

# Research on the Landscape Planning and Design Form of Children's Activity Area in Forest Park under the Natural Education Theory

Li He

Wuchang Shouyi Art and Design University, Wuhan, Hubei, 430064, China

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**Abstract:** This paper briefly analyzes many obstacles faced by children's physical and mental health education: lack of natural deficiency, lack of ecological awareness of environmental protection, imperfect nature education; clearly points out the importance of natural education theory to children's physical and mental health growth; and puts forward the adoption of forest park children's activities as a specific strategy, landscape planning and design of children's activity area as a key construction project to educate children's natural theory knowledge, enhance children's awareness of environmental protection, and promote children's physical and mental health growth.

## 1. Introduction

The theory of natural education includes nature education, environmental education, forest education, and the relationship among them. The concept of natural education originated from Rousseau's work *Emil*, in which nature was put forward as the teacher, and after a large number of practical education, the theory of natural education gradually diversified. In China, the theory of natural education has been defined at a higher level, which has aroused widespread concern in the society, that is, the educational process of guiding children to integrate into nature and making use of the inherent laws of nature to cultivate children's autonomous learning based on the natural ecological environment.

## 2. Problems in the Development of Children

### 2.1 Natural Deficiency

Natural deficiency, a term coined by the American book "The last child in the woods", reflects a psychological deficiency that does not require medication and gradually develops into the focus of social attention, that is, children's time to contact with the natural environment is gradually lost, which can easily lead to children's loneliness, anxiety, irritability and other adverse psychological problems, such as wasting paper, tearing up the renminbi and other adverse phenomena. The main causes of the disease are the reduction of children's outdoor play opportunities for safety reasons and the prevalence of electronic products, which reduces children's outdoor activity. According to statistics, at least one in every 10 children is suffering from natural deficiency, a serious threat Children grow up in physical and mental health.

### 2.2 Weak Environmental Awareness

Based on the social background of natural deficiency, children gradually show many poor abilities, such as poor concentration, poor emotional regulation, poor environmental adaptability, lack of curiosity about new things, weak communication skills, and even depression. On the basis of the problems of children's physical and mental health, it is easy to create bad social phenomena such as late-stage youth violence, excessive waste of resources and lack of social responsibility. Children's lack of correct ideological values and weak awareness of environmental protection threaten the future process of social and economic development.

### 2.3 Inadequate Natural Education System

In 2016, the National Natural Education Forum conducted a survey aimed at understanding the

state of development of natural education in the country through the survey, which targeted natural education institutions, including teaching methods, curriculum planning, teaching groups and so on. After investigation, common natural education institutions include: school's natural center ideological education, children's outdoor travel natural education, farming and pastoral life practice, museum field visits, park amusement projects and so on. Natural education institutions are diversified, but the educational system is not scientific and loses the learning value of natural theory education.

### **3. Landscape Planning and Design Scheme of Children's Activity Area in Forest Park under the Theory of Natural Education.**

#### **3.1 Cultivation of Children's Natural Theory**

(1) Landscape design tourist nature education base. Based on the theory of natural education, forest park should build a special area for children's activities, build a learning base for children's natural theory, and promote the growth of children's physical and mental health. In the children's activity area, the design of tourist entertainment items for children is conducive to children's familiarity with nature, the discovery of the inherent law of natural theory, the stimulation of children's curiosity about the natural environment, and the establishment of a good concept of environmental protection in the subconscious. The tourist nature education base, with the nature of the tour and viewing project, should prepare rich landscape elements, diversified animals and plants, magnificent topographic and geomorphological models, and rare natural landscape for children. Like science fiction, etc. Such educational bases are distributed in most urban parks, natural resources reserves and other public viewing spaces, with tourist walkways, tunnels, observation towers and other auxiliary facilities. Birds, starry sky and other natural phenomena, teach children to use binoculars to observe natural phenomena, and show them colorful natural phenomena; when observing natural phenomena at night, they should be equipped with lighting facilities [1].

In the case of Xinghai Park in Dalian, its tour project includes visiting tunnel, tourists walking in the tunnel are separated from all kinds of marine life, just like watching the swimming track and physical characteristics of all kinds of marine life, which is helpful to improve children's understanding of marine life, stimulate children's strong enthusiasm for marine life and guide them to establish a correct concept of marine ecological protection.

(2) Landscape design entertainment natural education base. Educator Piaget points out that games have the function of assimilation and creative imagination, which can easily guide children's divergent thinking and cultivate children's creative imagination and reasoning ability. Chen he, a famous education expert, points out that games are the source and motive force of children's growth. Therefore, based on the theory of natural education, the landscape planning of children's activity area in forest park should include entertainment and game nature education base. This type of education program includes: climbing, running and jumping, slide and other children's games, on the one hand, it is beneficial to enhance the physical quality of children, on the other hand, it is beneficial to improve their understanding of natural objects and promote their body and mind healthy growth.

