The problem of management and implementation of innovative models of network interaction in inclusive education of persons with disabilities

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Abstract—The authors raised the problem of accessibility of quality education of students with disabilities. The model of organization and management of network interaction is presented. The need to build management, cooperation and network interaction of educational organizations of all levels is explained by the high demand for the efforts of leading specialists, scientists, methodologists and practitioners in order to improve the quality and accessibility of General education for people with special educational needs. The model of network interaction in inclusive education contributes to: activation of participation of educational organizations in solving specific educational problems of teaching children with disabilities inclusive. It is increasing the efficiency of the use of methodological resources. The model of network interaction in inclusive education expands opportunities for training, pedagogical skills and psychological and pedagogical competence of teaching staff. It is improving management of educational processes and organizations, raising the level of social and human capital.

Keywords—integration, inclusive education, network interaction, disabilities, management, social capital, human capital.

I. INTRODUCTION

Integration of people with HIA into society, into education, has become significant throughout the world, and in Russia, unfortunately, this process is not at an adequate level from the innovative positions. This is due to a number of contradictions:

- between the declarations of the importance of human and social capital and the organization of management of communities and educational organizations in the direction of increasing these capitals and the commodification of life and education, the emasculation and desacralization of relations between people in general, and not only between people with and without disabilities;
- between the recognition of a significant part of the progressive community of the urgency of the problem of social, psychological and pedagogical adaptation of individuals, especially children with HIA in society and the unpreparedness of the society to accept this category of persons;
- between the growing number of people with HIA and low awareness of the society about their educational and vital needs, as well as the lack of an adequate environment for their successful socialization, education;
- between the needs of persons with HIA in educational services and the lack of readiness of the educational environment of the mass school and educators engaged in the educational process to provide such services;
- between the need of children and adult with HIA in adequate psychological and pedagogical support and inadequate development of methods of social and pedagogical support for this category of persons;
- between the need of children with HIA in the social and pedagogical support and incompetence of a significant part of modern teachers and parents in its organization.

However, recently in the inclusive education there are tendencies of the innovative direction related to the development of information technologies, starting at all levels, stages of training specialists for such activities, and for training people with disabilities. The use of these technologies is one of the ways to solve the problem of public and state recognition and confirmation, as well as the creation and realization of actions and programs that reflect these capitals.
II. Review

The methodological basis of the project consists of Russian scientific ideas and regulations management of education and pedagogical systems (M.V. Artyukhov, A.M. Moiseev, T.G. Novikova, M.M. Potashnik, K.M. Ushakov, etc.), the ideas of networks and network interaction (T.V. Abankina, A.I. Adamsky, I.M. Remarenko, V.I. Slobodchikov and others), fundamentals of the theory of modeling (V.G. Afanasyev, P.K. Anokhin, B.S. Gershunshkiy, A.D. Dakhin et al.), ideas of the scenario approach (T.V. Laeva, S.A. Popov, I.M. Remorenko, etc.). Western science and practice of inclusive education proceeds primarily from the system-modification reflection of inclusive learning. Peterson, S. Peters, T. Loreman, T. Smith and F. Armstrong present inclusive education along the lines of combinatorial complementarity and personalized, environmental, and other determinants of incorporating an atypical child or adult into common academic and social activities with peers. According to these researchers, for the maximum possible disclosure inherent in each person immanent potential for learning and socialization requires full adherence to the principle of multi-level modification of all key dispositions that directly or indirectly affect the content of inclusive teaching, allowing all students to demonstrate their relevant level of success [22; 23, p. 89; 24, p. 268].

The manager needs to identify the points of bifurcation in the development systems and provide timely assistance, attach this help synergistic nature. The management of support for inclusive practices is understood by us as a holistic process for identifying factors (controlled and uncontrolled) that impede the development or deform the work of inclusive processes in mass practice. This process include a set of measures to assist educational institutions, managers, teachers in overcoming professional, personal and organizational difficulties in the formation and development of inclusive practices. To the basic principles of building a new type of social partnership in management: inclusive complexes (network) experts include: humanism and child-centeredness; culture and openness; continuity of tradition and innovation; consistency and complexity; competence and science; optimism and long-term focus; variability and mobility; tolerance and consistency; Technology and efficiency; focusing on preventive and preventive measures, etc. Here we use productively a scenario approach to managing the support of inclusive practices based on network logic and enhancing its quality-forming characteristics by identifying controlled and uncontrollable factors, describing existing situations and possible scenarios for their further development, developing management strategies inclusive processes, building a scenario matrix. In addition, given the joint nature of management, it can be stated that the main his style and technology will be participatory management. Participatory management is based on the inclusion of performers in the processes of developing, making or implementing management decisions. The most important success factor of the implementation of the participatory style are the motives and value orientations of subjects of co-management.

