IRSTI 14.29.23

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## DEVELOPMENT OF METHODS FOR THE ADAPTATION OF CHILDREN WITH DELAYED PSYCHICAL DEVELOPMENT IN CONDITIONS OF INCLUSIVE EDUCATION

This article discusses the developed methodology for the adaptation of children with mental retardation in the context of inclusive education. The study involved 20 children with mental retardation, students in inclusive classes of secondary schools, as well as parents of these children. The experimental work carried out in three stages: at the first stage, a complex of organizational and pedagogical conditions developed for the adaptation of children with delayed psychical development by means of inclusive education in an educational institution. The second diagnostic and staging stage there was a theoretical and pedagogical justification; teaching and methodological, didactic and advisory materials created for parents and teachers. A stating experiment conducted; at the third stage, the organization of experimental work in general education schools on the implementation of a set of organizational and pedagogical conditions for the adaptation of children with delayed psychical development by means of inclusive education (formative experiment). According to the results of the formative experiment, it found out that inclusive education makes it possible to ensure the socialization of children in this category; each child can develop in his or her own way and receive affordable quality education tailored to their individual needs and their own opportunities in an inclusive education environment.

Key words: children with delayed psychical development, inclusive education, attention, thinking, teacher-defectologist, psychologist.

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#### Психикалық дамуының тежелуі бар балаларды инклюзивтік білім беру жағдайына бейімдеу әдістерін өңдеу

Бұл мақалада инклюзивтік білім беру тұрғысынан психикалық дамуының тежелуі бар балаларды бейімдеу әдістемесі қарастырылған. Зерттеу жұмысына психикалық дамуының тежелуі бар, жалпы білім беретін мектептердің инклюзивті сыныптарындағы 20 оқушы, сондай-ақ осы балалардың ата-аналары қатысты. Тәжірибелік жұмыс үш кезең бойынша жүргізілді: бірінші кезеңде білім беру мекемесінде инклюзивті білім беру арқылы психикалық дамуының тежелуі бар балаларды бейімдеу үшін ұйымдастырушылық-педагогикалық жағдайлардың кешені әзірленді; екінші диагностикалық кезеңде теориялық және педагогикалық негіздеу жүргізілді, ата-аналар мен мұғалімдер үшін оқу-әдістемелік, дидактикалық және кеңес беру материалдары жасалды. Тұрақтандыру тәжірибелері жүргізілді; үшінші кезеңде инклюзивті білім беру арқылы (қалыптастыру тәжірибесі) психикалық дамуының тежелуі бар балаларды бейімдеуге арналған ұйымдастырушылық-педагогикалық жағдайлар жиынтығын жүзеге асыру үшін жалпы білім беретін мектептерде эксперименттік жұмыстарды ұйымдастыру. Қалыптастыру тәжірибесінің қорытындысы бойынша, инклюзивті білім беру осы санаттағы балаларды әлеуметтендіруді қамтамасыз етуге мүмкіндік беретіні анықталды; әрбір бала инклюзивтік білім беру жағдайында өздерінің қажеттіліктеріне және өздерінің мүмкіндіктеріне бейімделген сапалы білім алатындығы байқалды.

**Түйін сөздер:** психикалық дамуының тежелуі бар балалар, инклюзивті білім беру, зейін, ойлау, педагог-дефектолог, психолог.

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### Разработка методов адаптации детей с задержкой психического развития в условиях инклюзивного обучения

В данной статье рассматривается разработанная методика по адаптации детей с задержкой психического развития в условиях инклюзивного образования. В исследовании приняло участие 20 детей с задержкой психического развития, обучающихся в инклюзивных классах общеобразовательной школы, а также родители этих детей. Экспериментальная работа проводилась в три этапа: на первом этапе разрабатывался комплекс организационно-педагогических условий по адаптации детей с задержкой психического развития средствами инклюзивного образования в образовательном учреждении; на втором диагностическо-постановочном этапе проводилось теоретико-педагогическое обоснование, создавались учебно-методические, дидактические и консультативные материалы для родителей и учителей. Проводился констатирующий эксперимент; на третьем этапе – организация опытно-экспериментальной работы в общеобразовательных школах по реализации комплекса организационно-педагогических условий по адаптации детей с задержкой психического развития средствами инклюзивного образования (формирующий эксперимент). По результатам формирующего эксперимента было отмечено, что инклюзивное образование позволяет в лучшей степени обеспечить социализацию детей этой категории; каждый ребенок может развиваться в своем собственном режиме и получить доступное качественное образование с учетом индивидуальных потребностей и собственных возможностей в условиях инклюзивного образования.

