

Neuropedagogical Principles as a Factor of Inclusive Education in the Context of Managerial Activity: European Experience

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Abstract: *The article analyzes the types, perspectives and trends of inclusive education management in a multifaceted manner, in particular, the experience of Western Europe today and during the last decades is analyzed. This is done with the aim of finding the most effective models or at least predicted appropriate recommendations for reforming inclusive education management.*

The general approach to writing the article is review-analytical with modeling elements. In this regard, the purpose of the article is to generalize the current trends in the management of inclusion in the world as a neuropedagogical principle of inclusive education in the context of management activities and to understand the theoretical conditions of reforming such management, taking into account the European experience.

According to the authors, the relevance of the article is due to the contradiction between the managerial (vertical) and self-initiative (horizontal) intentions in inclusive education.

As a result, it was possible to formulate a number of recommendations and find common problems and directions for the development of Ukrainian and European inclusion. The main trend that should be developed is the reduction of the management of state powers and the introduction of self-management principles based on the personal motivation of subjects of inclusion (self-directed behavior) within the most extended legal and power framework.

Keywords: *Planned/self-directed behavior, formal management, obstacles and stereotypes, motivation of inclusion subjects.*

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Introduction

Although Ukraine is located in the center of Europe, it is the heir of a totalitarian state that recently disappeared. In this regard, problems of inclusion, which should have been solved long ago and gradually, are still relevant, but are now solving quickly and comprehensively. Researchers have identified motivation as a key aspect of inclusive education (Maksymchuk et al., 2022; Omelchuk et al., 2022; Sarancha, 2022; Sarancha, 2021). This, in our opinion, is where the main problem of inclusion management arises: vertically (laws and hierarchy of institutions) and horizontally (interaction of equals and equality of dissimilars, self-organization, personal motivation and self-directed behavior).

The problem of inclusion management in Ukraine is somewhat different. A scientist who implements the European model of inclusion in Ukraine Davydenko et al., (2017) notes that the state policy regarding the formation of motivation in inclusive education is important. Another scientist, Teplova (2010), claims that societal transformations are possible only with minimal state administrative directives. The teacher claims: the state management of inclusion can only be framework and controlling, and the main resource of provision and self-management is provided by the participants themselves, in particular teachers, social workers, parents, etc.

So, the theoretical background and understanding of inclusive marketing, at least in the humanitarian sphere, in Ukraine is outlined. But we have an important fact: when Ukraine became independent, all international conventions on inclusion were already adopted. Therefore, Ukraine is rapidly going through the stage of institutionalization of inclusion, and now, like all leading states, it is preparing to move to maximally deinstitutionalized self-management of inclusion as a natural phenomenon that is characteristic of an open pluralistic globalized society.

In addition to the above, the relevance of our article is determined by the fact that the majority of obvious trends and processes do not find resource support or value understanding. They are also forced to overcome conservative hierarchical traditions. For example, not so long ago, Ukraine abandoned the medical model of disability and, like many developed countries dominated by educational traditions, is still fighting stereotypes. In our opinion, the stereotypes of the direct participants of the inclusive process do not allow us to implement the most effective management models. The most important stereotype is that the educational and social processes in the country must be managed from above, administratively or politically. Therefore, an important task is to develop the motivation of the

direct organizers of inclusion, the ability to take responsibility for self-management, initiative, and expedient pedagogical improvisation.

The purpose of our article is to consider the main trends of modern management of inclusive education in the theory and practice of Ukraine and some Western European countries, in order to formulate recommendations for improving the subject of research. This goal involves solving a number of partial tasks:

- We should analyze the thematic publications of recent years in order to understand the latest tendencies, trends and types of inclusion management.
- The authors also consider the main features of inclusion management in leading European countries. This will make it possible to compare, borrow or simulate the future Ukrainian model.
- We will also present the main features and achievements of Ukrainian inclusion on the example of education, which will make it possible to realize the fourth point of our goal.
- The final task, which is still compact, is to create a number of recommendations and generalizations for the management of Ukrainian inclusion, taking into account the generalizations obtained during the implementation of the first three tasks.

During the writing of the article, theoretical methods were used. At the stage of information gathering, this includes an analysis and summarization of relevant literature; an analysis of the authors' own experience, who in real life exchanged experience with foreign colleagues; a typological analysis of inclusive systems (mainly educational); other theoretical methods of education: analysis, generalization, modeling and forecasting of principles and models management of inclusion at the level of education.

