

# The management of the process of forming university students' tolerance in the conditions of digitalization of higher education

## La gestión del proceso de formación de la tolerancia de los estudiantes universitarios en las condiciones de digitalización de la educación superior

**Anna Konstantinovna Oreshkina** 

Russian Academy of Natural Sciences, Russia  
Russian Academy of Education, Russia  
ORCID: <https://orcid.org/0000-0002-7014-9404>

**Gennadiy Sergeevich Shkabin** 

Research institute of the Federal Penitentiary Service of Russia, Russia  
ORCID: <https://orcid.org/0000-0002-1908-668X>

**Tatiana Gennadievna Stanchuliak** 

Peoples' Friendship University of Russia, Russia  
ORCID: <https://orcid.org/0000-0002-9773-5438>

**Marina Georgiyevna Sergeeva** 

Research Institute of the Federal Penitentiary Service of Russia, Russia.  
ORCID: <https://orcid.org/0000-0001-8365-6088>

Received 10-12-20 Revised 12-25-20

Accepted 01-12-21 On line 01-20-21

### \*Correspondence

Email: [oreshkinaa2015@yandex.ru](mailto:oreshkinaa2015@yandex.ru)

## Summary

The article deals with the formation of students' tolerance and management of this process. The aim of the article is to cover theoretical and empirical aspects of the management of students' tolerance formation. A special focus is made on the role of tolerance in modern society and for the educational system as well as on the contradictions which determine the relevance of tolerance in the university environment. Tolerance is a complex, multifaceted phenomenon which touches all aspects of student life. Entering the university, young people find themselves surrounded by many different personalities who have their own values and beliefs in life. This calls for the necessity to respect and accept a different opinion and a different way of life. Therefore, nowadays the formation of tolerance acquires special importance in educational institutions as it is tolerance which is the basis of effective communication in a politically cultural society like the Russian Federation. So the formation of tolerance is a social order as it is impossible to develop the educational system unless this aspect is included. We scrutinized relevant literature on the issue and came to the conclusion that the formation of tolerance can be only achieved by means of democratic management and students' conscious choice of tolerant attitudes and behavior, which excludes any pressure or foisting. The study involved the choice of methods and an algorithm, which comprised the diagnosis of the mentioned parameters, conducting a formative experiment, repeated check of the parameters and performing a statistic analysis of the results. The study was carried out on the base of the Institute of Foreign languages, RUDN University (Russia). The research results allow drawing a conclusion about high effectiveness of the implemented actions aimed at the formation of students' tolerance.

**Key Words:** tolerance, higher education, communication technologies, tolerant personality, tolerant behavior.

## Resumen

El artículo trata sobre la formación de la tolerancia de los estudiantes y el manejo de este proceso. El objetivo del artículo es cubrir aspectos teóricos y empíricos de la gestión de la formación de tolerancia de los estudiantes. Se hace especial hincapié en el papel de la tolerancia en la sociedad moderna y para el sistema educativo, así como en las contradicciones que determinan la relevancia de la tolerancia en el ámbito universitario. La tolerancia es un fenómeno complejo y multifacético que afecta a todos los aspectos de la vida estudiantil. Al ingresar a la universidad, los jóvenes se encuentran rodeados de muchas personalidades diferentes que tienen sus propios valores y creencias en la vida. Esto exige la necesidad de respetar y aceptar una opinión diferente y una forma de vida diferente. Por lo tanto, hoy en día la formación de la tolerancia adquiere especial importancia en las instituciones educativas ya que es la tolerancia la base de la comunicación efectiva en una sociedad políticamente cultural como la Federación de Rusia. Entonces la formación de la tolerancia es un orden social ya que es imposible desarrollar el sistema educativo si no se incluye este aspecto. Examinamos la literatura relevante sobre el tema y llegamos a la conclusión de que la formación de la tolerancia solo se puede lograr mediante la gestión democrática y la elección consciente de los estudiantes de actitudes y comportamientos tolerantes, que excluye cualquier presión o imposición. El estudio implicó la elección de métodos y un algoritmo, que comprendió el diagnóstico de los parámetros mencionados, la realización de un experimento formativo, la verificación repetida de los parámetros y la realización de un análisis estadístico de los resultados. El estudio se llevó a cabo sobre la base del Instituto de Lenguas Extranjeras de la Universidad RUDN (Rusia). Los resultados de la investigación permiten sacar una conclusión sobre la alta efectividad de las acciones implementadas orientadas a la formación de la tolerancia de los estudiantes

**Palabras clave:** tolerancia, educación superior, tecnologías de la comunicación, personalidad tolerante, comportamiento tolerante.