**Ключевые слова:** дети с задержкой психического развития, инклюзивное образование, внимание, мышление, педагог-дефектолог, психолог.

#### Introduction

Today, the Institute of Inclusive Education is the only internationally recognized tool for the realization of the rights of children with disabilities to education and a bright future. In the world, it has been customary to pay a special attention to children with disabilities, their opportunities to receive a decent education and their needs for the attention, understanding and care of adults (Malofeev N. N., 2009 [1]; Borisova I. V. [2]).

Integrated learning acts as one of the forms of alternative learning, the basic principles of which are: early correction, educational psycho-correctional assistance for each child, psychological, medical and pedagogical selection of children for integrated learning, the presence of a positive system and relations from society, etc. Integration of children with limited opportunities to the institution for normally developing peers taking into account the level of development of each child and ensuring a real choice of integration model (Bond R., Castagner E., 2006 [3]; Brandon T., Charlton D., 2011 [4]; Suvorov A. V. [5]). Inclusion based on the position of general pedagogy and psychology, focused on the child, taking into account his individual educational needs. The goal of inclusion is not only the integration of children with disabilities, the "one school for all". Inclusive campaigns can support children with disabilities in learning and achieving success, which will give chances and opportunities for effective socialization (De Boer, Piil S., Minnaert A., 2011 [6]; Dicker Yu., 2009 [7]).

Today, the implementation of inclusive education is a priority for the development of social and educational policies of the majority of developed as well as developing countries. This trend most fully reflected in the materials of scientific periodicals in the field of special and educational psychology of the United States and European countries. According to the majority of foreign experts, the success of inclusion largely depends on the competent use of a whole complex of pedagogical and psychological resources. These include professional competence of teachers; professional competence of teachers; training and professional support of teaching staff; attitudes towards the phenomenon of disability among teachers and children with regulatory development; changing the structure of curricula to meet the needs of all categories of children (Salisbury C.L., Palombaro M.M., Hollowood W.M. [8]).

The inclusive approach allows solving the problems of education, upbringing and socialization of children with intellectual disabilities. Limited health does not mean limited ability (Ekzhanova E.A., 2010 [9]). On the contrary, often a child with mental disabilities, being in an environment that is adapted to his capabilities and needs, reaches a high level of socialization and self-realization. Inclusive education involves the individualization of learning and the complex psychological and pedagogical support of the child.

As part of the study, we examined the inclusive education of children with mental retardation. Delayed psychical development (DPD) is a psychological and pedagogical definition for the most common pathology in the psychophysical development of children of senior preschool age. This paper will present work on adaptation with children with mental retardation in an inclusive education.

Purpose of the study: development of methods for the adaptation of younger students with mental retardation in terms of inclusive education.

**Materials and Methods.** The study involved 10 children with mental retardation, students in inclusive classes of secondary schools, 10 children with mental retardation, students in the first classes of a special correctional school, 20 parents of these children. The experimental part of the work was carried out on the basis of comprehensive secondary school number 21 Temirtau in grade 1.

The study was carried out in several stages:

Stage I – an approximate analytical one. At this stage literary sources were studied and analyzed in order to determine the research strategy, methodical support for a comprehensive survey of children with mental retardation was analyzed, and regulatory documents were studied; developed a set of organizational and pedagogical conditions for the adaptation of children with CRA by means of inclusive education in an educational institution.

Stage II – diagnostic. Conducted a theoretical and pedagogical justification, the development of an algorithm for identifying, selecting, accounting and device in educational institutions of children with DPD. Created teaching materials, teaching and counseling materials for parents and teachers. A recruiting experiment was conducted.

Stage III - transformative, final. Organization

of experimental work in general education schools on the implementation of a set of organizational and pedagogical conditions for the adaptation of children with DPD by means of inclusive education (formative experiment).

When conducting a survey of children, we relied on the following principles of comprehensive diagnosis:

- the principle of an integrated approach;

- the principle of accounting leading activities;

- the principle of dynamic learning;

- the principle of qualitative analysis of data obtained in the process of pedagogical diagnostics.

The principle of an integrated approach requires examination and evaluation of the characteristics of the child's development. This approach covers not only speech, intellectual, cognitive activity, but also behavior, emotions, level of mastering skills, as well as the state of vision, hearing, motor sphere, its neurological, mental and speech status.

The principle of accounting for leading activities requires presenting tasks in a form that corresponds to the leading activities of the child at the development stage: play.

