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## PSYCHOLOGICAL ASPECTS OF IMPLEMENTING STRATEGIES AND MODELS FOR INCLUSIVE EDUCATION OF CHILDREN WITH SPECIAL EDUCATIONAL NEEDS

### *Abstract*

The strategies and models of foreign scientists to work with learners with special educational needs are discussed in the article. Methodology of the research: consolidation of experience, scientific-theoretical analysis, competence approach. It was analyzed the most appropriate models and strategies: cooperative learning, response to intervention, three-step interview, the diamond model of social pedagogy, etc. The experience of their introduction and testing in the educational process in the Republic of Kazakhstan is revealed. The authors describe the experience of pedagogues in teaching children with special educational needs based on the use of strategies and models in various institutions in the Republic of Kazakhstan.

**Keywords:** special educational needs, socio-pedagogical support, barrier-free educational environment, "differentiated learning", "cooperative learning" strategy.

### *Аңдатпа*

Мақалада шетелдік ғалымдардың ерекше білім беру қажеттіліктері бар адамдарға арналған модельдер мен стратегиялар қарастырылған. Қазақстан Республикасында білім беру үдерісіне оларды енгізу және апробациялау тәжірибесі жинақталған. Авторлар Қазақстан Республикасының түрлі мекемелерінде стратегиялар мен модельдерді пайдалану негізінде ерекше білім беру қажеттілігі бар адамдарды оқытудағы педагогтардың тәжірибесін сипаттайды.

**Тірек сөздер:** ерекше білім беру қажеттіліктер, әлеуметтік-педагогикалық сүйемелдеу, кедергісіз білім беру ортасы, "дифференциалды оқыту" стратегиясы, "бірлескен оқыту".

### *Аннотация*

В статье рассматриваются стратегии и модели работы зарубежных ученых с учащимися с особыми образовательными потребностями. Методология исследования: обобщение опыта, научно-теоретический анализ, компетентностный подход. Были проанализированы наиболее подходящие модели и стратегии: совместное обучение, реакция на вмешательство (RTI), трехэтапное интервью, Алмазная модель социальной педагогики и др. Обобщен опыт их внедрения и апробации в образовательном процессе в Республике Казахстан. Авторы описывают опыт педагогов в обучении детей с особыми образовательными потребностями на основе использования стратегий и моделей в различных учреждениях Республики Казахстан.

**Ключевые слова:** особые образовательные потребности, социально-педагогическое сопровождение, безбарьерная образовательная среда, стратегия "дифференцированное обучение", "совместное обучение".

**Introduction:** At present, in many countries, including Kazakhstan, much attention is paid to training specialists to work in the training of people with special educational needs. According to the data of Ministry of Educational Sciences of Kazakhstan, the number of children with special educational needs (SEN) who need inclusive education is growing every year. In 2017, 60,006 children with SEN; in 2018 - 61,336 went to secondary schools. According to the National educational database, conditions have been created for inclusive education: in 20% (1232 out of 6159 of kindergartens; in 60% (4207 out of 7014 schools) of secondary schools; in 30% of technical and vocational education institutions (in 250 out of 821 colleges). 58 higher education institutions have created conditions for students with special educational needs to study and live. They have ramps, elevators, social facilities, libraries, and more [1].

As a goal of socio-pedagogical support for children with special educational needs, and especially for gifted children with special educational needs, it is important to name the creation by the pedagogue the necessary conditions for personal development and facilitating the process of overcoming obstacles, problems and difficulties that prevent successful socialization[2]. As noted by G. V. Yakovleva and O. N. Kondakova, healthy pupils learn to pay attention to their classmates, see and understand the needs of people, gain experience in empathy, compassion, and the ability to do good deeds[3]. It is very important that parents of children with SEN have an adequate attitude, and that they believe in the child's ability to overcome their illness and discover their talents and abilities. But excessive guardianship leads to the formation of a child's "learned helplessness", which was described by M. Seligman. Therefore, the strategy of upbringing in a family with a child with special abilities should encourage the independence of the child with a reasonable system of requirements and encourage communication and enrichment of activities [4;5].

