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Disabled Students Inclusive Literacy Regarding Designing Individual Trajectories for Professional Development

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Abstract

The research relevance stems from the need to understand changes in the regulatory framework of higher education. Federal state educational standards of higher education enactment with regard to requirements of professional standards (FSES 3++) brought changes both in designing educational programmes and learning outcomes up to date. In the article the phenomenon of inclusive literacy considering the requirements of the updated standards is examined, the survey results of undergraduates and graduates inclusive literacy are described, the experience of forming inclusive literacy of students of various specialization is analyzed, the influence of inclusive literacy level on designing individual trajectories of students professional development at the stage of completing their bachelor's degree is revealed. The article describes the experience of the staff of the Department of Inclusive Education and Social and Pedagogical Rehabilitation of the Academy of Psychology and Pedagogy of the Southern Federal University. While working on the article various theoretical methods were used, including the analysis of modern research on the problems of inclusive culture, inclusive competence, functional and inclusive literacy, consolidating requirements of the latest generation federal state educational standards of higher education. The empirical methods are pedagogical observation, pedagogical experiment, questionnaires, mathematical processing of the experimental work results, qualitative and quantitative analysis of the data obtained during the study. At different stages of the research more than 200 undergraduates and graduates took part in it, 84 were directly involved in the experimental work.

Keywords: inclusive literacy, individual trajectory of professional development, project work, readiness.

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Introduction

At the present time inclusion represents a popular social idea, undergoing a process of active implementation into educational practices. In academic literature we often see such phrases as "inclusive competence" (Hafizullina, 2008; Goryunova, 2018; Idenbaum, 2020), "inclusive education" (Alehina, 2013; Orekhovskaya, Voevodina, Seregina & Raidugin, 2018; Sadikova, Sultanova & Karakpaeva, (2020), "inclusive culture" (Arpentyeva, 2018; Goh, Shestakova & Yurkov, 2019; Medvedev, 2013; Muzika & Popov, 2020), "inclusive society" Antilogova, Pustovalova & Lazarenko, 2020; Ahmetova, 2014; Golovina, 2014), "inclusive space" (Kovalev & Kovalyova, 2015; Staroverova, 2017; Lihoradova & Tishukov, 2020) and others. However, generally the awareness of the inclusion phenomenon meaning in modern Russian society in general and in education, in particular, cannot be described as something already taken place. Scientists and educators emphasize the fact that inclusive processes in Russian education and society are at the start of their establishment process, thus determining the demand for additional educational work and inclusive literacy formation within general public, and in specific professional groups, so called "translators" of inclusive values.

Federal state educational standards of higher education update, having regard to the requirements of professional standards (FSES 3 ++), which began in 2017, is currently ongoing. The list of updated higher educational standards is being supplemented, as evidenced by the information from the federal state educational standards of higher education portal. In 2020 the list of universal competencies was extended, thus providing the necessity in a renewed approach to design the content of educational programmes for higher education at the bachelor's level. The professional standards requirements determine the practice-oriented nature of educational programmes of higher education, which makes actual the need to form students' readiness to design flexible individual trajectories of professional development. Moreover, expanding the list of universal competencies demonstrates the significance of various types of functional literacy in the context of preparing a future graduate.

Today federal state educational standards of higher education have made actual the request to review various types of students functional literacy (Nurmuratova, 2019), one of which is inclusive (Goryunova, Timchenko & Timchenko, 2020). On the one hand, in the context of forming inclusive literacy, students act as a task force that can potentially expand the information field of inclusive practices and bring it outside the educational space of the university, thereby providing the ideas of inclusion brought to society (Romashevskaya, 2017).

On the other hand, inclusive literacy might indirectly influence the design process of individual trajectories of professional development of students in non-pedagogical training (including students with disabilities), determining the nonlinearity of trajectories of higher education in the "bachelor's - master's" link.

Purpose and objectives of the study

The purpose of the study is to examine the phenomenon of inclusive literacy considering the requirements of the updated federal state educational standards of higher education and to identify the peculiarities of students inclusive literacy, including those with disabilities. In the research the experience of forming inclusive literacy of students of non-pedagogical training will be examined, it will be figured out how inclusive literacy level influences the design of individual trajectories of students professional development when completing their bachelor's degree.

