

# *Educational activities of the museum as a means of improving the learning outcomes of students*

Shi Qi

*Nanchang Normal Affiliated Experimental Primary School, Nanchang, Jiangxi, 330000, China  
541919029@qq.com*

**Keywords:** Educational activities of the museum; museum education; learning outcomes of students

**Abstract:** As museum curriculum resources have a very important pedagogical value, more and more experts and scholars, frontline teachers, museum educators and university students have been conducting research and practice on them in recent years. However, it is still worth exploring how museum resources can be effectively developed and used in specific teaching practices. Museum education is a visual educational activity that uses displays and other supporting forms of objects to educate visitors. As the educational function of museums becomes more prominent, there is an increasing emphasis at all levels of society on the role of museums in the teaching and learning of students. Museum education as a pedagogical issue, the effective development and use of museum resources in specific teaching practice activities deserves to be explored in depth, and an analysis of the characteristics of education in a museum context, educational outcomes, etc. can suggest effective measures. Therefore, the purpose of this study is to reveal the theoretical and practical aspects of museum education activities, in order to improve student academic performance.

## 1. Introduction

As the role of museums in education becomes more prominent, there is an increasing emphasis on the educational function of museums at all levels of society. The development of museum resources provides a wealth of teaching and learning resources. Intuitive museum curriculum resources make the knowledge in teaching materials concrete and visual, linking classroom knowledge to real life in society and facilitating students' understanding, while vivid and intuitive heritage materials can attract students' attention and interest in learning, thus improving the effectiveness and efficiency of classroom teaching. The development of museum resources has improved the current lack of research and provided a theoretical and practical reference for relevant research. Currently, academic research on museum educational resources is increasing year by year, but there is little research specific to the teaching of museums and individual schools in each region. Therefore, the development of museum curriculum resources can greatly compensate for the current lack of resources in the school curriculum.

## **2. Theoretical Reflection on Museum Education Activities**

### **2.1. Educational activities of the museum as a pedagogical problem**

From an educational perspective, museums are playing an increasingly prominent role in social education. Museums are an important base for patriotic education and understanding of national culture for the general public, as well as a place for self-learning and cultural leisure for the population. In 1951, the Museum Law of Japan defined museums as an institution that collects and maintains (including fostering) materials related to history, art, folklore, industry and natural science for the purpose of educating the general public and improving their cultural education, research and recreation. In 1951, the International Council of Museums (ICOM) redefined a museum as an institution that uses various methods to preserve and study collections of art, history, science and technology, as well as zoos, botanical gardens, aquariums and other culturally valuable materials and specimens for the enjoyment of visitors, and to educate and open to the public for the purpose of managing everything for the benefit of visitors. With the development of society, the 21st Congress of the Museum Association held in Vienna, Austria, in 2007, revised the definition of a museum, updating the definition of a museum as a non-profit, permanent institution open to the public for the purpose of education, research and appreciation, collecting, conserving, studying, disseminating and exhibiting the tangible and intangible heritage of the human environment. The educational function of the museum is reoriented to the forefront of the museum's business.

### **2.2. Museum pedagogy: essential characteristics**

#### **2.2.1 Publicity**

Museums serve the public, with the mission of improving their scientific and cultural literacy, enriching their spiritual life and promoting the all-round development of people. Museum education is equal, all members of society are free to enter and leave the various display spaces, participate in various social activities organised by the museum, absorb scientific and cultural knowledge, and gain ideal sentiment and aesthetic taste.

#### **2.2.2 Social character**

Museums pay great attention to the spiritual and cultural needs of the whole society, highlighting the broadest social character. Through the unique museum patriotism education, vernacular education and other diversified ways to spread the right values, prompting the public to transform moral concepts and a sense of social responsibility into conscious action.

#### **2.2.3 Lifelong character**

Museum education has the advantage of being lifelong and infinite in its time frame, and can truly form the most frequent and lasting "social classroom" for interaction and exchange. As an integral part of social education, museum education is broad, varied and highly effective. As a public cultural facility, the museum is a three-dimensional 'encyclopaedia', a physical 'library'. As such, museums are an important facility for lifelong public learning, with a lifelong educational goal.

