ORGANIZATIONAL AND PEDAGOGICAL CONDITIONS FOR TEACHING CHILDREN WITH DISABILITIES IN COMPREHENSIVE ENVIRONMENT

Ekaterina Aleksandrovna Kirillova (a)*
*Corresponding author

(a) Kazan (Volga region) Federal University, Kremlyovskaya str., 18, 420008, Kazan, Russia, kirillova16102009@mail.ru, +79050269045

Abstract

Currently, all over the world there is an increase in the number of children who have various developmental abnormalities related to visual, hearing, intellectual, locomotor and speech impairments; and those with disorders of the emotional-volitional sphere and somatic diseases. The numbers of children with disabilities are growing every year, which indicates the need to create effective measures for their social adaptation to society. The main goal of this research is to develop the organizational and pedagogical conditions for teaching children with health limitations in the general educational environment. As a hypothesis of the study, the assumption is made that the education of children with health limitations in the general educational environment will be effective if: firstly, pedagogical materials for working with children with special educational needs are prepared; secondly, individual trajectories of education for children with health limitations on the basis of a general education institution are selected, taking into account the age and structure of the defect; thirdly, we organize systematic methodological work with parents of pupils; fourthly, developed organizational and pedagogical conditions for the education of children with health limitations in the general educational environment are effectively organized. The research stages included the study of inclusive competences in teachers of preschool educational institutions, the level of inclusive literacy and culture of parents, and inspection of the level of cognitive and speech development of children with limited health opportunities. The experiment included the implementation of the developed organizational and pedagogical conditions.

Keywords: Children with limited health opportunities, training, general education environment, pedagogical conditions, inclusive education.
1. Introduction

Nowadays an increase in number of children having various deviations in development (visual impairment, hearing, speech and mental disabilities, disorders of locomotor system and emotional-volitional spheres, and somatic diseases) is observed all around the world. Such children are usually identified as people with limited health opportunities (LHO).

In psychology-pedagogical literature it is possible to meet various synonyms of the concept "children with limited health opportunities": children with special educational needs, children with health impairment, with deviations in development, abnormal children, children with education difficulties, special children and others.

The concept "the learner with limited health opportunities" is enshrined in the Act of the Russian Federation "On education in the Russian Federation": this is the person having shortcomings in physical and (or) mental development confirmed by psychology-medical-pedagogical commission and preventing education without the creation of specific conditions. (The act of the Russian Federation "About education")

According to the classification propose by Lapshin and Puzanov, the key categories of disabled children are as follows:

- children with hearing disabilities (deaf, hearing-impaired, late deafened);
- children with visual impairment (blind, cecutient);
- children with speech disabilities (logopathy);
- children with disorders of locomotor system;
- mentally retarded children;
- mentally impaired children;
- children with behavior and communication disorders;
- children with complex disorders of psychophysical development, with so-called composite defects (blind, deaf-mute, deaf or blind mentally retarded children) (Zaytsev, Zaytseva, 1999)

The classification of main types of disorders of the body functions is presented in order N 1013 N of the Ministry of Health and Social Development of the Russian Federation of 23.12.2009 "On the adoption of classifications and criteria used for medico-social examination of citizens by federal state institutions of medical-social expertise". We refer the to main types of body functions disorders:

- disorders of mental functions - perception, attention, memory, thinking, intelligence, emotions, will, consciousness, behavior, psychomotor functions;
- disorders of language and speech functions - disorders of oral (rhinolalia, dysarthtia, stammer, alalia, aphasia) and written (dysgraphia, dyslexia) functions, verbal and nonverbal speech, disorders of phonation, etc.;
- disorders of sensory functions - eyesight, hearing, smell, touching, tactile, painful, temperature and other types of sensitivity;
- disorders of stato-dynamic functions - motor functions of the head, body, faculties, statics, coordination of movements;
- disorders of functions of blood circulation- respiration, digestion, secretion, haematopoiesis, metabolism and energy, internal secretion, immunity;
- disorders caused by physical deformities - deformation of the face, head, body and faculties resulting in external ugliness, abnormal holes of digestive, urinary, respiratory tracts, disorders of the body size, (Golikova, 2009)

According to the Commission of the Russian Federation for UNESCO, there are 650 million disabled people in the world, and about 30-40% of all children of the world are disabled.

According to the Ministry of Health of the Russian Federation, the number of disabled children aged up to 18 years receiving social pensions in 2010 were up to 519,000; in 2011 – 541,000 people; in 2012 – 560,000 people. In 2013, their number increased up to 568,000 people, and in 2014 made 580,000 people. In 2015, the number of disabled children, according to the Ministry of Health, made up to 600,000 people in Russia, in 2016 – 617,000 children. Presented indexes confirm the continuous growth of children with limited health opportunities in Russia for the last six years.