Literature review

The analysis of modern studies considering inclusion as a global idea permeating all spheres of our life reveals that such notions as "inclusion", "inclusive education" "inclusive culture" have become quite prevalent at the present time. Theses notions are being used both professionally and in a broader social context.

Therefore, inclusive culture can be considered either as a social phenomenon or a personal quality. According to Arpentyeva (2018), inclusive culture is a key concept of a mutual assistance pedagogy. It is the humanistic message of mutual assistance and support that becomes the key motive for functioning in all spheres of social life in the era of included awareness. Inclusive culture as a social phenomenon is being researched by sociologists, who consider it to be a principle for determining youth policy in the aspect of cultural hybridization (Medvedev, 2013). Booth and Ainscow (2002) emphasize that understanding and acceptance of inclusive values is an important feature of an inclusive culture in society, as well as overcoming barriers and stereotypes that hinder inclusion. Shemanov and Ekushevskaya (2018), studying the problems of an inclusive culture and practice formation, note that creating inclusive culture in society is associated with certain risks. This is the reason why it is essential to maintain the balance of education, society and inclusion goals.

Yakubova (2020) defines inclusive culture as a key factor of inclusive education development. Starovoyt (2016) positions inclusive culture as a fundamental basis of inclusive society culture, Sigal (2014) describes special inclusive atmosphere regarding inclusive culture and taking into account special needs of all subjects involved in the educational process.

Goh, Shestakova and Yurkov (2019) note insufficient semantic significance of the term "inclusive culture", which inherently synthesizes new sociocultural codes and practices of society in a unified semantic field.

We believe that an inclusive type of functional literacy might be a basis to form and develop an inclusive culture of a society in general and an individual person in particular. Inclusive literacy is a fundamental component of an individual inclusive culture determining its cognitive aspect and a human ability to act correctly in personal communication and social interaction situations with disabled persons.

Methodology

The basis of scientific research methodology in the framework of our study rests on the theoretical propositions and practical experience of studying inclusive competence and inclusive culture, represented in the works of the following scientists: Alehina (2015), Bogdanova (2016), Borodina (2014), Kirillova (2014), Romashevskaya (2017), Hafizullina (2008) and others. Data analysis and generalization of the results of these works enabled us to develop a research toolkit, meeting the tasks which have been assigned (the questionnaire "The basis of inclusive literacy", situational tasks, aimed at forming of inclusive literacy of students throughout interpersonal and formal communication). The article describes the experience of the staff of the Department of Inclusive Education and Social and Pedagogical Rehabilitation of the Academy of Psychology and Pedagogy of the Southern Federal University (Rostov-on-Don, Russia). The research was conducted among undergraduates and master's degree candidates. At different stages more than 200 people participated in it, including 84 participants involved directly in the course of the experiment. In the process of the research the following theoretical and empirical methods were used: analysis of the modern scientific works, devoted to the issues of inclusive culture, inclusive competence, functional and inclusive literacy, generalization of requirements for the state federal high education up-todate standards, pedagogical observation, pedagogical experiment, questioning, mathematical processing of the experimental work results, analysis of qualitative and quantitative data.

Results

Updated federal state educational standards of higher education in the context of professional standards requirements and their supplementation with a range of competencies proves the state level recognition of the necessity to expand the pool of universal results of mastering professional educational programs. Inclusive literacy is a core of forming an inclusive competence. It must be highlighted that this competence falls under the category of the universal ones, which makes its formation necessary for all students regardless of gender, age, professional and academic preferences, individual features and limitations.

Thus, inclusive literacy, as well as inclusive competence must be an individual qualitative characteristic of all students, including those with disabilities.