#### **2.2.4 Intuitive character**

Based on the exhibits, museums carefully organise their displays and exhibitions, making comprehensive use of text, illustrations and other forms, and with the aid of interpretive services, audio-visual education and participatory operations, to express the theme, content, connotation,

meaning and impact of the displays and exhibitions, and to popularise knowledge of history, culture, economics, politics, natural science and technology. This way of expressing connotations and transmitting information to the audience by means of physical examples is distinctly intuitive, comparable and strongly persuasive and powerful, and has become an important feature that distinguishes it from other educational methods.

### **2.2.5 Richness**

Modern technological tools such as digital museums, smart museums, smartphone tours, the use of social media, virtual reality technology and humanised services have given museum education activities an increasingly rich character and are more in line with the modern demand for cultural

### **2.2.6 Extensibility**

Museum education activities are flexible in scale, form and venue, not limited to the exhibition, and can be developed around the exhibition to develop different educational projects. It is possible to go out of the museum into schools and communities to hold various travelling exhibitions, as well as to hold diverse learning activities and educational programmes in the museum, and to hold training courses for volunteer docents, public service lectures, knowledge competitions, essay writing activities, etc.

### **2.2.7 Autonomy**

Contemporary museums carry the important task of "providing services for public self-learning to achieve the purpose of education", and public quality education in museums has an absolute sense of autonomy: no one is forced to learn; there is no prescribed curriculum and learning schedule; there is no examination, no diploma, education is omnipresent, and the educated are in open conditions to complete self-learning and education. There are no exams, no diplomas, education is omnipresent, and the educated complete their own learning and education under open conditions.

### **2.2.8 Pleasure**

The museum is not only a temple of knowledge, but also an elegant place of leisure and entertainment, where education and enjoyment are its strengths. Visitors are encouraged to receive, process and remember information through observation, listening, touch and manipulation, and thus complete the entire cognitive process.

## **3. Realizing the Educational Potential of Museums in Henan Province: A Practical Perspective**

### **3.1. Survey results on the development and use of the museum curriculum resources for primary and secondary schools in Henan Province of China**

This chapter focuses on the current situation of the development and use of museum curriculum resources in primary and secondary schools in Henan Province from the perspective of museums in primary and secondary schools respectively. By the end of 2022, there were 348 museums in Henan Province, 6 national-level museums, namely Henan Museum, Zhengzhou Museum, Kaifeng City Museum, Luoyang Museum, Nanyang Han Painting Museum and Revolutionary Museum of the Soviet Capital of EYUAN, 21 national-level museums, 25 national-level museums, 36 industry museums, 124 non-state museums, etc. By examining and analysing some of the museums in Henan Province, the author found that the development and utilisation of curriculum resources for primary and secondary schools in museums in Henan Province can be divided into the following three types.

### 3.1.1 History classroom "chain" model of curriculum resource development

The most representative of these is the Henan Museum. The Henan Museum is one of the earliest museums in China, a national museum and a national research and practice education base for primary and secondary school students. There are three types of educational activities, namely the Digital Classroom Education Service, the Huaxia Ancient Orchestra and the Zhongyuan National Education Forum, of which the History Classroom is quite unique: the History Classroom is an educational project pioneered by the Henan Museum in China's museum sector in November 2009, and is now the first of its kind to be set up by the State Administration of Cultural Heritage. "The History Classroom is an educational project pioneered by the Henan Museum in China's museum sector in November 2009, and is now a project set up by the State Administration of Cultural Heritage to improve the educational functions of museums for young people [1]. In November 2012, the History Classroom, an educational project, was launched outside the Henan Museum. In May, a third history classroom, the Henan Experimental Middle School History Classroom, was inaugurated, and in September 2017, the Henan Museum signed a joint agreement with the Kaifeng Museum, making it the 'first stop' for inter-museum educational branding. "In 2018, the history classroom was launched in Yangtang Village Primary School, and since then the history classroom has been introduced to rural primary schools. In December of the same year, the History Classroom was set up at the Pingdingshan Museum, and in 2019 it was set up at the Luoyang Museum, the Erqi District Primary School in Zhengzhou, and the Anyang Museum. Over the past decade or so, the history classroom at the Henan Museum has grown in scale, forming a replicable, standardised, chain-like development model like McDonald's and KFC, and has continued to enter the world, settling in primary and secondary schools, libraries and other public places.

