbringing of People with Special Needs

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### Abstract

Especially relevant today are new approaches to the use of reserves of their stored analyzers for compensatory restructuring of the body to replenish lost or impaired functions, and their further socialization, adaptation, labor rehabilitation and integration into a new society with other realities and guidelines necessary not for living, but for life. Scientific ideas about modern problems of defectology are still relevant for scientists and practitioners in working with abnormal children and require a new revival and understanding at present time in working with children having disabilities (Amirova, 2020). Based on this, the purpose of the research is the implementation of a scientific and theoretical analysis of the role of defectology as the basis of modern special and inclusive education. Within the last years of the twentieth century, the fundamental scientific and practical discipline " Defectology " was replaced with new concepts " correctional pedagogy and psychology", this was justified by " humanity " to special people, and we understand that correction is an important process for children with disabilities, but it is both in all pedagogy and psychology.

Research methods: theoretical research methods, systematic historical and philosophical analysis of the defectology subject based on the research of Vygotsky and his students and followers, analysis of special pedagogical and psychological literature, reflexive and systematic analysis of special and inclusive education organization.

The results of the research can be considered as a basis for the development of the Federal State Educational Standard and new approaches to the implementation of modern trends in the development of special and inclusive education.

The theoretical analysis made it possible to draw the following conclusions: 1. In the last decades of the XX century, defectology has almost lost its significance as a basis for special education. 2 Defectological science requires a new consideration of its methodological foundations for special education and upbringing of individuals with HIA. 3. Modern society puts forward new requirements for the development of defectology taking into account the new realities of special and inclusive education. 4. It is necessary to develop modern foundations of new defectology as the Foundation of special education for people with disabilities.

*Keywords:* psychotechnics, compensation, abnormal children, special and inclusive education, correctional work, blind and visually impaired.

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Published by Kazan federal university and peer-reviewed under responsibility of IFTE-2020 (VI International Forum on Teacher Education)

## **Introduction**

The relevance of the study. National defectology as a science was founded, developed and presented to us by (1926-1934). It became and was the basis for the theory and practice of special defectology education in our country and had been formed with the integration of scientific studies by biologists, physicians, teachers, psychologists, practitioners who contributed to the development of natural science, biomedical, psychological and pedagogical foundations of defectology. Thanks to this, many generations of scientists and practitioners in the late nineteenth and early twentieth centuries received unique data for effective corrective work, compensatory restructuring of preserved analyzers in various categories of abnormal children. The fundamental ideas of scientists of that time in the field of defectology contributed to the development of special pedagogy and psychology and their subject areas.

The beginning of the twentieth century was marked by the scientific ideas of Vygotsky (1929) and his students in the development of defectological science and positively influenced on its rapid development in the Soviet period up to 1992, by outstanding scientists of the Institute of defectology, the only one in the world.

After the collapse of the country, the notion of speech as the basis of special education has been replaced by the correctional pedagogy, and the Institute of defectology of NPA of the USSR (National Pedagogical Academy), recognized in the world, was renamed the Institute of correctional pedagogy RAO (Russian Academy of Education), special pedagogy and psychology was replaced by the concepts of correctional pedagogy and psychology.

Defectology and its specifics began to be destroyed, turning it into pedagogy, willing to equate the professional standard of a defectologist with the standard of an ordinary teacher or social worker. Defectology and its fields had their own subject of study, content, principles and means, norms, methods, technologies and techniques that have their own special specific features to work with various categories of abnormal children.

In the early years of the decade in 1993-1994, English-language definitions, such as "handicapchildren," translated into Russian or in new Russian-language transcription, replaced the traditional concepts adopted by the national defectology. Such definitions used in the scientific and professional environment as "abnormal children" have been repeatedly discussed: "children with special needs, features, disabilities, "children with disabilities, ""persons with disabilities," children with special educational needs" (Bazhukova, 2016).

