

# Inclusive education in the era of sustainable development

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**Abstract.** The increasing number of children with disabilities underscores the critical importance of timely rehabilitation and their integration into society. Recently, there has been a growing interest in how creative activities can positively affect children with disabilities as a means of rehabilitation. Additional education programs can yield significant corrective outcomes, addressing a variety of psycho-correctional challenges. Additional education, when used for rehabilitation and correction, benefits children with diverse disabilities. It facilitates substantial improvements in their emotional well-being, fosters positive interpersonal dynamics among children and adolescents, nurtures their creative talents, and substantially enhances their quality of life. This, in turn, helps children overcome shyness linked to communication difficulties and self-doubt.

## 1 Introduction

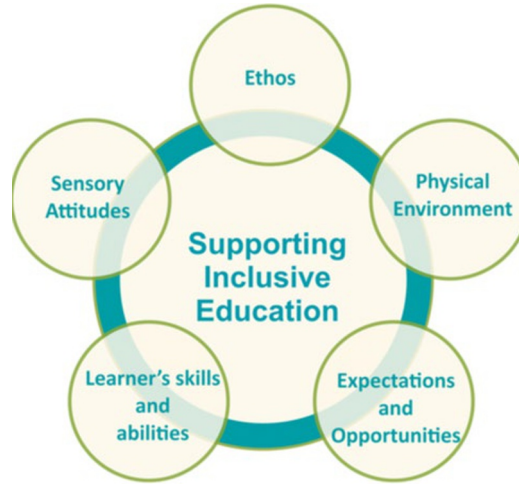
Ensuring accessible education is a paramount objective of state education policy in Russia, affecting a wide spectrum of society [1]. It is a matter of concern and discussion not only among government education officials but also within the ranks of teachers and parents. In the contemporary world, education is recognized as a primary economic resource critical for self-fulfillment, social advancement, and financial prosperity [2]. However, the criteria for those seeking an education are not always uniform, giving rise to issues of inequality concerning both access to and the quality of education. These disparities can be attributed to socioeconomic status, nationality, gender, physical abilities, and disabilities.

For some years now, there has been a global discourse on the development of accessible education for children with disabilities with the aim of achieving sustainable development. Education for sustainable development empowers individuals to gain the knowledge, skills, and values necessary for contributing to sustainability and making informed choices. Critical components for education in the interest of sustainable development include the execution of regional projects, a system for evaluating education quality, establishment of specialized classes for gifted children, pilot programs for inclusive education in secondary

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schools, the creation of resource classes, and the development of individualized programs for children with disabilities that actively engage their parents.



**Fig. 1.** Supporting inclusive education.

The introduction of Federal State Educational Standards for students with disabilities in September 2016 marked a significant milestone in aligning with the objectives of the UN Economic Commission for Europe Strategy on Education for Sustainable Development. These standards not only prioritize cognitive development but also emphasize personal and cultural growth grounded in the cultural and historical approach of the national scientific school. In this context, education shifts from imparting "solid knowledge for life" to fostering the capacity to learn and relearn throughout one's life, aligning with the aim of lifelong education for sustainable development.

## 2 Research Methodology

The trend towards inclusive education for children with disabilities within the general education system has been evident in the Russian special education system since the early 1990s. This topic has been the subject of interdisciplinary research and is examined from various angles in scientific literature, including psychological, philosophical, pedagogical, medical, and social research [4].

Some notable contributors and areas of research within this field include:

1. Philosophical and Methodological Perspectives: Scholars like F.B., L.I. Berezina, L.S. Wasserman, L.S. Vygotsky, O.I. Zotova, A.N. Leontyeva, and I.A. Miloslavova have delved into the philosophical and methodological aspects of integrating individuals with disabilities into society. They have explored the underlying principles and theoretical foundations of inclusion.

2. Psychological and Medical Aspects: Researchers such as T.A. Aristova, Yu.A. Alexandrovsky, I.I. Mamaichuk, A.G. Moskovkina, and Yu.B. Tempera have focused on the psychological and medical dimensions of inclusive education. They have examined issues related to diagnosis, psychological support, and assistance for children with disabilities.