According to the Ministry of Labour, employment and social protection of the Republic of Tatarstan, as of November 25, 2014, 14,668 disabled children lived in Tatarstan. According to the data of 28.11.2016, 316,000 disabled people lived in Tatarstan, 15,000 of them were disabled children.


The number of disabled children grows every year that testifies to the need to create effective measures for their social adaptation to the life of society and training.

Nowadays, every modern educational institution faces a significant task – to provide all children without any exception, with available, quality education: healthy ones, those with problems in development, with language difficulties (migrants), those practicing another religion, of another nationality, and various financial security. An individual and educational route for each "special" child should be constructed, attention has to be focused on personal qualities development of children without leaving them behind the common stream

2. Problem Statement

For a long time disabled children were studied in specialized, "closed", correctional educational institutions and had no opportunity for full adaptation to life and socialization in society. However, in recent years the tendency to include children with limited health opportunities into general education environment is observed.

According to the Territorial authority of Federal State Statistics Service in the Republic of Tatarstan, in 2011-2012 academic year, there were 38 organized classes for children with limited health opportunities, 5 of them for mentally retarded children, 5 classes for mentally impaired children, 17
classes for children with visual disabilities, and 11 classes for children with disorders of locomotor system. These classes were attached to comprehensive education institutions.

In 2012-2013 academic year, the number of classes for children with limited health opportunities increased up to 53: 18 classes for mentally retarded children, 6 classes for mentally impaired children, 1 class for children with severe speech pathology, 18 – for children with visual disabilities, and 10 – for children with disorders of locomotor system.

In 2013-2014 academic year, the number of classes for children with limited health opportunities also increased up to 62: 26 classes for mentally retarded children, 8 for mentally impaired children, 17 – for children with visual disabilities, and 11 – for children with disorders of locomotor system.

In 2014-2015 academic year, the number of classes for children with limited health opportunities increased up to 71: 31 classes for mentally retarded children, 11 for mentally impaired children, 18 – for children with visual disabilities, and 11 – for children with disorders of locomotor system.

In 2015-2016 academic year, the number of classes for children with limited health opportunities decreased to 68: 33 classes for mentally retarded children, 7 classes for mentally impaired children, 17 – for children with visual disabilities, and 11 – for children with disorders of locomotor system.

There is a contradiction between the need to include children with limited health opportunities into general education environment of modern preschool institutions, schools, higher education institutions, and the lack of organizational and pedagogical conditions of training these children in educational organizations - they have to study in any class but not in separate classes attached to mass schools.

This especially concerns preschool education, as preschool education in Russia is the first and significantly important stage of training. The subsequent life of children depends on the success and quality of preschool inclusion. It is possible to minimize the degree of available development disorders, to prevent and correct secondary disorders in the period of preschool childhood if to organize training and elaborate curricula appropriately; these actions will facilitate training of children with limited health opportunities at comprehensive school.

So, what are the conditions necessary for the organization of training of preschool children with limited health opportunities in general education environment? That is the problem of our research.

As a hypothesis of the research, the following assumption that training children with LHO in general education environment will be efficient if:

- firstly, we prepare teaching staff for activity with children with special educational needs;
- secondly, we choose individual trajectories of training children with LHO on the basis of an educational institution taking into account their age and structure of defect;
- thirdly, we organize systemic methodical work with learners’ parents;
- fourthly, we confirm the effectiveness of developed organizational and pedagogical conditions of training children with limited health opportunities in general education environment.

3. Research Questions

The methodological basis of the research is: conceptual provisions on the specificity of training process and learning abilities of children with problems in development (Ainscow, 2002; Galperin 1985; Makhmutov,1977; Rubenstein 1989; Rousseau, 1981; Zaruba, 1999; Disterweg 1981; activity-based
approach to personality study (Rogers, 1994; Vygotsky, 1960; Maslow, 1973); and philosophical bases connected with the specificity of training children with LHO in the system of inclusive education (Rieser, 2013; Loreman et al., 2010; Lebedinsky, 2003; Armstrong, 2003).

