Organization of Learning Process and Development of Programmes for Special Education Needs Students in Inclusive Education in Russia

Gulnara F. Biktagirova[a] and Alla L. Korotkova[b]

[a]Kazan (Volga region) Federal University, RUSSIA; [b]University of Management 'TISBI', RUSSIA.

ABSTRACT

The article deals with the timeliness and importance of the organization of the basic conditions for the organization of the learning process and the development of the special education needs of inclusive education programs in higher education in Russia. The article discusses the role of inclusive education, revealed the components of the educational environment for visually impaired students: special aspects of architectural mechanisms of environmental protection, the technical organization of the learning process for students with visual impairments. Disclosed the problem of adaptation of the educational program for students with disabilities, psychological support and psychological pedagogical support of students in difficulty learning and life situations. The article substantiates the need for the development of different forms of educational programs and adaptive educational modules (subjects) including higher education requires changes in the conditions of educational institutions and focus on the needs of each student.

Introduction

Urgency of the problem

The development of inclusive education is based on traditional and special education systems integrating them to the needs of persons with disabilities and impairment. As statistics shows, only about 4 percent of students from among persons with disabilities and impaired work capacity go to universities in Russia today. This means that the majority of young people with psychophysical peculiarities in development do not reach the higher education, and there is a need to create special conditions to engage them.

Theoretical and methodological basis

The problem of training students in inclusive education is an innovation in the education policy in Russia and a priority in many other countries.

It is significant that Europe and the United States have developed an effective system of support and maintenance of the learning process (e.g. for visually impaired students) — the system that favors the inclusive education and involves whole groups of professionals and a wide range of supporters including the student himself/herself, a teacher, a special education branch administrator, educational institution management, an eye care professional, an orientation and mobility specialist, a low vision specialist, a school advisor, a psychologist, etc.

Research objective

This allows defining the research problem: what are the basic conditions for organization of the training process and development of special education needs programmes for inclusive education in Russia's higher school.

The purpose of the research is to identify the conditions necessary to organize the learning and/or teaching process, and develop special educational needs programmes in inclusive education for visually impaired students.

Literature Review

Background context for inclusive education in Russia and abroad is addressed in the studies S.V. Alyohina (2015), N.S. Groznaya (2011), Yu.V. Melnik (2011) and others. Opportunities for development of the educational environment of Russia's and Belarus' educational institutions suitable for inclusive education were examined by G.F. Biktagirova & T.V. Lisovskaya (2014), G.F. Biktagirova & V.V. Hitryuk (2016), O.S. Gazman (1995), N.B. Krylova (2007), E.A. Martynova, D.F. Romanenkova & N.A. Romanovich (2015), A.V. Mudrik (2005), V.I. Slobodchikov & E.I. Isayev (2000) and others.

This problem is however new to higher education in Russia, so it is important to lay down the grounds of the learning process and the development of special (inclusive) learning / teaching programmes.

Methodological Framework

Conceptual framework of inclusive education environment fundamentally differs both from special education and mainstream education ones. This conceptual framework includes the following:

- Goals, functions and values of education (focusing on socialization, and social and adaptive functions of education); the value of each child's personality, his/her rights and place in the social community and educational environment, principles of inclusive education, inclusive policy and culture at school providing an opportunity to adapt to individual features and educational needs and etc.);
- Creation of educational (relational psychological, physical, learning / teaching, social) environment adequate to the features of each child);
- Content of professional activities of the teacher, his / her functions (techniques and practices considering the needs of each child in

group / class; communication and interaction arrangements within the group of children;

- Interaction with all participants supporting a child in the educational environment (education psychologist, resource teacher, social care teacher etc.);
- Role and position of children's parents, social partnership of all actors of inclusive educational environment etc.
- Today there is a wealth of experience in the field of special (inclusive) education in the world. This helped the English-speaking professionals develop strategies and give clear guidance on teaching the visually impaired students:
- For such students, the curriculum should be mapped annually to adhere to it in the learning process;
- Planning should be done in advance. Visually impaired students may feel the need for text and illustrations in large print, in audio, so you need to order training materials in advance;
- Provide training commented, especially effective in the case of missing visual information or instructions from the teacher;
- Educate such children standing in the immediate vicinity for a better listening experience;
- Let such students approach close to the board for the perception of visual information or for its copying if the degree of vision loss allows for;
- Allocate additional time to perform tasks, the number of tasks can be reduced, if necessary;
- Use tactile and other senses in learning, hands-on and life experience of students;
- Carefully organize the educational environment of visually impaired students: extra shelves, racks color, demarcated surface of the table;
- Demand the same discipline and obedience from visually impaired students as from healthy students;
- Resort to the help of a tutor or another student who voices the information aloud or to the recorded information on phonorecord in case of a large volume of text material;
- Encourage independent and autonomous learning activities of visually impaired students to avoid the formation of false dependence on others in cases where there is no direct need (Schwartz, 2009).

Using this wealth of experience and expertise and meeting modern demands set by Russia upon inclusive education, we have developed the following provisions.