At the initial stage of the study a survey was conducted among students. It included a number of questions about how familiar the respondents are with the topic of inclusion, how they understand this phenomenon, how they relate to it, if they are ready to accept the values of an inclusive society, etc. 270 people took part in the survey. The results showed that the greater part of the respondents had a very general idea of inclusion, associating it mainly with disabled people issues. A number of students (about 17%) although displaying generally positive attitude towards inclusion, admitted that they do not find necessary to learn more about aspects and rules of inclusive interaction, as they are confident this knowledge will be not demanded both in everyday life and professional sphere. Furthermore, more than 35% of the respondents found it difficult to visualize inclusion properly, which implies the meaning of inclusion as a social phenomenon being not completely clear to these individuals. 53.3% of respondents chose education as a prerogative area, answering the question "What areas should the practice of inclusion be implemented first and foremost?" They put social projects and health care on the second and third place respectively, then goes architectural environment and open information space. Consequently, according to the plurality of the students surveyed, education seems to have a stronger potential in terms of designing, implementing and replicating inclusive practices.

The results of the survey, concerning the questions of legal and regulatory aspect of inclusive literacy, turned out to be quite thought-provoking. More than 50% of the respondents knew about governmental and international documents guaranteeing the rights of disabled people, but found it difficult to identify at least one of them. Approximately 14% of those who took part in the survey could not answer this question. At the same time more complicated questions, designed with the demand to express personal views did not cause any particular difficulties. However, there was no unambiguity in answers and unity in opinions. For instance, the respondents were asked to comment upon the statement "Inclusion is not only a guarantee of rights, but also equality in requirements, responsibilities and duties." Their opinions were distributed as follows: 37.8% fully agreed with this statement, 44.8% rather agree with this statement, 14.8% of respondents were in doubt and 2.6% expressed categorical disagreement with it. The second statement "Guarantee and maintenance of human rights is the duty of the state and society" did not have unambiguous assessment either. There was a greater unity in opinion, though: 67.8% of respondents absolutely agreed with the statement, 29.3% stated that they rather agree with it, 2.6% of respondents doubted it and only one person strongly disagreed with it. Thus, the results obtained in this section have shown the necessity not only to enlighten students about the legal and regulatory basis of inclusion, but also to clarify the values and meanings of it.

As masters degree candidates also took part in the survey, they were asked several questions relating to their professional activities. Responses to the question "Do you deal with disabled people in the course of your professional activity?" were distributed as follows: 22.6% of respondents quite often encounter people with disabilities, 28.9% sometimes interact with such people, 22.2% of respondents rarely encounter them, 26.3% - never interact with disabled people. Responses regarding the question "What special professional knowledge and skills should a person have while working in conditions of inclusion?" were as follows: 80.7% indicated that it is necessary to know behavioural patterns of people with disabilities, 58.9% admitted the significance of legal and regulatory aspects knowledge for inclusive interaction, 55.2% stated the need to master first aid skills, 23% emphasized the importance of special professional knowledge and skills, 27.8% of respondents consider it impossible to understand in advance what knowledge and skills might be needed.

According to the opinion of the survey participants, a person who works in conditions of inclusion should obtain a certain set of personal qualities. Although respondents offered various options, six key characteristics were singled out: patience (84.1%), tact (83%), responsiveness (81.1%), poise (73%), learning ability (64.4%) and objectivity (57%). Other qualities such as reflexivity, optimism, stress resistance, sympathy, respect and acceptance of other people characteristics were also mentioned. One person expressed the opinion that personal qualities do not matter when it comes to professional interaction, as the relationship between employees is determined by professional standards, regulations and instructions.

In general, the obtained results demonstrated that targeted efforts must be made to form inclusive literacy of undergraduate students and masters degree candidates, regardless of students training or specialization.

In the context of our study, we have identified the levels and criteria for forming university students inclusive literacy. Knowledge of the specific characteristics of disabled people from various nosological groups and the number of correctly solved situational tasks involving interaction and communication with people with disabilities in the conditions of business, personal, situational and other types of communications were figured out as criteria for the formation of university students inclusive literacy.

According to the combination of the selected criteria, we defined the content of high, medium and low levels of inclusive literacy formation among university students. A high level means that students are aware of the specific features of communication with disabled people of various nosological groups, correctly solve most (from 80 to 100%) situational tasks related to communicating with such people in various conditions (business, personal, situational communication, etc.).

Those students who possess an average level know most of the specific features of communication with disabled people of various nosological groups, correctly solve from 50 to 79% of situational tasks related to communicating with those people. A low level of inclusive literacy means that students are partially aware of the specific features of communication with disabled people of various nosological groups and can correctly solve less than 50% of situational tasks related to communicating with above mentioned people.

