



# Insights into Art Education Practices in Shandong Museum: Implications from a Qualitative Study of Teachers and Museum Staff

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**Abstract:** This study explores the current practices, challenges, and strategic improvements of art education in Shandong Museum through semi-structured interviews with primary school art teachers and museum educators. Using NVivo-based thematic coding, the findings reveal a dominant reliance on traditional lecture-based methods, leading to limited interaction and student engagement. Educators reported that these methods often fail to capture students' interest or support deeper learning. In contrast, three effective strategies—gamification, multimedia interaction, and hands-on practice—emerged as key to enhancing participation, motivation, and learning outcomes. These strategies were supported by practical examples from both teachers and museum staff, reflecting a shared recognition of the need for more engaging, student-centered teaching approaches. The study concludes that these findings provide practical foundations for developing a learner-centered Fun Learning Model in museum art education, with implications for program design, instructional methods, and cross-institutional collaboration.

**Keywords:** Art education, constructivist learning, museum-based teaching, student engagement

## 1. Introduction

Museum education has evolved from static knowledge transfer to interactive, student-centered learning. In the field of art education, museums offer immersive environments where students explore history, culture, and art through direct engagement (Hansson & Öhman, 2021). Despite global advancements, Chinese museum education still faces constraints such as limited interactivity, lack of curriculum integration, and underutilized resources. Existing literature seldom bridges the perspectives of both school teachers and museum professionals (Li & Ji, 2025). This study fills that gap by conducting qualitative research to investigate the current state of museum-based art education in Shandong and identifying actionable strategies for improvement. The manuscript is organized as follows: Section 2 presents a review of relevant literature, Section 3 outlines the methodology, Section 4 discusses findings, and Section 5 offers conclusions and practical implication.

Although museum education in China has received increasing attention in recent years, existing studies tend to be either theoretical discussions or case-based reflections focused on individual museum programs. Very few studies adopt an empirical approach that incorporates voices from both school teachers and museum professionals in a coherent analytical framework (Kristinsdóttir, 2017). This limits the applicability of findings and hinders the development of actionable strategies for cross-institutional collaboration.

Moreover, current literature often fails to connect practice with theory in a grounded, data-informed manner. While many researchers advocate for constructivist or experiential learning approaches (Tafor et al., 2016), fewer studies critically examine how these theories are—or are not—being translated into practice within the museum context. Particularly missing is an understanding of how museum educators and school art teachers perceive and enact these approaches in real-world settings.

This study aims to fill that gap by combining qualitative data from two key practitioner groups—primary school art teachers and museum education staff—within a single research design. It not only investigates the existing challenges in teaching methods, student participation, and learning outcomes but also identifies three recurring, practical strategies (gamification, multimedia, and hands-on practice) that can support the development of a more engaging, student-centered

teaching framework. By doing so, the study offers both empirical insight and pedagogical guidance for improving museum-based art education in China.

## **2. Literature Review**

### **2.1 Evolution of Museum-Based Art Education**

Museum-based art education has undergone a global pedagogical transformation, evolving from didactic knowledge delivery to interactive, learner-centered models. Traditionally, museum education was limited to curatorial explanations and static display interpretations (Astuti et al., 2021). However, contemporary pedagogical frameworks advocate for experiential learning, emotional engagement, and co-construction of meaning between learners and objects (Vespone, 2023). In the context of art education, museums serve as immersive cultural environments that stimulate multisensory exploration, reflective inquiry, and creativity development.

Constructivist museum learning highlights the importance of learners actively constructing knowledge through their interactions with real-world contexts. These environments promote meaningful learning by allowing students to engage physically, emotionally, and intellectually with artworks and exhibits. Research has demonstrated that authentic, object-based experiences not only enhance factual understanding but also foster critical thinking, empathy, and cultural literacy (Ellinghaus et al., 2021; Li & Zhang, 2025).

In recent years, the constructivist paradigm has been widely adopted in museums across North America, Europe, and parts of Asia, leading to the integration of digital media, interactive exhibits, gamified trails, and hands-on art-making stations. These innovations have redefined museums as “third spaces” of learning—situated between formal schooling and informal community engagement—supporting both curricular and personal learning trajectories (Orjuela, 2018).

