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DEVELOPMENT OF STUDENTS' COGNITIVE COMPETENCIES THROUGH MUSEUM-BASED EDUCATION: EVIDENCE FROM SOUTH KAZAKHSTAN

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Abstract. This article examines the educational potential of museums in developing students' cognitive competencies in the process of studying history. In the context of the modernization of the education system in the Republic of Kazakhstan, the use of cultural and historical heritage as an educational resource is becoming increasingly important. Modern educational standards emphasize the development of analytical, research, and interpretative skills of students rather than the simple transmission of knowledge. In this regard, museums are considered an important educational environment that combines formal and non-formal learning. The purpose of the study is to analyze the potential of museum-based educational environments in the development of students' cognitive competencies and to determine the pedagogical conditions for the effective use of museum resources in school history education. The methodological framework of the research is based on the competency-based approach, the concept of museum pedagogy, and modern approaches to the use of cultural heritage in education. The research employed methods of literature analysis, historical-pedagogical analysis, comparative analysis, content analysis of museum educational programs, and pedagogical observation. The empirical part of the research involved students of grades 7–9 from secondary schools in Shymkent. The results show that the use of museum educational resources contributes to increasing students' cognitive activity, improving their ability to analyze historical sources, and developing research skills. The findings confirm that the museum educational environment has significant pedagogical potential and can

be effectively integrated into the system of school history education. The results of the study may be used in the development of educational programs and teaching methods based on the integration of museum resources into the learning process.

Keywords: museum education, museum pedagogy, cognitive competence, history education, cultural heritage, museum-based learning, secondary school students

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МУЗЕЙЛІК БІЛІМ БЕРУ НЕГІЗІНДЕ ОҚУШЫЛАРДЫҢ ТАНЫМДЫҚ ҚҰЗЫРЕТТІЛІКТЕРІН ДАМУ (ОҢТҮСТІК ҚАЗАҚСТАН МЫСАЛЫНДА)

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Аннотация. Мақалада тарихты оқыту барысында оқушылардың танымдық құзыреттіліктерін дамытудағы музейлердің білім беру әлеуеті қарастырылады. Қазақстан Республикасының білім беру жүйесін жаңғырту жағдайында тарихи-мәдени мұраны білім беру ресурсы ретінде пайдалану ерекше маңызға ие. Қазіргі білім беру стандарттары оқушылардың тек білім алуын ғана емес, сонымен қатар олардың аналитикалық, зерттеушілік және интерпретациялық дағдыларын дамытуға бағытталған. Осы тұрғыдан музейлер формалды және бейформалды білім беруді біріктіретін маңызды білім беру ортасы ретінде қарастырылады. Зерттеудің мақсаты – музейлік білім беру ортасының оқушылардың танымдық құзыреттіліктерін дамытудағы мүмкіндіктерін талдау және мектептегі тарих пәнін оқытуда музей ресурстарын тиімді пайдаланудың педагогикалық шарттарын анықтау. Зерттеудің әдіснамалық негізін құзыреттілік тәсіл, музей педагогикасының теориялық тұжырымдамалары және мәдени мұраны білім беру процесінде пайдалану мәселелеріне арналған ғылыми еңбектер құрайды. Зерттеу барысында ғылыми әдебиеттерді талдау, тарихи-педагогикалық талдау, салыстырмалы талдау, музейлік білім беру бағдарламаларына контент-талдау және педагогикалық

бақылау әдістері қолданылды. Зерттеудің эмпирикалық кезеңіне Шымкент қаласындағы жалпы білім беретін мектептердің 7–9 сынып оқушылары қатысты. Зерттеу нәтижелері музейлік білім беру ресурстарын пайдалану оқушылардың танымдық белсенділігін арттырып, тарихи деректерді талдау дағдыларын дамытуға және зерттеушілік қабілеттерін қалыптастыруға ықпал ететінін көрсетті. Зерттеу нәтижелері музей ресурстарын мектептегі тарих пәнін оқыту процесіне енгізу білім беру тиімділігін арттыруға мүмкіндік беретінін көрсетеді.