The game nature education base should carry a variety of game facilities to attract children's entertainment interest, shift the focus of their playing electronic equipment, promote the development of children's physical and mental health, build spacious and bright open spaces to prevent excessive light and too dark light from affecting children's eyesight. Beautiful activity space is helpful to improve children's love of natural landscape and cultivate their concept of ecological protection, such as: quiet underforest promenade, safe and comfortable underground swimming pool, indoor diversified game park and so on. In the game base, children can play games spontaneously, such as jumping houses, hide-and-seek, eagles catch chickens and so on. There are two points to pay attention to in the construction of game education base matters. First, the terrain design of mobile equipment should be relatively flat, prevent children from wrestling in the process of play, injury similar events, select geological materials with increased resistance function to

ensure the safety of children's games; second, because children are small, it is easy to cause close contact with game equipment, all building materials in this base should select green environmental protection materials to ensure children's health [2].

(3) Landscape design experiential nature education base. In the process of nature education, children acquire natural knowledge through practical experience, improve their hands-on operation ability, and deepen the understanding of their natural theory knowledge. Experiential natural education should be combined with the natural environment, humanistic culture and other contents of the site, so as to present a unique natural phenomenon for children. For example, in the geological landscape area, according to the characteristics of terrain change, carry out canyon crossing, cave exploration and other recreational projects to stimulate the enthusiasm of children to participate; farming cultural areas, conducive to the development of agricultural experience activities, improve children's understanding of farmers' homework, cultivate their awareness of cherishing food.

In the case of farming experience, the ground was dug up with roots and dirt, and several parts were sorted out; the children were allowed to separate the peanuts from the soil for a limited period of half an hour; the separated peanuts were all personal income of the children, and more work was done; and special gloves for agricultural separation were distributed to the children. Because peanuts and soil have strong adhesion, children's strength is insufficient, it is not suitable to work for a long time, so it is limited to half an hour to strengthen children's understanding of field work, cultivate their cherished grain and put an end to waste.

(4) Landscape design popular science nature education base. The form of popular science education is the core content of natural education. Comprehensive use of natural resources such as animals and plants, topography, astronomy and meteorology in forest parks to carry out natural science popularization education projects; hiring professional text interpreters to explain the content of natural knowledge to children, promoting children to learn the theory of natural knowledge in the natural environment, establishing a relatively complete system of natural knowledge, learning the biological laws of nature, plant growth, mountains and rivers and other theoretical knowledge to stimulate their love of nature, and establish their correct concept of environmental protection.

### **3.2 Enhancing Children's Environmental Awareness**

(1) Design an accessible natural environment. According to the data survey, 98% of children are interested in learning natural activities and are very eager to walk into nature; 70% of children approve of the combination of nature and classroom learning; and 96% of children say that in natural activities, they can improve their ability to live and collect natural knowledge. This shows that the natural environment and its related theoretical knowledge are of great significance to the growth of children's physical and mental health. We should make active use of children's natural psychological tendency and take the natural environment as the basis to carry out natural activities with teaching value for children, such as forests, grasslands, streams and so on. Design accessibility of the natural environment, and cultivate children's awareness of environmental protection [3].

(2) Design the natural environment of green environmental protection. The natural education sites for children's participation should have good environmental facilities and beautiful scenery. The colorful natural environment is helpful to enhance children's aesthetic ability, cultivate their interest in exploring the mysteries of nature independently, promote children's love of natural environment, cultivate their consciousness of protecting ecological environment, and give full play to the educational value of natural theory.

### **3.3 Improve the Natural Education System**

(1) Design rich natural education resources. Natural resources are rich and conducive to stimulating children's learning curiosity. For example, the growth law of animals and plants, the change characteristics of geological and geomorphology, the transformation process of water form, the principle of natural phenomenon, the development process of human history and so on. Using abundant natural teaching resources to carry out diversified natural education activities to meet children's curiosity about the world, improve children's physical strength, intelligence and hands-on

ability, and promote children's overall physical and mental development.

(2) Strengthen the safety management of children's activities. Because children are young, all parts of the body are not mature, physical strength and physical fitness are not formed, the ability to identify and avoid danger cannot be consistent with adults. Therefore, the special area of children's activities in forest park should increase the safety management of children's activities to ensure the safety of children in the process of natural activities, and to avoid toxic and harmful animals and plants endangering the health of children.

#### **4. Conclusion**

In summary, children are the hope of the future development of the country. Strengthening the education of children's natural theory and improving their comprehensive quality has become an important link in the social and economic development. Make scientific use of the natural resources of forest park, open up special areas for children's natural activity education, show rich and colorful natural phenomena; design accessible, green and environmentally friendly natural environment, enhance children's understanding of protecting ecological environment; design nature education bases such as tour, entertainment, experience, science popularization and so on, to cultivate children's correct ideological and value concepts.

#### **References**

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