

Curriculum Adaptation For Children With Special Educational Needs: Best Practices In Inclusive Education



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Abstract

The transformation of educational strategies in the global educational environment requires inclusiveness as a guarantee of the right to education. The relevance of the research is determined by the need to upgrade the system of psychological and pedagogical support for people with special educational needs. The purpose of the research is to analyze the potential for adapting curricula for children with special educational needs. The research examines innovative pedagogical tools in the field of inclusive learning technologies. The impact of the general digitalization of education on the development of inclusion in the educational environment is analyzed. The potential of a number of modern teaching approaches, in particular, audiovisualization, case studies, immersive technologies, gamification and case studies, has been highlighted. The proposed adaptive concept for the development of inclusive education includes innovative pedagogical solutions: targeted online platforms and educational resources, interactive learning, stimulating practices, as well as problem-based methods and personalization of the educational process. It has been noted that inclusion requires constant and high-quality feedback. It has been found that innovative pedagogy in the context of inclusion can really improve the level of communication skills, social behavior skills and the overall level of students' academic performance. It has been substantiated that the processes of European integration in Ukraine have a positive impact on the development of educational inclusion, allowing the involvement of leading successful practices. The study has proved that inclusive educational technologies have the potential to form an effective learning environment even in times of war, and the accompanying challenges can be overcome by upgrading the methodological and pedagogical process and effective management in the educational sphere.

Keywords: inclusive education, innovative pedagogy, psychological support, educational strategies, interactive technologies, personalized learning.

JEL classification: I24, I28, I29, O33.

Introduction

The practice of adapting curricula for children with special educational needs remains a delicate and poorly understood issue today, despite its scale. The development of the topic is reflected in the works of a number of scientists (Bahrudin, 2021; Karibaev et al., 2022). Modern inclusive educational strategies in this area should contribute to the effective solution of the priority tasks of supporting an inclusive educational environment.

According to European practice, the gradual integration of audiovisual methods of presenting educational material, replacing the traditional verbal form, is of particular importance. In addition, the potential of interactive and immersive learning technologies, project-based learning, and case methodology is also relevant.

Psychological and pedagogical support of children with inclusion, as the main condition for the correction of their development, is currently considered as a determining factor in ensuring the child's social adaptation. Against the background of the general trend of individualization of the educational process, which is gaining momentum in the period of crisis socio-political phenomena, the study of the potential for the development of inclusive education is positioned as a relevant scientific direction.

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Literature review

The scientific and methodological basis of the issues under study is laid by scientists who focus on analyzing trends and best practices in the field of psychological and pedagogical support and correctional and developmental work within an inclusive educational environment. For example, the publications of Masefield et al. (2022), Paulus et al. (2021), Rahmatullah et al. (2022) consider the variability of innovative pedagogical tools in the context of inclusion.

Davis-Kean et al. (2021), Slozanska (2021) identify priorities for inclusive education in the context of globalization and digitalization. At the same time, Yunusalieva (2022) explores the possibilities of psychological and pedagogical support for a young child with special needs in an inclusive resource center.

In the opinion of Veremchuk and Khomiak (2021), the issue of correctional activities for children with inclusion requires a comprehensive approach. At the same time, this approach is most effective when focused on the formation of logical thinking. The main prerequisites for the effectiveness of psychological and pedagogical activities in an inclusive educational environment, according to

Steinbrenner et al. (2020), include ensuring an individual and differentiated approach to the educational process, a slower pace of the learning process, visibility, interactivity, verbalization.

Scholars DeMatthews et al. (2020), Míguez-Álvarez et al. (2022) propose general principles that are essential for ensuring the development of inclusive education. In particular, the authors emphasize the systematic coverage of the content-activity and personal components of the intellectual side of the educational process.

The difficulties of inclusive education in crisis conditions, considered by Hornby and Kauffman (2021), make it possible to identify the main requirements for the content of the educational and correctional process, which should focus on the specifics of the child's development, maximizing his or her development as a person. Hornby and Kauffman (2021) argue that safe and supportive relationships between children with special needs and others promote social interaction. Regarding the organization of the learning environment, Miciak and Fletcher (2020) explain approaches to integrating successful inclusive practices into the educational environment.

At the same time, Zeng (2021) analyze existing strategies and practices in advanced countries that promote the inclusion of children in the general education process. Bezliudnyi (2019) studies inclusive education for adolescents in the United States, while Williams-Brown and Hodkinson (2020) examine the specifics of government policy for educating children with disabilities in England.

Publications by contemporary authors (Choi et al., 2020; Lopatynska et al., 2023) provide a holistic viewpoint of existing approaches to correctional and developmental work within the framework of inclusion. At the same time, there is a need to develop the sustainable positive dynamics of inclusive education in the context of the war in Ukraine, which requires an updated view of its development strategy.