## **Introduction**

The formation of tolerance is relevant due to:

the aggravation of the ethnic situation in the country and in the world, escalation of ethnic conflicts in society, which is reflected in interpersonal relationships between students (Magomedova, 1999);

the need in complex research into the state and dynamics of tolerance between the participants of the educational process in educational institutions (Dolzhich, Dmitrichenkova, 2018);

the need in a codified insight into the management of the process of forming students' tolerance (Vasbieva et al., 2018).

While studying literature on the formation of students' tolerance (Blinova et al., 2018; Gorev et al., 2018; Nickolson, 2001; Ponkin, 2003; Sharonova, Trubnikova, Sokolova, 2018; Solinin, 2009; Tekucheva, Gromova, 2016; Saralieva, 2001) we found a contradiction: increased requirements of modern higher education to the development of a harmonious, tolerant personality, on the one hand, and a lack of methodic recommendations. i.e. the absence of a clear set of methods for managing the process of students' tolerance formation, on the other hand. This dictates the necessity to study the process of forming students' tolerance and find the most effective algorithm of its formation and management.

## **Literature review**

The modern state of social relationships, including relationships between different participants of the educational process, allows concluding that the formation of tolerance is extremely important, first of all, due to the fact that without it, it is almost impossible to optimize a communication environment in an educational institution and develop communication skills, which are essential for students' future professional becoming (Bírová et al., 2018; Olport, 2003; Ovchinnikova, Shishkova, 2002; Solinin, 2009).

It is worth noting that tolerance is most easy to form in young years, when axiological and communication attitudes are not formed yet. As many scientists note (Kleptsova, 2004; Kukushkin, 2004; Leontiev, 2011; Markova, 2006; Miasischev, 2004; Zaretskaya, 1993), the development of the system of tolerant education should go alongside the integration of tolerance into the theoretical knowledge and practical activities of teachers and pupils from a very young age. Teachers should keep on searching the ways of tolerance development for children of early ages, teenagers, senior schoolchildren and adult people throughout their whole life.

School leavers' intolerant behavior is due to increased excitability, inadequate self-esteem or assessment of the situation, self-doubt and the severity of the motive for avoiding failure. This leads to the need in special forms and methods of forming tolerance (Galitskikh, 2004; Kudzieva, 2003; Mirimanova, 2002; Volkova, Panchenko, 2018).

Imposing axiological attitudes, including tolerant behavior, is counterproductive, so the formation of tolerance should be realized by means of special communication practices, with the democratic style of communication prevailing over other formats, and with the implementation of the meritocratic principle, when the student's position in the group and his/her praising depend solely on their contribution and the objective assessment of their activity and its results.

## Proposed methodology

The research was conducted from 2018 to 2019 at the Institute of Foreign Languages of RUDN University (Russia). 67 students aged 18-23 became participants of the continuous diagnostic study, 25 students took part in the formative part of the study.

The empirical stages of the study included:

1. The ascertaining stage, which consisted in diagnosing the students' level of tolerance / intolerance.
2. The formative stage, when the students attended special classes aimed to form their tolerance.
3. The control stage, when we assessed the effectiveness of the work carried out in order to form the students' tolerance.

At the ascertaining stage, we used the express questionnaire The Tolerance Index (by G. U. Soldatova, O. A. Kravtsova, o. E. Khukhlaev, L. A. Shaigerova) to diagnose the students' level of tolerance / intolerance. At the formative stage, we implemented a program of group classes which aimed to form the students' tolerance. The experimental group consisted of 13 University students aged 18-23 who had low indexes of tolerance. The control group was made of 12 students whose tolerance indexes were close to the experimental group. This condition would later let compare the effectiveness of the measures for the formation of tolerance. After the implementation of the program, at the control stage, we repeatedly diagnosed the level of tolerance in order to assess the effectiveness of the tolerance training classes.

The research algorithm is presented in Table 1.