3. Diagnostic and Psychological Assistance Programs: Scholars like A.D. Vinogradova, S.D. Zabramnaya, A.G. Litvak, V.I. Lubovsky, V.G. Petrova, I.A. Sokolyansky, among others, have worked on developing diagnostic studies and psychological assistance

programs for children with disabilities. These programs aim to assess and address the unique needs of these children.

4. **Social and Psychological Aspects:** Researchers like I.A. Allverdieva, G.M. Andreeva, I.B. Dermanova, T.V. Sereda, and others have explored the social and psychological aspects of inclusive education for children with disabilities. They have looked at issues related to social integration, identity development, and the impact of inclusion on psychological well-being [5].

5. **Personality Development and Socialization:** Scholars such as D.I. Vikhoreva, A.N. Leontyeva, N.A. Okhapkina, A.V. Petrovsky, and others have examined the development of children and adolescents with psychophysical disabilities during the socialization process.

### **3 Results and Discussions**

The establishment of both organizational and substantive conditions for the psychological and pedagogical support of additional education for children with disabilities, aiming to facilitate their participation in additional general education programs, should focus on the following:

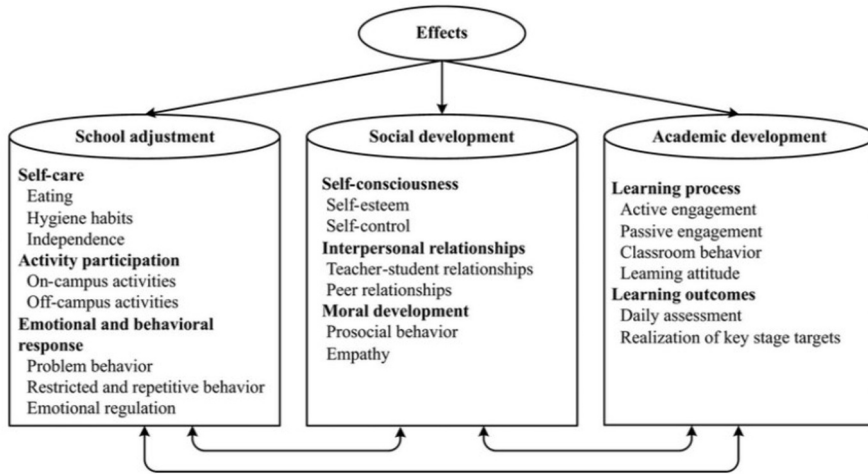
1. **Differentiated Conditions:** These conditions involve creating an optimal educational workload, utilizing various forms of additional education, and offering support in alignment with the recommendations of the Psychological and Medical-Pedagogical Commission (PMPC).

2. **Psychological and Pedagogical Considerations:** These should take into account the unique developmental characteristics of each child. The educational process should be geared towards correction and should prioritize the creation and maintenance of psychological comfort. Employing modern pedagogical technologies is essential.

3. **Health-Promoting Environment [6]:** It is crucial to promote physical and mental well-being, prevent physical and psychological stress, and adhere to sanitary and hygienic standards and rules.

Teachers of additional education play a pivotal role in this process. They must independently craft inclusive general development programs, considering the developmental challenges of children with disabilities, PMPC recommendations, family input, the needs of the educational institution, and the socio-economic conditions of modern society. Adapting additional education programs opens the door to expanding the potential of children with disabilities, fostering their inclusion in society. This, in turn, aids in the development of social roles and expands the scope of freedom of choice for their future life and career paths.

Creating favorable conditions for consistent development, while minimizing physical and mental costs for children with disabilities, is paramount for determining their prospects and emphasizing visible results. These successes are essential for motivating children to continue their development [7]. Teachers of additional education must design programs in a way that enables children with disabilities to realize their potential to the fullest extent. The psychological and pedagogical conditions for inclusive education of children with disabilities, as implemented through additional education programs, are pivotal in achieving these goals (fig.2).



The effects of inclusive education for children with developmental disabilities.

**Fig. 2.** The effects of inclusive education for children.

For children with visual impairments, the adaptation of general development programs and participation in additional education entail the following conditions [8]:

1. **Learning Objectives:** Setting educational goals that address the specific needs of children with visual impairments, focusing on socio-psychological adaptation, interactive resources, and the development and correction of cognitive and emotional aspects within a group setting.