Materials and methods

General scientific methods, fundamental research and scientific approaches are used in the research, including as follows:

- systematic analysis, synthesis and scientific abstraction to determine the essence of the formation of an inclusive educational environment and relevant adapted programs, detail the functionality of psychological and pedagogical tools in this context, and identify related risks;
- comparative analysis of modern approaches to determining the basic requirements for the formation of an inclusive educational environment;
- use of graphic methods for visual interpretation of research results.

The research materials are publications of national and international researchers indexed in the international scientometric databases Scopus, Web of Science, and statistical data. The analysis was based on literature sources, mainly of recent years, which formed a statistically significant sample.

Results

The implementation and development of inclusive learning strategies in the national education system require the readiness of teachers to actively engage with innovative and non-standard methods of teaching. Currently, there are a large number of pedagogical approaches that significantly increase the effectiveness of learning and the formation of the necessary skills in an inclusive learning environment.

Individualized educational plans in this context are critical determinants of upgrading the learning environment in the context of inclusiveness. The main categories of these plans are individual differentiation, use of targeted special equipment, integration of modern psychological and pedagogical technologies and practices, and professional counseling.

The following basic methods have special functionality:

- 1) didactic games and other forms of gamification: they provide an opportunity to learn educational material in an accessible game form;
- 2) interactive technologies: they facilitate the implementation of acquired skills in everyday activities;
- 3) audiovisual method: the meaning of the educational material is revealed through visual non-verbal visualization (diatribes, movies);
- 4) project methodology: it promotes the development of communication skills in the learning process;
- 5) reproductive methods: they facilitate faster and more accurate memorization of educational material;
- 6) individualization of learning: it increases motivation, allows students to focus on the personal rhythm of the learning process;
- 7) format of group interaction: partnership and group forms develop communication skills (exchange of opinions, pair interviews, zigzag reading), and the collective form involves the interaction of the entire team.

It is worth noting that the outlined forms of the educational process are particularly effective in the

concept of combining group and individual work with the introduction of digital solutions. The potential of innovative interactive teaching methods contributes to the development of the necessary skills in the context of inclusive strategies. It should also be emphasized on the positive experience of implementing innovative pedagogical tools in the format of mind maps and sequences, which can effectively develop communication and critical thinking skills (Putra et al., 2020).

The development of educational initiatives for inclusive children involves several main approaches that integrate effective methods of development and social adaptation of children with special educational needs. The practical experience of modern advanced countries is especially valuable in this context. In particular, Finland has updated an approach that guarantees fair and favorable learning conditions for children with inclusion. At the same time, assistance is provided at the levels of general assistance, psychological support, and specialized environments for individual students. The school environment is positioned as a single system where children with special educational needs and regular school classes interact organically.

Canada also provides equal conditions for every student in terms of access to education. School psychologists and social workers cooperate closely to help children develop relationships with school resources. In Indonesia, teachers and parents of children with inclusion receive additional support in these centers through counseling. At the same time, it is common practice in Italy to individualize the education of children with special educational needs in regular classes. However, special assistants help students with special needs to integrate into the classroom setting.

Japan has successfully developed and implemented special programs for social integration and emotional support for students with disabilities. Such programs help improve the interaction of peers of different categories and overcome depression.

The above-mentioned innovative approaches to upgrading the inclusive pedagogical process make it possible to create a learning environment of a new format, improving the overall quality of inclusive education even in the crisis conditions of war. At the same time, it is expedient to take into account the needs of different groups of inclusive education students. Differentiation of potential risks and main opportunities for adapting the learning environment to inclusion is presented in Table 1.

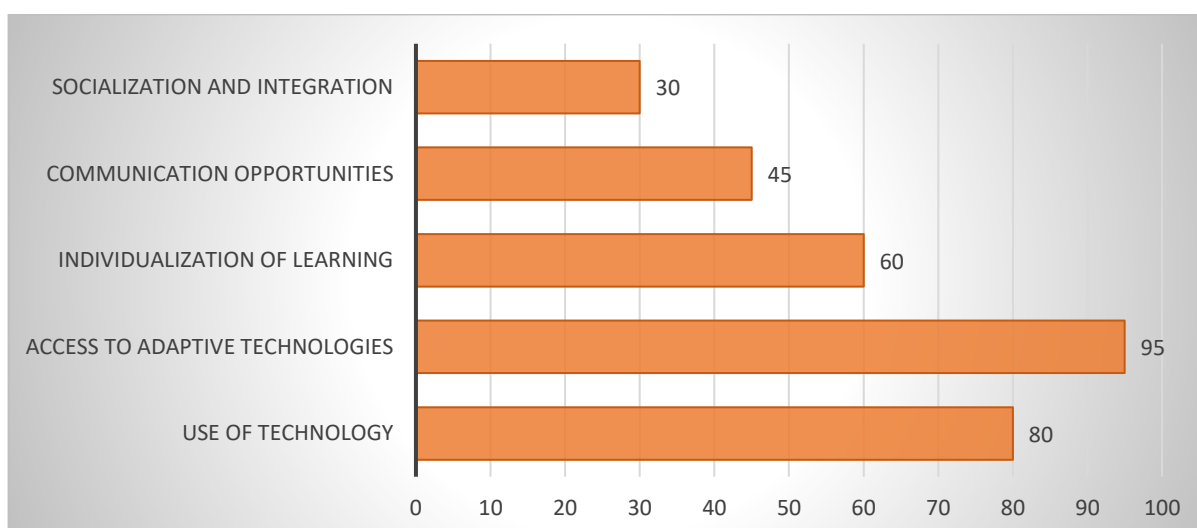
Table 1. Benefits and drawbacks of upgrading inclusive education