Түйін сөздер: музей педагогикасы, музейлік білім беру, танымдық құзыреттілік, тарихты оқыту, мәдени мұра, музейлік білім беру ортасы

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РАЗВИТИЕ ПОЗНАВАТЕЛЬНЫХ КОМПЕТЕНЦИЙ УЧАЩИХСЯ НА ОСНОВЕ МУЗЕЙНОГО ОБРАЗОВАНИЯ (НА ПРИМЕРЕ ЮЖНОГО КАЗАХСТАНА)

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Аннотация. В статье рассматривается образовательный потенциал музеев в развитии познавательных компетенций учащихся при изучении истории. В условиях модернизации системы образования Республики Казахстан возрастает значение культурно-исторического наследия как важного ресурса формирования аналитических, исследовательских и интерпретационных навыков обучающихся. Современные образовательные стандарты ориентированы на развитие способности к самостоятельному анализу информации и критическому мышлению. Цель исследования заключается в анализе возможностей музейной образовательной среды для развития познавательных компетенций учащихся, а также в определении педагогических условий эффективного использования музейных ресурсов в школьном историческом образовании. Методологическую основу исследования составляют компетентностный подход, концепция музейной педагогики и современные подходы к использованию культурного наследия в образовательном процессе. В ходе исследования применялись методы анализа научной литературы, историко-педагогического и сравнительного анализа, контент-анализа музейных образовательных программ, а также педагогического наблюдения. Эмпирическая часть исследования проведена

среди учащихся 7–9 классов общеобразовательных школ Шымкент. Результаты исследования показали, что использование музейных образовательных ресурсов способствует повышению познавательной активности учащихся, развитию навыков анализа исторических источников и формированию исследовательских компетенций. Практическая значимость исследования заключается в возможности применения полученных результатов при разработке образовательных программ и методических моделей интеграции музейных ресурсов в школьное историческое образование.

Ключевые слова: музейная педагогика, музейное образование, познавательные компетенции, историческое образование, культурное наследие, музейно-ориентированное обучение

Introduction. In the context of the ongoing transformation of the education system in the Republic of Kazakhstan, the development of students' key competencies has become increasingly important, as these competencies enable learners to engage in independent inquiry and critical analysis of information. Contemporary educational standards are oriented not only toward the transmission of knowledge but also toward the development of students' cognitive, research, and communicative skills. In this regard, the use of cultural and historical heritage as an educational resource has gained particular significance, especially the potential of museums as an educational environment.

Museums represent important institutions for preserving and transmitting the historical and cultural heritage of society. In contemporary conditions, they function not only as repositories of historical artifacts but also as active educational platforms that contribute to the development of students' cognitive activity and the formation of historical thinking. International UNESCO recommendations emphasize the educational role of museums as a significant resource within the cultural, historical, and educational landscape (UNESCO, 2015; 2022).

In academic literature, the use of museum resources in the educational process is examined within the framework of museum pedagogy. The fundamental theoretical principles of museum pedagogy were developed in the works of B.A. Stolyarov, who conceptualizes the museum as a unique educational space that contributes to the development of cultural and cognitive competence (Stolyarov, 2004). Studies by S.L. Troyanskaya highlight the educational potential of museums in fostering students' general cultural and cognitive competencies (Troyanskaya, 2007). Similarly, T.P. Mysheva emphasizes that museum pedagogy facilitates the integration of educational and cultural practices within the contemporary sociocultural environment (Mysheva, 2012). Significant contributions to this field have also been made by I.A. Makeeva, whose research focuses on the development of students' cognitive activity through museum-based educational approaches (Makeeva, 2014), as well as by M.Y. Yukhnevich, who examines the methodological foundations of cooperation between schools and museums (Yukhnevich, 2019).

Within Kazakhstani pedagogical research, issues related to the use of historical

and cultural heritage in education have been addressed in the works of national scholars. For instance, B. K. Elikbaev analyzes the potential of local history materials in shaping students' historical consciousness (Elikbaev, 2018). The studies of F.Sh. Orazbayeva focus on the development of communicative and cognitive competencies among learners in the educational process (Orazbayeva, 2000+). Issues related to museum pedagogy and the educational potential of cultural heritage are explored in the works of F.N. Zhumabekova (Zhumabekova, 2017–2020). Furthermore, the development of students' cognitive interest is examined in the research of G. Kasymova (Kasymova, 2019–2021), while the application of museum potential in teaching history is analyzed in the studies of S. Nurgaliyeva (Nurgaliyeva, 2021).