### **2.2 Challenges in Chinese Museum Art Education**

Despite global advancements, art education in Chinese museums continues to encounter numerous challenges that limit its pedagogical potential. Several studies have pointed out that museum-based learning in China is often confined to passive guided tours with limited opportunities for interaction, exploration, or student agency (Yan, 2024). These programs frequently rely on scripted narratives delivered by docents, focusing primarily on knowledge transmission rather than engagement or inquiry.

One major limitation lies in the lack of integration between museum content and school curricula. Art teachers report that museum visits are treated as isolated events, with little follow-up or alignment with classroom learning objectives (Souza et al., 2023). This disconnect hampers the depth and continuity of student learning and reduces museums to occasional “cultural outings” rather than meaningful educational experiences. Furthermore, strict scheduling, transportation constraints, and inconsistent teaching quality across museums exacerbate these difficulties, especially in regions outside major metropolitan centers (Bollo & Zhang, 2017).

From the perspective of educators, professional development and instructional support for integrating museum resources remain insufficient (Junjie et al., 2024). Museum staff often lack training in pedagogical design, while school teachers may struggle to contextualize museum materials within their teaching plans. As a result, the potential of museums to function as active sites of learning remains underutilized (Butcher et al., 2021). The problem is compounded by the broader marginalization of art education within China’s examination-oriented educational system, which prioritizes STEM subjects and test-based outcomes over holistic and aesthetic development.

## **3. Methodology**

This study employed a qualitative research design aimed at gaining in-depth insights into the current state, challenges, and improvement strategies for museum-based art education at the Shandong Museum. Qualitative research was deemed appropriate due to the exploratory nature of the inquiry and the focus on understanding participants’ lived experiences and professional perspectives (Prosek & Gibson, 2021). The primary objective was to uncover the pedagogical patterns and institutional constraints affecting student participation and learning outcomes, and to identify practical strategies that can inform the development of a learner-centered Fun Learning Model. The study was guided by two main research questions: 1) What are the current teaching methods, engagement levels, and perceived outcomes of art education activities conducted at the Shandong Museum?; 2) What practical strategies do educators believe can enhance student motivation, interaction, and learning effectiveness in museum-based art education?

### **3.1 Participant Selection**

A purposive sampling strategy was adopted to ensure the inclusion of participants with relevant experience and contextual knowledge (Campbell et al., 2020). The total sample included nine museum educators and twelve primary school art teachers, all of whom had direct involvement in organizing or facilitating art education activities at the Shandong Museum. Museum educators were selected based on their responsibility for program planning, exhibition education, and visitor interaction. They included education officers, exhibition interpreters, and volunteer coordinators. Primary school

art teachers were selected from public schools in Jinan and surrounding districts. These teachers had organized museum visits or had prior experience integrating museum content into their classroom instruction.

Inclusion criteria required that all participants: Had at least one year of experience with museum-based art education; Were familiar with curriculum alignment or student engagement strategies; Voluntarily consented to participate in recorded interviews. This selection approach ensured that insights were grounded in practical experience and institutional knowledge.

### 3.2 Data Collection and Analysis

Data were collected through semi-structured interviews conducted over a two-month period. Interviews took place either face-to-face or online, depending on participants' availability and public health considerations. Each session lasted between 30 to 50 minutes and was recorded with prior verbal and written consent. Follow-up clarifications were sought where necessary via email or messaging apps. The interview protocol covered four key areas: Teaching methods and instructional strategies used in museum art education; Student participation patterns and motivational factors; Observed learning outcomes and challenges in measurement; Suggestions for improving teaching effectiveness and institutional support. All interviews were transcribed verbatim.

The data analysis followed Braun and Clarke's six-step thematic analysis framework and was conducted using NVivo software (Naeem et al., 2023). The analytic process included: Open coding to identify initial data fragments; Axial coding to develop broader themes by grouping related codes; Thematic refinement to ensure coherence and relevance; Triangulation, utilizing program documents and observational notes for validation; Peer debriefing and collaborative coding to enhance reliability and reduce researcher bias. Data saturation was reached after interviewing the ninth museum educator and the twelfth teacher, at which point no substantially new themes emerged, confirming that the sample size was sufficient.

