

Inclusive Learning Environment in System of Secondary and Higher Professional Education

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Abstract. One of the topical fields of modern education is implementation of an inclusive approach which makes it possible to get equal rights and access to education for students without regard for their health condition. The purpose of the article is to carry out the analysis of the inclusive components of learning environment in educational institutions and of higher and secondary professional education (using the city of Volgograd and the Volgograd Region as an example). As a part of the study, an integrated model for inclusive educational environment, which contains technology (psycho-didactic), space-object, social and process components, was developed. Relying on this model, analysis and assessment of the state of the learning environment in educational institutions and of higher and secondary professional education of Volgograd and the Volgograd Region were made. The results showed that each educational institution has its own specific way of organizing inclusive environment; there is no common standard for its implementation. The research possesses both theoretical significance and applied functions so far as with the help of this model it is possible to assess the state of learning environment and building a unified educational system on the basis of all its components.

1 Introduction

In the process of investigating the essence, the specific character and the potential of the inclusive education, we principally based ourselves upon the most important legal acts, declarations and conventions concluded under the United Nations (UN) and the United Nations Educational, Scientific and Cultural Organization (UNESCO) auspices on a global scale and in particular on the Constitution of the Russian Federation, federal acts “On education in the Russian Federation” and “On the social protection of disabled people in the Russian Federation,” especially on art.48, art.79 of the federal act “On education in the Russian Federation” [1]. These documents oblige educational institutions and organizations to create conditions and adaptive (specialized) education programmes necessary for the development and becoming of people with health limitations. Unfortunately, there is no clear overview or precise understanding of how to build up inclusive educational environment in university space and, in particular, how to fulfil education programmes of this profile within the frames of principal educational programmes though. In these circumstances, the question of components of the inclusive educational environment remains unanswered.

Currently, we have obtained a wide flow of information represented by training programmes for academic teaching staff, articles and methodological recommendations proposed by different researchers,

practical experts and educational institutions. However, a multifaceted and consistent approach to this matter has not so far been worked out.

This article presents an attempt to give a conceptual description of the components of inclusive educational environment and analyze the experience available in higher and secondary education of Volgograd and the Volgograd Region. Hence, the purpose of that article is to carry out the analysis of the contents of inclusive components of learning environment in educational institutions and of higher and secondary professional education of Volgograd and the Volgograd Region. The increased focus on this region stems from the fact that the Volgograd Region is a beneficiary of the Russian Federation government-sponsored scheme “Accessibility Environment” for 2010-2020. Also, according to the Federal State Statistics Service of January 1, 2017, quite a large number of people with disability (195 per 1 000 people) live on the territory of the Volgograd Region [2].

2 Literature review

While defining an inclusive approach in the context of educational environment, we stick to the point of view of E. V. Ivanov who depicts it as “...the demand of the society having reached a certain level of economic, cultural and legal development. At this level, based on the principles of humanism and tolerance, there is rethinking of the attitude towards the heterogeneous population groups along with the recognition of the

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equality of their rights and also the awareness of responsibility to place them on an equal footing with other individuals, obtaining professional education included” [3].

The notion “educational environment” and its derivatives and components have been worked out for the last decades by both Russian (S. K. Bondareva, V. V. Rubtsov, V. I. Slobodchikova, N. B. Krylova, S. D. Deryabo, M. M. Knyazeva, O. S. Gazman, V. A. Yasvin, S. V. Tarasov and others) and foreign authors (C. McLaughlin, J. Gibson, K. Reid, D. Hopkins, M. A. Mastropieri, T. E. Scruggs, M. L. Hardman, M. W. Egan, C.J. Drew, A. Gajewski, S. Tetler, C.G. Pastor, D. Randoll). At the macro-level, educational environment is considered as a part of socio-cultural setting, and at the micro-level it is the academic setting, i. e. functioning of a particular educational institution. The research conducted by foreign counterparts confirms this statement. Thus, analysis of foreign experience showed that several levels of successful implementation of inclusive education can be identified: social (state support at the legislative level: welfare payments, adaptive educational standards); administrative (support of management of educational institutions: building up of specialized educational plans, working out new evaluation systems); individual (opportunity for students to plan their activities, specialized abilities and skills of both teachers and students); psychological (eliminating negative stereotypes concerning health limitations of some people in comparison with others, psychological compatibility of a teacher and his assistant or a tutor, psychological preparedness to provide effective communication and interaction within the system “teacher – student – class/group”).

