Multicultural University Education and Museum Pedagogy

G F Melnikova¹ and S I Gilmanshina¹
¹Kazan Federal University, 18 Kremlyovskaya street, Kazan, 420008, Russian Federation

ms.valitova1989@mail.ru, gilmanshina@yandex.ru

Abstract. The specifics of the educational process in the museum are revealed. The experience of using the multicultural educational space of the museum for developing non-humanitarian directions of the university of general cultural competencies is expounded. The emphasis is on the formation of the ability to tolerate social, ethnic, confessional and cultural differences.

Introduction

Today it is obvious that humanity is developing along the path of expanding the interconnection and cooperation of various countries, peoples and cultures. The existing expansion of international cooperation causes the interest of young people in multicultural university education. A special role in this process belongs to museums that take the individual beyond the borders of society, civilization into the world of culture. However, the problem of using the pedagogical potential of the university's museums in the multicultural education of youth has not been finally resolved.

Moreover, multicultural education is inseparable from the present historical period of the development of mankind. Today, according to the Federal State Educational Standard of Higher Education of Russia, as a result of mastering the bachelor's program, students, along with professional competences, should have general cultural competences. For example, the ability to analyze the main stages and patterns of historical development for the formation of patriotism and civic position, the ability to work in a team, tolerantly perceiving social, ethnic, confessional and cultural differences, etc. In our opinion, museum pedagogy could contribute to the formation of these competencies among university students.

The term "multicultural education" is defined as the formation of a person capable of active and effective life in a multinational and multicultural environment with a developed sense of understanding and respect for other cultures, the ability to live in peace and harmony with people of different nationalities, races, beliefs.

Multicultural education involves the adaptation of one ethnic group to another, the awakening of interest in the culture of neighbors. The reference to the values accumulated and sacretly preserved by mankind in world culture presupposes the inclusion of an individual in the cultural and historical space, which creates the ground for awareness of himself as a subject of culture. In modern socio-economic conditions, we view multicultural education as one of the main tasks of universities, in the solution of which a significant role is assigned to the museums of the university. And we view museum pedagogy as an effective approach to the education of young people in conditions of multinationality.
The purpose of the research: to reveal the pedagogical potential of the university's museums in the multicultural university education of youth.

The basic part

A distinctive feature of all forms of work of the museum institution at the present stage of the development of society is that the museum is no longer just a scientific institution, as it was in the XIX century, or a scientific and educational institution, which it was in the 60-70s of the XX century [5]. Today, the museum realizes its functions as a specific mechanism of socio-cultural communication, contributing to the reproduction of culture and the interaction of various cultural communities. The museum has a variety of ways to influence the audience. The process of acquiring knowledge is stimulated by sensory perception and emotional experiences, thanks to familiarization with the rarities of the national and world culture. Museums play a key role in the life of modern society, remaining a center for the preservation of cultural traditions, the formation of moral values and an indicator of the development of civilization in general.

A special category of museums are museums of universities. Let's turn to the history of museum business in Russia, where you can see the role and importance of university museums in the educational process.

For this purpose, we will dwell on the Kazan Imperial University, founded in 1804. According to the Charter of 1804, the university had an office for natural and natural history, a mineral cabinet that laid the foundation for modern geological, zoological and botanical museums. In 1815 the formation of a university cabinet of rarities laid the foundations for the organization of ethnographic and archaeological museums. Based on the cabinet of A.M. Butlerov in 1863 was created a museum of the Kazan Chemical School [6].

The Kazan Federal University owns the unique in the universities of Russia a unique combination of diverse museums called the Museum of the History of Kazan University. It includes expositions on the development of mathematics, physics, astronomy, chemistry, biology, medicine, physiology, jurisprudence, philology, history, Oriental studies at Kazan University. Today there are 10 museums in the museum complex of the Kazan Federal University. One of them is the museum of the Kazan Chemical School.

The traditions of the museum of the Kazan School of Chemistry are still in our days. The chemical laboratory, geographically combined with the museum, never stopped its work. The museum hosted lecture classes with students, as well as public lectures, experimental works, scientific discussions. The listeners and collaborators were people of different nations and religions, united by one great educational goal and humane views. Moreover, the territory of the Kazan Academic District covered polyethnic regions of the empire, and the national composition of the students was varied.