We also looked at the following provisions:

- conceptual provisions of humanistic pedagogics about the social value of a person, about the need to include each child with LHO into educational space enshrined in the Convention on the Rights of the Child (1989);
- conceptual provisions of the Salamanca declaration on education of persons with special needs (1994);
- concepts of integrated and inclusive education (Prochukhayeva & Samsonov (2010), Hodkinson (2010), Alyokhina & Semago (2010), Kapustin (2001);
- the concept of common and specific regularities of abnormal development (Vygotsky, 1960), (Lebedinsky, 2003);
- Vygotsky's concept on the leading role of teaching in education;
- the pedagogical concepts submitted in works of founders of Russian defectology (Akhmetzyanova, 2015; Malofeyev, 1996; Nigmatullina, 2014; Akimova, 2011; Alekhina, 2013);

The experience of teachers’ training for work in the context of inclusive education / (De Bojer, Pijl, & Minnajert, 2011; Brandon & Charlton, 2011; Kagran & Shmidt, 2011; Kirch et al., 2005; Kirillova, Ilbragimov, 2016; Pijl, 2010; Sharma, Shaukat, & Furlonger, 2015; Southerland & Gess-Newsome (1999); Sigurdardóttir, 2010; Symes &Humphrey, 2011) formed the theoretical basis of the research.

4. Purpose of the Study

During the preparatory stage of the research, the main diagnosed indicators influencing learning efficiency of children with limited health opportunities in general education environment demanding detailed studies necessary for projection of organizational and pedagogical conditions were specified.

The following was specified as main indicators:

1. Educational results of preschool children with limited health opportunities are: orientated to size; orientated to form; ability to work by memory, by pattern; holistic perception of the subject image in the picture; orientation to color and form; formation of logical thinking, formation of visual-figurative thinking, ability to define time sequence of events; formation of speech abilities and skills, and personal qualities.

2. Inclusive competence of teachers: inclusive readiness (volume of pedagogical, psychological, medical and some other knowledge, abilities and skills); degree of acceptance, understanding and realization of inclusive education goals; psychological readiness; motivation for activity; reflection.

3. Inclusive literacy and culture of parents: inclusive readiness (volume of pedagogical, psychological, medical and some other knowledge); degree of acceptance and understanding of inclusive education goals; readiness for the efficient organization of educational process in a family to form moral qualities in children (humanity, tolerance, empathy); cooperation with educational institutions, ability of
The family to ask for help; interest in positive experience of education and training children in the context of inclusive education, and desire to use it in practice.

The main goal of this research is to study the aforesaid indicators and, on their basis, to develop organizational and pedagogical conditions for training children with limited health opportunities in general education environment.

In compliance with the goal and hypothesis of the research, the research objectives were defined:
- to develop organizational and pedagogical conditions for training children with limited health opportunities in general education environment;
- to design a program of advanced training courses for teaching staff;
- to prepare individual educational routes for preschool children with limited health opportunities studying in general education environment;
- to organize full-rate participation of parents in educational process;
- to estimate the effectiveness of developed organizational and pedagogical conditions.

5. Research Methods

The stating experiment was conducted on Municipal independent preschool educational institutions No. 262, 222, 316, 313, on Municipal budgetary preschool educational institutions No. 49, No. 63, and on comprehensive school No. 78 in the city of Kazan, the Republic of Tatarstan (Russia).

70 children of senior preschool age with limited health opportunities (mentally impaired, mentally retarded, having severe speech disabilities, hearing and visual disorders), 70 children with normative development, 60 teachers and 50 parents took part in the research.

Main research methods are as follows:
- theoretical: the study of philosophical, defectological, sociological, psycho-pedagogical and educational-methodical literature, comparative analysis of approaches to teaching children with disabilities, studying and summarizing the existing experience in organizing the education of children with disabilities in the general educational environment;
- empirical: the study of training programs, documentation on the education organization of children with health limitations, monitoring the activities of teachers and students, performing the pedagogical experiment (ascertaining, forming);
- sociological: quiz, questioning, interviewing (of teachers, parents, children);
- diagnostic: testing, analysis of learning achievement, health indicators, mathematical processing of experimental results.

The stating experiment included the research of the level of cognitive and speech development of children with limited health opportunities, features of their personality, questioning of teachers to identify the level of inclusive competence, questioning of parents to identify the level of inclusive literacy and culture.

Diagnostics of children’s cognitive development was carried out according to the following techniques: Wenge’s technique "Inclusion in a row", "Draw the whole", Strebeleva's techniques "A box of forms", "Construct using sticks", "Combine the cut picture", "Group pictures", "Quantity representations and calculation", "Compare", "Tell", "Find the season".
Cognitive development assessment: scores were charged for each performed task from 1 to 4, there were 10 tasks in total, and the maximum score – 40 points. 4 levels of cognitive development are specified:

1 level (10-12 scores) – deep underdevelopment of cognitive activity;
2 level (13-23 scores) – considerable underdevelopment of cognitive activity
3 level (24-33 scores) – underdevelopment of cognitive activity
4 level (34-40 scores) – a good level of cognitive development

Diagnostics of speech development was performed according to E. A. Strebeleva's technique.
Diagnostics of personality traits was performed according to K. Makhover’s technique - "The drawing of the person"; it assumes the evaluation of quality, and the detection of children’s characteristic features and properties.