Individual and psychological levels of implementation of inclusion are in focus of research work of many American scientists. For instance, empirical study conducted by M. A. Mastropieri, T. E. Scruggs revealed the fact that the level of teachers’ readiness to implement joined learning does not meet the requirements of this education system (in most cases they lack efficiency in solving conflicts, knowledge of characteristics of people with disability, self-adjustment skills). The results of this research reaffirmed the need to establish special conditions for implementing inclusive programmes [4].

Foreign scientists are also concerned about the issues of adherence to the principles of professional ethics and morals in carrying out inclusive education. When constructing an effective system of inclusive education many of them point out that it is necessary to develop international relations in this field, participation of state authorities in regulating education process. The focus of attention also is the problem of marginality of disabled children. This phenomenon in educational institutions ranks equally with racial, social and other prejudices of that kind. In this regard, there is a need to learn the concepts of “norm” and “ideal pupil”. For example, as was shown by the analysis carried out by S. Marginson social inequalities in families with disabled children affect their chances to get a good education [5].

The investigations aimed at the search for the unity of methodological and conceptual approaches to the inclusion are of utmost interest for us. One of the obstacles in realizing the idea of equality and accessibility of education for all might be considered plurality of meaning of the term “inclusive”. K. Göransson and C. Nilholm revealed four various ways to interpret the notion of inclusive education: a) integration of disabled children into regular classes for collaborate education; b) insertion of children with disabilities into general school system to satisfy social and training needs of all students; c) inclusion of students with disabilities into the process of learning for the purpose of creating communities [6].

It would be important to undertake the analysis of approaches and views on inclusion in Russia as well as the way students are integrated into the multilevel education system. The process of education in high school has been a subject of research of Russian scientists for a long period of time. The problems of the inclusive education are also handled by Russian scientists from different scientific and operation areas (S. V. Alekhina, S. G. Andreevckikh, V. G. Borovik, A. S. Pugachev, L. E. Shevchuk, Y. V. Shumilovskaya, E. R. Yarskaya-Smirnova, E. V. Mikhailchi, N.V. Kryatova, E. A. Petryakova, A. I. Akhmetzyanova, T. V. Artemieva, A. T. Kurbanova, I.A. Nigmatullina, A.A. Tvardovskaya, A.T. Faizrakhmanova, O.V. Zinevich, V.V. Degtyaryova, T. N. Degtyaryova, K. M. Grabchuk, G. A. Reznik, M. A. Kurdova, etc.).

Current studies are devoted to various approaches to training: autonomously oriented, information and interdisciplinary [7].

3 Materials and methods

As a methodological basis for this study, there is the most complete and informative model for learning environment constructed with the involvement of the eco-psychological approach by Vitold Albertovich Yasvin, PhD in psychology. He defined its structure according to the principle of functional unity of human societies and ecology. Drawing on the key message of the conception of “ecological complex”, he points out the following components necessary for analyzing interaction of students and education actors: 1) social component of learning environment; 2) space-subject component of educational environment; 3) technology (psycho-didactic) component of educational environment. From his point of view, the quality of learning environment can be assessed by analyzing the quality of its components and links between them. Combination of all the components presented forms an “area of capacity-building” [8].

4 The results of the study

4.1. Model of inclusive educational environment

But in our opinion, there is one more inseparable fourth component – procedure component which describes specific character, roundaboutness, continuity of the education system (secondary education – vocational education – higher education). Then, the design of all the components of inclusive learning environment will look as follows (ref. fig. 1).

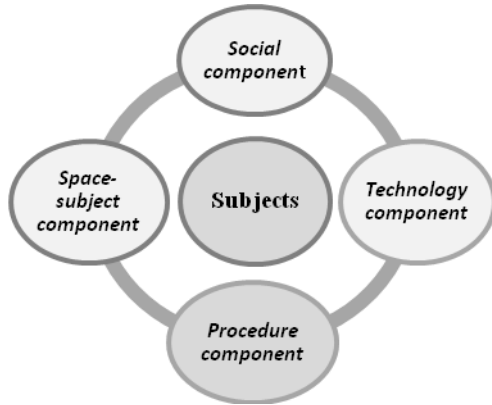


Fig. 1. Model of inclusive educational environment.