International experience offers models of vocational education for people with disabilities, both in an inclusive (or integrated) form, and in specialized centers provided with special equipment, training technologies and conditions for people with disabilities. Main components of the readiness to implement inclusive education in primary, secondary and high school are the availability of resources necessary to ensure equal access to education for people with disabilities and people with disabilities, the training of specialists who can effectively implement inclusive education, taking into account the diverse needs of students, a clear definition of the result of inclusive education.

Both in Russia and in other countries, practitioners and theorists point out the importance of a complex merging of external and internal conditions in creating equal starting opportunities for all children in a class / group.

In a direct correlation with this interpretation is also a teleological productive understanding of inclusive education. According to him, all students, being in the general class, are influenced by a combination of factors that are diverse in etiology. These factors simultaneously serve as the basic products of the functioning of the system of training and education of each child. A. Jordan, K. Amaladoss, L. Archer, D. McIntyre, J. Porter indicate the presence of a directly proportional correlation between the direction, content, intensity of the impact of the spectrum of inclusion factors and learning outcomes. They also point out the direct connection between the factors of inclusion and the measures of involvement of children or adults, which differ from the majority of their peers on any basis, in a holistic educational team with its extensive network of social interactions and transactions [24]. The organization of inclusive practice is a creative process. In this process, everyone who implements it will have the opportunity to contribute. Already in the most inclusive approach, there is a need to change the educational situation, to create new forms and ways of organizing the educational process, taking into account the individual differences between children and adults. Therefore, the system of organizing inclusive practices must be flexible, able to include the changes necessary for maintaining the system itself. To manage inclusive processes, it is necessary to introduce command forms of work, project forms of organizing activities, diagnosing and monitoring inclusive processes, forms for coordinating the interests of different participants in the educational process (students, parents, teachers, administrations). Teamwork of employees is one of the important principles of organizing an inclusive process. The management team is a group of specialists united by an understanding of the prospects for the development of an educational institution and the ways to achieve it, pursuing a common policy for achieving the goals set by the team. The functioning and development of an inclusive children's educational institution depends on the exchange of information and the ability of people to jointly solve problems and tasks.

Teamwork contributes to more successful work of an educational institution; rapid adaptation of the educational system to changes in the external environment, rapid response to changes in the educational request; modernization of the organizational management system, when the transition from the functional-linear organizational structure to the matrix
structure, which combines vertical and horizontal management systems is carried out. Modern inclusive educational practice is still quite limited, largely experimental and extremely unstable, so it needs organizational, material, financial, economic, methodological support, in the organization of which the role of municipal systems is important formation and creation of network complexes of work. Many problems associated with the lack of management mechanism that promotes the promotion of inclusive processes at the regional and federal levels.

Inclusive education is the process of joint education and training of children and adults with disabilities and children and adults who do not have such limited. In the scientific space, only the institutionalization of the term "inclusive education" begins. Active use in the Russian scientific and practical space of this concept occurs only at the end of the XX century and the beginning of the XXI century. It is no coincidence that the introduction of the concept of inclusive education by the Salamanca Declaration of Persons with Special Needs (1994) and the adoption of the UNESCO Declaration on Cultural Diversity (2001) are close in time. Both documents express not only the recognition of the heterogeneity of society and its culture, but and changing the attitude in society towards this diversity. These declarations are an awareness of theirs value, value of the human and social capitals, an awareness of the value of differences between people.

Inclusion in the modern world acts as the leading social idea of Western countries, which is based on the struggle to eradicate discrimination based on individual differences. The human community is viewed in all its diversity, suggesting the common existence of ordinary people and people with special needs.

In modern scientific literature and periodicals devoted to the education of people with special needs, the concept of "inclusion" gradually began to displace the previously used term "integration", claiming a more accurate semantic expression of the essence of understanding the practical realization of the rights of people with special needs [7, 12].

In the scientific space, the term "inclusion" in English means "inclusions". Inclusive or included education is a term used to describe the learning process of persons with disabilities, and as a result, with special educational needs in general education institutions [3]. It is based on an ideology that ensures equal treatment of all people, but, nevertheless, it provides for the adaptation of the environment and creation of compensatory conditions. Inclusive education is a new model of education management as a cultural blessing and the basis of cultural development and reproduction, focusing on the values of the human and social capitals, as opposed to the model of modified education as a service (trade educational and pseudo-educational services).