45 questions-statements, 5 questions on each group of abilities concerning various sides of professional activity in the context of inclusive education, were developed to study the level of inclusive competence of teachers working in general education organizations:

The first group — abilities to focus on a learner with LHO; be flexible to reconstruct pedagogical goals and tasks according to needs of students – disabled people.

The second group - abilities to work with training material contents, to adapt and interpret training material according to needs of school students with LHO; abilities to study personal qualities, specific features of school students with LHO, to build individual educational routes for them, to foresee possible difficulties; abilities to select and apply combinations of training forms and techniques for healthy children and children with LHO; and to apply differentiated and individual approaches.

The third group - abilities to use inclusive pedagogical experience of colleagues; to correlate difficulties of school students with drawbacks shown in own work; to analyse and generalize the experience of pedagogical activity in the context of inclusive education.

The fourth group - ability to create conditions for psychological safety, favorable microclimate in the inclusive class.

The fifth group – ability to interact with school students with LHO and their parents as well; ability to understand and interpret the internal state of the child with LHO; to create a situation of confidence, tolerance to “otherness” of a different person in the inclusive class; ability to treat all children humanely, to show tolerance and empathy, to maintain equal attitude to all children.

The sixth group - abilities to understand the significance of the profession; the need of training people with LHO; to develop pedagogical abilities; to operate own emotional states.

The seventh group - abilities to realize the prospect of professional development, to reinforce strong sides, to eliminate weak ones, to transfer from the level of mastering to own creative level.

The eighth group - abilities to diagnose children with limited health opportunities; to analyze results, to define the state of activity, skills, types of self-control and self-evaluation in educational activity; to define reasons why children with limited health opportunities fall behind.

The ninth group – ability to form inclusive culture in all participants of educational process; to perceive the school student’s personality overall; to create conditions to stimulate underdeveloped personality traits in some students (Kirillova, Ibragimov, 2016).
Teachers were offered either to agree with suggested statements, or to disprove. Answers "yes / agree" - 1 score, answers "no/disagree" - zero scores. Answers "partially" got 0,5 scores. The maximum number of scores - 45.

We identified the levels of inclusive competence in teachers of general education organizations:

Zero level (0-11,5 scores) testifies to complete underdevelopment of inclusive competence and corresponding abilities.

The initial level (12-23,5 scores) demonstrates that teachers of educational organizations have some ideas of inclusive education, but they do not use them in their practical work.

The basic level (24-35,5 scores) testifies to poor inclusive competence. In general, knowledge and abilities necessary to work in the context of inclusive education are created, but in case of complex challenges they face difficulties.

The maximum level (36-45 points) identifies the formation of inclusive competence, a high level of available theoretical knowledge and their applicability in practical activities.

60 teachers of general education organizations aged between 25 - 55 years took part in the research: 40 of them were teachers of preschool educational institutions, 20 - teachers of comprehensive school.

45 questions- statements, 5 questions for each indicator were also developed to study parents’ inclusive literacy and culture:

- inclusive preparedness (the volume of pedagogical, psychological, medical and some other knowledge);
- the degree of acceptance and understanding of inclusive education goals;
- readiness for the efficient organization of educational process in the family to form moral qualities in children (humanity, tolerance, empathy);
- cooperation with educational institutions, ability of the family to appeal for help;
- interest in positive experience of education and training children in the context of inclusive education, and desire to apply it in practice.

Parents were offered to agree with suggested statements or to disprove. Answers "yes / agree" - 1 score, answers "no/disagree" - zero scores. Answers "partially" - 0,5 scores. The maximum number of scores were 45.

We specified the levels of inclusive literacy and culture in parents:

Zero level (0-11,5 scores) testifies to the complete underdevelopment of inclusive literacy and culture.

The initial level (12-23,5 scores) demonstrates that some knowledge about inclusive education is available in parents, but they do not apply it in everyday life.

The basic level (24-35,5 scores) shows poor inclusive literacy and culture in parents. In general, parents have the minimum of inclusive literacy and culture necessary for the solution of daily tasks.

The maximum level (36-45 scores) testifies to a high level of inclusive literacy and culture in parents and ability to impart it in the children.

This principle governs the research in the stating stage.
6. Findings

The study of the criteria and indicators presented earlier is necessary to define if actually these components need further transformation and realization of formulated organizational and pedagogical conditions in training children with limited health opportunities in general education environment?