2. **Differentiated and Individualized Education:** Tailoring instruction to consider the developmental characteristics and intact functions of children with visual impairments. This involves accommodating compensatory functions, memory, selection of appropriate materials for auditory and tactile learning, personal characteristics, and social interaction experiences.

3. **Comprehensive Approach:** Providing both individual and group instruction.

4. **Optimal Load Regime:** Establishing a pace of activity that avoids excessive fatigue for children with visual impairments.

The requirements for an educational environment for children with visual impairments include:

- **Landmarks:** The presence of sound, tactile, and visual landmarks in the educational space to aid spatial orientation and warn of obstacles.

- **Subject-Spatial Environment:** Ensuring that the educational environment meets ophthalmic-hygienic requirements.

- **Safety:** Creating a safe environment for independent movement, including wide passages, appropriately arranged furniture, and storage for Braille manuals [9].

Conditions for adapting general education and providing additional education for children with musculoskeletal disorders (NODA) include:

**Tailored Learning:** Personalizing the education for each child.

**Small Group Sessions:** Involving children in small groups and social activities during public events. **Modern Teaching Technologies:** Actively using contemporary educational methods.

**Provision of Technical Resources:** Supplying necessary computer programs and equipment that cater to each child's specific characteristics.

**Organized Temporal and Spatial Environment:** Ensuring a well-structured learning space. **Support for Communication Development:** Offering various types of support for

verbal and nonverbal communication growth [3]. Visually Engaging Content: Making learning materials visually stimulating and simplifying tasks. Adaptation of Text Materials: Modifying text materials, such as increasing font size and using color-coding. Comfortable Stress Levels: Maintaining a suitable stress level and an orthopedically friendly regimen.

Emotional Well-being: Creating a comforting atmosphere that helps children manage fatigue and anxiety. For children with hearing impairment, important conditions for adapting general education and receiving additional education involve:

- Accessible Textual Information: Ensuring that textual information is presented in printed tables on stands.
- Equipment and Storage: Providing designated storage spaces for hearing aids, FM systems, batteries, and chargers.
- Optimized Workspace: Creating workspaces for children with hearing impairment, equipped with tools for optimal oral speech perception, even in noisy settings.
- Correctional Teaching: Teaching methods that stimulate auditory-visual attention, expand vocabulary, correct speech errors, and reinforce grammatically correct speech skills. Ensuring that the teacher enunciates in a way that allows children to follow their lips.
- For children with autism spectrum disorders (ASD), the conditions for adapting general education and receiving additional education encompass:
  - Individualized Approach: Recognizing that each child with ASD is unique and requires a personalized, content-based approach.
  - Specialized Methods and Content Adaptation: Using specific teaching methods, adapting educational content, and creating a suitable and nurturing communication environment.
  - No Assessment Activities: Avoiding assessments, which significantly expands the scope of adaptation in terms of methodology, content, and pace.
  - Comfortable Learning Environment: Organizing a comfortable learning environment.
  - Gradual Inclusion: Gradually incorporating students into group interactions.
  - Controlled Introduction of Novelty: Gradually introducing new information.
  - Teacher-Child Communication: Building communication primarily at the "Teacher-Child" level.
- Alternative Communication: Using alternative means of communication to provide feedback when verbal interaction is not possible.

## 4 Conclusions

The challenges in organizing inclusive education in modern schools primarily stem from the fact that the internal culture of schools and educational standards are often not attuned to the differences in children and their abilities. The traditional focus of many schools tends to revolve around standardized educational programs rather than accommodating individual student needs. The prevailing notion in education often places paramount importance on achieving academic outcomes rather than emphasizing success in socialization.

Several contradictions exist between the realities of general education and the evolving requirements for it:

1. Traditional Education vs. Inclusive Education: Mass education, which is based on conservative concepts like grouping students into relatively homogeneous classes and emphasizing normative assessment and comparisons, can create significant challenges for the implementation of inclusive education. This traditional model is often at odds with the principles of inclusive education, which seek to cater to the diverse needs of students.

2. Changing Standards: On the other hand, evolving educational standards, such as the Federal State Educational Standard for Primary General Education, now highlight the

importance of interpersonal skills, including the ability to engage in dialogue, respect differing viewpoints, express one's opinions, and assess events critically. These skills are essential for success in a diverse and inclusive society.

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