The defectological professional community was disjointed by contradictions and did not defend the specialty to train a defectologist as did "Clinical psychology", retaining the specialty, rejecting the Bologna model, justifying that it works with extreme situations and conditions and has its own specifics, which is so individual and requires not standard, but special knowledge for their adoption in unpredictable situations. (Mallaev, Omarova, & Bazhukova, 2019).

Considering defectology from this point of view, we also face the need to train a specialist to work with individual characteristics and conditions of abnormal development of persons with disabilities (HIA).

The science of defectology, which has developed and proved its validity in the special corrective work with persons with complex organic lesions and defects of psychophysical development was undeservedly forgotten in the mid-90s and early 2000s. In the first decade of the 21st century, defectology as a science has become in demand for special defective education and science.

Today, in the last decades of the 21st century, Vygotsky's students have done a lot to restore defectology, special pedagogy and psychology, and their subject areas to the achievements and concepts of Soviet (national) defectology and its subject areas, which should again become the foundation for special education in the new social conditions.

Modern society requires a new level of development of the basics of defectology for special, integrated, combined, inclusive education and upbringing. Therefore, today it is necessary to show that defectology requires the study of new modern problems to supplement its foundations for all processes of early diagnosis and correction, compensation of developmental anomalies.

It is necessary to re-realize that it is an independent and specific field of science to solve the peculiar special problems of theory and practice of special education and the upbringing of persons with special needs and opportunities for development.

A new understanding of the role of defectology is to strengthen the foundation firmly created by national scientists and practitioners to solve modern problems in special education and upbringing, a new understanding of all its provisions and bases with philosophical, sociological, natural-scientific, medical-biological psychological-pedagogical foundations and information-digital and technical resources and means of both traditional and distance education practice.

This is the modern basis of updated defectology, which lays a new foundation in the development of special education and upbringing of people with special unlimited development opportunities to include them in our real modern society with the concept of a new culture of cohabitation, interaction and work and creative activity.

The development of psychological functions of thinking, memory, attention, the level of ownership of processes of analysis and synthesis in abnormal children proceed differently. The inability to use its natural psychological functions to master psychological tools highlights each type of cultural development of an abnormal child and adult.

The abilities to use psychological tools by abnormal people highlight the most significant in their cultural behavior. The most difficult in this are people with intellectual disabilities.

This category of persons requires a solution to the problem of differentiating the borderline of intellectual disabilities, where it is difficult to distinguish between mental retardation and mild to moderate mental retardation.

### **Methodology**

The problem under consideration in the context of scientific and theoretical research was based on the following methodological foundations and used the well-known theoretical methods: systematic historical and philosophical analysis of the subject of defectology based on the research of Vygotsky and his students, analysis of special pedagogical and psychological literature, reflexive and systematic analysis of the organization of special education (1929).

### **Discussions**

The most important problems of modern defectology should be considered not only theoretically, scientifically, but also in practical terms (Mallaev, 2008).

The most urgent problem of defectology is the problem of compensating the shortcomings of the psychophysical development of an abnormal person's personality, since its solution creates effective conditions for his socialization and mastering the processes of labor adaptation, mastering new competencies for integration into society.

Changing the realities of modern society requires scientists to rethink approaches to socialization taking into account the future prospects of labor orientation, the choice of professional guidelines for employment of persons with HIA in order to provide themselves with a certain economic stability.

With the growth of people with disabilities in modern society, the possibilities of the state social guaranteed medical and employment care are reduced, since many elementary and complex processes in production previously performed by this category of citizens have been replaced by robotics.

At the same time, there are examples where parents and special educational institutions in the new conditions of the inclusive education orient their children to the active and equal participation since childhood, and prepare them to receive professional education in the future and to participate independently in small and medium-sized businesses. Including both employers and business representatives begin to look at their participation in small and medium-sized businesses in a new way, for example, the employment of blind people and with autism spectrum disorders, who are good at modern digital technologies, they give almost a hundred percentage of the efficiency of their participation in business as they are not distracted by long coffee breaks, smoke breaks and communication with each other compared to their normal-typical colleagues.