The research of cognitive development of children with limited health opportunities showed that 43% of children in this category have considerable underdevelopment of cognitive activity, 34% of children have underdevelopment of cognitive activity, 23% of children have deep underdevelopment of cognitive activity.

All children revealed the underdevelopment of speech function of various degrees: from slight disorders in phonetic and lexical-grammatical systems to the total absence of phrase speech.

The study of personal traits showed that the majority of children with limited health opportunities had: increased anxiety, inadequate self-esteem, aggression, loneliness (introversion), reclusiveness though they demonstrate latent desire to show off.

The research of inclusive competence in teachers of general education organizations showed that most of the teachers had zero levels of inclusive competence (65% - 39 people). The initial levels of inclusive competence were characterized by 32% (19 people). 3% (2 persons) had basic levels of inclusive competence, and maximum levels of inclusive competence were not revealed.

Most teachers were not ready to work with children having limited health opportunities in general education environment. Many of them needed specialized training to provide this activity and to increase corresponding qualification. In this case, psychological trainings can be helpful.

The study of the level of parents’ inclusive literacy and culture showed that most parents (92%) had zero levels, 8% demonstrated initial levels of inclusive literacy and culture that testifies to the lack of knowledge, underdeveloped representations, non-availability of methods of behaving, lack of knowledge of activity in the context of inclusion.

Thus, in the stating research phase it was proved that it is necessary to improve the process of preschool inclusion.

Developed organizational and pedagogical conditions were introduced into one of the preschool educational institutions in the forming stage of the experiment.

Educational seminars to increase the level of inclusive competence, formation of psychological readiness to work with children with LHO were held for teachers once a week within 4 months; they considered issues of both theoretical and practical character.

At the same time systematic work with parents aimed to form inclusive culture and literacy in them was conducted: weekly consultations, design of stands, meetings, inclusion of parents in educational process, enrichment of their knowledge in the sphere of inclusive education by methodical support, and questionnaires.

Individual educational routes, in compliance with which children were taught during this period, were worked out.

After four months, the control research of all indicators was conducted.

The control research specified the growth of most indicators, namely indicators of cognitive and personal development of children with limited health opportunities, the level of inclusive competence in
teachers increased: the number of teachers with basic level increased by 5% and made 8% (5 people), the number of teachers with an initial level increased by 12% and made 42% (25 people). The number of teachers with a low level decreased by 15% and made 50% (30 people).

The control research of the level of inclusive literacy and culture in parents showed that the number of parents with an initial level increased by 10% and made 18% (9 people). The number of parents with a zero level of inclusive literacy and culture development decreased by 10% and made 82% (41 persons).

According to the results of the control research, it is possible to draw a conclusion that elaborated organizational and pedagogical conditions promoted the growth of main indicators both in quantity and quality sense.

This testifies to the effectiveness of performed work.

Thus, the research goal is achieved, the hypothesis of the research is proved.

7. Conclusion

The twenty first century endures a radical change of approaches to education, to sociocultural and educational policy in general. It is substantiated by society reorientation to the development and formation of personal qualities of the human. For the XXI century, it is characteristic to comprehend personal self-realization as the key goal of any social development. These changes in public consciousness caused the emergence of a new paradigm in education which relies on the approaches and concepts developed by modern practice (Akimova, 2011) – inclusion of children with limited health in general education environment.

Inclusive approach to education is brought to life by reasons of various characters. Cumulatively, they can be designated as the social order of the society and state that have reached a particular level of economic, cultural, legal and social development. In this stage, the society and the state reconsider their attitude towards disabled people, recognize the equalities of their rights and understand the duty to provide such people with equal opportunities in different areas of life, including education (Alekhina, Semago, Fadina, 2010). It becomes more actual in the situation when the number of children with limited health opportunities grows exponentially.

Introduction of inclusion in all structures of education system, training of disabled children in general education environment is possible due to the development and realization of many organizational and pedagogical conditions, namely: creation of adaptive educational environment, methodological support, training and formation of teachers’ psychological readiness for this activity, psychology-pedagogical support, and the development of inclusive culture and literacy in all participants of educational process.

The conducted research proves a positive orientation of elaborated organizational-pedagogical conditions of training children with limited health opportunities in general education environment and significantly contributes to the development of issues of inclusive education.
Acknowledgments

The work is performed according to the Russian Government Program of Competitive Growth of Kazan Federal University.

References

Golikova T. A. Addendum to the Order of the Ministry of Health and Social Development of the Russian Federation of December 23, 1013.