Results

We agree that inclusive education qualitatively differs from the specialized and integrative education.

Students with the HIA from specialized schools are in "emasculated" environment minimally close to the real conditions of everyday life in society (nozocentrism in training and development). After finishing these schools, graduates find themselves in a deep "social pit" as they lack the essential thing in their development — the inclusion into the real, diverse range of social contacts which makes them "outsiders" in the public relations arena.

As a result of integrative education in an ordinary high school, students with the HIA have to adapt to the conditions of training and educational programmes focused on the statistically average rate (normocentrism in training and development). Graduates of such schools are non-competitive in the real world of adulthood compared with their conventionally healthy peers, in terms of obtaining the desired job, implementation of creative and professional goals.

The training process within the system of inclusive education is organized in such a way that all students, regardless of their physical, mental, intellectual, cultural, ethnic, linguistic, and other features are included into the mainstream education and are trained in the same groups with students without disabilities.

Creating opportunities in higher education to meet the educational needs of an individual becomes the basis for the construction of many education systems worldwide. However, there are groups of students whose educational needs are not only individual but also have special features.

Students whose special educational needs appear in the course of their learning process have difficulties to match their opportunities with common social expectations, the educational standards of success, communicative and social norms of behaviour established in the community. These student's special education needs require the school to provide additional or special materials, programs, or services. We have gained experience in the design of educational environment for visually impaired students in view of the problems that arise in the design of the organization of the learning process and the development of educational programmes.

Components of the educational environment for visually impaired students

There are the following specific components of the educational environment for students with visual disabilities:

Special aspects of architectural environment arrangements.

For students with vision problems one should take into account special aspects of structural organization of the environment inside the building and premises, technical equipment of athletic rooms, auditorium, facilities for recreation and other activities.

All important announcements regarding any changes in the learning/teaching process, and extracurricular life and leisure of students, should be duplicated in Braille inscriptions.

Thus, the specially organized architectural environment helps students with the HIA more actively focus on the faculty, be included into the learning / teaching process and extracurricular student life.

Technical organization of the learning process for students with visual disabilities.

The main difficulties with the assimilation of educational programmes at university are experienced by low vision and blind students. The residual vision of impaired users lets them visually get a general idea of computer programs, read enlarged text. But the visual work makes them get tired quickly, which leads to further deterioration of vision. Visual fatigue, in turn, causes a decrease in mental and physical performance capacity. In this connection, special

conditions are created for the visually impaired students to facilitate visual perception in the course of the learning process.

The most common solution used by low vision or blind students is Jaws for Windows. It helps them listen to text files, run applications, work with software systems, and browse the web for information.

Problem of educational programme adaptation for students with disabilities.

The teaching problems of this kind include particular organization of phased program assimilation, conditions for effective delivery of educational material and learning by students in lectures, seminars, and practical classes.

Lectures and seminars in most subjects are held jointly at the faculty. In this case the teacher should be able to more flexibly restructure lectures and seminars, adapt both the material itself and the method of its delivery to the needs of a mixed audience.

Students with problems of vision, in contrast to ordinary students, have their own specific features of perception and processing of the material, performing intermediate and final forms of knowledge control. Blind students and students with residual vision perceive information by ear quite well. Perhaps because of the vision defect compensation, as well as due to lack of distracting visual stimulation, their orientation by ear helps them acquire knowledge sometimes better and bulkier than students without visual defects do.

On the other hand, there are articles and topics rather complex for understanding and mastering by low vision or blind students. The teacher should comment on the visual presentation, find concepts of tactile sphere close in meaning, explain aloud illustrated diagrams, drawings, etc.

Typically, students with visual impairment (who have difficulty in taking notes) are allowed to use the recorder in a lecture for them to study the material again at home. Some blind and low vision students use laptops quite successfully for taking lecture notes.

It is normally hard for most of students with vision problems to deliver reports, do public speaking, and make presentations by their own. Therefore, teachers often practice group training options for seminar topics and report classes. A visually impaired / blind student often feels uncomfortable in front of the public by the board, so he / she is allowed to respond from his / her place. Usually only oral forms of reporting and examination are available for visually impaired students.

There are various forms of cooperation, mutual support, tolerance to each other between ordinary students and students with visual impairments to facilitate much to the learning process.

Psychological support and psycho-pedagogical maintenance of students in difficult training and life situations.

This task is solved by joint efforts of administration, psychologist service, teachers, and academic staff of the university. Monthly internal concilia of these professionals should be held to discuss specific cases requiring urgent tactful psycho-pedagogical intervention.

In order to optimize psycho-pedagogical maintenance and improve the psychological climate at university, trainings on cohesion, refinement of behavior in the situations of conflict should be held among the students, as well as psycho-pedagogical work should be conducted aiming to avoid possible isolation of students with the HIA, and support groups among healthy students should be organized for them.

Organization of inclusive education process for students with the HIA

Among the modern perspective of learning / teaching conditions necessary to organize inclusive education process for students with the HIA, special focus is given to customized educational programmes and modules that contribute to the professional and social integration of students, self-learning activities that help to adjust the individual violations of educational and communicative skills, including but not limited, through information and communication technologies.