Technology (or psycho-didactic) component includes such characteristics as “activity-orientated structure of the schooling process, teaching style and nature of socio-psychological control, collaborative or competitive forms of education, training content (whether it is conventional, conservative or flexible) etc.” [9]. The key function of this component is to provide links between space-subject and social components of educational environment in the process of their interaction with educational actors. In the frame of inclusive education, the technology component can first be defined as availability in a higher educational institution of specialized educational programmes meeting the requirements and needs of students with disability and health limitations; staff capable of using methods of teaching disabled people; forms of education affordable for students with various types of disordered body functions.

According to V. A. Yasvin and G. A. Kovalev’s vision, the contents of **space-subject component** of inclusive educational environment is presented by architectural and design properties of a building of an educational institution [10]. Yet, it is important to note that it is not the presence of these characteristics that matters, but their utility, for example, possibility and scope of spatial movement of students inside the building. In inclusive education, this component is quite significant when it comes to the presence of accessible entrance to a building for students with locomotor disorders and also the existence of conditions ensuring students with eyesight disabilities to orient freely indoors, etc. In other words, space-subject component includes adequate equipping of a building with the facilities necessary for barrier-free access and free movement inside.

A social component of educational environment first of all characterizes peculiarities of interaction and communication of subjects involved in the educational

process. It is the context, “in which group needs are realized, interpersonal and group conflicts are initiated and solved” [11]. The significance of this component is revealed in the course of establishing conditions necessary for responding to the entire spectrum of social needs of the students.

Within the system of inclusive higher education, the social component reflects the level of acceptance of people with disability by the subjects of the education process, their involvement in the social system of a university, the degree of consciousness, satisfaction and effectiveness of collaboration in the course of obtaining higher education.

A procedure component of educational environment is responsible for the continuity of the educational process. A multi-level educational structure implies various grades of education. Cooperation between intuitions belonging to different grades would lead to a more effective implementation of the education process.

This component is highly significant for performing inclusion. The procedure constituent will make it possible to provide coordinated, targeted individual support for students with disability and health limitations over the entire learning process right up to the moment of employment. The integrative element contributing to realization of the contents of all components is the notion of “the subjects involved in educational environment (education actors).” This includes all those engaged in the process of education in one way or another. To perform inclusive education properly, a lot of different specialists apart from students themselves, teaching staff and PLO leaders must be employed in the process as well; among them are accompanying persons on the part of educational institutions – tutors, and also accompanying persons on the part of students with disability – their parents or guardians.

In this respect, it is principal to clear up the way components of inclusive learning environment in the structure of higher and vocational education in the region are implemented. It is crucial to find the answer to the question to what extent components of inclusive educational environment are present in universities and institutions of secondary vocational education of the Volgograd Region; whether inclusive educational environment has been established in the region; if the experience of certain educational institutions could be used as an effective model of implementation of Education Act.

At present, on the territory of the Volgograd Region, there are 69 vocational colleges which train workforce and mid-level professionals through the programmes of secondary vocational education. There are over 50 thousand students, among which there are 804 students with disability including those with locomotor disorders, disabilities of vision, hearing and various forms of mental underdevelopment.

In Volgograd, there are 23 higher educational institutions, which include non-state educational establishments and branches. “In 2001, 11 073 young people with disability and HIA studied in 299 higher educational institutions belonging to the RF Ministry of Education system. The number of students with

disability and health limitations is constantly growing: from 5.4 thousand people in 2002 to 14.5 thousand people in 2003; in 2016 their number was over 23,000 people” [12].

4.2. The analysis of inclusive educational environment in educational institutions

To carry out the analysis of inclusive educational environment in educational institutions of higher and secondary professional education, we used the model from fig. 1.

Technology (psychodidactic) component.

Specialized educational programmes for students with disability and HIA in higher educational institutions are not widely available. Learning materials or technical teaching aids adapted for various types of disease are either lacking or being developed. Nevertheless, in Volgograd State Social and Pedagogical University, for example, educational and training programmes are worked out at the “Centre for Ensuring Conditions for Education of People with disability and Health Limitations.” In Volgograd State University, a specialized classroom equipped with computer facilities, a Braille portable display and a video magnifier has been organized.

As for secondary vocational institutions, the technology component of educational environment is represented significantly broader. Thus, Volgograd Industrial College offers distance learning under 11 educational programmes. In accordance with the College Development Programme for 2017-2030, it is expected to focus on developing special training aids, using technical teaching aids as well as providing disabled students with assistant (helper) service. Adapted programmes for training students with disability and HIA in various occupations are available in Mikhailovsky Vocational and Pedagogical College named after V. V. Arnautov, Volgograd construction technical school, Zhirnovsky oil technical school, Volgograd technical school of railway transport and communications, Volgograd Technical College, Kamyshin Pedagogical College, Pallasov Agricultural Technical School, Volgograd College of Restaurant Service and Trade.