Modern defectology should not operate only with quantitative characteristics of the child's abnormal development, it is very important to study his individual state and development at this stage, it is surprising but the fact is that even with the same diagnosis of a disorder, we see each child's different ways of his development and get different results of achievement.

Today, defectology cannot operate and confirm its research results only by statistical methods, so in every child, even with the same nosology, the processes of compensatory adjustment occur differently and we get from the individual his qualitative originality either.

## **Results**

The conducted research allowed us to identify a qualitative originality, a specific structure of the body, as well as the compensation processes of each child with an anomaly of development have their own level of qualitative replenishment of impaired functions.

Therefore, it is necessary to identify new ways of compensation and supercompensation in order to work with children suffering from the impaired psychophysical development. Compensation opens up new opportunities for giftedness not only for children with HIA, but also for normal-class peers in special training.

The idea of Stern, "that which does not kill me makes me stronger", that is, he formulates it so, noting that compensation from weakness creates strength, from shortcomings -abilities (Stern, 1923).

From our practice of working with anomalous children, we can confirm that not always the compensation process led to success, but those who sought to overcome the abnormal influence on development and kept on fighting against the absence of the affected organ or its underdevelopment since birth together with their parents, doctors, and speech pathologists were successful. Unlike the norm, anomalous children in this approach include the unused capabilities of the analyzer system in compensation for lost or impaired body functions. The compensation process should be directed to the effective inclusion of all preserved analyzers to compensate the lost and impaired bodily functions of abnormal children.

The development of subtle functions of differentiated perception by preserved analyzers of the assessment received from outside information, such a technique has been tested with blind children and adolescents. We also used elements of psychotechnics, psychotechnical games, and exercises to develop the motor sphere of blind and visually impaired children of senior preschool and primary school age (Mallaev, 1993).

The use of psychotechnics in corrective work among children with lost or impaired visual functions contributed to the development of orientation in space and complex coordination processes, in the formation of the motor sphere.

The development of motor activity among these children contributed to more successful socialization, more confident integration into the general society: gaming, educational, as our research showed motor activity contributed to the confident interaction of children with visual impairment with their sighted peers, active communication, acceptance of social norms and behavior, moral and physical development (Mallaev, 2008).

Therefore, one of the significant fundamental ideas for modern defectology in the context of the development of a compensatory approach in persons with lost and impaired functions in various pathologies is motor compensation using adequate psychotechnical tools.

Modern defectology being a fundamentally important direction in its theoretical and scientific research base should pay attention to the research of the motor sphere as an important factor of compensation and development of a special child with different specifics of his psychophysical development.

The problem of motor insufficiency or its redundancy in some cases requires a separate study of defectology and its subject areas in the unity and diversity of corrective work and in the formation of such important principles of corrective orientation and compensatory restructuring and the role of analyzers in replenishing the lost and disrupted processes that ensure their development. (Vlasova & Pevsner, 1929).

For example, mastering Braille without developing fine motor skills for the blind or sign and dactyl speech for the deaf and deafblind is impossible to learn and gain quality knowledge.

Thus, we can conclude that the current development of special and inclusive education requires first of all a rethinking the role of defectological science, supplementing its foundations with new directions of compensation processes development, supercompensation, development of new content, organization of correctional work, principles and forms, tools, methods and techniques taking into account modern realities to complement the new digital technologies, elements of psychotechnical (psychotechnical exercises and games), cultural and cultural-historical approach. It is necessary to review the stages of early diagnosis and the beginning of corrective work, as well as the interaction of parents, doctors, special psychologists, teachers, and defectologists.