Such adaptive educational modules as *Social Adaptation and the Fundamentals of Social and Legal Knowledge* that forms the ability to adapt to different life and professional conditions considering health restrictions of students and *Intellectual Labor Technology* that forms the ability to self-learning activities and individual correction of capabilities to learn by means of information and communication technologies are being developed.

Adaptive educational modules (disciplines) are not compulsory, they are chosen for learning by students themselves following recommendations of educational psychologists. To this end, an educational organization can create composite groups of students with disabilities and disabled ones to develop different training areas. Learning opportunities are available for some students on an individual schedule. It is advisable to introduce adaptive educational modules (disciplines) associated with specific adaptation processes, which are often difficult for people with disabilities in the new social conditions, for the transition to a new level of professional education requiring more complex skills of intellectual work from them, into the training schedule of the first or second years of training as divergent or optional. General planned result of the introduction of adaptive educational modules (disciplines) into the learning process is the development of educational programmes of professional education by students with disabilities and students with the HIA by considering and minimizing the impact of health restrictions on the formation of general (common) cultural and professional competencies. That is, we must remember that these students need to acquire specific additional skills that are formed by assimilating the adaptive educational module (discipline) for the full development of the competences.

Recommended workload for adaptive educational modules (disciplines) is two to three credits, including lectures, workshops, independent work of students and intermediate certification in the form of credit tests. Special selection of the studied material and psychological, teaching, material, information technology techniques which are used to provide adequate perception and assimilation of educational material by students with the HIA and disabled students with regard to their individual psychophysical characteristics, health limitations and capability to percept and give out educational information, is required to assimilate these modules (Martynova, Romanenkova & Romanovich, 2015).

Lectures are held in the form of problem lecture, lecture-discussion, lecture-presentation, lecture-dialogue, lecture-consultation, interactive lecture, lectures with the use of remote access technology and the Internet. Practical exercises are conducted with the use of social and psychological proactive learning technigues: (training, discussion, brainstorming, business, role-playing game), multimedia presentations, remote access technologies and the involvement of the Internet. Independent work includes working with books and other sources of information: drawing-up of summaries, writing abstracts, reconstructive, heuristic, creative and independent design work, preparation for lectures and seminars, trainings, discussions, preparation of reports and presentations. For the current control of progress as the means of competence assessment, the formation of which involved the adaptive educational module (discipline), it is expedient to evaluate abstract and creative works and projects carried out independently, homework and presentations, participation in group discussions, case studies, benchmarking and peer reviews, as well as the score-rating system (Biktagirova & Kasimova, 2015). All instructional materials for teaching on the adaptive educational module (discipline) should include the provision of information to students with the HIA in forms adapted to the limitations of their health and perception of information. For persons with visual impairments — in printed form in large print, in the form of an electronic document, an audio file, in printed form in Braille. For persons with hearing disabilities — in print, in the form of an electronic document.

During the development of the adaptive educational module (discipline), the following information technologies are used: means of visual presentation of educational materials in the form of presentation, multimedia tools (videos illustrating the application of active learning methods in psycho-pedagogical practice), distance learning system (current and interim control of knowledge, self-work, consultations), e-mail (for the current interaction with the teacher and the exchange of educational materials), special software for students with visual impairments (voice navigation software, speech synthesizers, screen magnifiers). Students with the HIA and students with disabilities should be able to use the laptop for recording lectures with a text editor.

Discussions

It is also necessary to take into account that the development of the adaptive educational module (discipline) can be carried out in part with the use of distance learning technologies in the conduct of lectures and independent work: a system of webinars (to participate in the lectures), distance learning (for monitoring knowledge, for independent work, for communicating with the teacher and other students), e-mail (to interact with the teacher and exchange educational materials), social networks (for online interaction with the teacher and other students).

Mastering the adaptive educational module (discipline) by students with the HIA is carried out with the use of teaching means of general and special purpose. The educational institution should have a lecture hall having access to the Internet, with multimedia equipment, a computer and video equipment (LCD projector, speakers). Classrooms for workshops should be provided with the possibility to redesign the space. Classrooms for independent work must be equipped with standard workstations with personal computers, special

workstations with personal computers with installed screen reader software, a program used to increase the on-screen display and Braille for students with visual impairments.

Conclusion

Thus, the inclusive higher education requires changes in education conditions in institutions and orientation to the needs of each student. Many students with disabilities cannot master the curriculum of universities in a timely manner and to the necessary extent. They need a programme drawn up in accordance with their features and capabilities. Adapted curriculum and individual curricula are important conditions for the successful education of persons with disabilities and the HIA.

The basic conditions for organization of the learning process and development of programmes for special education needs of visually impaired students in inclusive education have been substantiated.

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Disclosure statement

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Notes on contributors

Gulnara F. Biktagirova is PhD, Associate Professor of Kazan (Volga region) Federal University, Kazan, Russia.

Anna L. Korotkova is PhD, Head of the Department of Pedagogy of University of Management 'TISBI', Kazan, Russia

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