The relevance of this research is further reinforced by the state policy of the Republic of Kazakhstan aimed at preserving and promoting cultural heritage. National legislative documents such as the Law of the Republic of Kazakhstan “On Culture” and the Law “On Education” emphasize the importance of utilizing cultural resources and historical heritage within the educational process (Law on Culture of the Republic of Kazakhstan, 2023; Law on Education of the Republic of Kazakhstan, 2023). In addition, the implementation of the national program *Rukhani Zhangyru*, which is aimed at strengthening national identity and promoting the historical and cultural heritage of the country, plays a significant role in this context (Rukhani Zhangyru Program, 2017–2023). In recent years, particular attention has also been devoted to the development of museum infrastructure, which is reflected in the “Concept for the Development of Museums of Kazakhstan until 2030” (2023).

Despite the considerable scholarly attention devoted to the issue of museum pedagogy, the use of museums as a tool for developing students' cognitive competencies within regional educational contexts remains insufficiently explored. This is particularly evident in the integration of museum resources into school history education at the regional level.

In this regard, the aim of the present study is to analyze the educational potential of museums in the Republic of Kazakhstan and to identify opportunities for the formation and development of students' cognitive competencies through museum resources, using the example of South Kazakhstan.

To achieve this aim, the following research objectives were formulated:

- to analyze the theoretical foundations of museum pedagogy and its role in the educational process;
- to identify the educational potential of museums in the development of students' cognitive competencies;
- to examine the possibilities of using museum resources of South Kazakhstan in teaching history;
- to determine the pedagogical conditions for the effective use of museums within the school educational process.

Literature Review. The issue of using museums in the educational process is

examined in academic literature within an interdisciplinary field that integrates pedagogical, cultural, and historical studies. Scholars primarily focus on the educational potential of museums, their role in fostering students' cognitive activity, and the possibilities of integrating museum resources into school education.

One of the fundamental directions in the study of this problem is museum pedagogy, which has developed at the intersection of pedagogy, cultural studies, and museum studies. In academic discourse, museum pedagogy is understood as a system of educational practices aimed at utilizing museum resources in the processes of teaching and personal development. The theoretical foundations of museum pedagogy were significantly developed in the works of B. A. Stolyarov, who conceptualizes the museum as a unique educational space. In his fundamental work *Museum Pedagogy: History, Theory, and Practice*, the museum is interpreted as a special educational environment that contributes to the formation of cultural identity and the development of individuals' cognitive activity. The author emphasizes that the museum environment possesses unique didactic opportunities, enabling the integration of emotional perception of historical artifacts with analytical interpretation of historical processes (Stolyarov, 2004; 2020).

The development of the theoretical foundations of museum pedagogy was further advanced in the studies of S.L. Troyanskaya, who considers the museum an effective educational environment for the formation of students' general cultural competencies. According to the researcher, museum exhibitions contribute to developing students' ability to interpret cultural symbols and historical sources, which constitutes an important component of cognitive competence (Troyanskaya, 2007). A similar perspective is presented by T. P. Mysheva, who notes that museum pedagogy serves as an important instrument for integrating educational and cultural practices within the contemporary sociocultural environment. In her studies, the author highlights the significance of the museum environment as a space of non-formal education, where students gain opportunities for independent exploration of historical and cultural heritage (Mysheva, 2012).

Particular attention in academic literature is devoted to the influence of museum pedagogy on the development of students' cognitive activity. In the works of I. A. Makeeva, it is demonstrated that the use of museum resources in the educational process contributes to the development of students' research skills, stimulates their interest in historical knowledge, and promotes the formation of critical thinking (Makeeva, 2014). Contemporary studies also confirm the influence of museum education on the development of students' cognitive abilities. For instance, Ş. Noyat notes that educational programs implemented within museum environments contribute to the development of observation, analytical thinking, and cognitive engagement among learners (Noyat, 2024). Methodological aspects of cooperation between schools and museums are extensively examined in the works of M.Y. Yukhnevich, who emphasizes that museum-based activities allow students to develop skills in analyzing historical sources, interpreting cultural objects, and conducting independent information searches (Yukhnevich, 2019). The studies of

E.G. Vanslova also highlight the importance of integrating school education with museum activities as an effective means of developing students' historical thinking.

