

**LEASECON 2021**  
**Conference on Land Economy and Rural Studies Essentials****SOCIOCULTURAL APPROACHES FOR MODERN SCIENTIFIC  
AND EDUCATIONAL SPACE CONSTRUCTION**

Maria Y. Karelina (a), Anastasia V. Fakhrutdinova (b, c)\*

\*Corresponding author

(a) Moscow Automobile and Road Construction State Technical University, Moscow, Russia, karelinamu@mail.ru,

(b) Kazan Federal University, Kazan, Russia, avfach@mail.ru

(c) Russian Academy of Education, Moscow, Russia, avfach@mail.ru

**Abstract**

The research is devoted to a problem of misunderstanding among people due to differences in outlook, life attitude, and culture- reasonable views. The collaboration of people from different countries with different cultural backgrounds and worldviews is of particular importance at the level of scientific communication. Unity, respect may allow us to concentrate on solving important scientific problems. In this regard, the article attempted to study the socio-cultural component of the modern scientific and educational space of Russian universities. The purpose of our research was to determine the main problems that both graduate students and teachers may face. Research is also devoted to reasons for their emergence in communication field of scientific and educational space of Russian universities, from the point of view of their significance, complexity and defining ways to overcome them. The study was conducted with postgraduate level students at universities of the Republic of Tatarstan. The study involved 60 postgraduate students, 15 professors and scientific advisers working with them. The result of the study was the identification of factors that represent risks as well as promising approaches for the development of the system of training of higher scientific qualification, specialists, the solution of which will be facilitated by updating the socio-cultural component of the formation of the scientific and educational space of the university.

2357-1330 © 2022 Published by European Publisher.

*Keywords:* Institution of higher education, multicultural space, postgraduate student, scientific advisor, sociocultural environment



## 1. Introduction

Modern society is faced with huge problems of cultural misunderstanding due to the peculiarities of peoples' outlook, life attitude and culture-reasonable views. According to what it is necessary to conduct serious work on bringing people closer through rising tolerant respect of other people's views. Scientific cooperation may help to solve the most difficult problems that arise in the global world. The research is carried out in educational institutions of Russia at all levels of education, including the level of training of high qualified scientific personnel and is reflected in the construction of a modern scientific and educational space of a modern university. At the same time, the socio-cultural approach of the modern scientific and educational space is characterized by the perspective of development, in the context of the processes of multiculturalization of society (Fakhrutdinova et al., 2017). These processes determine the need to form not just a respectful attitude to other cultures and people, but also the formation of a new Russian identity. Otherwise, it is impossible to understand adequately the essence of the ongoing processes, as well as to determine the trajectory of the evolution of the world's socio-political systems.

### 1.1. Key approaches addressing the problem

The dominant position in the structuring and content of the scientific and educational space at postgraduate level of education is humanistic approach that is based on the principle of humanization (Leonova, 2006). We agree with E.V. Bondarevskaya, who views education through the prism of a cultural approach. It allows one to judge the scientific and educational environment at all levels of higher education as a culture-like environment (Kondrateva & Fakhrutdinova, 2016). All important components should be filled with humanistic meanings and manifested through subjectivity and individuality. They define the cultural self-development and self-determination of an individual in the world of cultural values (Bondarevskaya & Rostov, 2000). The culture-forming approach in combination with the personality-oriented and subject-oriented approach allow us to consider the phenomenon of the scientific and educational space at postgraduate level of education both as a result and as a process of designing the process of training highly qualified personnel (Bondarevskaya & Rostov, 2000). This approach requires consideration of an educational space as a multicultural educational space. For our research, the attitude to these approaches by a number of scientists (V.P. Borisenkov, A.Ya. Danilyuk, O.V. Gukalenko) is essential. They consider the multicultural educational space through understanding of an education by defining it as a basic category of the space itself, and through understanding of a space as a unity of historical, pedagogical and anthropological aspects (Borisenkov et al., 2006).