The educational process in the museum has its own specifics. Modern university education provides systemic rational knowledge and professional competences [1 - 4], which are formed through the active work of consciousness. The museum educational space attracts emotions and feelings, by immersing in a certain epoch or historical situation. As a result, a person experiences general feelings with a story in the museum or any other museum exhibit.

Thus, the museum educational space allows to preserve and, most importantly, cultivate the patriotic feelings of young people. This sensory process is difficult to implement in an intensive stream of modern visual information.

In the multinational society, the importance of education in the spirit of friendship, tolerance and mutual understanding of people of different nationalities is very important. Tatarstan is a multi-ethnic and multi-confessional republic with centuries-old traditions of peaceful and good-neighborly residence of a large number of nations and nationalities, which greatly increases the sensitivity of the republic's population to any manifestations of xenophobia and ethnic intolerance. An important role in the prevention of xenophobia and ethnic intolerance, the creation of a favorable educational space for students of all ethnic groups, is assigned to the museums of the Kazan Federal University.

Today the museum of the Kazan Chemical School conducts cultural and educational work and is part of the educational process. In the memorial room of the museum there are lectures and practical
classes for students in such disciplines as "Development of Chemistry in Kazan", "The Role of Chemistry in the Development of Natural Science Knowledge", "Kazan School of Chemists", "History and Methodology of Chemistry". Round tables, seminars and public lectures of Russian and foreign scientists in the field of chemistry and chemical education are held. With the purpose of forming the need for self-development, the teachers introduce the students to the history of cognitive contradictions in chemistry that served as the impetus for the birth of a new theory. Moreover, students - future teachers of chemistry carry out design work on the history of chemistry, and a number of tasks on chemical disciplines are presented in the form of cases containing historical material.

For example, in case studies on thermodynamics, a historical explosion is described in an attempt to break up a caked mixture of nitrate and ammonium sulfate, and it is proposed to evaluate the measure of the risk of decomposition of ammonium nitrate on the basis of thermodynamic calculations. Another case raises the issue of thermodynamic justification for the possibility of spontaneous decomposition of potassium chlorate. A historical reference is made to the effect of the degree of purity of a given salt (the presence of impurities of combustible substances such as phosphorus and sulfur) on its susceptibility to friction, its use in the history of match production, and the corresponding thought experiment.

Thus, chemistry cases containing historical international material can be considered as a complex integrated system of active learning in the multicultural educational space of the university.

Consequently, the multicultural educational space of the museum contributes to the education of the person's value relationship, the expansion of her sensory experience, the development of patriotism and citizenship, the ability to tolerate social, ethnic, confessional and cultural differences, thereby creating general cultural competencies for university students.

Conclusion

Museum pedagogy presupposes the inclusion of appropriate elective courses in the content of the university multicultural educational process. The pedagogical potential of the museums of the University is to bring up value orientations through the expansion of sensory experience in the process of communicating with museum objects and creating a favorable educational space for students of all ethnic groups. As a result, in the modern multicultural educational space of the museum, conditions are ensured that ensure the formation of general cultural competencies, protection and support for the development of each student. Consequently, the museums of the university can be regarded as one of the most important means of multicultural education and upbringing of modern youth.

References

[1] Gilmanshin, I.R., Gilmanshina, S.I. 2016 The formation of students' engineering thinking as a way to create new techniques, technologies, materials IOP Source: International Scientific-Technical Conference on Innovative Engineering Technologies, Equipment and Materials Vol 134 012006

[2] Gilmanshina S I, Gilmanshin I R 2015 Building axiological competence of graduate students by means of project-based learning IOP Conference Series: Materials Science and Engineering, Vol 86 (1) 012029

[3] Gilmanshina S I, Khalikova F D 2016 Teaching Gifted Adolescents in Terms of the Transforming Natural Sciences Education Ifte 2016 - 2nd International Forum on Teacher Education Vol 12 pp 50-54

[4] Gilmanshina S I, Sagitova R N, Gilmanshin I R 2016 Innovative Components for Preparing Graduates and Master's Degree Holders of Natural Sciences, for Education at the University Level Ifte 2016 - 2nd International Forum on Teacher Education Vol 12 pp 55-59

[5] Sidorova I B 2012 Musei i muzeinoe delo Rossii (dorevolyucionnyi period) [Museums and museology Russian (pre-revolutionary period)]. Kazan, 299 p

[6] Valitova G F 2014 Aleksandr Mihailovich Butlerov [Alexander Butlerov]. Kazan, 431 p