It is necessary to take into account that children with SEN are a polymorphic and extremely diverse group, therefore, their educational needs also differ, since they are set by the specifics of mental development disorders and determine the special logic of the educational process. Consequently, the specifics of children's development should be reflected in the structure and content of education in the general education process. The teacher of an inclusive class should focus on an individual approach in his / her work, and be aimed at supporting the development of an individual and unique personality of each child[6].

"Barrier-free environment – is a set of measures to ensure accessibility and create equal opportunities for people with psychophysical development in all spheres of society" [7]. According to N. N. Bukovtsova, a barrier-free educational environment is an accessible environment for handicapped children, which provides access to educational resources and the joint process of their education in ordinary schools. Barrier-free education is the basis for the development of inclusive practices in educational institutions, the main idea of which is to exclude any discrimination of learners and create special conditions for children who have special educational needs. Every child is worthy of respect, so they can and should study in a mainstream class and work on creating comfortable learning conditions is an important stage for barrier-free education [8].

"Differentiated Instruction", which is perhaps one of the main elements of the implementation of "learner inclusion" in the learning process in practice. This is a pedagogical approach that involves adapting teaching methods to the needs of each specific learner. Instead of preparing a general working plan for a class designed for all children, the teacher must focus on the features of training, motivation and readiness to learn new things for each of the learner. Thus, the lesson plan will be adapted to the needs of each learner as much as possible [9]. To be more specific, the learner is always the main one in this approach to learning.

**Methodology of the research: consolidation of experience, scientific-theoretical analysis, competence approach.** A leading approach to the study of this problem is a competence approach. Competence is a measure of updating competencies in the process of their development, related to the self-actualization of the graduate's personality in the relevant activities (Subetto AI)[10].

**Results:** It was analyzed the most appropriate models and strategies: *cooperative learning, response to intervention (RTI), barrier-free environment, student teams achievement divisions (STAD), three-step interview, the diamond model of social pedagogy*, etc. for working with learners with SEN, their implementation and testing in the educational process in the Republic of Kazakhstan.

**Discussion:** According to Eliseeva I. G., Ersarina A. K., 2019, the following definition is proposed:

Persons (children) with special educational needs – (SEN) - persons (children) experiencing permanent or temporary difficulties in obtaining education of the appropriate level due to: developmental disorders;- behavioral and emotional problems; environmental factors (social, psychological, economic, linguistic, cultural); special educational needs are needs for assistance and for services in the educational and development process, without which it is impossible to get- research Institute of quality education[11].

Foreign researchers describe new concepts - models of learning in inclusive education. James B. Hale identifies a learning model based on active use of feedback (RTI); Response-to-Intervention, literally "response to intervention". The fundamental idea of RTI was developed by psychologists at least a century ago in the framework of the behavioral tradition. The idea is quite simple. You collect data over a period of time and select an approach to submitting training material until the student is successful. Then you regularly check how it is progressing to see if your approach is working. If it works, the problem is solved. If not, you modify your approach and track further progress. This process continues until academic performance improves. The novelty of the modern version of RTI is that it requires the use of effective, science-based teaching methods and monitoring of academic performance of all students. According to Hale, this approach also carries a humanistic idea. You help all children in the classroom learn and do well by selecting approaches and methods that meet the individual

needs of each child, avoiding unnecessary labeling. Hale points out that the national Association for School psychologists strongly recommends using the well – known problem solving process (PS-Problem Solving) to make decisions about how to change a child's approach to learning in order to improve their performance [12]. This approach appears in the literature as **PS/RtI**, where PS is a systematic process designed to change a learner's learning outcomes, and RtI is a systematic process for identifying whether a change has occurred and under what conditions[12].