## 2. Problem Statement

In modern pedagogical and philosophical science, the scientific and educational space becomes the subject of intensive research. It is recognized as an independent phenomenon. The reasons for its recognition are the processes of globalization and integration of education, the rising availability of all kinds of information. Today the digital space and wide range of educational opportunities at all levels of higher education, including master's and postgraduate levels of education are presented. At the same time there is a number of reasons in pedagogical science that allow us to believe that the phenomenon of the

scientific and educational space in general and at the level of training of high qualified scientific personnel and does not have meaningful generalization. That is of fundamental importance for modern higher education (Khairutdinov et al., 2019). In the context of the same reasoning we can also talk about the humanistic potential of the phenomenon of scientific and educational space for an individual, despite its spontaneity and unpredictability.

### **3. Research Questions**

The study of the importance of the socio-cultural component of the modern scientific and educational space of the Russian universities in the context of creating a special communicative field in the training and especially training of high qualified scientific personnel.

### **4. Purpose of the Study**

The purpose of our research was to identify the main problems that arise at postgraduate students and professors and the reasons for their occurrence in the communication field of the scientific and educational space of Russian universities, from the point of view of understanding of their significance and complexity for finding ways to overcome them.

### **5. Research Methods**

To determine the problem field of our research a detailed analysis was carried out. It allowed us to identify approaches to understanding the essence of scientific and educational space of the Tatar republic universities, as well as their significance at the level of postgraduate education. Moreover, we conducted a study involving 60 people of the 2nd and 3rd years of study (30/30) of doctoral students and 15 professors including scientific advisors (from various universities) in order to identify main difficulties that are faced by professors and doctoral students due to multinational environment of the postgraduate communities as well as the reasons for their occurrence. The research was conducted in order to find out how the socio-cultural approach of the modern scientific and educational space will allow them to solve their scientific problems. The choice of doctoral students participating in the study was random. Authors did not focus on gender characteristics, nationality, citizenship, age. Nevertheless, the research was limited by doctoral students studying in engineering and natural science fields. Among professors who took part in the experiment were professors who teach general disciplines, namely: philosophy and foreign language (5 professors) and scientific supervisors of doctoral students (10 professors).

### **6. Findings**

During the first part of the study, each student and professor was interviewed and the most frequent responses were outlined. At the second stage of the experiment, in order to identify to what extent the socio-cultural approach of the modern scientific and educational space organisation will allow them to solve their scientific problems. They were offered answers compiled by experts based on the analysis of an earlier interview. This allowed one to come to a conclusion about the correctness of the

proposed assumption concerning the definition of problems and prospects for their solution through the appropriate organization of the scientific and educational space, despite its spontaneity and unpredictability.

The results of the survey allowed one to reveal that only 70% of the respondents studying at a postgraduate level in Russian universities take their studies responsibly and consider them as their main life activity. Doctoral students emphasize as the main a problem insufficient attention paid to foreign languages study in their educational program. During their postgraduate studies they need to have an opportunity to consult with professors on the difficulties of understanding of authentic scientific texts (however, the subject “Foreign language” is taught only during the first year). At the same time, they have difficulties with the publication of research materials in foreign scientific journals. In this case they note a problem of low level of language knowledge not only for getting information, but for a scientific and practical experience research results presentation. Often they mention difficulties with structuring of their research materials. This is due to the differences in logic of presentation of scientific materials accepted for Russian and foreign scientific literature. Many students also note the difficulty in the process of information search and obtaining required knowledge in a large flow of digital information from the standpoint of determining its scientific significance value. Foreign students 10% of the total number of respondents pointed out problems of an insufficient knowledge of the Russian language and associated with this difficulty in accessing Russian-language scientific sources. Almost half of the postgraduate students note difficulties in preparing reports and presentations at conferences held in in-person format. Professors, in turn, note the insufficiently high desire of doctoral students to take part in presentation of their scientific research at conferences outside the city of study. But if the trip to the place where conference is held on is not paid by the educational institution then students have difficulties with participation. According to doctoral students, this is due to the low level of scholarships, while only 30% of postgraduate students take part in different competitions and grant activities. The problem is similar with the publication of research materials of doctoral students. Scientific advisors note the difficulties that doctoral students experience when they try to publish research results in the first two years of postgraduate studies. All professors and scientific advisors who took part in the study note that the problem of the scientific, research component in the preparing of scientists today remains one of the main for the further development of doctoral students as a separate stage of education (Guseva, 2012; Mikhailov, 2009; Salnikov & Burukhin, 2008). This is due to the fact that the educational block of modern programs for the training of doctoral students takes too much time. To identify the extent to which the socio-cultural approach to the modern scientific and educational space will allow them to solve their problems, postgraduate students were offered to choose answer options compiled by experts. Answer options were suggested on the basis of an analysis of earlier interviews. Among the most frequently selected answers from the list of suggested answers doctoral students pointed importance of creation of a communication space where post graduate students can discuss their scientific research issues with each other, with scientific advisors and university professors, who conduct researches in related fields (centers of academic communication). Also, doctoral students and scientific advisors noted the need to increase the number of hours to study discipline “Academic communication”. A lot of attention all students gave to socialization programs for foreigners that may give an opportunity to meet