The principle of dynamic study involves the use of diagnostic methods, taking into account the age of the subject and the identification of its potential.

The principle of qualitative analysis of the data obtained in the process of pedagogical diagnostics includes methods of actions, the nature of his mistakes, the attitude of the child to the experiments, as well as the results of its activities. A qualitative analysis of the results obtained during speech testing is not opposed to quantitative data accounting. A combination of quantitative and qualitative approaches to data analysis is needed.

For the study of attention, perception and thinking, we used the diagnosis of visual forms of thinking (the test "Color Raven Matrices" for children 5-11 years old. The color variant of the Progressive Raven Matrices is intended for examining children from 5 to 9 years old). This technique used for individuals with any level of speech development. All diagnostic tests were adapted for children with DPD.

Diagnostics of the level of development of voluntary attention ("Correction test" method). In the process of work, the degree of attention concentration and stability is monitored. The ability to focus, keep your attention on a certain activity, apply volitional effort when performing a teacher's task, the ability to act according to the rule is one of the indicators of a child's psychological readiness for school (Kagran, M., 2015 [10]; Kim J., 2017 [11]).

Diagnostics of verbal-logical forms of thinking. Methodology "Exclusion items." This type of work is aimed at the study of higher forms of thinking and the determination of the possibilities of children to generalize and establish cause-and-effect relationships between objects and phenomena. When performing tasks, actualization of skills associated with speech activity is required.

Projective test of personal relationships, social emotions and value orientations "Houses". The methodical basis of the test is a color-associative experiment, known from the A. Etkind relationship test. The test was developed by O.A Orekhova (Orekhova, 2006) and allows diagnosing the emotional sphere of a child in terms of higher emotions of social origin, personal preferences and activity orientations, which makes him especially valuable from the point of view of analyzing the child's emotional attitude to school. The indicator of total deviation is interpreted as follows: more than 20 points – the predominance of negative emotions. The child is dominated by a bad mood and unpleasant experiences. There are problems that the child cannot solve on his own; 10 - 18 – the emotional state is normal. A child may rejoice and grieve, there is no cause for concern; less than 10 – the predominance of positive emotions. The child is cheerful, happy, optimistic.

When creating a system for the adaptation of younger schoolchildren with mental retardation in the context of inclusive education, the program "Education without barriers" was one of the basic conditions and components of successful work. Development of systems for the adaptation of younger schoolchildren with mental retardation in the context of inclusive education consists of the following stages:

- Conducting psychological and pedagogical work on the development of children in the conditions of new forms of education for the school where they are: preschool department at the school, variable groups of short-term stay;

- Early prevention of various deviations in the development of the child;

- Psychological support for the education of children with various impairments and developmental disabilities, children with special educational needs;

 Psychological support of activities to ensure the psychological and physical health of students, the prevention of possible ill-being in the mental and personal development of schoolchildren;

- Identification and study of the reasons that hinder the successful development and communication of students in order to provide timely assistance;

- Elimination of deviations in mental and personal development of schoolchildren, work on the formation of their personality, help in solving the problems that addressed to the psychologist;

– Reducing anxiety in parents;

- Introduction of the pedagogical team, students and their parents to psychological knowledge;

- Activities on the organization of a psychologically safe environment.

The teacher-psychologist carries out constant dynamic monitoring of primary school students and students of the class of correctional and developmental education. Work with the rest of the school's contingent is conducted on request or in the order of planned activities. If necessary, children are sent for additional consultations to the Centers for Psychological and Pedagogical Rehabilitation and Correction, medical institutions.

Socio-adaptation support also provides for the formation of tolerant attitudes among primary, middle and high school students.

During the school year, work was carried out on the developed system for the adaptation of younger schoolchildren with limited health in an inclusive education.

Every child with DPD began studying in a secondary school and a special (correctional) school after consulting psychologists and teachers. Specialists conducted a study of the characteristics of cognitive activity and the personality of a first-grader and discussed the measures necessary for his adaptation in school in an inclusive education (Ljusberg A. L., 2009 [12], French N., Chopra R., 2006 [13]). If the child does not know how to follow the instructions of the teacher, a dialectologist teacher accompanies him in classes in a secondary school. If the lesson is to explain the difficult material, with special students preliminary, individual lessons are held in preparation for mastering a new topic.

**Results and discussion.** In general, the survey of schoolchildren made it possible to determine to what extent school-important functions were formed by first-graders and to track the developmental progress of a student in dynamics.