**Table 1.**

*The algorithm of actions in the experiment*

Algorithm of actions
1. The ascertaining stage, which consisted in diagnosing the students' level of tolerance / intolerance.
2. The formative stage, when the students attended special classes aimed to form their tolerance.
3. The control stage, when we assessed the effectiveness of the work carried out in order to form the students' tolerance.

## Result analysis

At the first stage, we diagnosed the level of students' tolerance. The total number constituted 67 students of the Institute of Foreign Languages, RUDN University (Russia).

At the formative stage, we worked out The Structural-Functional Model of Managing the Formation of University Students' Tolerance and realized the program The Formation of University Students' Tolerant Attitudes and Consciousness. The formation of tolerance was trained in Sociology, Political Science and Pedagogy classes, whose programs included relevant principles, and by means of psychological training.

In order to characterize the level of students' tolerance and the effectiveness of the formative experiment, we here provide a comparison of the indexes at the ascertaining and control stages of the research. The percentage of the group level of tolerance in groups A and B is depicted in Table 2 and in Figure 1.

**Table 2.**

*The percentage of the group level of tolerance in groups A and B, NA=13, NB=12*

Stage	Group	Low level	Medium level	High level
Ascertaining stage	Experimental group A (%, number of students)	15% (2)	62% (8)	23% (3)
	Control group B (%, number of students)	17% (2)	66% (8)	17% (2)
Control stage	Experimental group A (%, number of students)	0% (0)	92% (12)	8% (1)
	Control group B (%, number of students)	8% (1)	84% (10)	8% (1)

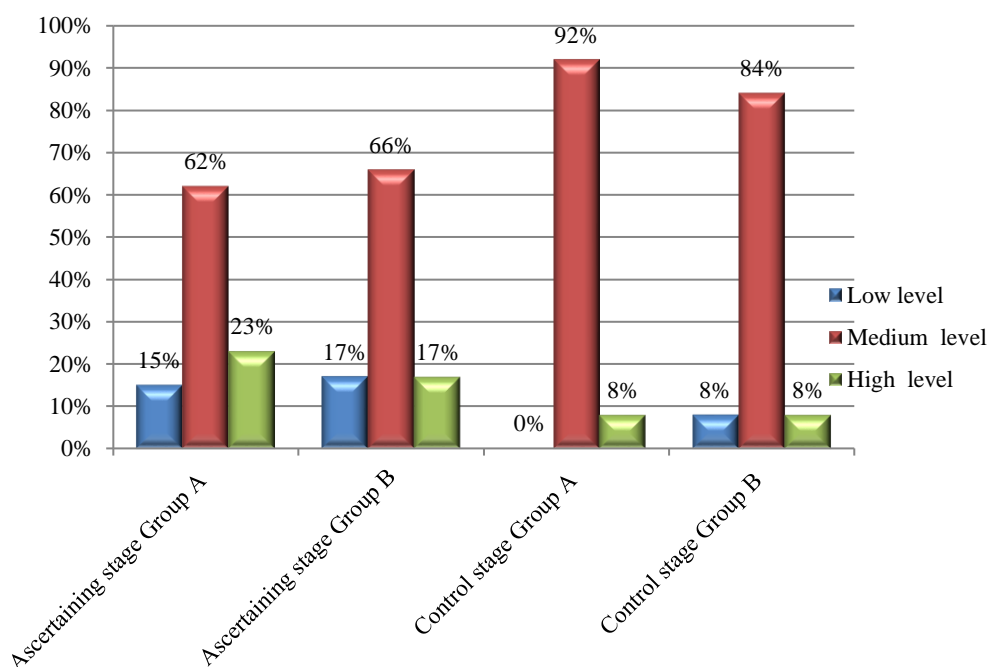


Figure 1. The percentage of the group level of tolerance in groups A and B

It is worth noting that group A showed positive dynamics:

- there is a sharp rise of the level of tolerance to the medium level. 92% of students show both tolerant and intolerant characteristics in different situations, which implies the influence of the educational process on the formation of such personal traits as sociability, self-confidence, respect to fellow-students, responsibility;

- there are no students with a low level of tolerance, which says about formed positive tolerant attitudes.

There is a marked decrease of students with a high level of tolerance in group A from 23% to 8%, and in group B, from 17% to 8%, which reflects the change of their views and judgments about the surrounding reality.