Based on existing ideas about the work and structure of the brain, scientists and practitioners identify a number of principles for increasing the effectiveness of learning, taking into account the characteristics of brain activity, for example:

- at the beginning of the educational session and during its course, it is advisable to refer to the previously studied, ensuring the "priming effect", "students' readiness for the best perception and subsequent memorization of new material";
- it is useful when students independently structure and systematize the material presented to them and work with projects;

- it is useful to use different types of forms of team group work, to use multimedia;
- it is important to show and develop interest in the subject of science, which develops motivation for learning in students and for development in general, etc.;
- it is important to prevent educational stress that blocks cognitive activity, etc., it is necessary to create a psychologically favorable atmosphere that stimulates student activity.

The approach to the selection of the analyzed literature and the epistemological emphases made in the article was carried out in accordance with the specifics of this magazine, as well as the need to study inclusive aspects of modern education.

Neuropedagogical principles as a factor in the effectiveness of inclusive education

Higher and even secondary professional education often remain inaccessible to people with disabilities. However, the inclusive model of education, which involves the widespread introduction into modern education of technologies that help to learn and teach the most diverse groups of students, actively and purposefully stimulates the search for ways to improve the educational process, its adaptation to the needs and characteristics of students with various deviations or developmental delays, as well as the search ways to improve academic performance, results for all students, with or without certain socio-cultural, psychological, physical and other characteristics or limitations. It is not surprising that now, in the period of active digitalization of social life, the inclusive doctrine, aimed at ensuring access to education, its different levels and types, different groups of students, pays special attention to neurotechnologies and neuropedagogical principles. However, the hopes of inclusive education for the neuropedagogical principle of our time face many problems, in particular, the spiritual-moral-psychological "opacity" and ambiguity of the developments, the goals of their creation, application and correction: the problem of evidence and scientific validity of these developments is combined with the problems of ethical and cultural-ethical and psychological state. The theoretical significance of the study is related to an attempt to integrate the effects of using various neurotechnologies in the system of inclusive education. The novelty of the research is connected with the combined analysis of socio-psychological and spiritual-moral aspects essential aspects of the use of neurotechnologies in inclusive education. The article is addressed to teachers and psychologists who conduct practical

work and conduct scientific research in the field of digital technologies, digitization of inclusive, special and general education, as well as to all teachers and students who seek to improve the quality of education through the purposeful use of knowledge about the activity, development and correction of work brain, central nervous system as a whole.

Within the framework of the traditional idea of didactics, neurodidactics is the application in the educational environment of "knowledge about how the brain learns and what stimulates the development of its cognitive and other functions." The brain is a "rule-making machine," the term "neuro-didactics" to denote an interdisciplinary field at the intersection of brain sciences (neurosciences), pedagogy, and psychology. Neurodidactics is a branch of neuropedagogy along with neurodiagnostics. Neurodidactics, based on the latest achievements and discoveries in the field of sciences that study the functioning and activity of the human brain, strives to build a training system that would optimally take into account the individual characteristics of a person and the psychological characteristics of students.

Neuroeducation is considered as an aspect of the application in education of strategies and technologies obtained as a result of brain research. Neurodidactics sets itself a number of goals, including optimization of individual training programs, forecasting the effectiveness of training programs, development of software to stimulate intellectual cognitive activity, and multivariate analysis of student data to identify predictors of effective and ineffective learning.

Currently, neurodidactics is considered as a relatively new scientific interdisciplinary field that combines brain research and didactics. It is based on the results of brain research and offers methods of increasing the effectiveness and productivity of learning, including by working directly with the human brain. The results of recent research in the field of neurodidactics show, however, that there is no single correct and universal way of learning based on the functioning of the brain.

However, in practice, there are a large number of definitions of the term "neurodidactics" and no fewer ideas about what it is. In general, neurodidactics is the art of organizing and improving learning based on knowledge about the structure and functions of the brain, various learning styles and the differences that determine them in the types of perception, thinking, imagination, memory, etc., for example, sensory preferences, knowledge, about differences in functioning of the cerebral hemispheres, about the predominant reaction to stressful situations. This concept unites and connects various aspects of traditional learning and education and new

views on it, emphasizing the importance of taking into account individual and situational factors of learning, ranging from issues of motivation to learning and characteristics of the educational (learning) environment to issues of information processing by the brain in interaction with artificial intelligence, etc. This is the science of organizing the educational process using modern knowledge about the human brain and skills of interaction with the brain. The main goal of neuropedagogy is to build a system of education and upbringing that optimally takes into account the individual neuropsychological features of students (neuropsychological profile), integration with a personally oriented approach to learning with the aim of helping the child in self-development, providing sufficient a diverse, rich, developmental, corrective, comfortable, safe educational environment. As a result, education can be considered not only as a process and result of assimilation of knowledge and skills (competencies), but also as a transformation of the student's internal experience, which bears the imprint of his life situation.