and understand the traditions, customs, culture and history of Russia and other countries. The doctoral students paid special attention to the expanding collaboration opportunities with production-sector, research and educational sites/centers in Russia and in the world. Professors identified the expansion of the educational component in the organization of the educational process as the main position, which will help to develop a sense of responsibility towards the country and foster pride for belonging to the Russian society.

Many researchers note that according to modern on-going processes of Russian society polyculturation it is facilitated with the internationalization of the vocational education system as a whole. Largely this is associated with an increase of an attractiveness of Russian education in the international market. Moreover, differences in ways of outlook, life attitude, and culture- reasonable views are based on historically established signs of particular society. Especially in cultural traditions of religious and philosophical views. This explains the need to update educational approaches to all levels of education. Interpersonal communication and mutual respect is based on knowledge, understanding and acceptance (Vinnikova et al., 2017). In turn, expanding of boundaries and opportunities for getting education in other countries creates competition in the global market for higher and post-higher education. At the same time, it is important to remember that this is not just a source of funds for universities. A process of training highly qualified scientific personnel meets the needs of labor market and social demands of society. The scientific educational space of an educational institution or a scientific institution often goes beyond the real space. We are aware that modern society is increasingly focused on the digital space. Virtual communication leads to the transformation of society. Globalization actualizes the issues of respect for the country and culture of the country in which students from other states are educated. In a global world without borders one of the most important problems is a culture of scientific communication in a multicultural space. Researches also record that at the regional level, universities are predominantly focused on rising of the attractiveness of postgraduate programs. This is primarily due to the goals of commercialization, but not due to the idea of educational programs quality improving (Isaev & Zainetdinova, 2011). A positive change in the situation is intended to contribute to the programs implemented by the state to stimulate the innovative activity of universities, the creation of innovative platforms (Volov, 2014). The proposed solutions to the problem of the development of research and scientific-pedagogical components of postgraduate studies most often relate to either educational programs of various effectiveness (for practical activities implying a connection between science and production or scientific and industrial - pedagogical activity), or to the conditions that allow to organize a scientific and educational environment for postgraduate students. The results of the study made it possible to reveal that the creation of conditions for the organization of scientific and educational space for graduate students is the most successful way to improve the training of highly qualified scientific personnel. One of the ways is creation of a scientific communicative field. The results of the polls have shown its socio-cultural significance. So, we can talk not only about the importance of development and modification of educational programs, but about the importance of creation of certain conditions of improving the process of training graduate students. The question of general academic disciplines that present in the training program for highly qualified scientific personnel was a subject of debates among the interviewed professors. This is due to the fact that research activities are often carried out outside the

