

Problems and Development Suggestions of Nature Education in Jiangxi Province

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Abstract The forest coverage rate of Jiangxi Province ranks second in China. It has rich natural resources, a long history of ancient color culture and rich red culture. In the development of nature education, Jiangxi Province has great potential and advantages. This paper introduces the development conditions of nature education in Jiangxi Province, summarizes the problems existing in the development of nature education in Jiangxi Province from the aspects of the types of nature education and the construction of nature education base, such as simple content and single form, imperfect infrastructure and lack of professionals, and puts forward some suggestions on the development of nature education in Jiangxi Province.

Key words Jiangxi Province; Nature education; Problem; Development suggestion

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With the rapid advancement of urbanization, the contact between humans and nature is becoming less and less, and this phenomenon is known as "nature-deficit disorder", especially prevalent among adolescents. Long-term lack of intimate contact with nature can lead to a series of problems such as decreased attention and poor emotional regulation ability. Therefore, the urgency of carrying out nature education has become increasingly prominent. Nature education is a complete plan that utilizes various natural resources, explores and understands natural laws, and enables learners to receive education through labor within the ecological natural system. It cultivates comprehensive qualities such as self-reliance, self-improvement, self-confidence, and self-care, while establishing correct outlooks on life and values, and achieving balanced development^[1]. In recent years, China has attached great importance to quality education, advocating the use of study tours to carry out nature education and cultivate the comprehensive quality of adolescents.

1 Development conditions of nature education in Jiangxi Province

Jiangxi Province has abundant natural resources and profound historical and cultural heritage, providing favorable conditions for the development of nature education. Jiangxi is located in the southeast of China, on the south bank of the middle and lower reaches of the Yangtze River. It has a subtropical warm and humid monsoon climate, with an average annual temperature of 16.3–25.0 °C, generally increasing from north to south. It is warm in winter and hot in summer, and frost free period is up to 240–307 d.

The duration of stable daily temperature exceeding 10 °C is 240–270 d. By 2022, a total of 547 nature reserves of all kinds have been built in Jiangxi Province, including 1 national park (Jiangxi area of Mount Wuyi National Park), 190 nature reserves (15 national and 39 provincial), 45 scenic spots (18 national and 27 provincial), 15 geological parks (5 national and 10 provincial), 5 world heritage sites, 109 wetland parks (40 national and 69 provincial), 182 forest parks (50 national, 120 provincial and 12 municipal and county level). At present, various science popularization venues, forest and grass laboratories, and forest and grass education institutions in Jiangxi Province are open to the public, and the co construction and sharing of natural science popularization resources have achieved significant results.

2 Current development status of nature education in Jiangxi Province

2.1 Type of nature education According to the characteristics of nature education bases, they can be divided into perceptual, cognitive, and practical categories^[2]. Jiangxi Province has abundant natural education resources and diverse educational models, which provide the necessary conditions and venues for carrying out different forms of nature education activities. The main goal of natural perception type of nature education is to promote experiencers to relax the body and mind, and cultivate character, dominant by activities such as natural observation, natural interaction, and natural experience. The main goal of natural cognition type of nature education is to popularize natural knowledge, dominant by activities such as environmental explanation, science popularization exhibition, and thematic course^[3]. The main goal of natural practice type of nature education is to enable participants to have a deeper understanding of nature, understand the relationship between humans and nature, enhance environmental aware-

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ness, and establish a correct ecological perspective, dominant by activities such as horticultural practice, handicrafts, artistic creation, outdoor sports, and volunteer service.

2.2 Construction of nature education bases At present, Jiangxi Province has built a certain number of nature education bases, providing people with abundant nature education resources and places^[4]. Under the promotion of forestry departments at all levels in Jiangxi Province, various forms of nature education activities have been carried out in various regions, providing nature education environment and services for visitors of different ages. Among them, it includes not only traditional natural landscape (forest ecology, wetland and swamp) tourism experience activities, but also some nature education activities with themes such as red education, labor experience, and health and sports. At the same time, multiple nature education operation institutions have been established, and many large, primary, and secondary schools are actively carrying out nature education activities. By entering the forest, exploring the forest, and understanding the forest, people's understanding of the natural environment has been effectively enhanced, thereby cultivating their awareness of environmental protection.

3 Problems of nature education in Jiangxi Province

3.1 Simple content and single form At present, the development of nature education in Jiangxi Province is still in its early stage. Although multiple courses and activities have been established, a complete nature education system has not yet been formed. Only simple facilities limited to the base can be provided to the vast educated population, and there is a single problem in terms of form. The regional characteristics are not fully demonstrated, and there is a lack of innovative and differentiated nature education curriculum content.