Taking into account important discoveries in the field of neuroscience, the purposeful implementation of data obtained in modern brain research, which uses neurobiological and psychological knowledge about education and uses brain research to gather information about what happens in the brain and how a person learns. Neurodidactics combines didactic or, ultimately, pedagogical, psychological concepts of learning with modern knowledge of neuroscience and other brain sciences. Neurological discoveries are now the subject of a wide discussion, but most often in a shortened form, unsuitable for solving specific practical tasks of inclusive education. They focus on the individual abilities, talents and interests of a person. Based on the revealed ability of a person and assessment of his readiness to carry out a certain activity, it is possible to develop him as a person, as a partner, as a professional, expanding his horizons and competencies, influencing the values and goals, patterns of behavior and communication of a person.

Many neurodidactically oriented researchers note that they want to help educators and teachers to implement "adequate mental training", based on understanding the inner experience of a person and the inner processes of cognitive, conceptual and emotional-image processing of information. However, most questions regarding neurodidactics and neurology in general remain open. Neuroscientists can describe, for example, the neural basis of learning, but they cannot understand the complexity of the problems that teachers and educators deal with every day. The future of teaching in schools and universities does not exclude the problems of education and personality

But the relationship between a teacher and a student, a student and a teacher, which takes place in educational situations, is full of questions and unresolved problems, including the possibilities and limitations of neurotechnology in education. If we consider the postulates of neurodidactics, described by some didactics as certain "basic principles", for example, the statement that knowledge is not transmitted automatically, but is created "anew" in the student's brain, then we have a completely illogical construction, which is a "mixture" of concepts.

Modern administration of inclusion. Key trends of recent years

In the form of a review and analysis of the literature, we will try to briefly consider the modern international issues of inclusion and its management. Thus, discussions about the parallel coexistence of special education and inclusive education are still ongoing in the world, although the Salamanca Declaration summarized the basic concept of inclusive education. Florian (2019) identifies the features of inclusive education as a factor in the abolition of special education. Can inclusive and special education be approximately the same? If not, then special education should be left as an aid to a very narrow segment of people with special needs (Florian, 2019). The author admits that the main obstacles on the way to maximum inclusion exist mainly in marginalized regions.

Since inclusive education has been widespread in Europe for more than 30 years, it is possible to trace certain traditions of its implementation and study. We do not mean the traditions of national education, but the newest traditions of the last 30 years in this regard, comparative studies become interesting (Amor et al., 1999). For some reason, in Spanish language publications over the last decades, it is much smaller (Amor, et al., 1999). From this we can conclude: inclusion is at the stage of philosophical creation, and for more marginalized regions, the problems of inclusive practice in the scientific world are less relevant.

Since the direct management of educational and social projects and processes is gradually receding into history in the countries of Western Europe, the terms "promotion of inclusion", "interaction with inclusive institutions", "planned behavior" etc. are now becoming more accurate. Recently, the lower executive level (i.e. the teacher, administration and schools) plays an increasingly important role in the implementation of inclusion (Pit-ten Cate et al., 2018). The above authors analyzed the factors related to the implementation of inclusion at the empirical level several years ago. They took teacher characteristics into account for facilitating and hindering inclusion. Such a triad is based on the competence and life

characteristics of the teacher (Pit-ten Cate et al., 2018). Scientists deeply substantiate that the new liberal, "warm" attitude determines not only the atmosphere in the classroom where children with special needs study, but also affects the management of planned behavior, the development of a more adequate and universal program, and even self-management within the institution.