The results of diagnostics of visual forms of thinking (the test "Raven Color Matrices" allowed to evaluate the level of development of first-graders in dynamics. When diagnosing visual forms of thinking in children with a diagnosis of DPD, students in an inclusive school had a low level of development in 4 first-graders, which is 40%, developmental level was noted in 6 first graders (60%), according to the results of the third quarter, there was progress in development. Not a single child had a very low level of development, 9 children showed a low level of development (90%), the average the level of development was noted in one child (10%). It was noted among children with mental retardation that children enrolled in an inclusive class showed a higher level in the third quarter.

The results of the correctional test (Bourdon test) made it possible to assess the sustainability of attention among younger students, again, children with mental retardation, who study in inclusion conditions, show a higher level compared to students of correctional school. Children diagnosed with DPD who study in an inclusive school are marked low attentional stability of all first-graders, which is 100%. At the end of the third quarter, the following changes were noted: a low level of attentional stability was noted in eight first-graders (80%), 5 students showed a level of attentional stability below the average (20%).

Methodology "Exclusion items." Children of 7-8 years old with normal development coped with the tasks of all groups of complexity. There have been isolated difficulties in speech generalizations, in the explanations of solutions. Separate tasks were performed by children with mistakes, but the general tendency of categorical thinking was already clearly expressed (Schmidt M., Kagran B., 2006 [14]; Markovskaya I. F., 2004 [15]; Loshakova I.I., 2009 [16]).

Children with mental retardation performed standard generalizations, but they are not well aware of generalizing words (transport, furniture) and had difficulty in tasks that required a detailed generalization in speech ("things into which something can be put"). Children studying in an inclusive classroom have found better results than first-graders from a correctional school.

No less informative was the projective test of personal relationships, social emotions and value orientations of "The Houses" (Table 1).

Indicator of total deviation	Children with DPD, studying in terms of inclusion		Children with DPD enrolled in a correctional school	
	Before experiment	After experiment	Before experiment	After experiment
Bigger than 20	15%	8%	50%	45%
10-18	62%	57%	50%	51%
Less than 10	23%	35%	-	4%

 Table 1 – Indicator of total deviation for all surveyed (%)

The predominance of positive emotions in children with mental retardation is 1/6 of the total number of children studied in inclusive classes, which was not recorded in the 1st grade of the correctional school. The emotional state is normal by 12% more in children with DPD of an inclusive class compared with children in a correctional school.

According to the results of the survey, the following conclusions: all parents of children with DPD are satisfied that the child is studying in an inclusive school. Successes in learning parents also associate with learning in terms of inclusion. Parents of first-graders children with DPD of an inclusive class note that their children are happy to go to school, that children have adapted to the school regime, their children practically do not get sick, children share positive impressions about school life.

### Conclusion

Inclusion based on the position of general pedagogy and psychology, focused on the child, taking into account his individual educational needs. The goal of inclusion is not only the integration of children with disabilities, the "one school for all". Inclusive campaigns can support children with disabilities in learning and achieving success, which will give chances and opportunities for effective socialization.

Inclusive education based on the principle of access to education for all students, including those with disabilities. This approach is holistic, integrated, based on the interests of the child. The basis of an inclusive approach should be a guide to the normal mental development of each student, and not to deviations in the form of deviation or pathology. Understanding the essence of this approach and its adoption can improve the self-esteem of people with disabilities and gives them the right to equal rights and opportunities. For the system of national education, this approach is of great importance, and the positive experience accumulated in each educational institution at any level will used for the benefit of integration and inclusion.

In general, the survey of schoolchildren made it possible to determine the extent to which fourthgraders form school-important functions and track the progress of a student in development in dynamics.

The study examined the inclusive education of children with mental retardation. The delayed psychical development is a psychological and pedagogical definition for the most common pathology in the psychophysical development of children of senior preschool age. The delayed psychical development characterized by an uneven formation of the processes of cognitive activity, due to the underdevelopment of speech and thinking, as well as the presence of disorders in the emotionalvolitional sphere. According to the results of the study, the following conclusions: correctional and developmental work with children with mental retardation in the context of inclusion will be more effective than education in a special correctional and developmental school; inclusive education makes it possible to better ensure the socialization of children in this category. Each child can develop in his or her own way and receive affordable quality education tailored to their individual needs and their own capabilities in an inclusive education environment.

Children with delayed psychical development trained according to uniform programs developed for special correctional educational institutions. However, according to the results of the first quarter, there is a positive dynamics of general development, attention, thinking, improvement of the emotional state in children with mental retardation, who study in the conditions of inclusion. In the inclusive classroom for the child with mental retardation, the conditions for success.

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