Mention can be also made of Volgograd professional technical school of human resources, which has been closely working with the children who have HIA. In it, a model of a basic vocational educational institution included into the regional structure of inclusive vocational training of disabled students is being developed. Moreover, this technical school takes part in the National Championship of Professional Excellence in the fame of International Abilimpics.

In Kamyshin Pedagogical College, training in certain disciplines is accessible to students with intellectual disabilities. For children with disorders of that kind there is also opportunity of being trained in other occupations: house painting (Pallasov Agricultural Technical School), computer systems and complexes (Volgograd Energy

College), tile lining (Zhirnovsky oil technical school), plastering (Volgograd construction technical school).

Students with hearing and eyesight disorders are educated in specialized programmes in Volgograd College of Restaurant Service and Trade and in Volgograd College of Management and New Technologies.

Realization of specialized programmes requires suitably qualified personnel. Teaching staff of most Volgograd universities receive advanced training not only in the specifics of work with disabled students, but also in developing adapted educational programmes for people with disability and HIA (e.g. in Volgograd Institute of Management – branch of Russian Academy of Science and Technology). Besides, a number of universities are training their graduates in disciplines which require particular attention to people with health limitations: “Speech and language pathology,” “Deaf education,” “Oligophrenopedagogics.”

Volgograd State Academy of Physical Culture set up a master’s degree programme in Physical Culture for Health-Disadvantaged Persons (Adaptive Physical Culture).

In many colleges and technical schools, there is also the need for highly qualified employees. Thus, in 2015-2016 teachers of Volgograd vocational technical school of human resources mastered additional training programmes which contain methods of education and socialization of students with health limitations. In the technical school of human resources educational process for students with deafness and defective hearing is accompanied by the experienced sign language interpreters.

In most universities, the content of technology component of inclusive educational environment is also presented by the sufficiency of computer-based information and educational system: computers with internet connection, digital libraries, information and educational resources of their own. In almost all higher educational institutions of the city, there is a special version of the official website adapted for visually impaired persons. It offers a possibility of launching online learning. For instance, Volgograd Institute of Culture and Art reports on the opportunity of doing curricular practical training online with the help of field instructors from university graduating chairs who hold webinars in fundamental issues of professional specialization. Experts of this educational institution “have prepared software support for methodological documents concerning practical training in disciplines offered by university,” including for students with sight and hearing disability.

In Volgograd universities, technology component of inclusive educational environment is also realized in accordance with the activities prescribed by the law. All universities stick to: fulfillment of certain arrangements for holding initial trials for applicants with disability and health limitations (opportunity to choose either oral or written form of examination, extending the duration of the exam, possibility to use technical aids necessary due to health disorders); providing an adequate opportunity to get education based on individual plans and

conducting PE lessons for students with disability and HIA in an adaptive form.

At the secondary vocational level, the technology component of inclusive educational environment is presented in different ways. Some of technical schools and colleges possess a great variety of technical aids and offer proper conditions for training students with health limitations (online courses, access to the Internet, specialized classroom facilities for students with hearing, visual and locomotor system impairments). Still, not all colleges have alternative versions of official websites and special conditions for holding initial tests, which includes limitations due to the medical status of students prescribed by educational standards.

Close examination reveals that the technology (psycho-didactic) component provides an important condition for getting inclusive education both in higher and in secondary vocational educational institutions. It also demonstrates preparedness of the regional authorities to establish inclusive learning environment in most educational institutions.

A space-subject component. Architectural peculiarities of a building are of utmost importance in the context of inclusive education and to a great extent shape the physical accessibility of educational environment for students with disability. As a rule, the majority of Volgograd universities are fitted with the minimum of aids required for barrier-free access to buildings. Thus, the building of VolSU is equipped with a wheelchair ramp, a lifting platform and appropriate sanitary facilities. The width of stairs, stairwells and doors ensures free movement of wheelchairs. In addition, there is signage in Braille.

In technical schools and colleges conducting education of disabled learners, accessible educational environment has been created (passages have been broadened; there are ramps and information plates for those hearing or visually impaired). In a number of secondary vocational educational institutions, these changes are planned and incorporated into development programmes. But there is the only evidence of implementing inclusive education in some secondary vocational institutions – information about improving accessibility of room on their official websites.