In recent years, academic interest in the educational potential of museums has intensified in the context of transformations in educational systems and the development of competency-based approaches to learning. Contemporary research increasingly considers museums not only as repositories of cultural heritage but also as important elements of educational infrastructure. In the works of B.A. Stolyarov and E.N. Mastenitsa, it is emphasized that under the conditions of digitalization, museums are transforming into multifunctional educational spaces that combine traditional exhibition formats with interactive educational technologies (Stolyarov, 2019; Mastenitsa, 2020). Such transformations significantly expand the possibilities for integrating museum resources into the educational process.

A separate line of research is related to examining the role of museums in developing students' cognitive and research competencies. In the works of L.S. Imenova, museum pedagogy is considered an important instrument for the development of the educational environment aimed at fostering students' ability to independently analyze historical and cultural phenomena (Imenova, 2019). The researcher emphasizes that the museum environment stimulates students' cognitive activity through the combination of visual perception, emotional experience, and research-based learning.

In Kazakhstani pedagogical research, the issue of utilizing museum resources in the educational process has also received considerable attention. Studies conducted by national scholars are primarily associated with the use of local history materials and cultural heritage in the teaching of history. For instance, B.K. Elikbaev examines the potential of local historical materials in shaping students' historical consciousness. According to the author, regional historical and cultural resources allow students to gain a deeper understanding of historical processes and contribute to the formation of their civic identity (Elikbaev, 2018).

A significant contribution to the development of the competency-based approach in Kazakhstani pedagogy has been made by the scientific school of F. Sh. Orazbayeva. In her studies, particular attention is paid to the formation of communicative and cognitive competencies of learners as an essential component of the contemporary educational process. The author emphasizes that the development of students' cognitive activity can be achieved through the use of diverse educational resources, including cultural and historical heritage (Orazbayeva, 2000). Issues related to the educational and formative potential of museums are explored in the studies of F.N. Zhumabekova, where the role of museum pedagogy in shaping students' value orientations and cultural identity is analyzed. The author notes that the museum environment contributes to the development of students' respect for historical heritage and stimulates their cognitive interests (Zhumabekova, 2017–2020).

Recent studies by Kazakhstani scholars also focus on the development of students' cognitive interest within the educational process. For example, G. Kasymova examines the pedagogical conditions for fostering students' cognitive

interest and emphasizes the importance of interactive teaching methods in the learning process (Kasymova, 2019–2021). In turn, the research of S. Nurgaliyeva is devoted to analyzing the educational potential of museums in teaching history in schools of the Turkestan region. The author notes that the use of museum resources contributes to the development of students' research skills and increases the effectiveness of studying historical disciplines (Nurgaliyeva, 2021).

Despite the considerable number of studies devoted to museum pedagogy and the use of cultural heritage in the educational process, several issues remain insufficiently explored. In particular, the academic literature contains a limited number of studies that provide a comprehensive analysis of the educational potential of museums in developing students' cognitive competencies at the regional level. Moreover, the pedagogical mechanisms for integrating museum resources into school history education within the context of contemporary educational reforms remain insufficiently investigated.

Thus, the analysis of academic literature demonstrates that museum pedagogy possesses significant educational potential and can be considered an effective instrument for developing students' cognitive competencies. At the same time, the need for further research in this field is determined by the necessity to develop effective models of cooperation between schools and museums, as well as to expand the use of museum resources in educational practice. Moreover, studies indicate that the effectiveness of museum educational programs largely depends on teachers' pedagogical attitudes and their readiness to integrate museum resources into the learning process (Karnezou et al., 2021).

Research Methodology. The methodological framework of this study is based on the principles of the competency-based approach in education, the concept of museum pedagogy, and contemporary approaches to the use of cultural and historical heritage in the educational process. The research is grounded in an interdisciplinary approach that integrates methods from pedagogy, history, and museum studies.

The object of the research is the educational potential of museums in the Republic of Kazakhstan in the context of developing students' cognitive competencies. The subject of the research is the pedagogical conditions and methods of using museum resources in the process of teaching history at school (with reference to museums in South Kazakhstan).