## **Conclusion**

The results of scientific and theoretical analysis of defectological science and practice, taking into account the current realities of special education, recommend the following. It is necessary to review the content of special defectological education, return the specialty as an acceptable form of speech pathologists training, which cannot be implemented at the undergraduate level (at the level of the bachelor), qualification requirements and its content do not allow to work in the specialty of defectologist, speech therapist, special psychologist, typhoid, sign-pedagogue, etc., but only the opportunity to work in the social sphere.

The professional standard of a teacher-defectologist is to equate to the standard of a teacher not taking into account the specifics and each level of education working in the subject area of defectology.

The content of education for abnormal children acts as a powerful factor in correcting the shortcomings of its development and development in General (Vygotsky, 1929).

The scientific heritage of Vygotsky created the scientific basis for the development of problems of education, upbringing and correctional work with anomalous children in the Institute of defectology of the USSR Academy of Pedagogical Sciences (Vlasova & Pevsner, 1929; Lubovsky, 1990; Lebedinskaya & Nikol'skaya, 1991; Morozova, 1969; Pevsner, 1963; Zemtsova, 1956; Lubovskiy, Rozanova, & Solntseva, 2005).

Today it is necessary to review some approaches to understand defectological science and practice in the world and national defectology, based on the foundations developed by the great psychologist and defectologist L. S. Vygotsky and his students, and to supplement them with new realities of modern society, and to return defectology as a scientific basis for special, integrated and inclusive education.

### **Acknowledgements**

We are very grateful to Vygotsky and his followers who made a huge contribution to the formation and development of defectological science.

The work is performed in the aspect of scientific and theoretical analysis taking into account modern approaches to the development of modern defectological science as the basis of special education.

The authors declare that there is no conflict of interest. This article is published for the first time.

### **References**

- Amirova, S. K. (2020). Integration problems of psychological and pedagogical support of children with visual impairment. *Scientific electronic journal "Meridian"*, 11(45), 20-27.
- Bazhukova, O. A. (2016). Psychological practice of help for children with intellectual disabilities in the systems of special and inclusive education. *Journal of Dagestan State Pedagogical University*, 4(10), 5-10.
- Lebedinskaya, K. S., & Nikol'skaya, O. S. (1991). *Diagnosis of early childhood autism*. Moscow: Education.
- Lubovsky, V. I. (1990). Psychological experiment in differential diagnosis of mental retardation in children, *Defectology*, 6, 3-16.

- Lubovskiy, V. I., Rozanova, T. V., & Solntseva, L. I. (2005). *Special psychology*. Moscow: Akademiya.
- Mallaev, D. M. (1993). *Pedagogical foundations of the game as a means of moral and physical development of blind and visually impaired children of senior preschool and primary school age* (Doctoral Dissertation). Makhachkala: Dagestan State University.
- Mallaev, D. M. (2008). *Psychology and pedagogy of the game of a blind and visually impaired child*. Moscow: Akademia.
- Mallaev, D. M., Omarova, P. O., & Bazhukova, O. A. (2019). *Inclusive education in primary school. Manual for primary school teachers*. Moscow: Parnassus.
- Mallaev, D. M., Omarova, P. O., & Bazhukova, O. A. (2019). *Inclusive professional training. Manual for teachers of educational institutions of secondary vocational and higher education*. Moscow: Parnassus.
- Morozova, N. G. (1969). *The formation of cognitive interests in abnormal children: compared with the norm*. Moscow: Prosveshenie.
- Stern, V. (1923). *From the life of a child*. State publishing house. Moscow: Pedagogical library.
- Vlasova, T. A., & Pevsner, M. S. (1929). *About children with developmental disabilities*. Moscow: Prosveshchenie.
- Vygotsky, L. S. (1929). *The Main problems of modern defectology*. Moscow: MSU.
- Vygotsky, L. S. (1995). *Problems of defectology. Defect and overcompensation*. Moscow: Prosveshchenie.
- Zemtsova, M.I. (1956). *Ways to compensate for blindness in the process of cognitive and work activities*. Moscow: APN RSFSR.