### 3.1.2. Museums that develop their own curriculum

In Henan Province, several museums have opened educational experience areas, such as the Chinese Writing Museum, Henan Museum, Zhengzhou Museum, Pingdingshan Museum, Xinxiang Museum, Xuchang Museum, Anyang Museum, Xinyang Museum and so on. Several museums use the educational experience area as a second classroom for students and have developed some educational programmes for primary and secondary school students based on the characteristics of their collections (see Table 1).

The Chinese Character Museum is located in Anyang, Henan Province, the hometown of the oracle bones, and is the world's first national museum with Chinese characters as its theme [2]. It is also a national museum, a centre for the popularisation of Chinese characters, a training base for science education, a national training base for patriotic education, and the first national education and practice base for primary and secondary school students. Since its official opening in 2009, the museum has taken on the responsibility of promoting the spread of Chinese character civilisation with its unique humanistic status and social functions. It has developed educational programmes such as the "Chinese Character Station", and regularly visits primary and secondary schools in Anyang. They offer courses on different topics for different grades of primary and secondary school students, such as the study course at the Oracle Academy (see Table 2).

Table 1: Selected museums in Henan and the programmes they have developed

Name of the museum	Developed programmes
Chinese Writing Museum	The Oracle School series of courses "I Love Oracle", "Discovering the Beauty of Chinese Characters" and "Children Learn to Write Oracle"
Zhengzhou Museum	Aesthetic Education Programme "Painting with Ink" at Zheng Bo
Zhengzhou Science and Technology Museum	Enchanting Science Classroom Series "Magic Box", "Air Cannon", "The Worm that Climbs the Rope", "Magical Whitening Water"
Kaifeng City Museum	New Year's Money", "Palace Lanterns for Good Fortune", "Exploring the Water Transport Observatory" and "Weapons of the Song Dynasty" are all part of the "Learning to Enjoy Chinese New Year" series.
Luoyang Museum	Study Course "Illumination of the Tang Dynasty --- Three Colours Colouring Experience Course Bronze Mirror, Bronze Goblet, Bronze Sword from the Warring States, White Stone Reclining Rabbit Town
Xuchang Science and Technology Museum	Science Lab Series 'The Science of Baby Warming', 'Magnets and Compasses', 'Putting Out Fires with Carbon Dioxide'
Puyang Museum	Youth Education Experience Series Courses "Tea Art", "Woodblock New Year Painting", "Paper Cutting to Welcome the New Year", "Mysterious Ancient Ornaments Creativity Education Series "Ruyi Jinbao" "Robotics"
Nanyang Han Painting Museum	Aesthetic Education Programme "Mystery in a Painting"
Anyang Museum	Ambiente School series "In Search of the Nine-Coloured Deer", "Ancient Style and Modern Words", "Topping the Essence"
Geological Museum of Henan Province	The Foundations of Natural Science - Understanding Our Planet
Hongqiqu Memorial Hall	A Study Course on the Spirit of the Times: Passing on the Red Gene

Table 2: Introduction to the Chinese Writing Museum Study Programme

Grade Level	Course Topics
Primary 1-2	I love oracle script Charming Chinese Characters
Primary 3-4	Discovering the beauty of Chinese characters The big secret of Chinese character radicals
Primary 5-6	Children learn to write oracle bones Oracle helps you learn ancient languages