Inclusive education is a term used to describe the process of teaching children and adults with disabilities, and as a result, with special educational needs in general (mass) schools [15]. The inclusive education should represent a balance between whether a child or adult can master a general program if there are additional conditions and an individual program, and the importance of its social integration.

Scientists gives the following definition of "inclusive education," which he understands as "a socio-educational phenomenon consisting in building an educational process in which a child or adult with disabilities learns along with healthy peers and receives specific pedagogical support and correctional assistance related to the satisfaction of his special educational needs [6].

The idea of implementing inclusive education suggests that the diversity of needs of students with disabilities should correspond to the continuum of services, including the educational environment most favorable for them. All children and adults should be included from the outset in the educational and social life of the school at the place of residence; the task of an inclusive school is to build a system that meets the needs of everyone. In inclusive schools, all children and adults, not only with disabilities, are provided with support that allows them to achieve success, feel security, the value of co-stay in the team [16].

The network form of implementing educational programs (hereinafter referred to as the "network form") provides an opportunity for the learners to learn the educational program with the use of resources of several organizations that carry out educational activities, including foreign ones, and also, if necessary, using the resources of other organizations. In the implementation of educational programs using a network form, along with educational organizations engaged in educational activities, scientific organizations, medical organizations, cultural organizations, physical culture and sports and other organizations that have the resources necessary to carry out educational training, conduct training and production practices and exercise other kinds of educational activity, provided by the corresponding educational program. Network interaction of educational institutions implies a special social partnership, which implies bilateral benefits. Informal and formal contacts arise between all participants in this interaction. Main problems of this interaction is the management, aimed to organizational integration and personal and social development of the all parts of inclusive network system.

In pedagogical practice, such concepts as partnership, network are often encountered. The network is a collection of institutions. This is a mechanism that has certain parameters, such as: unity of purpose; certain resources to achieve them; total control center. The peculiarities of creating an innovative model of network interaction in education depend on what resources will be exchanged.

The main task of a full-fledged processes and results of the management of the network inclusive system in education and other spheres is to achieve the originally set goal of the social and human capital development. Depending on which particular problems of network interaction in education are chosen as the main ones, certain types of educational organizations are connected to the system being created. As the main governing body is mainly the management of the district, district or city. The main problems of networking in education are related to the substantial territorial remoteness of different educational organizations. To overcome these problems, computer technology is used. Particular attention is
paid to working with children who have special educational needs. Not all schoolchildren, according to medical indications, can attend school and for them it is necessary to create conditions for obtaining education. The Ministry of Education of the Russian Federation created a special project. It implies networking in inclusive education. Teachers communicate with their wards through the latest computer technologies and programs. Before the teacher is allowed to work with a sick child or adult, he undergoes special course preparation. Such courses are aimed at overcoming psychological problems related to establishing contact with a sick learner. A special department for inclusive (distance) education carries out coordination of relationships between pupils, parents, teachers, educational institutions. Schools give the specialists of the network interaction department information about the number of children or adults who need the special educational needs, indicate the recommendations of pediatricians on the organization of the educational process. The received information is studied in the coordination center, the information received is entered into a special database. At the next stage, a mentor is selected for each specific child. At the third stage, the selection of the educational program takes place, its approval by the focal point. Such networking in education is a set of measures aimed at conducting distance lessons with schoolchildren or students who have health restrictions. The Coordination Center creates a network schedule in which the time of the lesson, the working teacher, is indicated for each child or adult. This work also involves serious periodic reporting. All reporting materials are sent to the coordination center, then duplicated in the educational institution in which the child or adult is listed. The law on education, on networking, regulates the relationship between the distance tutor, the parents of the student, representatives of the Ministries of Education. Network interaction of educational institutions allows you to combine the efforts of various clubs, schools, sections, rehabilitation centers aimed at developing a harmoniously developed personality of the child or adult. The network of educational organizations is a multifunctional system that can provide a wide range of quality educational services based on the network interaction of organizations. Networking - the use of resources of several educational and other organizations that provide an opportunity for learners to master educational programs of various levels and focus. Models of resource support is parity cooperation of educational organizations (distribution educational resources, "temporary links"). This model contain the outsourcing (transfer of functions for psychological and pedagogical support of children and adults with HIA, implementation of adapted programs and supplementary education programs, methodological support of teachers of the educational organization). In this model also include "cluster network" (grouping of a network of educational organizations around one powerful educational organization, on the basis of which it is possible to implement scientific and methodological support of all participants in inclusive education - leaders, teachers and special sheets psychological and educational support).