The empirical basis of the study includes museum institutions of South Kazakhstan that are of significant interest in terms of their historical and cultural heritage as well as their educational activities. In particular, the study examined exhibition and educational programs of museums in the Turkestan region and the city of Shymkent, including regional historical and local history museums as well as museums related to the history and culture of the region. The analysis was conducted on the basis of museum exhibitions, educational programs, methodological materials, and the practical experience of cooperation between museums and school educational institutions.

The following research methods were employed in the course of the study.

Historical and pedagogical analysis was used to examine the development of museum pedagogy as a scientific field and to determine its role in the formation of students' cognitive competencies. This method was applied in the analysis of scientific works by domestic and international scholars devoted to museum education, as well as normative documents regulating the development of educational and museum systems.

The method of literature analysis was used to systematize contemporary studies in the field of museum pedagogy, the educational potential of museums, and competency-based approaches to learning. During this stage of the research, publications by Kazakhstani and international scholars, as well as articles from academic journals indexed in international databases, were analyzed.

Content analysis was applied in the examination of museum educational programs and exhibition materials used for educational purposes. This method made it possible to identify the main thematic directions of museum exhibitions and to determine their potential for developing students' cognitive competencies.

Comparative analysis was used to compare different forms of interaction between museums and educational institutions and to identify the most effective methods for utilizing museum resources in the teaching of history.

In addition, the method of pedagogical observation was applied in order to examine the characteristics of students' interaction with museum exhibitions and to identify the influence of the museum environment on the development of their cognitive activity. The observations were conducted during students' familiarization with museum exhibitions and educational programs.

Methods of generalization and interpretation of scientific data were used to structure the results of the research. These methods made it possible to identify the main directions for the use of museum resources in the educational process and to formulate conclusions regarding the pedagogical potential of museums in developing students' cognitive competencies.

During the preparation of the article, auxiliary digital tools based on artificial intelligence were used for text editing and structuring certain elements of the manuscript. Their application was limited to technical editing and organization of the scientific material under the author's supervision, which complies with the editorial policy of the journal.

Results. Within the framework of this study, an analysis was conducted to examine the educational potential of museums in South Kazakhstan and their role in developing cognitive competencies among students of secondary schools. The empirical stage of the research was carried out in general secondary schools in the city of Shymkent with the participation of middle school students.

The study involved students of grades 7–9 from general secondary schools in Shymkent. The main objective of the empirical stage was to identify the influence of museum educational resources on the development of students' cognitive competencies in the process of studying history.

At the first stage of the research, the characteristics of the participants were

determined. The data on the composition of the study participants are presented in Table 1.

Table 1 – Characteristics of the study participants

Indicator	Number
Total number of students	84
Grade 7	28
Grade 8	29
Grade 9	27
Schools	General secondary schools of Shymkent
Research region	Turkestan Region

Note: Compiled by the authors.

As shown in Table 1, the study involved 84 middle school students from general secondary schools. The largest group of participants consisted of Grade 8 students (29 participants), while students from Grades 7 and 9 were represented in approximately equal numbers. This distribution made it possible to conduct a comparative analysis of the level of cognitive competence development among students from different age groups. Thus, the selected sample allows for an analysis of the influence of museum educational resources on the development of cognitive competencies among middle school students.

At the next stage of the study, an analysis was conducted to determine the level of students' cognitive competencies before and after the use of museum educational resources. The educational resources included museum exhibitions, thematic excursions, and learning tasks aimed at analyzing historical artifacts.

Table 2 – Levels of students' cognitive competence development

Level	Before the use of museum materials (%)	After the use of museum materials (%)
High	19	37
Medium	41	47
Low	40	16

Note: Compiled by the authors.

The analysis of the obtained data indicates a clear positive dynamic in the development of students' cognitive competencies.

In particular, the proportion of students with a high level of cognitive competence increased from 19% to 37%, which indicates an improvement in analytical thinking, the ability to interpret historical sources, and the capacity to independently formulate conclusions. At the same time, a significant decrease was observed in the proportion of students with a low level of cognitive competence, from 40% to 16%, which demonstrates the effectiveness of using museum materials in the educational process.