3.2 Insufficient infrastructure Most nature education bases in Jiangxi Province have basic outdoor activity venues, but lack some ecological nature education infrastructure, such as ecological science popularization exhibition rooms, exhibition rooms, specimen halls, ecological halls, *etc.* The facilities are simple, and there is a general lack of experiential education equipment, which cannot meet the various needs of people of different ages.

3.3 Lack of professional personnel The nature education industry involves a wide range of content and requires a large number of professional technical and management personnel. At present, there is a serious shortage of nature education practitioners in Jiangxi, resulting in poor level and weak professionalism of nature education teachers in many bases, which greatly restricts the development of nature education activities and greatly reduces the effectiveness of nature education. In recent years, institutions such as Jiangxi Forestry Society have trained a certain number of nature educators through various forms, but it still cannot keep up with the rapid development of the industry's demand for professional

and management talents^[5].

4 Suggestions for the development of nature education in Jiangxi Province

4.1 Enriching content of nature education Jiangxi Province is rich in natural resources and has a profound historical and cultural heritage. When setting up nature education content, in addition to emphasizing natural observation and science popularization, courses such as outdoor sports, scientific research practice, and artistic creation can be appropriately added to cultivate the scientific exploration spirit and thinking ability of adolescents. It should strengthen cooperation with cultural tourism, education and other departments, fully utilize the natural resources, revolutionary memorial halls, historical museums, *etc.* of Jiangxi Province, and offer different types of nature education courses suitable for different age groups. Nature education should not only promote ecological science education, but also promote ecological regulations, develop ecological economy, and study ecological science. It needs to develop content of nature education from multiple perspectives, allowing people to go from entering and understanding nature to utilizing it, ultimately achieving the goal of harmonious coexistence between humans and nature.

4.2 Improving the implementation equipment of nature education The nature education base mainly targets adolescents, but it also takes into account the various needs of different age groups of participants. Therefore, it is necessary to improve various infrastructure according to the needs of participants of different age groups, such as forest exploration experiences, forest health trails, nature education interpretation systems, forest observation platforms, nature classrooms, and quality development venues. At the same time, it is necessary to enrich the content and form of nature education courses, and equip with nature education manuals, nature education mentors, nature education commentary systems, and other auxiliary facilities, such as simulation models, dynamic capture and other creative experience devices, to fully mobilize multi-dimensional senses such as vision, hearing, and touch, so that more people can participate and experience, and create a dynamic space for nature education with scenery, fun, and stories.

4.3 Strengthening the construction of professional talent team In response to the lack of professional technical and management talents in nature education activities in Jiangxi Province, and the generally low level of professionalism among practitioners, industry regulatory authorities should work together with Jiangxi Agricultural University, Jiangxi Environmental Engineering Vocational College and other units to strengthen the training and cultivation of nature educators, so that more professionals can participate in the cause of nature education and improve the general level of practitioners in the nature education industry. Each nature education base should attach importance to the team construction of nature educators, focus on skill training for practitioners, gradually

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4.4 Improving infrastructure and comprehensively improving the ecological environment^[16] With the development of social economy, the infrastructure in the town can no longer meet the needs of residents. The water environment of Wumu Stream, the "blood" of the ancient town, is also deteriorating. As a basic element of the traditional mountain settlement, some aborigines moved out because of dissatisfaction with the current situation. With the loss of these populations, some traditional cultural elements also faded. Hence, in the development of the ancient town, on the one hand, infrastructure should be improved to enhance residents' quality of life^[17]; on the other hand, the polluted Wumu Stream and other ecological environments should be comprehensively remediated and protected to retain residents, so as to ensure the sustainable development of the ancient town.

5 Conclusions

Based on the self-organization theory, the evolution characteristics of the settlement space of Anju Ancient Town was analyzed, and its self-organization characteristics was clarified. The influence mechanism of self-organization on traditional mountain settlements was specifically revealed, and the suitable protection and development strategies of traditional mountain settlements with other organization nature based on self-organization were summarized finally. In the era of rapid urbanization, self-organization and other organization jointly promote the sustainable development of traditional mountain settlements.

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establish a professional technical and talent system, and improve the educational effectiveness, management level, and service quality of nature education bases.

4.4 Strengthening the publicity and promotion of nature education Industry regulatory authorities should promote and report the significance and effectiveness of nature education through various channels, regularly organize nature education recommendation activities, and enhance people's awareness and demand for nature education. At the same time, all kinds of nature education bases should also promote their own advantages and characteristics through new media technologies such as Tiktok and Kwai, so as to enhance their nature education brand awareness and market competitiveness. It should pay attention to collaborating with schools, research institutes, and study tour institutions to carry out diverse and rich nature education activities, and

enhance the influence and attention of nature education bases.

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