

Study on the Development Path of Museum Education Under the “Double Reduction” Policy



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Abstract: In the context of the “Double Reduction” policy, museum education has become an important carrier of quality education. Based on the current situation of policy implementation, this paper puts forward four strategies for the development of museum education. Through curriculum innovation and hierarchical design, we build an education system that adapts to the diversified needs of students; strengthen resource integration and synergy mechanism to promote the in-depth integration of museums and schools; improve policy support and evaluation system to ensure the sustainability and high quality of the education service; and expand the innovation possibilities of the education scene with the help of technological empowerment and spatial reconfiguration. The above strategies aim to provide a new path for the comprehensive development of students after the “Double Reduction” policy, and the museum education has gradually shifted from knowledge supplementation to the cultivation of literacy, and has become a key pivot for the connection between school education and social education.

Keywords: double reduction policy, museum education, curriculum innovation, resource integration, policy support

Introduction:

The “Double Reduction” policy, with the core objective of reducing the burden of homework and the pressure of out-of-school training on students in compulsory education, aims to reshape the educational ecology and promote the development of educational equity and quality education. With the deep implementation of the policy, students' after-school time has increased significantly, and the value of museum education as an informal learning scenario has become increasingly prominent, and has become a key carrier for improving comprehensive quality and expanding hobbies and interests. As a space for cultural education, the educational potential of museums needs to be explored in depth, exploring the feasible path of collaborative education among museums, schools and families, and constructing a new pattern of education with pluralistic co-management. Through systematic research, we aim to provide practical wisdom in the field of museum education for the effective implementation

of the “Double Reduction” policy, and help young people's comprehensive development.

1. Educational Functions and Resources of Museum Education

Museum education is rich in informal learning scenarios and carries a unique and diversified educational mission. Its function goes far beyond the simple transmission of knowledge, and lies in stimulating learners' desire for exploration, critical thinking and cultural empathy through physical objects, scenarios and interactive experiences. From the viewpoint of educational function, museum is a three-dimensional textbook. As silent narrators, cultural relics and specimens condense the crystallized wisdom, natural mysteries and artistic essence of the long river of history into exhibition cabinets, making abstract knowledge touchable and palpable. For example, the ceramic pots exhibited in Xi'an Half-slope Museum not only show the survival wisdom of the Neolithic ancestors, but also reflect

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the simple pursuit of geometric aesthetics of human beings; and the restoration model of the semi-digested house visually presents the great creativity of the ancient human beings in adapting to and transforming the natural process. At the level of skill development, the museum guides students from passive reception to active construction through inquiry-based learning programs. Through the repair of ceramic fragments, simulated archaeological excavation, design of thematic exhibitions and other practical activities not only to refine the hands-on ability, but also to cultivate the strategic thinking of problem solving. The construction of emotion and cultural identity is the deep value of museum education. When the audience stops in front of the mottled traces of revolutionary cultural relics or looks up at the flying shirts of Dunhuang murals, the double shock of history and art quietly awakens the cultural genes and strengthens the sense of national pride and aesthetic appreciation. The resource system of the museum is also rich and diversified. Physical resources constitute the foundation of education, and digital resources expand the boundaries of learning. Virtual exhibition halls, 3D models, online courses, the museum collection breaks through the shackles of physical space. The integration of human resources, such as scholarly lecturers and cross-border education experts, has become a bridge connecting exhibits and audiences with professional depth and charisma. In short, museum education uses objects as the medium and human beings as the hub, weaving a three-dimensional education network in knowledge transfer, skill cultivation, emotional inculcation and interdisciplinary integration, providing inexhaustible power for lifelong learning.

2. The Strategic Significance of Developing Museum Education under the “Double Reduction” Policy

2.1 Responding to the policy guidance

The “Double Reduction” policy is like a spring breeze, injecting new development momentum for museum education. This policy takes the reduction of students' excessive homework burden and the

pressure of out-of-school training as the starting point, pointing to the reshaping of the education ecology, and museum education can be the extension and supplement of in-school education, and it can make a big difference in the wide world of after-school service. Museum education can effectively alleviate the educational anxiety brought about by academic pressure. When the heat of disciplinary training fades, the interest-oriented informal learning scenario of museums provides young people with diversified options to explore themselves and develop their specialties. In the pottery billet focus, in the starry sky observation look up, the children enjoy the fun of playing in the middle school, truly realize the burden does not reduce the quality. More far-reaching is that museum education carries the mission of cultural inheritance and innovation. When the non-heritage skills in the museum study program resurrection, when the revolutionary heritage in the immersive experience of new life, the museum has become a bridge connecting tradition and modernity, so that cultural confidence in the hearts of young people to take root and germinate. This kind of awakening and inheritance of cultural genes coincides with the ultimate goal of the “Double Reduction” policy of fostering “all-round development of human beings”.