In group B, the percentage of students with the medium level of tolerance rose from 66% to 84%, whereas the percentage of students with a high and low level of tolerance decreased. On the whole, the indexes of the control stage are significantly better than those of the ascertaining stage. The students of group A proved to be more tolerant than the students of group B. The breakdown into subscales showed the following results.

**Table 3.**

*The comparative assessment of the level of ethnic tolerance. NA=13, NB=12*

Stage	Group	Low	Medium level	High level
Ascertaining stage	Experimental group A (% , number of students)	23% (3)	62% (8)	15% (2)
	Control group B (% , number of students)	8% (1)	84% (10)	8% (1)
Control stage	Experimental group A (% , number of students)	8% (1)	69% (9)	23% (3)
	Control group B (% , number of students)	8% (1)	92% (11)	0% (0)

The data of table 3 show a marked averaging of the indexes of ethnic tolerance. At the control stage, the percentage of students with a low level of ethnic tolerance in group A decreased from 23% to 8%. In group B, these indexes did not change and made up 8%. Therefore, the percentages of students with a low level of ethnic tolerance are on the same level.

The medium level of ethnic tolerance at the ascertaining and control stages is higher in group B. In group A, the number of students with the medium level almost did not change.

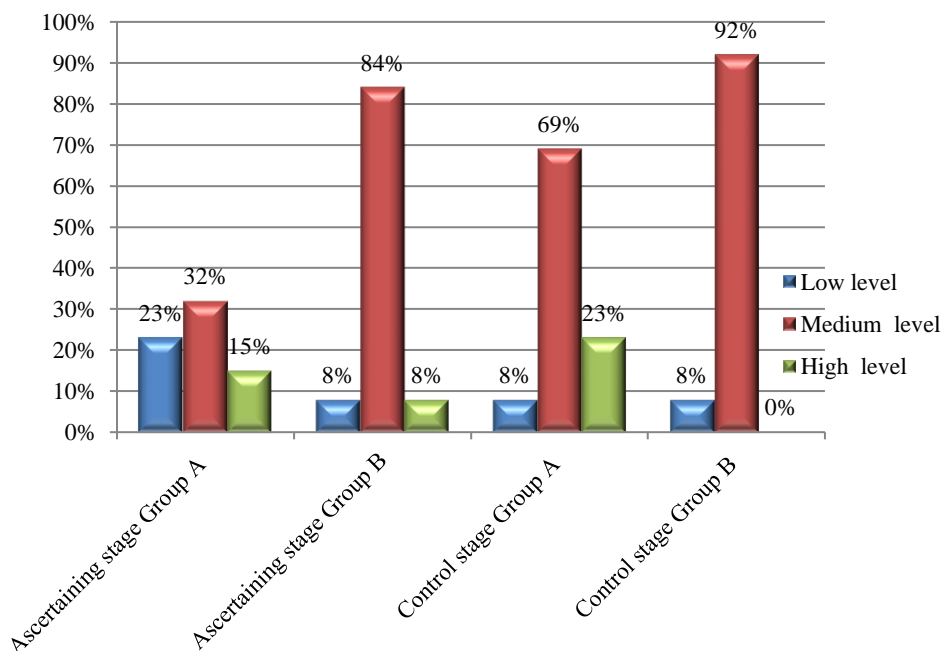


Figure 2. The comparative assessment of the level of ethnic tolerance

However, at the control stage, the number of students with a high level of ethnic tolerance rose from 15% to 23% in group A, whereas in group B, this index dropped from 8% to 0%. This reflects the desire of students from group A to be friendlier to representatives of other ethnic groups, and their willingness to engage in cross-cultural interaction.

In regard to social tolerance, the indexes are as follows in table 4 and in Figure 3:

**Table 4**

*The comparative assessment of the level of social tolerance. NA=13, NB=12*

Stage	Group	Low level	Medium level	High level
Ascertaining stage	Experimental group A (% number of students)	23% (3)	69% (9)	8% (1)
	Control group B (% number of students)	17% (2)	83% (10)	0% (0)
Control stage	Experimental group A (% number of students)	8% (1)	92% (12)	0% (0)
	Control group B (% number of students)	25% (3)	75% (9)	0% (0)

1. At the ascertaining stage, the percentage of students with a low level of social tolerance prevailed in group A (23% / 17%). At the control stage this index fell in group A to 8%, whereas in group B, it rose to 25%.

