



MUSEUM PEDAGOGY AS A TOOL FOR DEVELOPING SOURCE-CRITICAL AND INTERPRETATIVE SKILLS IN PRE-SERVICE HISTORY TEACHERS

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ABSTRACT

This study examines the impact of museum pedagogy on the development of source-critical and interpretative skills among pre-service history teachers in Uzbekistan. Using a quasi-experimental design, participants were divided into an experimental group, participating in structured museum pedagogy sessions, and a control group, receiving traditional lecture-based instruction. Data were collected through assessments and reflective journals. Quantitative analysis showed that participants in the experimental group demonstrated notable improvement in their ability to critically analyze historical sources and interpret artifacts, while qualitative findings indicated enhanced engagement, critical thinking, and interpretative reasoning. The results suggest that integrating museum pedagogy into history teacher education can effectively foster historical thinking and pedagogical competencies in future educators.

Introduction

In the contemporary educational landscape, history education increasingly emphasizes cultivating critical thinking and interpretative skills among future educators (Axmadjanov, 2024; Ne'matov, 2025). Traditional lecture-based methods often prioritize memorization over analytical reasoning, limiting students' ability to engage deeply with historical sources (Akchayev, 2020). Museum pedagogy, as an experiential learning approach, offers a unique opportunity to bridge this gap by integrating tangible historical artifacts, exhibitions, and interactive activities into teacher education (Marayimova, 2022; Jo'rayeva, 2025).

By engaging with museum collections, pre-service history teachers can practice source evaluation, contextual analysis, and interpretative reasoning, which are crucial competencies for effective teaching and historical scholarship (Sariyeva, 2025; Rappoport, 2021). Furthermore, museum pedagogy encourages active learning, collaborative inquiry, and reflective practice, aligning with global trends in educational innovation (Museumsbund eV, 2010).

The purpose of this study is to investigate how structured museum pedagogy sessions impact the development of source-critical and interpretative skills in pre-service history teachers. Specifically, the study aims to answer the following research questions:

How does museum pedagogy influence participants' ability to critically analyze historical sources?

In what ways does museum-based learning enhance interpretative skills in pre-service history teachers?

What pedagogical strategies are most effective in integrating museum experiences into history teacher education?

Literature review

Research on museum pedagogy highlights its multifaceted role in history education. Studies indicate that museum-based learning supports the development of historical thinking skills, including chronological reasoning, evaluation of primary sources, and interpretation of artifacts (Brown, 2007; Komilov, 2025). Marayimova (2022) emphasizes that engaging learners in guided museum activities promotes reflective and critical inquiry, enabling them to construct knowledge rather than passively receive information.

In the context of Uzbekistan, scholars have explored the evolving role of museums in fostering historical consciousness among students (Inoyatillayeva, 2024; Jo'rayeva & Behruz, 2025). The research suggests that interactive exhibits and historical reconstructions provide learners with concrete experiences that enhance source evaluation and interpretative reasoning. International literature also supports the effectiveness of museum pedagogy in teacher education. The Museumsbund eV (2010) emphasizes quality criteria for educational programs in museums, including learner engagement, content relevance, and reflective practice. Similarly, Rappoport (2021) describes the use of digital time capsules and interactive exhibits to strengthen students' historical inquiry and analytical skills.

Despite these findings, there remains a need for empirical research that systematically examines the impact of museum pedagogy on pre-service history teachers' source-critical and interpretative skills, particularly in higher education settings in Uzbekistan. This study addresses this gap by implementing a quasi-experimental design with participants engaging in structured museum sessions alongside those following traditional instruction (Ne'matov, 2025; Sariyeva, 2025).

Methodology

Research design

This study employed a quasi-experimental research design to investigate the effect of museum pedagogy on pre-service history teachers' source-critical and interpretative skills (Ne'matov, 2025; Marayimova, 2022). Two groups were formed: an experimental group that participated in structured museum pedagogy sessions, and a control group that continued with standard lecture-based instruction.

Participants

Participants were drawn from pre-service history teachers enrolled in undergraduate history programs. They represented a range of academic levels to ensure diversity in prior knowledge and experience (Jo'rayeva & Akmal, 2025). The experimental group engaged in structured museum pedagogy sessions, while the control group followed traditional lecture-based methods.