2.2 Students' development needs

After the “Double Reduction” policy has been implemented, students' schoolbags are lighter and they have more time after school, but how to make the time after the reduction of burden more quality has become a new proposition in education. Museum education, with its unique nurturing value, fits the needs of the comprehensive development of young people (Liu, 2025). At the level of cognitive development, museums are classrooms without walls. When students are piecing together pottery pieces in the history exhibition hall and debugging robot programs in the science and technology museum, they are experiencing the metamorphosis from knowledge reception to knowledge construction. This kind of inquiry-based learning not only deepens the understanding of subject knowledge, but also

develops problem-solving skills and innovative thinking. Emotional and social development also needs to be nourished by museum education. In the face of the bullet holes in the revolutionary artifacts, young people can intuitively feel the spirit of sacrifice of the revolutionary forefathers; in the non-heritage experience activities to make brushes, rice paper, will make history is no longer a textbook on the plain narrative, but touchable and palpable vivid existence. This immersive experience, so that cultural confidence and national sentiment in the subtle development. Especially important is that museum education for different endowments of students to provide the possibility of personalized development. Whether it is a small creator who is keen on science and technology, or a small painter who is fascinated by art, they can find their own stage of growth in the museum. This kind of respect and stimulation of multiple intelligences is precisely the meaning of quality education advocated by the “Double Reduction” policy.

2.3 Educational equity promotion

For a long time, the distribution of educational resources between urban and rural areas has been uneven, and the Matthew effect of out-of-school training has exacerbated this divide. After the implementation of the “Double Reduction” policy, museum education has become a key force in bridging the gap. Through mobile exhibitions, digital museums and other forms, museums send quality resources to remote areas. Those students who were once difficult to access museums due to geographic location and economic constraints can now stop in front of mobile museums or “enter” the Palace Museum through virtual reality technology, allowing educational equity to move from equity of opportunity to equity of experience. Museum education with its inclusive qualities, for the disadvantaged groups to open the door of hope. Left-behind children can also find emotional support in the museum study activities, special children can get cognitive development through tactile heritage experience. These scenes are the warmest footnotes of educational equity, enabling students from

different regions to share the nourishment of cultural heritage. This promotion of cultural equity makes the museum a space for building “common educational memory” and helps to extend educational equity to a deeper level (Zhang, 2023).

2.4. Cultural heritage and innovation

The “Double Reduction” policy has given museum education the mission of cultural heritage and innovation. In the disciplinary training boom subsided, the unique value of the museum as a cultural temple is more and more prominent - it is not only the custodian of historical relics, but also the awakening of cultural genes. When students in the museum hand-made non-heritage tie-dye, in front of the revolutionary artifacts to listen to the story of the revolutionary forefathers, traditional culture is no longer the cold symbols on the textbooks, but is transformed into a palpable life experience. This kind of immersive education allows cultural memory to be renewed in intergenerational transmission. Museum education is also an incubator for cultural innovation. Empowered by digital technology, cultural relics “come alive” in virtual form, 3D printing makes bronze ornaments leap out of the display cabinet, and AI technology visualizes ancient craftsmanship. This innovative expression has successfully attracted young people, allowing traditional culture to burst into new vigor in the technological empowerment. More profoundly, museum education promotes the shaping of a larger cultural outlook. It breaks the boundaries of disciplines, melting art, history, and science and technology into a single furnace, allowing students to understand the multifaceted unity of Chinese civilization in project-based learning. This expansion of cultural horizons builds a firm foundation for cultural self-confidence, and also allows young people to become a force for cultural inheritance and innovation (Roland, 2024).

3. Challenges to the Development of Museum Education under the “Double Reduction” Policy

While the “Double Reduction” policy opens a new window for museum education, challenges also follow. First, the mismatch between resource supply

and education demand. After the implementation of the policy, students flocked to museums, but the expansion of hardware and human resources, such as venue space, the number of exhibits, educators, and so on, is difficult to match the spurt of growth in demand for visits and learning, resulting in the embarrassment of oversupply (Zhou et al., 2023). Second, the quality of service is also a test. Part of the museum's educational programs have a tendency to homogenization, or stay in the shallow mode of explanation, guided tours, the lack of in-depth interaction and practical design, it is difficult to continue to attract students. If the educational experience is superficial, the museum may be reduced to a punch card attraction, deviating from its nature of education. Third, the lack of synergistic mechanism. Museum education and school curriculum system is not yet closely linked, credit recognition, curriculum development and other cooperation mechanisms are not yet sound. Home, school and community collaborative education network has not been fully formed, museum education is still regarded as an extracurricular activity, rather than an important part of quality training. Fourthly, evaluation should not be neglected. The evaluation system of museum education needs to scientifically quantify the effect of improving students' core literacy. The existing evaluation system focuses on explicit indicators such as the number of participants and the number of activities, while the evaluation of students' innovative thinking, cultural identity and other implicit impacts has yet to break through. In the face of these challenges, museums need to innovate the mode of resource supply, deepen the quality of educational services, strengthen the linkage with schools and families, and explore the multi-dimensional evaluation system, so that they can truly become the promoter of educational change in the wave of "Double Reduction".