The number of students with a medium level of competence also increased from 41% to 47%, indicating a gradual transition of some students from the low level to

a higher level of cognitive activity. These results confirm that the use of museum exhibitions and historical-cultural objects contributes to the activation of students' cognitive activity.

The obtained results allow us to conclude that the integration of museum resources into the educational process contributes to the development of students' skills in analyzing historical sources, enhances research abilities, and increases interest in the study of history. For a clearer visualization of the dynamics of students' cognitive competence development, the results of the study are presented in Figure 1.

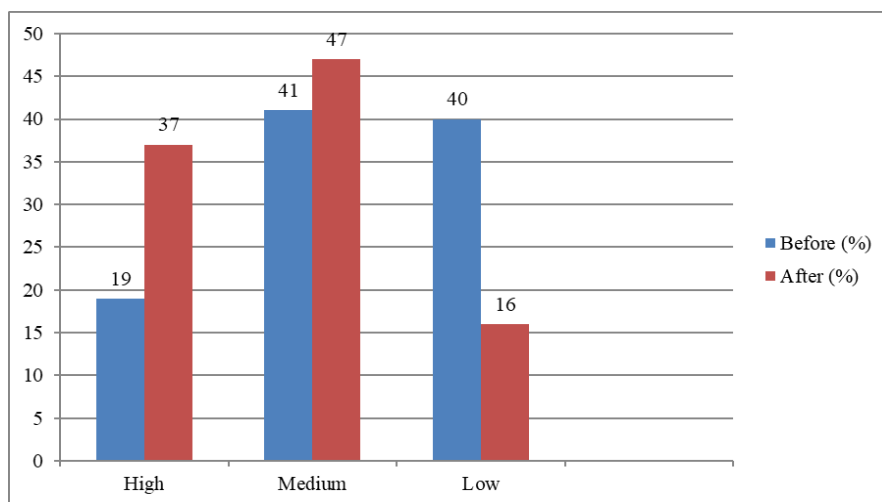


Figure 1 – Dynamics of Students' Cognitive Competence Development after the Use of Museum Resources

Note: Compiled by the authors.

As shown in Figure 1, after the use of museum educational resources a noticeable increase can be observed in the proportion of students demonstrating a high level of cognitive competence. At the same time, there is a reduction in the number of students with a low level of cognitive activity. These results confirm the effectiveness of the museum educational environment in the process of studying history.

Discussion. The results of the study confirm the significant educational potential of museums in developing students' cognitive competencies. Contemporary research also considers museum education as a form of active and inquiry-based learning that is based on students' interaction with cultural objects and museum exhibitions (Todino, 2025). The comparative analysis of the obtained data demonstrated that the use of museum educational resources contributes to an increase in students' cognitive activity, the development of analytical thinking, and the formation of skills for interpreting historical sources.

The results of the study are consistent with the findings of foreign and Russian

scholars in the field of museum pedagogy. In particular, B. A. Stolyarov considers the museum as a unique educational space where the integration of cultural heritage and educational activity takes place. According to the author, the museum environment enables students to perceive historical processes not only at a theoretical level but also through direct interaction with historical artifacts (Stolyarov, 2004; 2020). A similar position is expressed by S. L. Troyanskaya, who emphasizes that museum pedagogy contributes to the development of students' general cultural and cognitive competencies through the visualization of historical information and the emotional perception of cultural objects (Troyanskaya, 2007).

The data obtained in this study also confirm the conclusions of I. A. Makeeva, who argues that museum-based learning activities stimulate students' research activity and foster their interest in studying historical heritage (Makeeva, 2014). Within the framework of the competency-based approach, the museum becomes an important tool for developing students' research and analytical skills. The findings of the present research are also consistent with studies conducted by Kazakhstani scholars. In particular, B.K. Elikbaev emphasizes the importance of using local history materials in shaping students' historical consciousness. The use of regional historical sources and museum exhibitions allows students to better understand the specific features of the historical development of their region (Elikbaev, 2018). In turn, F.Sh. Orazbayeva considers the development of communicative and cognitive competencies as one of the key outcomes of the contemporary educational process (Orazbayeva, 2000).