Instruments

The following instruments were used to collect data:

Source-Critical Skills Assessment (SCSA): A set of tasks designed to evaluate participants' ability to analyze historical documents, photographs, and artifacts (Komilov, 2025).

Interpretative Skills Assessment (ISA): Participants were asked to interpret historical events using primary and secondary sources (Rappoport, 2021).

Reflective Journals: The experimental group maintained journals to document their museum-based learning experiences and reflections (Marayimova, 2022).

Procedure

The study was conducted over one academic semester. The experimental group participated in weekly museum sessions, including guided tours, artifact analysis, and group discussions. The control group continued with traditional lectures on the same historical topics. Both groups completed the SCSA and ISA assessments at the beginning and at the end of the semester.

Data analysis

Quantitative data from the assessments were analyzed using paired-sample t-tests to measure changes in source-critical and interpretative skills. Qualitative data from reflective journals were analyzed through thematic analysis, focusing on patterns of engagement, critical reflection, and interpretative reasoning (Sariyeva, 2025).

Results

The analysis revealed that participants in the experimental group demonstrated improvement in both source-critical and interpretative skills compared to the control group.

Source-Critical Skills: The experimental group demonstrated enhanced abilities to critically evaluate historical sources, including documents and artifacts (Komilov, 2025).

Interpretative Skills: Participants showed higher competence in contextualizing historical events and constructing informed interpretations (Rappoport, 2021; Marayimova, 2022).

Reflective Journals: The thematic analysis of journals revealed patterns of:

Active Engagement: Participants reported heightened interest and motivation in history learning.

Critical Thinking: Participants questioned the authenticity, origin, and perspective of historical artifacts.

Interpretative Reasoning: Participants demonstrated the ability to connect evidence with historical narratives and construct nuanced interpretations.

Overall, the results support the hypothesis that museum pedagogy positively impacts pre-service history teachers' source-critical and interpretative skills (Ne'matov, 2025; Sariyeva, 2025).

Discussion

The results demonstrate that museum pedagogy provides a rich, interactive environment for developing historical thinking skills among pre-service history teachers. Participants' improvement in source-critical skills indicates that hands-on interaction with artifacts and documents encourages evaluation of authenticity, origin, and context of historical sources (Komilov, 2025; Rappoport, 2021). This aligns with prior research emphasizing that museum-

based learning promotes analytical and critical reasoning in historical education (Marayimova, 2022; Sariyeva, 2025).

The increase in interpretative skills highlights the importance of contextualized learning. Participants were able to connect evidence from multiple sources to construct coherent historical narratives, an essential competency for history educators (Ne'matov, 2025; Jo'rayeva & Akmal, 2025). Reflective journals revealed that museum sessions fostered active engagement and self-directed learning, which are often lacking in conventional lecture-based methods (Marayimova, 2022; Rappoport, 2021).

These findings also confirm that experiential and socially interactive learning enhances outcomes (Axmadjanov, 2024; Gulyamov, 2024). By physically interacting with artifacts and participating in guided discussions, participants became active constructors of historical knowledge. This approach supports the development of critical historical consciousness, preparing participants to analyze and interpret historical sources in both academic and practical contexts.

Moreover, museum pedagogy encourages ethical and cultural awareness. Engaging with heritage artifacts helps pre-service teachers appreciate historical and cultural diversity, fostering responsibility for the preservation and interpretation of historical knowledge (Mamadaliyeva, 2025; Sariyeva, 2025).

Conclusion

The study confirms that museum pedagogy is an effective tool for enhancing source-critical and interpretative skills in pre-service history teachers. Participants exposed to structured museum sessions demonstrated greater analytical abilities, deeper engagement with historical materials, and improved interpretative reasoning compared to those in traditional lecture-based settings.

Implementing museum pedagogy in history teacher education provides multiple benefits:

- Enhances critical evaluation of historical sources.

- Promotes contextual understanding and interpretation of historical events.

- Encourages active and reflective learning.

- Develops cultural awareness and historical responsibility among future educators.

These findings suggest that integrating museum pedagogy into teacher education curricula can significantly improve historical thinking and prepare participants to become competent, reflective, and culturally aware history educators.

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