4. Strategies for the Development of Museum Education under the "Double Reduction" Policy

4.1 Curriculum innovation and layered design

Under the "Double Reduction" policy, museum education needs to take curriculum innovation and layered design as a breakthrough to build an education system that adapts to the diversified needs of students. Curriculum innovation should break the linear narrative of traditional exhibition and develop theme-based and project-based learning modules. For example, focusing on the theme of "Silk Road", integrating multidisciplinary knowledge of history, art, geography, etc., and designing inquiry learning tasks, students can build an interdisciplinary cognitive framework in the observation of cultural relics, analysis of maps, and trade simulation. This type of curriculum emphasizes problem-oriented and participatory learning to stimulate active exploration. Layered design requires museum education to accurately match the cognitive development of students in different school years. For primary school students, we can focus on sensory experience and interest enlightenment, and develop interactive courses such as cultural relics imitation and history puzzles; for secondary school students, we need to design research projects, such as analyzing the principles of ancient science and technology, and planning for cultural heritage preservation programs, to cultivate critical thinking and innovation skills. The stratification strategy is not only reflected in the age dimension, but also should pay attention to individual interest differences, provide menu-based course choices, so that each student can find a suitable learning rhythm and development path in the museum (Zhao, 2025). In addition, the museum should establish a curriculum cooperation mechanism with the school, and incorporate museum educational resources into the after-school service system. Through joint teaching and research, mutual recognition of credits, etc., the organic integration of the school curriculum and the museum curriculum can be realized, forming a three-dimensional cultivation mode of basic classroom combined with practical expansion. This kind of stratified and classified curriculum design can not only meet the needs of personalized development of students after the "Double Reduction", but also enhance the

systematic, targeted and effective museum education.

4.2 Resource integration and synergy mechanism

Under the “Double Reduction” policy, museum education needs to build an open and synergistic resource integration mechanism to break through the limitations of fighting alone. Resource integration should break the physical space barriers, and promote the linkage between museums and libraries, science and technology museums, cultural centers and other cultural institutions to build and share educational programs. Through the joint development of thematic curriculum packages and the holding of traveling exhibitions, the complementary advantages and intensive use of cultural resources can be realized, forming the aggregation effect of cultural education (Zhou & Chen, 2025). At the same time, museums need to deepen the synergistic cooperation with schools. The establishment of school museum joint teaching and research mechanism, co-design of after-school service programs, museum education into the school curriculum system. Through order-based services, accurate matching of school needs, such as providing cultural relics image materials for history classes, designing experimental observation programs for science classes, so that museum education becomes an organic extension of school education. The synergy mechanism should also be extended to the family and society. Develop family exploration programs to guide parents to participate in their children's learning process; establish a volunteer service system to absorb social forces to participate in educational services. In addition, the use of digital technology can also build a virtual learning community to achieve online and offline integration and interaction, such as booking courses and submitting assignments through the online platform, and practice verification in the physical venues to form a closed loop of learning. This kind of synergy not only optimizes the efficiency of resource allocation, but also builds an ecological network of family, school and community collaborative education. Through mechanism innovation, museum education will be upgraded from an independent scene to an educational hub, releasing

greater efficacy of education in the context of the “Double Reduction” policy.

4.3 Policy support and evaluation system

Under the “Double Reduction” policy, the sustainable development of museum education cannot be separated from the double support of policy support and evaluation system. Policy support needs to crack the development bottleneck from the system level. The government should increase the financial investment in museum education, and support the development of curriculum, teacher training, digital resource construction and other key aspects through special funds (Gao, 2024). At the same time, the development of museum education service standards, the establishment of access and exit mechanisms, standardize the market order and ensure the quality of education. Policies can also incentivize museums to innovate education models and improve service effectiveness through tax incentives, recognition and rewards, and other measures. The construction of the evaluation system needs to take into account the process and results, quantitative and qualitative. It should break through the assessment framework of a single number of participants and establish multi-dimensional evaluation indicators covering students' cognitive development, emotional inculcation and practical ability. A dynamic assessment mechanism should be introduced to track the growth trajectory of students through questionnaires, analysis of learning records and display of works. At the same time, we explore the introduction of a third-party assessment organization to ensure the objectivity and credibility of the evaluation results. More critically, the evaluation results need to form a closed loop with educational improvement. Based on evaluation feedback, museums should dynamically adjust their curriculum structure, optimize resource allocation, and improve their service model. At the policy level, an incentive mechanism can be established to promote the construction of the evaluation, linking the evaluation results with the allocation of education funds and project approval, so as to promote the transformation of museum education from rough

development to connotative enhancement. Driven by both policy guidance and evaluation innovation, museum education will gradually build a high-quality development system led by the government, participated by the society and supported by the profession under the background of the “Double Reduction” policy.