“Cooperative learning” strategy is a strategy designed to implement the entire curriculum with a whole class of diverse students. Cooperative learning was developed by R. T. Johnson and D.W.Johnson (1994) at the University of Minnesota. Learners organize and work together in small heterogeneous groups to maximize their and each other's learning. After receiving the teacher's instructions, learners work on the task until all members of the group understand and complete it. Collaborative learning is based on the fact that learners benefit from each other's skills and knowledge, and they work towards the same goal - completing learning tasks. Cooperative learning promotes the active participation of learners. By studying in groups, they prepare for life in modern society. Roger T. Johnson, David W. Johnson and others have done a lot of research to show the positive impact of cooperative learning on students ' academic performance and social development. They found that some of the benefits of collaborative learning include higher levels of reasoning, more frequent generation of new ideas and solutions, greater transfer of what is learned in one situation to another, increased creativity, and higher levels of self-esteem [13]. According to the studies of R. T. Johnson and D. W. Johnson and E. J. Smith. Holubek (1993) [14] in cooperative learning, small group activities have several key components: positive interdependence (learners' skills and knowledge depend on each other, and this gives them a chance to succeed); strengthening interaction (learners motivate and help each other to learn); individual and group accountability (evaluating individual and group contributions to ensure group activity benefits everyone), interpersonal and group skills (building social skills for effective teamwork); providing group feedback. Cooperative learning has been designed to facilitate the inclusion of all learners. It is a tool that helps teachers in attracting learners with different levels and types of learning abilities. It has also been shown that cooperative promotes social integration in the form of greater acceptance and sympathy of learners for all learners, including those with special educational needs. Researchers found that when healthy learners collaborate with their handicapped peers in training sessions, their sense of empathy and altruism, as well as their ability to view situations from different perspectives, improves [15]. Team accelerated instruction (TAI) is used in mathematics, where it combines high-quality interactive learning with cooperative learning[16]. The three-step interview strategy focuses on developing learners 'active listening skills, helping to develop students' skills and ability to share information with others. Learners are divided into groups of three, and each is assigned a role: interviewer, interviewee, and recorder. Roles change after each interview[17].

The "**diamond model of social pedagogy**" developed by foreign researchers is of particular interest for inclusive education. According to foreign scientists Cameron C., Moss P. (2011), the diamond model symbolizes one of the most fundamental principles of social pedagogy: the diamond in each of us. As individuals, we are all precious and possess a rich variety of knowledge, skills, and abilities. Every person has the potential to shine like a diamond - and social pedagogy should support them in this. The diamond model provides a simplified structure that serves to define the conceptual foundations of social pedagogy, their relevance and interconnectedness. It offers 4 cardinal points that serve as a compass when navigating the "garden". Therefore, social pedagogy has four main goals that are closely related: well-being and happiness; holistic learning; relationships; and empowerment. Consider these goals. **1. Well-being and happiness:** the main goal of all social teaching practice is to ensure well-being and happiness on a sustainable basis through a human rights approach. Although the terms "well-being" and "happiness" are sometimes considered the same, according to the authors, they are conditionally different: happiness describes the current state, while well-being describes a long-term sense of physical, mental, emotional, and social well-being.



**Picture -1.** "The diamond model of social pedagogy" Cameron C., Moss P. (2011). *Social Pedagogy and Working with Children and Young People. Where care and education meet.* Edited by Gallaudet University Press: Jessica Kingsley Publishers. p.38

**2. Holistic learning:** Cameron C., Moss P. (2011) cite the definition of "learning is a pleasant expectation of oneself" given by the German philosopher Peter Sloterdijk. In this sense, holistic learning reflects the goal of well-being and happiness - it should be seen as contributing to or enhancing our well-being. Social pedagogy is about creating learning opportunities so that people feel their potential and how they have developed. **3. Relationships:** pedagogical relationships are central to achieving these two goals. Social pedagogues use their personality and should be genuine in the relationship, which is not the same as separation of personal affairs. Pedagogical relations are professional and personal at the same time. **4. Empowerment:** empowerment means that a person can take responsibility and responsibility for their own learning and their own well-being, happiness, and their relationship with society. Therefore, social pedagogy is aimed at supporting the empowerment of people, their independence and interdependence. **Positive experience:** in order to achieve these main goals, social pedagogy must provide a positive experience. The ability to experience something positive-something that makes someone happy-has a double impact: it increases self-confidence and self-esteem, so it strengthens their sense of well-being, learning, ability to form strong relationships, or feelings of strength [18].