We understand that the problem of administration, management and methodological problems of teaching in inclusive institutions are problems of modern practice (Nilholm, 2021). Of course, there are achievements in the field of inclusion, but they mainly concern the theory/framework recommendations and protection of rights. The scientist calls for the creation of such a scientific discourse on inclusion that would represent and explain high empirical achievements and effective tools. Other Swedish scholars call for the use of case studies to illustrate personal, school or regional achievements in the field of inclusion (Opoku et al., 2021). Against the background of general positive reviews of most theories and their corresponding models, unfortunately, ambiguous aspects have been outlined. The most important of them are the following: inconsistency of qualitative and quantitative indicators of the effectiveness of planned behavior; dissonance between expected and actual behavior in a specific inclusive situation (Opoku et al., 2021). This means that it is necessary to conduct a revision among dozens of theories and models of planned inclusive behavior of teachers for compliance with legal, social and educational standards of inclusion, and most importantly for the purpose of predicting control and predicting the intentions of teachers.

Volunteers and ideological mentors of innovative administration of inclusive education in so-called developing countries, countries with remnants of colonial or military dictatorships in power, or countries at a low socio-cultural level of development are concerned with absolutely opposite problems. In such countries, at the request of organizations that protect the rights of people with special needs, inclusion is still formally implemented. It turns out that the administration of the inclusion must be combined with its implementation. An example of such a problem can be the management and implementation of inclusive education in Nigeria and other African countries (Sambo&Bwoi, 2015). It is relatively positive that the administration of inclusion in such countries is not a separate problem, but so far an unproductive component of the triangle "disinterest of the authorities - unfavorable environment - unwillingness of the population to change traditions." Fortunately, there are already a number of publications with specific recommendations for certain countries, mainly in Africa and

Asia. Invariant components of such programs are issues of propaganda and creation of community committees, training of personnel, creation of official institutions according to administrative division, implementation and administration of inclusion as a pilot project in individual institutions, classes, etc.

It has already been mentioned that in the last few years, the research of empirical verification of effectiveness and theoretical proposal of inclusion management models has significantly increased. This state is interesting because it contains a province that has completely abolished segregated forms of education (full inclusion). Through semi-structured interviews, researchers found out that inclusion administrators here have linear relationships with teachers and other staff. Administrators of school councils are not so much managers as bearers of inclusive culture, attractors of external and personal support of school staff. They are the bearers not so much of power, but of the responsibility of organizing it and attracting the necessary resources. This survey showed that school administrators and managers still formally consider themselves to be key in the implementation and administration of inclusion, but their answers to the peripheral questions of the questionnaires indicate a gradual leveling off. We predict that the policy of having a manager and a teacher on the same hierarchical level, a culture of mutual support rather than mutual control, etc., can lead to self-control of inclusion in the institution in a short time. Such an institution can become a relatively closed system of plans for the organization and control of inclusive education on the ground, and at the same time remain open to the financial, informational and other resource assistance that the managers will attract. We understand that in Ukraine the stimulation of a personal culture of inclusion and self-motivated and self-controlled behavior can only happen after changing the stereotypes and traditions according to which the executive vertical exists, and managers are always hierarchically higher than the direct executors of daily routine work.

When we talk about the linearity of executive and organizational relations, we should not forget that there is a problem of managing diversity. This can also apply to the resources, individual characters, pedagogical styles and personal motivations of all participants in the process. We analyzed the literature of recent years, but found only a few works on human resource management based on inclusion, diversity and partnership (Itam & Bagali, 2019). Scientists explain this not only by the different motivations of the participants of the inclusive process, but also by the most profound psychological determinants, in particular, personal identity, which is confirmed or weakened when performing certain social roles. We analyzed

this ontological fact and came to the conclusion: it is necessary to promote inclusion not as inclusion and equality, but as the absolute value of diversity. There is also no need to emphasize the different inclusive role of a volunteer and ward in a broad sense. This means that both Ukraine and other countries need to develop models of such an inclusive environment that would be attractive to all participants. Of course, such participants should feel and understand: their difference is only existential, and this is the greatest value of a person. And biologically, socially and morally, everyone is included and equal. This is another greatest value.

Attempts to structure the achievements of modern neuropedagogy prompt the researcher to understand that, despite the declarations and projects describing neurodidactics as an epoch-making, innovative paradigmatic phenomenon, the final result is sometimes extremely insignificant and trivial. The exception is digital neurotechnologies, the introduction of which as a way of "cancelling" traditional education, traditional didactics is a very significant event for pedagogy, in particular inclusive, an event described by the metaphors "death of the school", "death of the university". However, the productive use of these technologies is possible only where and when they are subordinated to the tasks of didactics, the interaction of the teacher and his students (Li & Ruppap, 2021). It became clear that on an empirical level it is possible to predict and evaluate the consequences and prospects of a teacher's work in an inclusive environment (Li & Ruppap, 2021). It seems to us that such metaconcepts can become a starting point for the theoretical development of a model and organization of regional inclusive systems of autonomous management based on the self-directed behavior of all its participants.