4.4 Technical empowerment and spatial reconstruction

Under the “Double Reduction” policy, technological empowerment and spatial reconfiguration have become the key path to improve the quality and efficiency of museum education. Technological empowerment should focus on the deep transformation of digital technology on the educational scene, using virtual reality (VR), augmented reality (AR), artificial intelligence (AI) and other cutting-edge technologies to break through the time and space limitations of the traditional exhibition. Through the development of virtual cultural relics restoration, historical scene restoration and other interactive experiences, to build an immersive learning space, so that abstract knowledge visualization, so that the static cultural relics “live”, to enhance the learning of the sense of fun and participation (Xu, 2025). Space reconstruction requires museums to break through the inherent form of physical venues to create a borderless learning field. On the one hand, the functional upgrading of the physical space, the setting of interactive laboratories, creative workshops and other diversified learning scenarios, to meet the needs of inquiry learning, project-based learning; on the other hand, the use of digital twin technology to build a virtual museum, the realization of the cloud sharing of educational resources and cross-region access, so that students in remote areas can also enjoy high-quality educational resources simultaneously. The deep integration of technological empowerment and spatial reconfiguration has given rise to a new mode of education that integrates online and offline. Students can conduct physical observation and hands-on practice in physical venues, as well as obtain expanded resources and participate in remote

collaboration through online platforms, forming a three-dimensional education ecology of learning in the museum and thinking in the cloud. This reconstruction not only improves the efficiency of education supply, but also promotes the evolution of museum education in a more open, inclusive and innovative direction, injecting a strong impetus for the reform of quality education under the “Double Reduction” policy.

Conclusion:

The “Double Reduction” policy has opened up a new track for museum education, whose functional value has transcended the scope of traditional out-of-school education and become a strategic fulcrum of quality education reform. After the recession of subject training, museums are accelerating the transformation to personalized learning centers by virtue of their unique cultural resources and scene advantages. This transformation not only means the reconstruction of physical space, but also points to the education concept from knowledge inculcation to ability construction, from standardized education to personalized growth. In the future, the museum will be deeply integrated into the school after-school service system, becoming a bridge connecting formal education and informal learning, and building an important part of the learning ecological network for students. Its positioning as a key node of lifelong education will also promote the integration and restructuring of social education resources, injecting lasting momentum into the construction of an open and inclusive innovative education pattern.

Conflict of Interest

The author declares that she has no conflicts of interest to this work.

References

- Liu, W. (2025). The cultural nature of museum learning and the construction of learning society. *Chinese Museum*, (01), 14–20, 132.
- Zhang, B. T. (2023). *Research on youth education in industrial museums* [Master’s thesis, Zhejiang

- University].
- Roland. (2024). Analyzing the “Double Reduction” background of museum children's education. *Identification and Appreciation of Cultural Relics*, (21), 56–59.
- Zhou, B., Deng, K., Li, W., et al. (2023). Research on the effectiveness of museum immersion experiential learning in the context of “Double Reduction”. *Science Education and Museums*, 9(03), 3–10.
- Zhao, T. (2025). Design of museum curriculum based on the concept of STEAM education—Taking the bronze theme course of Zhengzhou Museum as an example. *Heritage World*, (03), 40–43.
- Zhou, R., & Chen, N. (2025). A preliminary study on the development of out-of-school educational resources under the perspective of participatory museum. *China Out-of-School Education*, (01), 5–13.
- Gao, Y. J. (2024). Research on the development path of museum education under the policy of “Double Reduction”. *Journal of Heilongjiang Institute of Technology (General Edition)*, 24(11), 18–21.
- Xu, Y. (2025). Innovative application of augmented reality technology in museum exhibit interpretation. *Encyclopedic Knowledge*, (03), 82–84.

How to Cite: Zhang, Y. (2025). Study on the Development Path of Museum Education Under the “Double Reduction” Policy. *Journal of Global Humanities and Social Sciences*, 6(4), 116-122.
<https://doi.org/10.61360/BoniGHSS252018160401>