The formation of university students inclusive literacy demands implementing the combination of methodological approaches defining informative and methodological strategies for organizing training. The informative strategy implies selecting key elements of academic disciplines necessary to familiarize students with special needs of disabled persons and specific moments of interaction with them. The methodological strategy means choosing organizational forms, methods and means of working with students during classes corresponding to the content and objectives of the training.

The next step of our research was to carry out an experiment in forming inclusive literacy among Southern Federal University students. The informative content of pedagogical disciplines was used and possible organizational models of the educational process within the framework of their implementation were taken into account. It was vital to define the most effective organizational model in forming inclusive literacy.

The first organizational model suggests including additional content elements focused on the formation of students inclusive literacy into the main pedagogical subject. These elements complement each topic of the training course. This model is being implemented as a compulsory part of the curriculum of a bachelor educational program. It was tested on first year students of the physics department, specializing in pedagogical education (the group consisted of 24 people). The results showed that complementation of each topic with additional elements is not effective. Special material is hard to integrate. Therefore, this circumstance makes it impossible to form an entire image of interaction with disabled people. This organizational model contributed to the students progress and their results improvement (for example, at the initial stage, the average indicator for solving situational problems was less than 20%, and at the final stage it corresponded to 45%). However, most students showed a low level of inclusive literacy formation during this organizational model approbation.

The second organizational model is related to the organization of the training process in Southern Federal University. While students are mastering any educational program, they are given the opportunity to study modules aimed at the formation of universal and professional competencies, offered by different university structural units. These are the so-called modules of university academic mobility, aimed at implementing the principle of interdisciplinarity.

The choice of such modules is the head of the educational program—responsibility. They are commonly integrated into the curriculum at the stage of its design. As a result, students have no alternative. During our research, within the framework of this organizational model, we implemented the subject "Social communication and technologies of intellectual labor" for masters degree candidates of the physics department, specializing in pedagogical education. The implementation of this model has shown the following results. Despite specific content, aimed at forming student inclusive literacy, students were attracted by the possibility to master the technologies of intellectual labor, while social communication and strategies for establishing interaction with various categories of people, including those with disabilities, were of only personal interest for some undergraduates. In this regard, this organizational model can not be efficient, and depends on situations and students personal life experience. Therefore, despite the sufficient progress of participants (more than 50% of the group demonstrated a high level of inclusive literacy), it is difficult to consider this model effective.

The third organizational model implied forming students inclusive literacy when mastering an elective subject "Social adaptation and communication in educational and professional activities". Students from the law department were involved (there was a group of 26 students). This model offers the greatest extent of freedom within the subject framework both for teachers and students. Each lesson was designed considering the demands and needs of students. For instance, students had the possibility to learn a specific topic of a greater interest in details. Active forms of interaction, such as business and role-playing games, research quests, intellectual competitions, etc., also had a positive effect. Independent compilation of situational tasks for classmates, finding solutions in real time allowed students not only to get acquainted with the rules of inclusive interaction, but also to master the competencies necessary for effective professional and interpersonal communication. It is necessary to mention that this organizational model turned out to be the most effective, even though students mastered the subject being enrolled in another enlarged group. Efficiency is proved by both quantitative results (more than 70% of the group showed a high level of inclusive literacy, the rest of the students demonstrated an average level of inclusive literacy) and qualitative personal changes in the interests of students. They delved into general topics related to inclusion and became a part of the student scientific association "Inclusion in education and society".

As a result, the most efficient organizational model of the educational process aimed at forming student inclusive literacy is the third one - the "elective" model. The research results also demonstrated that not only the concerns of interaction with disabled people can be the subject of study. For instance, students found other topics engaging and relevant. Among them there are "Effective interaction without sufficient knowledge of a foreign language", "Religious diversity and effective interaction" and etc.

Thus, forming inclusive literacy becomes not only an educational system objective, but also the actual need of various people.