The realities of managing educational inclusion in the countries of Western Europe and Ukraine. Borrow or discard?

In this section, we will briefly consider the general features of educational inclusive systems at the level of institutions, focusing on the methods of administration (Hodkinson, 2005). It includes teachers, social workers, extracurricular staff and even representatives of the student community. This practice is stipulated by one of the laws on education, has a long tradition and involves not so much management as personal responsibility. In some cases, such a management group accompanies children with special needs even after entering higher education institutions. The equality of the administration of inclusion is solved by creating similar working groups at different levels of the country's administrative division (provinces, cities and towns). It is clear that at the highest level, such a

working group no longer deals with individual children/students, but with resource management: conclusion of contracts, search for sponsors and general control of compliance with inclusive law in the field. Such a system could be exemplary for Ukraine if it were not for the tradition of a clear functional division of inclusion and education in general.

In Great Britain, as a deeply traditional and conservative country, at the legislative level of implementation, management and control over inclusion is carried out according to the "top-down" scheme, but in real practice inclusion moderation begins with teachers. In the country, there is even a contradiction between the official opinion of the authorities and specific providers of educational services: the government is convinced that inclusion is a political initiative and project, and those who provide inclusive services believe that inclusion is a process and a result of their direct activities (Tod, 2001). Such an opinion would be useful for Ukraine and would replace the stereotype of absolute power in terms of social reforms. For example, in Ukraine and a number of other countries, there are still ministries of sports, culture and art, although in the civilized world it has long been clear: forms of social consciousness, which are the highest manifestation of the individual, cannot be administered from above.

In France, inclusion is traditionally considered a proper educational field, which is administered from above by the relevant ministry. In practice, such a ministry only takes care of resource and its control aspects. For more than 20 years, a national audit agency has been operating in the Republic, formed from representatives of various spheres of society, who have different attitudes and interest in inclusion. Such administrative alignment is complemented by considerable autonomy of educational institutions. The higher the level of the institution, the more autonomy. Such autonomy implies not only self-management, but also the right to maximum decentralization. The latter concerns both territorial communities and local educational administrations, which can conduct project, pilot, contractual, investment and other aspects of inclusive activities among themselves or externally. The dominant factor of administrative equalization is the equality of representatives of the government and representatives of the inclusive process at the level of communities (Mattson & Hansen, 2009).

But this formally prescriptive approach is offset by a wide network of non-governmental organizations that balance the formally centrist modeling with an inclusive process. For example, in Finland and Sweden, intermediate councils are formed that represent delegates from state and public structures related to the inclusive process (Davidenko, 2017, p. 124). For example, in Spain, there is a tradition of concluding multi-year contracts

between institutions of various professional levels: employment agencies, government organizations, volunteer associations, etc.

Perhaps, a transitional format of inclusion management alignment would be suitable for Ukraine. For example, such as in Poland, which also has a negative experience of staying in a socialist camp. An extensive network of local institutions (provinces or poviats) has been created there, which coordinate cooperation according to a principle similar to Spain, but have the right to monitor and certify inclusion institutions.

As for Ukrainian realities, there have been attempts to implement its inclusion on the bottom-up principle for almost 10 years at the level of individual educational institutions. On the one hand, Ukrainians do not have many years of experience of inclusion, free from socialist or totalitarian pressure; on the other hand, Ukraine has a chance to use the mistakes and gains of other European states and go through the forms of forming an inclusion administration at an accelerated pace. We studied the process and accumulated experience of implementing inclusion in a number of higher education institutions of Ukraine, indicated in the introduction, and noticed the heterogeneity of the process and different successes. As a rule, the managerial initiative in a specific institution is implemented only in certain areas: involved projects, conducting scientific conferences, ensuring access and universal design (Martynchuk et al., 2021, p. 167).