The system of inclusive education includes educational institutions of secondary, professional and higher education. Its goal is to create a barrier-free environment in the training and vocational training of people with disabilities. This requires a set of measures that involves both the technical equipping of educational institutions and the development of special training courses for teachers and other students aimed at their work and developing interaction with people with disabilities, developing tolerance and changing attitudes. In addition, special programs are needed to facilitate the adaptation of children with disabilities in a general educational institution [1, p. 333]. In the context of the stated problem, the concept of inclusive education requires fundamental changes in the system of not only the secondary (as a "school for all"), but also professional and additional education (as "education for all"). Scientists consider the very system of inclusive education as an effective mechanism for the development of an inclusive society, i.e. developing a system of inclusive education. Thereby we contribute to the development of an inclusive society - a society for all, a society for everyone. In their opinion, this is the key meaning of inclusive education. Inclusive education is an education that allows everyone to be involved in the overall process of education and upbringing (development and socialization), in spite of the available physical, intellectual, social, emotional, linguistic or other characteristics, which then allows an adult to become an equal member of society, reduces the risks of its segregation and isolation. Together growing up, children learn to take their own characteristics and take into account the characteristics of other people. It is based on an ideology that ensures equal treatment of all people, but, nevertheless, it provides for the adaptation of the environment and creation of compensatory conditions [2]. For us, the idea of continuity in inclusive education, from preschool to high school, is valuable. Proceeding from this, a person with special needs is constantly in the system of social relations and connections, which, as he socializes, will expand and deepen. The system of inclusive education includes educational institutions of secondary, professional and higher education. Its goal is to create a barrier-free environment in the training and vocational training of people with disabilities. The set of measures implies both the technical equipment of educational institutions and the development of special training courses for teachers and other students aimed at developing their interaction with people with disabilities [3; 13; 14]. In addition, special programs are needed to facilitate the adaptation of children with disabilities in a general education institution. It should be noted that at the present stage of the development of Russian society the concept of "inclusive education" is legislated as providing for all trainees equal access to education, taking into account the diversity of their special educational needs and individual opportunities. Network Interaction in the inclusive education of children with disabilities (HIA), a new phenomenon is the joint activity of several organizations (general education organizations, special (correctional) educational organizations, universities, social rehabilitation centers, consulting and diagnostic centers, medical organizations, etc.), implemented for the purpose of effective education, upbringing, socialization and rehabilitation, on the basis of taking into
account all special educational needs of children with disabilities (EH). Innovative educational institutions can not develop in a closed system (within the framework of one school, an educational institution). To implement a general educational strategy for the organization of an accessible and qualitative process of inclusive (inclusive) education of children and adults with HIA, it is necessary to interact with institutions and organizations that have the necessary information, educational, human resources, methodological resources. Education and society need to create new models of educational systems that take into account all the features, including regional ones [5; 9; 10; 11; 13].

III. RESULTS

If in organizing the education of children and adults with HIA, and often, with intellectual disabilities, according to the adapted educational program, the network interaction of educational and other organizations is a joint activity that provides an opportunity for learners to master an educational program of a certain level and focus using the resources of these organizations.

The purpose of our study was theoretical and methodological basis and experimental verification of an innovative model of inclusive education of children and adults with disabilities in a single information and educational space to correct the physical, psycho-emotional state.

The main objective of the research is the theoretical and methodological substantiation, development of an innovative model of network interaction in the inclusive education of children and adults with disabilities in a single information and educational space of the region and its central and remote territories. Our aim is the determining the existing potential of educational institutions, teachers, psychologists, high results in professional activities, to provide targeted methodological, tutoring support for students, pedagogical and managerial personnel. We also need the study of theoretical and methodological principles of inclusive education.

Children and adults with HIA from various institutions of Russia, students of inclusive education system, pre-school workers, teachers, teachers, employees, specialists, students, graduate students took part in the experiment. The experiment contained elements of a model of network management and interaction in inclusive education of institutions of different levels, including those training specialists for working with such children. We summed up the results of the experimental study in conclusions.

Current trends in education aimed at introducing integration processes that require restructuring of the school’s cultural and educational space, ensuring the right each child, young man and adult for a full-fledged education, regardless of their adaptive capabilities, personal psychophysical features of development, nationality, etc.