educational institution, sometimes outside the region. In this connection, the obligatory disciplines that present in curricular and opportunities for research work are in confrontation. The result of training at the postgraduate level is the defense of the scientific research. Accordingly, in the formation of the educational space, the attention should be paid to selection of professors. In this case, we are not talking about scientific advisors, but also about professors who teach general education disciplines. Their scientific level, the intensity and quality of research work, as well as the indicators of their publication activity and participation in scientific events at various levels should become decisive in the selection for work with graduate students. This will help to strengthen the communicative scientific field. However, if we appeal to the experience of researches conducted in Research Institutions, then we can say that there is the most powerful communicative environment, affecting the scientific space and allowing future candidates and doctors of sciences to educate themselves. This also enables them to be engaged in the process of self-development. Modern society is strongly focused on digitalization and digital educational space, which is becoming global and multicultural. In this case, probably, these centers of scientific communication should be created on the basis of universities' collaborations in the region, perhaps with the definition of one university as a base platform. Moreover, these centers will make it possible to increase the attractiveness of Russian education for foreigners, to increase the interest of young people in conducting scientific research.

## 7. Conclusion

Training highly qualified personnel is a difficult task in a multicultural society. On the one hand, we see the modern requirements concerning an educational process and the preparation of the personnel with the highest scientific qualifications', on the other, there are realities of modern Russian universities. Finally, the special requirements arise due to changes taking place in the world. These requirements relate to the introduction of significant changes in approaches of modern professionals' qualities development. Special attention should be drawn to the issues of personality development promoting respect for other people, tolerance, responsibility, etc., which are now often replaced by the commercialization of the way of thinking.

## Acknowledgments

The study has been conducted in MADI as an activity under the project "Effective training model of technical discipline lecturers for the purpose of obtaining "International Educator of Engineering University" certificate - "ING-PAED IGIP"". MADI is recognized as a Federal Innovative Platform according to Order No. 1580 of 25.12.2020 (registered on 03.02.2021).

## References

- Bondarevskaya, E. V., & Rostov N. (2000). *Theory and practice of personality-oriented education*. Publishing house "Bulat".
- Borisenkov, V. P. Danilyuk, A. Ya., & Gukalenko, O. V. (2006). *Poly-cultural educational space of Russia: history, theory, fundamentals of design*. Pedagogika.

- Fakhrudinova, A. V., Kadyrova, L. H., & Musina, K. I. (2017). Artistic and Aesthetic Education of Students by the Means of the National Arts and Crafts: the Tatarstan Republic Experience. *4th International Conference On Education, Social Sciences And Humanities (SOCIOINT 2017)*, 752-757.
- Guseva, I. A. (2012). Scientific magistracy: dream or reality? *Higher education in Russia*, 2, 9-17.
- Isaev, A. P., & Zainetdinova, I. F. (2011). Individualization of training of masters of management on the basis of the competence approach. *Higher education in Russia*, 1, 86-91.
- Khairutdinov, R. R., Korchagin, E. A., Safin, R. S., Fakhrudinova, A. V., & Nikishina, S. R. (2019). The content of educational programs in technical universities: Quality of applying the modern professional standards. *International Journal of Instruction*, 12(1), 357-360.
- Kondrateva, I. G., & Fakhrudinova, A. V. (2016). Modeling Teacher's Multicultural Identity through Studying a Foreign Language. *IFTE 2016 - 2nd International Forum on Teacher Education*, 12, 245-250.
- Leonova, O. A. (2006). Educational space as a pedagogical reality. *Alma mater (Bulletin of the Higher School)*, 1, 30-36.
- Mikhailov, A. Yu. (2009). Once again about the preparation of masters. Retrieved from <http://www.waksman.ru/Russian/Konference/2009/VI/mih1.htm>
- Salnikov, N., & Burukhin, S. (2008). Reformation of higher education: current state and problems. *Higher Education in Russia*, 8, 3-12.
- Vinnikova, M. N., Fakhrudinova, A. V., & Dulmukhametova, G. F. (2017). Modern Use of the Pedagogical Technology Team-Teaching in the Training of Teacher Candidates. *Quid- Investigacion Ciencia Y Tecnologia*, 28, 767-772.
- Volov, V. T. (2014). On the criteria for the effectiveness of higher education in Russia in the era of change. *Kazan Pedagogical Journal*, 3(104), 17-21.