## **3.2. Problems of fulfillment of the educational activities of the museum in Henan Province of China**

### **3.2.1 There is an imbalance in regional development**

The unbalanced regional development of museum curriculum resources for primary and secondary schools mainly refers to the unbalanced development of museum curriculum resources for primary and secondary schools between urban and rural areas. Through the official website of Henan Provincial Bureau of Cultural Relics, the author learns that there are 37 museums open to the public in Zhengzhou, 66 museums open to the public in Luoyang, 27 museums open to the public in Kaifeng, 16 museums open to the public in Xuchang, 14 museums open to the public in Anyang, 11 museums open to the public in Puyang, etc. Most of these museums are located in urban areas. Most of these museums are located in urban areas, and almost none of them are located in remote villages. The number of museums in rural areas in Henan Province is very small, and the number of rural museums that can meet the requirements of the Museum Regulations is even smaller, less than 10. The disparity in the number of museums between urban and rural areas means that primary and secondary school students in rural areas are far less likely to make use of museum resources than those in urban areas.

### **3.2.2. Teachers' motivation cannot be mobilised**

The research study found that for most teachers, they would only support the development of museum curriculum resources for primary and secondary schools psychologically for a while, but in concrete terms, they would have various reasons for not being willing to develop and use museum resources. The first is the time factor, teachers have to write lesson plans, prepare lessons collectively, correct assignments, listen to and evaluate lessons, go to poverty alleviation, persuade lost students, write various materials etc. There is no more time and energy to concentrate on such areas as museum curriculum resources. The second is the difficulty of accessing resources, the limited resources around the school, the lack of dedicated staff to gather relevant knowledge, and the limited personal power to gather information is not comprehensive, can not fully understand the museum resources talk about how to develop, talk about how to use. The third is related to the examination for higher education, as knowledge related to museums is not included in the national examination syllabus, the examination is not tested is the biggest obstacle. Fourthly, it is a question of funding. Without the relevant funding and without the inclusion of the examination syllabus, schools do not spend much time and energy on the study of museums by teachers and students.

### **3.2.3 Lack of systematic theoretical guidance**

Curriculum objectives are a necessary part of a complete museum curriculum design that must be included. An excellent museum curriculum for primary and secondary schools must have clear objectives and be relevant to the needs of primary and secondary school students. When I took students on study visits to museums, I found that the museum docents just gave simple explanations to the students as if they were general visitors, with no pre-course objective setting, no teaching programme, no study manual, etc. According to Taylor's principle, there are four steps in curriculum development i.e. defining objectives, selecting experiences, organising experiences and evaluating results. Determining the objectives is the first part of curriculum development. The author believes that the development and use of museum curriculum resources in primary and secondary schools must first determine the objectives of the curriculum. According to the new curriculum reform of basic education in China advocates the design of the three dimensions of the curriculum objectives, we can develop the curriculum objectives of our museum primary and secondary school curriculum

resources from three aspects: knowledge and skills, process and methods, emotional attitude and values.

## **4. Recommended strategies of improvement of the educational function of the museums in China**

### **4.1. Improving government safeguards**

The development and utilisation of museum curriculum resources for primary and secondary schools cannot be achieved without specific government policy guidelines. Firstly, the government can issue some legal documents to make the development and use of museum curriculum resources for primary and secondary schools an assessment mechanism, and give moral or material rewards to those who have made significant contributions to the development of educational resources, so as to motivate schools and museums to actively develop and use museum curriculum resources. Secondly, the government should allocate special funds to museums and schools each year, so that they can jointly use the funds to develop and utilise museum curriculum resources for primary and secondary schools. In addition, the government must specify how many hours of service museums must provide to primary and secondary schools each year and how many sets of available curriculum resources they must develop, and monitor their implementation efforts. Finally, the government could join forces with museums and schools to transform some public schools into museum schools.[3]