## 4. Results and Discussion

This section presents key findings derived from semi-structured interviews with primary school art teachers and museum educators, analyzed thematically using NVivo software. The analysis reveals three major areas of concern in current museum-based art education practices at Shandong Museum: (1) traditional teaching methods dominate over interactive approaches, (2) student participation lacks depth, and (3) learning outcomes are difficult to evaluate consistently. The section also highlights three emergent strategies—gamification, multimedia interaction, and hands-on practice—as effective ways to enhance engagement and learning, based on educators' experiences and preferences.

### 4.1 Core Themes in Museum Art Education

Initial coding of interview data yielded nine high-frequency thematic nodes. As shown in Table 1, "Participation" and "Learning Outcomes" received the highest number of coded references, indicating the central concern shared by both teachers and museum educators regarding how students engage and what they learn. "Teaching Methods" and "Role of Teachers" also emerged as critical nodes.

*"We often try our best to bring students into the museum context, but the real participation still varies a lot—some students are just physically present."* — Teacher Wu, Yuxiu Primary School

*"Learning should not stop at 'telling'—if we only explain the history of a relic, students won't remember or care."* — Museum Educator Li

These concerns informed the further exploration of pedagogical strategies and engagement frameworks in subsequent coding rounds.

**Table 1: Key Themes in Art Education at Shandong Museums**

Node Name	Source of material	Reference point
Art Education Program	8	13
Learning Outcomes	19	113
Difficulties and Challenges	15	67
Teaching Evaluation	7	28
Teaching Methods	19	86
Role of Teachers	16	60
Suggestions	6	14
Collaboration between schools and libraries	3	19
Successful Cases	9	11
Participation	28	191

## 4.2 Limitations of Current Teaching Methods

A closer examination of the “Teaching Methods” node (Table 2) reveals that the traditional lecture method is still the most frequently used approach in museum art education at Shandong Museum. It accounts for 21 coded references across 14 data sources, significantly outnumbering other more interactive or student-centered methods.

*“Most of our activities are still explanation-based. Educators stand in front of exhibits and deliver facts. It's informative, but not interactive.”* — Museum Educator Guo

*“The children are passive listeners. Some can't concentrate for long. It's hard to blame them when all we do is talk at them.”* — Teacher Tan, Affiliated Primary School.

While methods such as interactive teaching, hands-on practice, and gamification were mentioned, they remain sporadic and often depend on the individual creativity of teachers or temporary special events. For instance, interactive teaching was cited 19 times across 11 sources, often in the form of basic Q&A rather than deeper engagement strategies.

*“My interaction usually starts with a question like ‘What do you see here?’ But honestly, it's still mostly teacher-led.”* — Teacher Wu, Jinan Foreign Language School

*“We sometimes use immersion, but not often. It depends on available time and space.”* — Museum Educator Liu.

The findings suggest that while awareness of modern teaching strategies is growing, institutional and operational barriers continue to limit their application.

**Table 2: Teaching Methods in Art Education Programs at Shandong Museums**

Node Name	Source of material	Reference point
Teaching Methods	19	86
Gamification	4	9
Task-based Learning	4	7
Interactive Teaching	11	19
Multimedia Technology	5	8
Hands-on practice	6	8
Traditional Lecture Method	14	21
Immersion	7	14

## 4.3 Student Participation: Passive Presence vs. Active Engagement

Despite the rise of “museum fever” in China and increasing visitor numbers, interviewees reported that true student engagement remains limited. Many students attend museum activities as part of school-mandated programs rather than out of personal interest or intrinsic motivation.

*“Some children really want to learn. Others are just here because their parents or teachers told them to come.”* — Museum Educator Gao.

*“Real engagement means thinking, questioning, discussing—not just looking and leaving.”* — Teacher Yin, Shandong Normal University Affiliated Primary School.

Although some teachers and museum staff attempt to use storytelling and questioning to increase engagement, these methods remain isolated and unstructured. Interviewees repeatedly emphasized the need to go beyond surface-level attendance and foster cognitive and emotional participation through meaningful interaction. This lack of deep engagement directly impacts students' ability to internalize and apply what they learn.

*“Just asking a few questions during the visit is not enough. We need more structured, interactive activities.”* — Teacher Hu, Hongjialou Primary School.