Benefits	Drawbacks
Variety of forms, methods and approaches to the presentation of educational material	The predominance of game-based learning and minimization of “live” communication slows down socialization processes
Adaptability, mobility, ability to participate in responsible decisions	Risks of disrupting the curriculum, which lead to a decrease in academic performance
Improvement of physiological and psychological state, memory and attention processes	Risks of constant dominance of some team members over others in the process of group work
Increasing motivation to learn	The risk of partial loss of control by the teacher
Development of logical and critical thinking	Risks of shifting the balance of the learning process in favor of interactive learning tools
Formation of emotional intelligence	Increased risks of rivalry that negatively affect the psychological microclimate

Source: compiled by the author

It should be noted that the success of implementing innovative approaches to inclusive education is determined by the practical readiness of teachers, including in the context of their mastery of innovative approaches to coaching and tutoring, and individualization of the educational process. In particular, tutoring is positioned as a purely individual educational practice, which is especially important in the context of inclusion. The tutor has a targeted focus on the learning process and uses a variety of reflective techniques.

Figure 1 shows a bar chart that displays the impact of technology use on inclusive learning when examined across several criteria. This representation shows statistics for each angle, reflecting access to technology, use of individualized learning, opportunities for communication, socialization and integration, and availability of adaptive technology. The results of international studies for 2020–2022 were used as a source for the analysis.

**Figure 1. The impact of using educational technologies on inclusive education**

Source: UNESCO (2022), OECD (2021), European Agency for Special Needs and Inclusive Education (2020), National Center for Education Statistics (2021), ISTE (2021)

In general, motivation, the activity component, and reflection play an important role in the development of inclusive education:

- 1) motivation determines the orientation of the student to active interaction and information activities;
- 2) the activity component involves the active information and communication activities of the student, which ensures the actualization of knowledge and skills, their effective practical implementation;

3) reflection is a set of necessary personal qualities and reflection, and it is determined by the attitude of the student to himself / herself, his / her own activities and the world around him/her.

Discussion

When developing an individualized plan of psychological and pedagogical work with children with special educational needs, it is necessary to take into account the maximum possible account of typological and individual capabilities and needs. At the same time, the correctional and developmental process should be characterized by a complex nature and include language abilities, cognitive activity, and behavioral reactions. This is confirmed by the scientists Syriopoulou-Delli and Gkiolnta (2022), Masefield et al. (2020).

DeMatthews et al. (2020) argue that the introduction of modern technologies, methods and forms of psychological and pedagogical support involves multidimensionality and variability. The use of information and communication, game, interactive, project, art and pedagogical technologies for teaching children with special educational needs is considered appropriate (Bazić, 2023).

Furthermore, Miciak and Fletcher (2020), Gorski et al. (2023) note that every child with special educational needs requires maximum contact with the outside world. In general, psychological and pedagogical support aimed at forming sustainable emotional self-regulation skills should be implemented according to a certain algorithmic sequence, which includes:

- improving the quality of implementation in the peer group; social and psychological adaptation of children;
- providing a subject-spatial developmental environment in accordance with individual characteristics;
- development of an individual educational and correctional process;
- development of perspective planning of personal development;
- monitoring the dynamics of psychosocial development.

The publications by Rahmatullah et al. (2022), Choi et al. (2020) highlight the need to create a developmentally and psychologically comfortable microclimate in the educational environment in the context of developing children's ability to emotional self-regulation and social integration. Such conditions can be ensured by using innovative approaches in psychological and pedagogical work (Putra et al., 2020).

Given an effective correctional and developmental process of psychological and pedagogical support for children with special educational needs, it is quite

possible to increase the level of mastery of communication skills and social behavior skills, which is an indicator and result of general mental development. Further scientific studies require practical adaptation strategies for applying the proposed psychological and pedagogical measures.

Conclusions

The potential of a number of modern educational approaches forms an adaptive concept for the development of inclusive education, which includes innovative pedagogical solutions - targeted online platforms, educational resources, interactive learning, stimulating practices, as well as problem-based methods and personalization of the educational process. Innovative pedagogy in the context of inclusion can really improve the level of communication skills, social behavior skills, and the overall level of education of students.

Based on the experience of advanced countries, individualized learning plans in this context are critical determinants of upgrading the educational environment in the context of inclusiveness. The main categories of these plans are individual differentiation, use of targeted special equipment, integration of modern psychological and pedagogical technologies and practices, and professional counseling.

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