2. The percentage of students with the medium level of social tolerance prevailed in group A at the control stage, thus showing the rise from 69% to 92%. In group B, this index fell from 83% to 75%. In other words, while at the ascertaining stage there were more students with the medium level in group B than in group A, the situation changed to the contrary at the control stage.

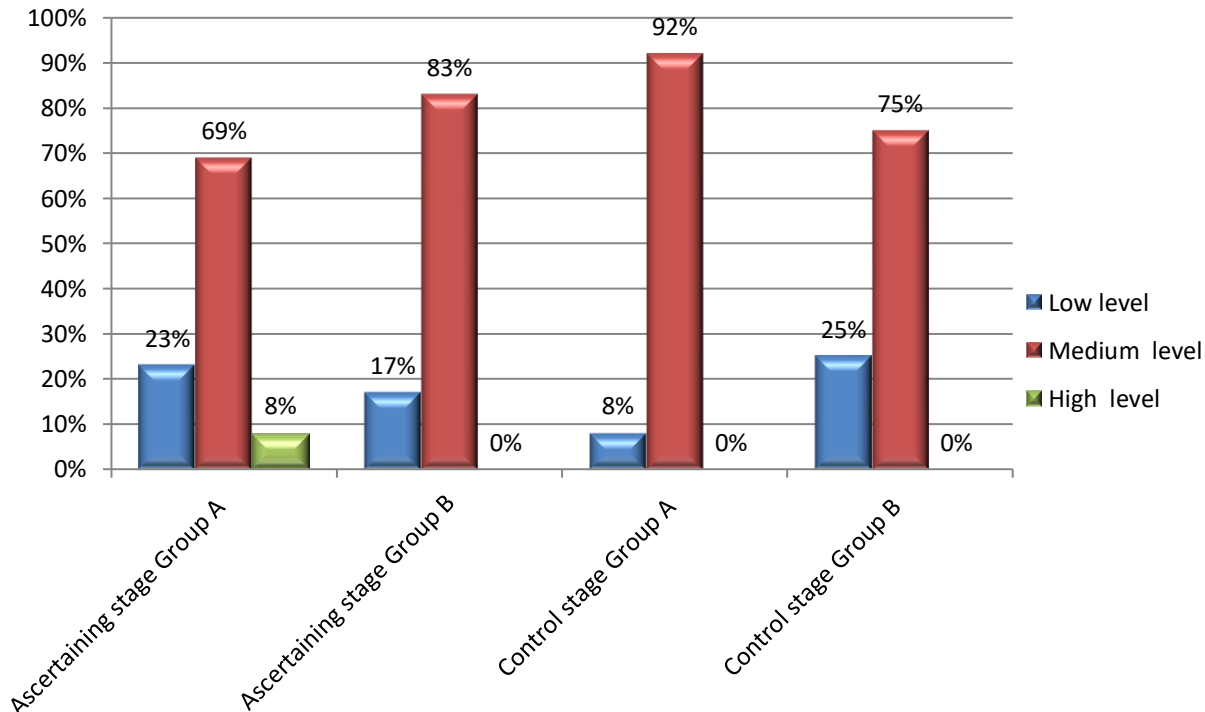


Figure 3. The comparative assessment of the level of social tolerance

3. At the ascertaining stage, the low level of social tolerance prevailed in group A, with 8% of students. At the control stage, this index dropped to 0%. In group B, it did not change. As we can see, the students did not show a high level of social tolerance at the control stage.

So, at the control stage, the level of social tolerance in group A is higher than in group B, while at the ascertaining stage, the situation is different.

In regard to tolerance as a personal trait, the indexes are as follows in table 5 and in Figure 4.

At the ascertaining stage, a low level of tolerance as a personal trait prevailed in group A. At the control stage, the index dropped to 0%, while in group B it remained at the same level and made up 8%.

**Table 5**

*The comparative assessment of tolerance as a personal trait. NA=13, NB=12*

Stage	Group	Low level	Medium level	High level
Ascertaining stage	Experimental group A (%, number of students)	15% (2)	77% (10)	8% (1)
	Control group B (%, number of students)	8% (1)	75% (9)	17% (2)
Control stage	Experimental group A (%, number of students)	0% (0)	85% (11)	15% (2)
	Control group B (%, number of students)	8% (1)	84% (10)	8% (1)

The percentage ratio of the medium level changed significantly; at the ascertaining stage, these indexes were at the same level in both groups, i.e. 77% and 75%; at the control stage they are also on the same level, i.e. 85% and 84%.