Discussion

It is vital to mention that nowadays inclusive literacy formation is barely discussed in scientific literature. Most researches are oriented at broader concepts, such as "inclusive culture", "inclusive competence", "inclusive readiness", etc. In this set of concepts the term "inclusive literacy" must become a semantic core, because the literacy itself (the ability to follow rules of inclusive interaction) defines the possibility of mastering inclusive competence, a degree of inclusive readiness formation and inclusive culture level.

It is important to mention that inclusive literacy is a universal characteristic, uniting all the participants of interaction, in this particular case, in the conditions of the university. Inclusive literacy is crucial for students within developmental norm and students with special needs (regardless of their nature). It is inclusive literacy in various situations that allows to avoid awkwardness and conflicts, and find solutions. We presume that the question of disabled students inclusive literacy demands a separate discussion, since its level can determine the options for designing individual trajectories of these students professional development. Every student must understand the inclusion does not only mean equal rights, but also equal requirements, duties and responsibilities. The basic effects of formed inclusive literacy of students, including those with disabilities, are knowing and protecting your own rights, being ready to take responsibility and performing labour duties according to the requirements.

Furthemore, we would like to point out the fact that many students with the high level of inclusive literacy show flexibility in designing individual trajectories of professional development at the stage of being awarded a bachelor's degree. Some of them choose master's degree programmes in the framework of such disciplines as "Psychology", "Pedagogical education", "Psycho-pedagogical education", "Special education". They are targeted at work with people with special needs. Other students demonstrate a high level of skills for competent inclusive interaction with different groups of people in the framework of their professional activity. Inclusive literacy is an important qualitative characteristic of both a bachelor's and master's degree graduate, regardless of their speciality. Inclusive literacy is an objective need of modern society, which lacks individuals able to find constructive solutions and interact effectively in different professional and personal situations.

Conclusion

In summary, it should be noted that according to the study results the problem of inclusive literacy is not examined enough in the scientific literature and requires further detailed consideration. Most modern students associate inclusive issues with disabled people negating other aspects. Three organizational models of the educational process with varying degrees of efficiency, aimed at forming students inclusive literacy can be used at universities. At present the most effective model means learning an optional subject that meets the interests and needs of students choosing it. At the same time, the federal educational standards of higher education update and their supplementation with specific competencies actualizes the need for a separate module focused on students inclusive literacy formation. That means the possibility to design the fourth organizational model of the educational process. Inclusive literacy is a universal characteristic. It complements the competence model of a modern university graduate naturally and determines the possibility of flexible design of individual trajectories of professional development, both in and out of the university.

References

- Alehina, S. V. (2015). Psychological and pedagogical research of inclusive education in the practice of training undergraduates. *Psychological Science and Education*, 20(3), 70-78.
- Alehina, S. V. (2013). Development of inclusive education in the light of the new law "On education in the Russian Federation". *Bulletin of the Educational and Methodological Association of Higher Educational Institutions of the Russian Federation on Psychological and Pedagogical Education*, 1(4), 073-078.
- Antilogova, L. N., Pustovalova, N. I., & Lazarenko, D. V. (2020). Problems and prospects of creating an inclusive society. *Professional education in the modern world*, 10(3), 3948-3958.
- Arpentyeva, M. R. (2018). Inclusive culture and self-help pedagogy. *Scientific notes of the St. Petersburg State Institute of Psychology and Social Work*, 2 (1), 97-106.
- Ahmetova, D. Z. (2014). Inclusive education is the path to an inclusive society. *Pedagogical education and science*, *1*, 65-70.
- Bogdanova, E. V. (2016). The structure of the inclusive competence of students in the information and educational environment of the university. *Minin University Bulletin*, *3*. Retrieved from: https://elibrary.ru/download/elibrary 27125147 10310037.pdf