In the Republic of Kazakhstan with the aim of improving the process of training of students of pedagogical specialties to work in conditions of inclusive education developed special courses, conducting seminars were practiced in the branches of departments, organized on the bases of special and general education institutions, for example at Karagandy State University "Boarding School for children with Oppositional Defiant Disorder № 3, KSU "Secondary school No. 27" of the Education Department of Karaganda. These forms of classes provide the desired results in the formation of professional skills and abilities of students, and most importantly-the formation of tolerance and readiness to work with children with SEN. In addition to traditional training methods, innovative methods have been actively used, the method of solving cases and project training can be called one of the effective methods. [19].

Solodnikova L. V. considers the experience of the gymnasium No. 83 in Almaty. It is a professionally oriented educational institution of an innovative type. Developing within the framework of the idea of a multicultural environment, the gymnasium has accumulated some experience in implementing inclusive education in integration with the areas of "Art", "Aesthetics", and "Cultural Studies". In the course of development, the problems of integration of profile and educational content components were solved, for which a common criterion for evaluating results was worked out - the "Mastership" category. The idea of competence-based education, freedom of choice of educational trajectory of self-improvement, accountability for the educational outcomes between the teacher and learner inherent in the priority development of the school, and accumulated capacities allow you to see the prospects of this development in the transition from monoprofile school to poliprofile school. The task of a teacher working in classes for children with mental retardation is to reveal the best qualities and knowledge necessary for the socialization of the person. [20]. In the process of teaching the subject "English language", a crucial role is assigned to the teacher, whose task is to improve teaching, create a learning environment based on an individualized approach and eliminate obstacles for children with special educational needs [21]. The importance of using parable miniatures at Physics lessons is emphasized by Aratai L. B. Using parable miniatures, creating physical parables allows learners to understand that the world is not a collection of separate, independent events, but various and numerous manifestations of one whole. The author gives an example of "the law of communicating vessels" [22].

The students of the specialty "Social pedagogy and self-cognition" of the department of pedagogy and educational management of al-Farabi Kazakh National University carry out continuous practice in various institutions of Almaty, such as "House of Mercy"; "the Foundation for children with autism and other developmental disabilities- "Ray of Light"; "The day center of handicapped children with psycho-neurological pathologies", Almaty, №3<sup>rd</sup> branch, "The Montessori Center", as well as in secondary schools, where they work with children with SEN. By practicing, they acquire the experience of communicating with such a category of children, learn empathy, tolerance, and endurance. Future social pedagogues also had experience of communicating with parents of children, getting acquainted with their problems. In inclusive education, strategies or formats for the work of pedagogues, and other professionals play an important role. The following strategies should be noted: PALS (*Peer-Assisted Learning Strategies, barrier-free environment, collaborative learning, cooperative learning, Direct Instruction strategy, game-based learning strategies in inclusive education, and tutoring strategies.*

**Conclusion:** All of the above points to the need and importance of selecting an accessible strategy and integration model for each learner with special educational needs in the general education environment and

realizing their right to receive a quality education. The quality of education is becoming a strategic area and a national asset of the state. Due to the ongoing changes in the education system of the Republic of Kazakhstan, there is an increasing need for high-quality training and retraining of qualified specialists, in particular social pedagogues, to work in inclusive education.

References:

1. <https://informburo.kz/cards/inklyuzivnoe-obrazovanie-kak-v-kazahstane-uchat-detey-s-osobymi-obrazovatelnyimi-potrebnostyami.html>. Access date 24.12.2019 г
2. Magauova A.S., Makhambetova Zh.T. Features of socio- pedagogical work with gifted children with special educational needs.//Materials of the International scientific and practical conference: «Vocational training of creative specialties teachers: search, tendencies and prospects» devoted to the implementation of the state program «Ruhani Zhangyru» (Spiritual Revival) Turkistan, 2019. P.294-299
3. Yakovleva G.V., Kondakova O.N. Conditions for the development of giftedness in children with disabilities.// Siberian pedagogical journal.-2012.- No. 3-P. 270-273.
4. Khrustaleva T. M. Age features of manifestation of social giftedness of school children.// Siberian pedagogical journal.-2011.- No. 10-P. 170-176.
5. Yurkevich V. S. Gifted child is Gifted: illusion and reality. Book for teachers and parents-M: Education, educational literature, 1996.- P.136
6. Rsaldinova S.K., Kemeshova A.M. Professional development of pedagogues in the field of inclusive education of children with SEN within the renewed content of education // Republican scientific and practical conference dedicated to the 50th anniversary of the Institute "Kazakhstan's experience implementing inclusive education: problems and prospects" (Almaty, October 29, 2015) - Almaty: RIPKSO RK, 2015 - P.3-6.
7. Gaidukevich E. S. Organization of the educational environment for children with psychophysical development peculiarities in the conditions of integrated learning [Text]: –method. manual / E. S. Gaidukevich [and others]; under the General editorship of S. E. Guydukewich, V. V. Checheta. - Minsk: BSPU, 2006. – P.98.
8. Bukovtsova, N. I. Inclusive education of children with special educational needs: problems and prospects [Text] / N. I. Bukovtsova. - Moscow: MSPPU, 2011.-P.286
9. Tomlinson, C., C. Hertzberg, H. Callahan, C. Moon, T., Brimijoin, K, Conover, L. & Reynolds, T. (2003). Differentiating instruction in response to student readiness, interest, and learning profile in academically diverse classrooms: A review of the literature. *Journal of the Education of the Gifted*, 27(2/3).-P. 119-145.
10. Subetto A. I. Ontology and epistemology of the competence approach, classification and qualimetry of competences. SPb. - M.: Research. Center for quality problems of training specialists, 2006-P.72
11. Eliseeva I. G., Ersarina A. K., Psychological and pedagogical support of children with special educational needs in secondary schools: method. recommendations / Almaty: NSPCCP MC, 2019-P.96
12. Hale J. B. Response to Intervention: Guidelines for Parents and Practitioners. URL: [www.wrightslaw.com/idea/art/RtI.hale.pdf](http://www.wrightslaw.com/idea/art/RtI.hale.pdf) (date of issue: 15.02.2020)
13. Johnson, R. T., & Johnson, D.W. (1994). An overview of cooperative learning. /J.Thousand, A.Villa, & A. Nevin (Eds.), *Creativity and collaborative learning* (P. 1-20). Baltimore: Brookes Press.
14. Johnson, D. W., Johnson, R. T., & Holubec, E. J. (1993). *Cooperation in the classroom* (6th ed.). Edina, MN: Interaction Book Company.
15. Jolliffe, W. (2005, September). The implementation of cooperative learning in the classroom. Paper presented at the British Educational Research Association Annual Conference, University of Glamorgan, UK.
16. Luebbe, B.M. (1995). *Team accelerated instruction (TAI): Mathematics. Educational Programs That Work*. JDRP No. 84–5 (3/23/84). Baltimore, MD: Johns Hopkins University.
17. Cox, J. (n.d.). *Teaching strategies: The three-step interview*. Retrieved from <http://www.teachhub.com/teach-ing-strategies-three-step-interview>
18. Cameron C., Moss P. (2011). *Social Pedagogy and Working with Children and Young People. Where care and education meet*. Edited by Gallaudet University Press: Jessica Kingsley Publishers. - p.224
19. Rymkhanova A. R. Psychological and pedagogical bases of training of students of pedagogical specialties for professional activity in the conditions of inclusive education: Diss ...Doct. of philosophy (PhD): 6D010300-Karaganda: KarSU named after E. A. Buketov, 2019.-P.163.
20. Solodnikova L. V. Implementation of inclusive education in gymnasium No. 83 //Materials of the Republican scientific and practical conference dedicated to the 50th anniversary of the Institute "Kazakhstan's experience implementing inclusive education: problems and prospects" Almaty: RIPKSO RK, 2015-P.15-17
21. Kushagenova G.K. Teachers' work in teaching English to learners with special educational needs in secondary schools during the implementation of inclusive education. //Materials of the Republican scientific and

*practical conference dedicated to the 50th anniversary of the Institute "Kazakhstan's experience implementing inclusive education: problems and prospects" - Almaty: RIPKSO RK, 2015-92-94 p.*

22. Aratai L. B. *The role of the teacher of Physics in the education of students with special needs. //Materials of the Republican scientific and practical conference dedicated to the 50th anniversary of the Institute "Kazakhstan's experience implementing inclusive education: problems and prospects" Almaty: RIPKSO RK, 2015.- 125-127 p.*