At the ascertaining stage, a high level of tolerance as a personal trait prevailed in group B, with 17% against 8%; at the control stage, the percentage of students with a high level increased in group A to 15%, whereas in group B it decreased to 8%. So, at the control stage, this index prevails in group A.



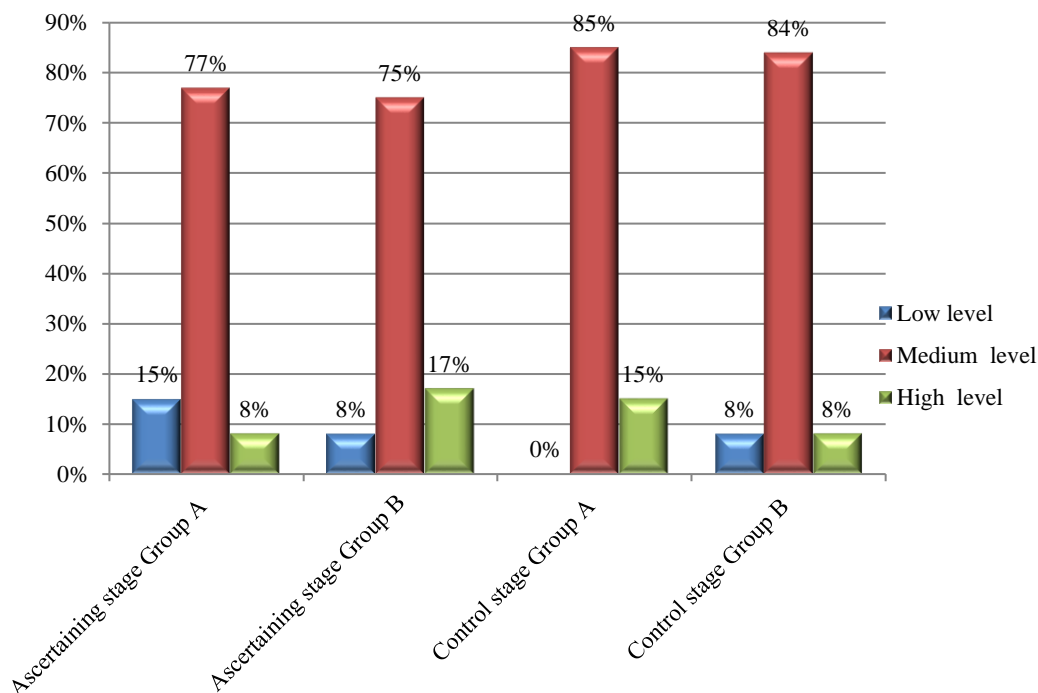


Figure 4. The comparative assessment of tolerance as a personal trait.

Thus, at the control stage, group A demonstrates a positive trend: there are no students with a low level of tolerance, which reflects the formation of positive tolerant attitudes; tolerance sharply rose to the medium level; students demonstrated both tolerant and intolerant qualities in different situations, which means the influence of the educational process on the formation of such personal traits as sociability, self-confidence, respect to fellow-students, responsibility; in group A, the percentage of students with a high level of tolerance decreased, which means the change of their views and judgements about the surrounding reality.

In group B, there was a slight increase in the percentage of students with the medium level of tolerance. However, the percentage of students with a high level decreased. The percentage of students with a low level of tolerance also decreased, which indicates the students' readiness for cross-cultural interaction.

## Conclusion

In order to increase the effectiveness of managing the process of the formation of university students' tolerance it is necessary to follow the following principles:

- to involve all participants of the educational process in the management of students' tolerance;
- the faculty should illustrate tolerance with their own example;
- to carry out diagnostic checks to define students' level of tolerance;
- to read lectures for students to better know and understand the necessity to raise tolerance;
- to conduct training to form skills of self-orientation in the conditions of cross-cultural communication with inclusion of basic ideas of tolerance into the system of personally significant students' values;

- to involve students in the university social life: participation in different student communities.

**Conflict of interests:** The authors declare that they have no conflicts of interest.

**Authors' contribution:** The authors have participated in the research process, in the writing of the work and in the analysis of the documents.