- Borodina, O. S. (2014). Formation of inclusive competence of a future health basics teacher. *Professional education in Russia and abroad*, 1(13), 75-79.
- Booth, T., & Ainscow, M. (2002). Index for inclusion: Developing learning and participation in schools (102). Bristol, United Kingdom: Centre for Studies on Inclusive Education. Retrieved from: http://www.eenet.org.uk/resources/docs/Index%20English.pdf
- Golovina, T. A. (2014). Making society "inclusive": on protecting the rights of people with disabilities. *Ideas and innovations*, 2, 39-43.
- Goryunova, L. V. (2018). Framework of inclusive competence of a teacher in the process of his professional training. *Human sciences (Yalta)*, 2(42), 57-63.
- Goryunova, L. V., Timchenko, E. S., & Timchenko, I. V. (2020). Formation of students inclusive literacy at university: analysis of the effectiveness of organizational models of the educational process. *Pedagogy. Questions of theory and practice*, *5*(6), 828-834.
- Goh, A. F., Shestakova, N. N., & Yurkov, D. V. (2019). Inclusive culture: from educational to sociocultural context. *Bulletin of V.P. Astafiev State Pedagogical University in Krasnoyarsk*, 2(48), 189-198.
- Hafizullina, I. N. (2008). Formation of inclusive competence of future teachers in the process of professional training (Doctoral thesis, Astrakhan State University, Astrakhan, Russia). Retrieved from: http://www.dslib.net/prof-obrazovanie/formirovanie-inkljuzivnoj-kompetentnosti-buduwih-uchitelej-v-processe.html
- Idenbaum, E. L. (2020). Inclusive competence as a perspective of modern teacher education. *Tomsk State University Bulletin*, 452, 194-204.
- Kirillova, E. A. (2014). Inclusive culture as a factor in the development of multicultural education in Russia. Kazan: Fatherland.
- Kovalev, D. S., & Kovalyova, A. S. (2015). Inclusive educational space: potential opportunities for participants in the educational process. *Educational environment today: development strategies*, 3(4), 32-34.
- Lihoradova, I. N., & Tishukov, A. V. (2020). Inclusive educational space: problems and prospects. *Problems of social and human sciences*, *I*(22), 199-204.

- Medvedev, K. E. (2013). *Inclusive culture as a principle for the formation of youth policy in the aspect of cultural hybridization* (Doctoral thesis, Y.A. Gagarin State Technical University in Saratov, Saratov, Russia). Retrieved from: https://www.dissercat.com/content/inklyuzivnaya-kultura-kak-printsip-formirovaniya-molodezhnoi-politiki-v-aspekte-kulturnoi-gi
- Muzika, O. A., & Popov, V. V. (2020). Relevance of the problem of forming an inclusive culture: scientific discourse. *Sociology*, 1, 232-237.
- Nurmuratova, K. A. (2019). Functional literacy as the basis for the development of a harmonious personality in modern conditions. *Pedagogical Science and Practice*, *1*(23), 14-18.
- Orekhovskaya, N. A., Voevodina, E. V., Seregina, T. N., & Raidugin, D. S. (2018). Inclusive education social problems. *Modern Journal of Language Teaching Methods*, 8(1), 11-21.
- Romashevskaya, E. S. (2017). Professional training of teachers for the design of an inclusive educational space (on the example of training masters) (Doctoral thesis, Southern Federal University, Rostov-on-Don, Russia). Retrieved from: https://www.dissercat.com/content/professionalnaya-podgotovka-pedagogov-k-proektirovaniyu-inklyuzivnogo-obrazovatelnogo-prostr
- Sadikova, A. A. Sultanova, K. A., & Karakpaeva, S. K. (2020). Inclusive education as one of the main directions of reform in the education system. *Scientific and practical research*, 2-2 (25), 106-109.
- Sigal, N. G. (2014). Inclusion as a vector of humanization of education and society: foreign experience.

 Questions of pedagogy and psychology: theory and practice: collection of articles. Materials of
 International scientific conference Moscow, June 26-28. ed. prof. V.I. Pisarenko, 73-79.
- Staroverova, M. S. (2017). Formation of a tolerant educational environment in an inclusive space. *SOTIS* social technologies and researches, 3(83), 105-110.
- Starovoyt, N. V. (2016). Inclusive culture of an educational organization: approaches to understanding and shaping. *Scientific and methodological electronic journal "Concept"*, 8, 31–35.
- Shemanov, A. Y., & Ekushevaskaya, A. S. (2018). Formation of an inclusive culture in the implementation of inclusive education: challenges and achievements. *Electronic journal "Contemporary Foreign Psychology"*, 7(1), 29-37.

Yakubova, F. R. (2020). Inclusive culture is key to the success of inclusive education. *Science and school*, 1, 123-129.