Important contributions are also made by the studies of F.N. Zhumabekova, in which the museum is considered as a space for the formation of students' value orientations through their acquaintance with cultural heritage. According to the author, museum pedagogy contributes to the development of interest in history and culture and fosters respectful attitudes toward national heritage (Zhumabekova, 2017–2020).

The results obtained demonstrate that the museum educational environment contributes to the development of various components of students' cognitive competence. First, museum-based activities stimulate students' interest in historical events and cultural objects. Second, they contribute to the development of analytical skills related to the interpretation of historical sources. Third, museum-based learning activities enhance students' research abilities, as they involve independent exploration of historical materials and the formulation of conclusions.

Thus, the use of museum resources in the educational process can be considered an effective pedagogical tool for developing students' cognitive competencies. As contemporary studies indicate, the development of museum education also requires institutional support from schools and teachers, which expands the educational potential of the museum environment (Wu, 2026). The integration of museum materials into the learning process allows for the combination of formal and non-formal education and expands the possibilities for teaching history through real historical and cultural objects.

Based on the results of the conducted research and the analysis of academic literature, a model for the development of students' cognitive competencies through museum pedagogy was developed.

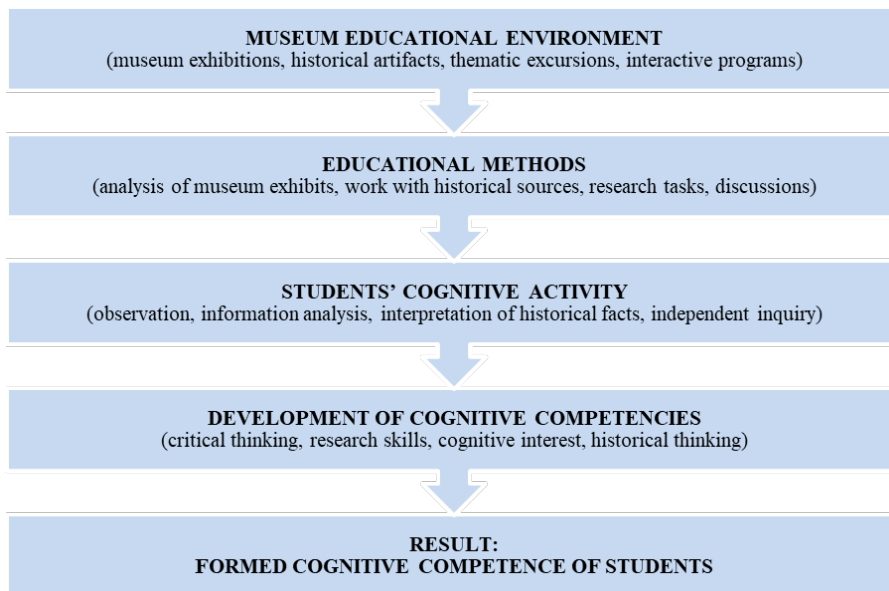


Figure 2 – Model for Developing Students' Cognitive Competencies through Museum Pedagogy

Note: Compiled by the authors.

The proposed model reflects the sequence of pedagogical conditions and educational mechanisms that ensure the development of students' cognitive competencies. Within this model, the museum educational environment functions as the initial component that provides students with access to historical and cultural heritage. The use of museum-based educational methods stimulates students' cognitive activity, which ultimately leads to the development of research and analytical competencies.

Conclusion. The conducted research made it possible to identify the educational potential of museums as an important tool for developing students' cognitive competencies in the process of studying history. The analysis of academic literature demonstrates that museum pedagogy represents one of the promising directions of contemporary education, facilitating the integration of cultural heritage and educational practice.

The results of the empirical study confirmed that the use of museum resources in the educational process has a positive impact on the development of students' cognitive activity. A comparative analysis of the obtained data showed that after the implementation of museum educational materials, the proportion of students with a high level of cognitive competence increased, while the number of students with a low level of cognitive activity significantly decreased. These findings indicate that

the museum educational environment contributes to the development of analytical thinking, the formation of research skills, and an increased interest among students in studying history.

The study also demonstrated that the effective use of museums in the educational process is possible when museum resources are integrated into school curricula, interactive forms of museum-based learning are applied, and students' research activities are organized. Cooperation between educational institutions and museum organizations also plays an important role in developing joint educational programs and projects.