The list of limitations, risks and difficulties of neurodevelopment, including in inclusive practice, is long. One of the problems is the destruction or blockade of the educational aspects of educational interaction: excessive interaction with neurotechnologies leads to the degradation of reflexive-empathetic elements and increased aggression and violence in relations with other people and with oneself. Therefore, education using neurotechnologies requires high application of their culture, based on the prohibition of authenticity, rights and responsibilities of a person as a subject of culture, a member of society. The culture of neuroeducation includes the interaction of culture and the use of neurotechnology in education. Now, inspired by the illusions and simulations of mass culture, many students and teachers consider themselves competent in neurotechnologies and their consequences, on the spot they have no more or less serious ideas about the essence of what happens to a person who is subjected to "chipization" or is included in a neural network and especially the processes and effects that occur when a person ceases to live as part of a natural, natural system, and completely transitions into a technical, artificial system.

However, we can say that the International University of Human Development named "Ukraine" is in the lead in terms of the number of indicators of autonomous effective administration (Collins & Rourke, 2003). This institution managed to create a number of branches, and a motivated team (although it does not have significant financial resources) is already traditionally a leader in the management of inclusion in the following areas: educational innovations, universal design, conducting scientific and practical seminars (Montessori, 1955).

The "top-down" administrative scheme is also supported with the help of Internet platforms and the initiative of student volunteers, who help to solve minor problems on the ground here and now. Equalization of inclusive management is carried out through the interaction of student councils, institution administration and the trade union system. First, a consensus was reached on the creation of a package of services and external extracurricular connections.

Conclusion

If we turn to the inclusive discussions of the countries of Western Europe in recent years, we will see different and common problems with Ukraine. The common ones include international perspectives of inclusion, its need for the coexistence of special and inclusive education, problems of promotion of inclusion and soft management of it, improvement of inclusion practice, replacement of direct administration with planned behavior, etc. An important theoretical argument for the linearity and behavioral nature of inclusion is that this issue has deep theoretical traditions. Since the beginning of the 2000s, and especially in the last two or three years, the planned behavior of the subjects of the educational process has been practiced all over the world in a full-time or project (pilot) mode as an optimal way of managing inclusion within the framework of its general administration from "top-down". This approach is justified by the fact that the organizers of the inclusive educational process are limited only by the principles of implementation of inclusion, and in tactical actions and specific situations they have the opportunity to implement their own educational profile, under the conditions of expediency, to express subjective intentions, beliefs, techniques and manner of behavior.

Over the past ten years, Ukrainians themselves have recognized that the biggest problems in inclusive education in Ukraine are organizational and managerial. In general, inclusive education, administration and management in Ukraine, in addition to political and traditional factors, is determined by the following realities: mainly limited funding, fragmented implementation

of European experience and universal access, and often predetermined specialization of the educational institution according to medical indicators (for example, only for the hearing impaired and visually impaired, only for people with a musculoskeletal disorder). These factors prevent not only equal management, but also the implementation of full inclusion in general. Our analysis of the content and procedural part of the management of the inclusive process in domestic institutions allows us to predict the directions of the main reforms. For example, the Ukrainian inclusive system needs to go beyond the framework of pedagogical innovations, because inclusion is not an innovation, but a natural and permanent process for society. Secondly, it is not the pedagogical, but the resource sphere that needs the most active administration. It would also be useful to adopt the Law of Ukraine on Inclusion, which would outline cross-vertical-horizontal principles of inclusion management. Such a model (the presence of a power vertical and the development of connections and self-initiative on the ground), in our opinion, is the most natural for the Ukrainian consciousness. This consciousness almost equally gravitates towards individualism and the habit of receiving correction of professional activity from above. Undoubtedly, the formation of management of inclusive education in Ukraine requires a synergistic approach, which may not be the best, but currently the most effective components of the general model.

Such a transition unusually means that the person himself and his life acquire artificial features or character. In connection with these initial and main tasks of neuropedagogy, there are tasks related to neurodigital culture: its formation, implementation, correction of errors and illusions that are brought to modern inclusive and general education due to increased opportunities and reduced digital limitations. including neurotechnological ones logium

Research limitations. Since the research has a generalized theoretical and recommendatory nature, its subject needs empirical research and confirmations / refutations of the provided recommendations and predictions.

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AUTHOR 3 studied the real achievements and problems of inclusion management in Ukraine, and AUTHOR 4 was engaged in modeling work, as based on the analyzed data, he composed recommendations and forecasts for the main tasks of the article. Special gratitude to AUTHOR 5, who was able to verify the received collective data within the framework of one article.

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