## 4.4 Learning Outcomes: Evaluation Challenges and Hidden Gains

Participants expressed concerns about the lack of clear, standardized mechanisms to assess learning outcomes in museum-based education. Existing evaluations are usually limited to informal feedback or end-of-session satisfaction surveys.

*“We usually ask, ‘Did you enjoy the visit?’ or ‘What did you like?’ That's it. We rarely assess if they learned something valuable.”* — Museum Educator Li

Yet, interviews also revealed that museum learning can support deeper outcomes, such as improved creativity and artistic awareness, when supported by reflective tasks or post-visit activities.

*“When students sketch or write about what they saw, they remember it better. They start seeing art differently.”* — Teacher Ma, Shandong Normal University Affiliated Primary School.

*“One of my students made a seal print after visiting our calligraphy exhibit. She understood not only the process but also the aesthetics behind it.”* — Teacher Liu, Quanze Primary School.

Teachers noted that learning outcomes should include creative thinking, artistic expression, and emotional resonance—aspects often ignored by current evaluation methods. This underscores the need to expand assessment frameworks beyond knowledge recall.

#### 4.5 Three Strategies to Improve Teaching and Engagement

As shown in Table 3, three strategies emerged as the most frequently mentioned and recommended by educators to address the shortcomings identified: gamification, multimedia interaction, and hands-on practice. Educators shared successful experiences with treasure hunts, clue-based missions, and “art detective” activities that transformed passive observation into active exploration.

*“We gave students a map and riddles about exhibits. It turned into a game, and they were completely immersed.”* — Teacher Gao.

*“Gamification lights up their eyes. They forget it's an assignment—they just enjoy and learn.”* — Museum Educator Zhang.

Several teachers emphasized that digital media—such as interactive screens, tablets, and audio guides—can enhance student focus and support differentiated learning.

*“We used tablets with AR filters to show ancient pottery in color and detail. Students were amazed.”* — Teacher Yin.

*“Short videos and animations work better than lectures. They grab attention instantly.”* — Teacher Hu.

Many participants advocated for more hands-on activities, including clay sculpting, seal carving, and drawing workshops that complement the museum visit and deepen conceptual understanding.

*“Making something helps them understand what they saw. It's the bridge between seeing and knowing.”* — Teacher Wang.

Together, these three strategies were consistently cited as practical, scalable, and engaging. They also align with constructivist pedagogy by promoting experiential, student-centered learning.

**Table 3: Engagement Factors in Museum-Based Art Education**

Node Name	Source of material	Reference point
Engagement	28	191
Knowledge base	1	1
Gamification and fun	17	37
Group work and discussion	4	5
Task-driven	2	3
Situation	11	23
Controlling the number of people	3	9
Interact with the classroom	7	15
Aligns with cognitive hierarchy	4	23
Multimedia technology	14	44
Hands-on experience	15	29
Traditional lectures can be tiring	2	2

## 5. Conclusion

This study examined the current state of museum-based art education in the context of Shandong Museum, revealing a continued reliance on traditional lecture-based teaching methods and highlighting the challenges educators face in engaging students meaningfully. Through interviews with primary school art teachers and museum staff, the findings provided strong empirical support for three practical strategies—gamification, multimedia interaction, and hands-on learning—that emerged as effective ways to enhance student participation and improve learning outcomes. These strategies offer a foundational framework for developing a learner-centered Fun Learning Model tailored to museum education settings. The study offers several practical implications: museums should incorporate diverse instructional strategies such as task-based exploration, digital media integration, and object-handling activities to create more

interactive learning environments; school-museum collaboration must be strengthened through co-designed lesson plans, professional development for teachers, and alignment with classroom curricula; and assessment systems should move beyond basic satisfaction surveys to include portfolios, reflective writing, and indicators of creativity and engagement. As one of the first studies to integrate the perspectives of both museum educators and school art teachers within a unified qualitative framework, this research contributes actionable insights into pedagogical improvement in museum contexts. However, the regional focus on Shandong and the absence of direct student interviews or longitudinal classroom observations limit the broader generalizability of the results. Future studies are encouraged to expand the geographic scope, include student voices, and implement pilot teaching programs based on the proposed Fun Learning Model to test its effectiveness in diverse educational settings.

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