The obtained results allow the museum educational environment to be considered a significant factor in the development of students' cognitive competencies. The use of museum educational resources expands the possibilities of the learning process and contributes to the formation of students' sustained interest in historical and cultural heritage.

Prospects for further research are associated with the development of new methodological models of cooperation between schools and museums, as well as with the broader implementation of museum pedagogy in educational practice. The results of this study may be used to improve the methodology of teaching history and to develop educational programs focused on the integration of museum resources into the educational process.

References

- Anderson D. (2012) *A common wealth: Museums in the learning age*. London: Department for Culture, Media and Sport (in Eng.)
- Elikbaev B.K. (2018) *Oqushylardyn tarihi sanasyn olketanu materialdary arqyly qalyptastyru* [Formation of students' historical consciousness through local history materials]. Almaty: Abai Kazakh National Pedagogical University. (in Kazakh)
- Falk J.H., & Dierking L.D. (2016) *The museum experience revisited*. London: Routledge. <https://doi.org/10.4324/9781315417851> (in Eng.)
- Hooper-Greenhill E. (2007) *Museums and education: Purpose, pedagogy, performance*. London: Routledge. (in Eng.)
- Imenova L.S. (2019) *Museum pedagogy as a direction for the development of the education system*. *RUDN Journal of Sociology*, 19(3)7 — P. 432–440. (in Eng.)
- Karnevou, M., Pnevmatikos, D., Avgitidou, S., & Kariotoglou, P. (2021). *The structure of teachers' beliefs when they plan to visit a museum with their class*. *Teaching and Teacher Education*, 97. — 103254 p. <https://doi.org/10.1016/j.tate.2020.103254> (in Eng.)
- Kasymova G. (2021) *Development of students' cognitive interest in the educational process*. *Bulletin of Abai Kazakh National Pedagogical University*, 2. — P. 85–92. (in Russian)
- Makeeva I.A. (2014) *Development of students' cognitive activity through museum pedagogy*. *Pedagogical Education in Russia*, 8. — P. 112–118. (in Russian)
- Mastenitsa E.N. (2020) *Museums in the modern world: Challenges and responses*. *Voprosy Museologii*, 11(2). — P. 14–23. (in Russian)
- Mysheva T.P. (2012) *Museum pedagogy in the modern socio-cultural educational context*. *Pedagogical Education and Science*, 4. — P. 96–101. (in Russian)
- Noyat Ş. (2024) *The effects of museum-based art education on the cognitive and socio-sensory development levels of preschool children*. *Educational Academic Research*, 58. — P. 112–126. (in Eng.)

Nurgaliyeva S. (2021) The use of museum potential in teaching history in schools of Turkestan region. *Bulletin of Khoja Akhmet Yassawi International Kazakh-Turkish University*, 3. — P. 102–110. (in Eng.)

Orazbayeva F.Sh. (2016) *Til qatynasy teoriiasy zhane ädistemesi* [Theory and methodology of language communication]. Almaty: Abai Kazakh National Pedagogical University. (in Kazakh)

Stolyarov B.A. (2004) *Muzeinaya pedagogika: istoriya, teoriya, praktika* [Museum pedagogy: History, theory, practice]. Moscow: Vysshaya shkola. (in Russian)

Stolyarov B.A. (2019) Museum in the educational space. *Voprosy Museologii*, 10(1). — P. 5–12. (in Russian)

Todino M.D. (2025) Museum education: Concepts and practices in contemporary educational environments. *Heritage*, 5(1). — P. 1–15. <https://doi.org/10.3390/heritage5010003> (in Eng.)

UNESCO (2015) *Recommendation concerning the protection and promotion of museums and collections, their diversity and their role in society*. Paris: UNESCO (in Eng.)

Wu D. (2026) Teachers' perspectives on influencing factors of children's museum education. *Education Sciences*, 16(1). — P. 45–59. (in Eng.)

Yukhnevich M.Y. (2019) *Ya povedu tebya v muzei: uchebnoe posobie po muzeinoi pedagogike* [I will take you to the museum: A guide to museum pedagogy]. Moscow: Russian State University for the Humanities. (in Russian)

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