The tasks of modern inclusive education are as follows:

- creating an adaptive educational environment that satisfies both general and special educational needs child or adult with HIA;
- provision of an individual psychological, pedagogical and socio-medical approach to a child or a child with a disabilities with regard to the specifics and the severity of developmental disorders, social experience, individual and family resources;
- the construction of training in a special way - with the allocation of special tasks, sections of the content of training, as well as methods, techniques and means of achieving those educational tasks that in terms of the norm are achieved by traditional methods;
- coordination and interaction of specialists of different profiles and parents involved in the process of education;
- development of specialized software and methodological complexes for teaching children and adults with disabilities;
- providing psychological, pedagogical and socio-medical support for the process of integrating persons with HIA into the educational and social environment, assisting the child / adult and his family, help teachers and other professionals working with them;
- integration of the process of learning and learning skills and process of development of social experience, life competencies;
- enhancing the professional competence of teachers, managers, psychiatrists, doctors and social workers in matters of training and development, providing other assistance to children and adults with disabilities of various characteristics and severity;
- formation of tolerant perceptions and attitudes of participants educational process to various developmental disorders and children and adults with disabilities.

Efficiency of development management of an inclusive educational institution includes:

- the development of all components of the adaptive educational environment in an inclusive educational institution that determine the inclusion culture - the inclusion of every child, adolescent or adult in accordance with social norms and the requirements of the state standard of education;
- creating the necessary social and pedagogical conditions for managing the development of an adaptive educational environment in an inclusive educational institution;
- purposeful search for the internal resources of the educational institution, stimulating its development taking into account the needs of an adaptive and developing educational environment;
- prompt response to the information of diverse channels of effective feedback aimed at removing obstacles hindering the successful adaptation of each student in the educational space of a school or university.

The adaptive and developing environment of an educational inclusive institution as part of a network complex is a complex system for including every child, adolescent or adult in school / university space constituting an interconnected set purposefully organized managed spaces (components).

The problems and risks of the management of an educational inclusive institution in the system of network interaction of institutions of an exclusive purpose are:

1. difficulties of interaction between all participants of the inclusive educational process, especially at the initial stage of the implementation of the new approach.
2. administrative and professional unwillingness of
employees of educational institutions, the school community to adopt inclusive practices.

3. the lack of variation in educational standards, which impedes the implementation of an inclusive educational process for children who are “outside the standard”.

4. the lack of methodological support for the implementation of an inclusive educational process and psycho-pedagogical support.

5. insufficiency of financial, legal mechanisms for the implementation of inclusive practices, undeveloped political strategies and mechanisms for the development of inclusion in connection with the ideology of commodification, consumerism and social anomic of citizens who are in a state of permanent social fatigue, inactivity and refusal to accept and accept the “directives” of people who have become discredited as immoral corrupt and violent governing structures and organizations/

IV. CONCLUSIONS

Inclusive education is a new model of education management as a cultural blessing and the basis of cultural development and reproduction, focusing on the values of the human and social capital, as opposed to the model of modified education as a service (trade educational and pseudo-educational services). The results of the network interaction of educational organizations involved in the implementation of inclusive education are formulated as follows:

- improving the management of educational organizations in the direction of preserving and accumulating the human and social capital of an organization, a network that includes the organization, the community and the country as a whole;
- activation of participation of educational institutions in solving specific educational problems of teaching children and adults with HIA inclusive;
- increasing the effectiveness of the use of methodological resources;
- expansion of opportunities for professional development, pedagogical skills and psychological and pedagogical competence of teaching staff;
- improving the quality of the educational process in organizations of inclusive education of children and adults with HIA and disability.

The main results of our experimental work, the testing of the model of network interaction in the inclusive education of children and adults with disabilities can be considered:

- improvement of professional skill, managerial, psychological and pedagogical competence of the managers, pedagogical workers participating in network interaction;
- normative-right, organizational, informational and scientific-methodical support for the implementation of inclusive education of children with HIA (orders, information and instructive letters, methodological recommendations, methodological developments and programs);
- In the process of experimental work it was found out that in the inclusive education of children and adults with HIA it is necessary to use the method of network interaction. It is necessary both for raising the professional qualification of specialists, for informing the pedagogical community and the population, and for achieving the main goal - to receive education from children and adults with HIA, subject to health preservation.

The experimental approbation of the innovative model of network interaction in the inclusive education of children and adults with HIA proved its effectiveness, revealed the opportunities for improving the quality of education, both for future specialists and students. A key element of a successful inclusive model is the training of personnel (managers, educators, psychologists, doctors, etc.) [17; 18; 19; 20; 21].

The model of network interaction in inclusive education contributes to: activation of participation of educational organizations in solving specific educational problems of teaching children with disabilities inclusive. It is increasing the efficiency of the use of methodological resources. The model of network interaction in inclusive education expanding opportunities for training, pedagogical skills and psychological and pedagogical competence of teaching staff. It is improving management of educational processes and organizations, raising the level of social and human capital.

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