### **4.2. Integrating museum resources fully into everyday school education**

In July 2021, the General Office of the Central Committee of the Communist Party of China and the General Office of the State Council issued the "Double Reduction" policy document, which proposes to promote the quality and balanced development of compulsory education and expand quality educational resources. Museum resources are one of the many quality educational resources that can be used to promote quality development of compulsory education. Internationally, museums can be divided into historical museums, art museums, science museums, general museums and other types of museums according to their collections and basic display content. For primary and secondary school students, then, different types of museums can develop different types of curriculum resources based on the characteristics of their pavilions. For example, history museums can develop history curriculum resources for primary and secondary school students, art museums can develop art curriculum resources, nature museums can develop biology curriculum resources, and revolutionary museums can develop ideology and political science curriculum resources.[4] In addition, from the school side, we can include museum education in the school-based curriculum to add colour to it. Under the guidance of the "double reduction policy", we can also develop more comprehensive practical courses of interest in the after-school service programmes of primary and secondary schools, such as museum studies courses and archaeological and cultural courses, so that children can receive these excellent cultural influences from an early age and build up strength for the future of our country's cultural and archaeological career.

### **4.3. Active promotion of the implementation of museum education by museums**

Libraries need to strengthen popularization work. Primarily, this means that museums need to strengthen their efforts to popularise museum curriculum resources for teacher groups. This is because a lack of clarity about what resources are available in museums is one of the major factors affecting teachers' development and use of museum curriculum resources. So museums need to

strengthen their efforts to popularise the resources for teacher groups. Museums can regularly invite primary and secondary school teachers to visit museums. And work with schools to develop appropriate museum curriculum resources for primary and secondary school subject teaching with reference to curriculum objectives and student needs combined with museum resources. [5]It is also necessary to categorise and plan the museum curriculum resources that have been developed, such as primary school language subject curriculum resources, primary school science subject curriculum resources, junior high school history subject curriculum resources, junior high school physics subject curriculum resources and so on, and send them regularly to local groups of teachers of various subjects, so that teachers of different subjects know what suitable curriculum resources are available in the museum for the teaching of their subjects. Only by strengthening the dissemination of museum resources to teachers can we continue to guide primary and secondary school teachers to develop and use museum curriculum resources.

## 5. Conclusion

This thesis analyses the educational outcomes developed in the curriculum in the museum context by reviewing a large amount of information. Museum curriculum resources for primary and secondary schools mainly refer to the various conditions in museums that can be linked to the primary and secondary school curriculum and directly become material for the content of activities or support the achievement of curriculum objectives. The development of museum curriculum resources for primary and secondary schools can be the subject of government units, museums, front-line teachers and third-party organisations in society. The audience of museum curriculum resources for primary and secondary schools is mainly the majority of primary and secondary school students.

This thesis takes the current situation of the development and utilisation of museum curriculum resources for primary and secondary schools in Henan Province as an example, and analyses the problems that exist in the development and utilisation of museum curriculum resources for primary and secondary schools in Henan Province from the perspectives of museums and primary and secondary schools: uneven development between museums, uneven regional development, uneven popularisation, lack of rigorous professional terminology, low motivation of teachers, and lack of systematic theoretical guidance. In the face of these problems, this chapter puts forward targeted recommendations: improving government safeguards, enhancing the initiative of schools, museums actively promoting the implementation of museum education, and social multi-stakeholder collaboration to promote museum education.

## References

- [1] Shan, J. X. *From the World of the House to the World of the Thousands* [M]. Tianjin: Tianjin University Press, 2011. – P. 70-100.
- [2] Jiao Shixing, Wang Anzhou, Yu Zhengsong. *Research on the development and construction of Chinese character culture tourism resources in Chinese character museum* [J]. *Journal of Anyang Normal College*, 2017, (05): 69-71.
- [3] Huang Chen. *Research on pedagogy in museums for young people. A case study of the National Museum of China* [J]. *China Museum*, 2017, (4): 7-11.
- [4] Zhao Jing. *The realization path of museum curriculum resources development under the perspective of government-school cooperation* [J]. *Museums*, 2020, 22, (4): 92-98.
- [5] Zheng, Y. *Research on the institutional design of integrating museums with primary and secondary school education* [M]. Shanghai: Fudan University Press, 2020. P. 65-69.