This component is often substituted for the concept of the entire inclusive education system. If university or college administrations are focused on modifying architectural space, it is, in our opinion, an indication of their unpreparedness to realize the federal law of the Russian Federation of 29.12.2012, № 273-FL

A social component. Promotion of inclusion is most effective if in universities there are appropriate services, which are responsible for implementing relevant projects and programmes. A vivid example of this is Volgograd State Agrarian University (VSAU) where “The Programme of Support for Disabled People and Persons with HIA” is being carried out. The programme is devoted to the issues of disabled students’ adaptation and building effective communication between teachers and students. In Volgograd State Technical University, a similar programme aimed at providing disabled students with relevant counseling support and instruction. In

VolSU, VASPC, VSAU students with disability are integrated into the social setting of the university with the help of tutors and volunteers. Furthermore, a number of similar projects are in the process of designing. Based at VASPC, “No Border” Scientific and Applied Centre of Adaptive Physical Education started its functioning in 2017.

The social component in secondary vocational educational institutions is presented by services of psychological and educational assistance, tutors (helpers) and volunteering centres aimed at adaptation of disabled students to the changed living conditions. Volgograd technical school of human resources, Volgograd technical school of railway transport and communications and Volgograd industrial technical school are implementing the social component of inclusive education most closely to its contents. Not only disabled students themselves, but also their legal representatives (parents and guardians) and students without health limitations are included into the information and adaptation programmes.

Analysis indicates that the **procedure component** in Volgograd universities and colleges either is not presented at all or is not common enough to examine its contents.

Consistency of education levels will make it possible for the education actors to be very clear about the prospects for various occupational activities, ways of receiving educational services, and also to look into the requirements of Educational Standard. Therefore, it would be possible to prepare psychologically those involved into the educational process, how to behave in social situations not experienced before by reducing the risks of disadaptation and fully realize constitutional rights to equality and affordable education for all members of society.

Since 2017, this component has been evolving under the project of Volgograd State University – “University District.” We assume that it will contain inclusion element as a strategically critical indicator of the level of education accessibility in the region. This project is meant to provide necessary continuity of education in the region, and also to replicate it in other subjects of the Russian Federation [13].

Discussion and conclusion

Today, there is the question of uniform requirements for the accessible environment in educational institutions, which would enable students with disability and HIA to see the prospects of their vocational training and development and also the opportunity for adaptation and personal fulfillment in modern society. The purpose of the research involved analyzing the contents of inclusive components of educational environment in institutions of higher and secondary vocational education in the Volgograd region.

The article proposes a complex model of building up inclusive environment containing four components: technology (psycho-didactic), space-subject, social and procedure. This model allows structuring the experience

of certain institutions concerning the experience in arranging and introducing inclusive approach into work practices of universities and secondary vocational institutions. Besides, it could serve as a means of assessing actual state of introducing accessible education. This all contributes to working out uniform principles of arranging inclusive education in reality in the whole country.

The present study examined the components of the complex model of inclusive education using the example of postsecondary institutions of the Volgograd Region. Analysis of the contents of inclusive educational environment indicated that every Volgograd university performs arranging space-subject, social and technology components in its own way. In the structure of secondary specialized education, contents of inclusive educational environment are not represented on a full scale. Some colleges and technical schools created a really affordable environment, others are in the process of developing it and the rest ones do not implement most of the components. Nevertheless, education standards of certain disciplines taught in secondary vocational schools make great demands on the state of health of potential students. For these colleges introduction of inclusive education presents great difficulties unless new programmes and disciplines are opened.

The collected data allow one to present methodological justification of realization of inclusive element under the Federal Act "On Education in THE Russian Federation", № 237-FZ, through the prism of the proposed model. At the same time, a single model of inclusive environment will make it possible to unite all educational institutions into the common education area. Also, the scientific importance of the research lies in widening and deepening the perspective on interdisciplinarity and complexity of arranging the educational system in accordance with inclusion at the current stage of the development of science and practice. To sum up, we see the prospects for further research on this topic in the following: 1) to conduct the analysis of all levels of the educational system bearing inclusion in mind: from preschool to higher education; 2) work out the complex model in detail; 3) to apply the complex model for the purpose of arranging and assessing common educational area in the context of inclusive environment.

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