### **Bibliographic references**

- Bírová, J., Kružlík, P., Kalimullin, A., Sokolova, N., Haroun, Z., Králik, R., Vasbieva, D. (2018). Mathematical and Statistical Bibliometric Indicators for Scholars in the Field of Romance Languages and Linguistics. *EURASIA: Journal of Mathematics, Science and Technology Education*, 14(12).
- Blinova, S., Dugina, T., Zabolotskikh, A. (2018). Teaching mixed nationality groups (on the example of students from the Northern Caucasus region). *INTED2018: Proceedings of the 12th International Technology, Education and Development Conference* (pp. 7977-7982). Valencia, Spain.
- Dolzich, E., Dmitrichenkova, S. (2018). Computer science terminology (a case study of the Spanish language). *INTED2018: Proceedings of the 12th International Technology, Education and Development Conference* (pp. 2556-2559). Valencia, Spain.
- Galitskikh, E.O. (2004). Dialogue in education as a way of tolerance formation. Moscow: Academic Project.
- Gorev, P., Telegina, N., Karavanova, L., Feshina, S. (2018). Puzzles as a didactic tool for development of mathematical abilities of junior schoolchildren in basic and additional mathematical education. *EURASIA: Journal of Mathematics, Science and Technology Education*, 14(10), 178-185.
- Kleptsova, E.Y. (2004). The psychology and pedagogy of tolerance. Moscow: Academic Project.
- Kudzieva, N.Y. (2003). The formation of tolerance in the participants of the higher professional education: Extended Ph.D. Thesis. Moscow.
- Kukushkin, N.V. (2004). Tolerance is the basis of the pedagogical process. Borisoglebsk: Borisoglebsk Pedagogical Institute.
- Leontiev, D.A. (2011). New angles of understanding personality in psychology: from the necessary to the possible. *Issues of psychology*, 1, 3-27.
- Magomedova, E.V. (1999). Tolerance as a principle of culture: Extended Ph.D. Thesis. Rostov-on-the Don.
- Markova, N. (2006). The solution to the problem of tolerance formation. *Alma mater*, 2, 56-58.
- Miasischev, V.N. (2004). The psychology of relationships. Moscow – Voronezh: MODEK.
- Mirimanova, M.S. (2002). Tolerance as a problem of education. *The development of personality*, 2, 104-116.

- Nickolson, P. (2001). Tolerance as a moral ideal. *The herald Ural of the Interegional Institute of social sciences*, 1, 129-146.
- Olport, G. (2003). Tolerant personality. In *The age of tolerance: Scientific herald*, issue 6. Moscow: MSU.
- Ovchinnikova, N.V., Shishkova, G.A. (2002). Communication technologies in the formation of tolerance. Rostov-on-the Don.
- Ponkin, I.V. (2003). Tolerance and tolerism in a secular state. *Education*, 5, 29-43.
- Sarialieva, Z.H. (2001). The youth of the 21st century: tolerance as a way of the world perception. Nizhniy Novgorod: NISOC.
- Sharonova, S., Trubnikova, N., Sokolova, N. (2018). Interpreting religious symbols as basic component of social value formation. *European Journal of Science and Theology*, 14(3), 117-129.
- Solinin, N. E. (2009). Tolerance as an integral quality of a personality. In Y. P. Povarenkova (Ed.), *Systemogenesis of the learning and professional activity: Proceedings of the 4th all-Russia Scientific Conference* (pp. 230-232). Yaroslavl: Yaroslavl State University.
- Solinin, N.E. (2009). Approaches to tolerance in domestic and foreign sciences. *Yaroslavl pedagogical herald*, 4(61), 178-182.
- Tekucheva, I.V., Gromova, L.Y. (2016). On present state of teaching Russian language in Russia. *International Journal of Environmental and Science Education*, 11(14), 6504-6511.
- Vasbieva, D.G., Sokolova, N.L., Masalimova, A.R., Shinkaruk, V.M., Kiva-Khamzina, Y.L. (2018). Exploring the EFL teacher's role in a smart learning environment: a review study. *XLinguae*, 11(2), 265-274.
- Volkova, Y., Panchenko, N. (2018). Discourse variation of the concepts of destructive emotions. *Vestnik Rossiiskogo Universiteta Druzhby Narodov. Russian journal of linguistics*, 22(1), 175-194.
- Zaretskaya, I. I. (1993). *Learning to communicate*. Moscow: RAO.