Abstract: The current rural revitalization faces challenges such as population loss and aging, single industrial structure, and relatively backward cultural level. Among the many paths of rural revitalization research, natural research activities analyze and study the local culture of rural areas in the study area, combined with the scientific development concept of harmonious coexistence between humans and nature. While improving the current difficulties of rural population loss and aging, single industrial structure, and relatively backward cultural level, they also achieve the inheritance and development of local excellent traditional culture, optimize rural population structure, promote rural economic development, and explore local cultural genes. This article conducts typical research and reflection on the path of natural research to assist rural revitalization, combined with Anji Dazhuyuan Village. In general, this article takes Anji Dazhuyuan Village as an example to study the path of natural research to assist rural revitalization. Starting from the scientific theoretical perspective of "harmonious development between humans and nature", and combining relevant practical experience, it objectively analyzes and evaluates the advantages and disadvantages of this type of assistance plan, providing ideas for the path research of rural revitalization to a certain extent.

Keywords: rural revitalization, natural research, cultural heritage, common prosperity

1. Introduction

The report of the 20th National Congress of the Communist Party of China pointed out that the most difficult and onerous task in the comprehensive construction of socialist modernization in China is still in the countryside.[1] The fundamental feature of the socialist rural revitalization path with Chinese characteristics lies in basing itself on China's national conditions, taking into account the reality of China's rural areas, and valuing Chinese cultural traditions.[2] China has a long history of local civilization, with thousands of years of farming tradition making rural areas an important part of the country's economic and social structure.

Nature studies is a learning method based on the natural environment and natural experience, which integrates culture, art, science, sports, labor, and other aspects. Through personal experience of nature and participation in natural activities, participants' creativity, problem-solving ability, and environmental awareness are cultivated. Explore and discover natural phenomena and scientific problems, conduct research, and solve problems through the scientific method. The educational method of natural studies is based on students' active participation and learning through practice and experience. The goal of natural studies is to cultivate students' observation, experimental ability, and problem-solving abilities, and to stimulate students' interest and curiosity in science. In recent years, culture and art have played an increasingly important role in helping rural revitalization. As one of the many ways of rural revitalization, natural studies have gradually attracted people's attention in recent years. Starting from nature research to help rural revitalization, this paper takes the practice of Dazhuyuan Village in Anji as an example to explore and think about this way.

2. The current predicament of rural revitalization

2.1 Rural population loss and aging

In the long history of our country, rural development has always played an important role, reflecting the context and direction of national development.[3] In recent years, a large number of young people have flocked to cities, resulting in a decrease in rural population and serious aging, which has caused a shortage of rural labor and limited the rural economic development and modernization process. In the process of promoting rural revitalization, there are certain problems at the level of policy implementation, and some policies are difficult to effectively implement, resulting in ineffective actual results.
2.2 The rural industrial structure is unitary

Rural areas lag in scientific and technological innovation and industrial technology, making it difficult to develop new industrial fields. Some rural areas still rely on traditional agriculture and have a relatively single industrial structure. Due to geography, resources, and other reasons, it is difficult to introduce diversified industries and employment opportunities and lack diversified economic development, which makes the rural economy vulnerable to market fluctuations. At the same time, the rural land system is not perfect, land transfer is more difficult, and some farmers find it difficult to effectively use the land resources to upgrade their industry and develop new modes of management. Although the goal of rural revitalization is to increase farmers' income, the income level of farmers in some regions is still relatively low.

2.3 The level of rural culture is relatively backward

Compared with the city, the rural cultural level is still lagging, which not only restricts rural development but also affects the living standard of residents. There are many reasons for the relatively backward rural cultural level. First of all, the rural educational resources are insufficient, which limits the opportunities for rural residents to receive high-quality education and affects their cultural level. Secondly, the brain drain in rural areas. Due to the relatively backward economic development in rural areas, people may choose to seek better education and employment opportunities in the cities, which leads to the loss of young and talented talents in the rural population and aggravates the lag of rural cultural level. At the same time, cultural inheritance is hindered. In some regions, due to historical reasons, geographical isolation, and other factors, cultural inheritance is hindered, and traditional culture cannot be effectively transmitted, which affects the improvement of cultural level. In addition, the lack of cultural activities is also one of the reasons. The promotion of the cultural level requires a wide range of cultural experiences and participation, and the lack of diversified cultural activities and entertainment venues in rural areas leads to the limitation of cultural development in some rural areas.

3. The potential value of natural research to help rural revitalization

3.1 It is helpful to optimize the rural population structure

Natural research emphasizes field observation and experience. By carrying out natural research activities in rural areas, it can stimulate the interest of teenagers in natural science, improve the education level of residents, and cultivate more high-quality talents. Nature study activities can provide rural residents with more opportunities for outdoor activities, promote social interaction, improve ecological awareness, enhance cognition and learning, relieve stress and anxiety, and have a positive impact on the health of rural residents. Through the development of natural research activities, attracting more young people to return to their hometown to start businesses can promote interaction and cooperation within the village, help to establish a closer community relationship, make the village a more cohesive community, help to retain talents, improve the population structure, and optimize the problem of rural population loss and aging.

3.2 Help to promote rural economic development

The goal of rural revitalization is to raise the level of rural economic development, improve farmers' living standards, and promote the integrated development of urban and rural areas. Nature research can inject innovative impetus into rural revitalization, improve the relatively simple rural industrial structure, promote the development of ecological tourism, ecological agriculture, and characteristic industries, promote agricultural experience education, enhance the visibility of the countryside, stimulate people's interest in the countryside, cultivate the entrepreneurial spirit of rural youth, and attract young people to return home to start businesses. Gradually improve the backward rural infrastructure and other problems, and promote the upgrading of the rural economy. Natural research projects have practical effects on improving the single industrial structure and backward infrastructure in rural areas, driving economic development in all aspects of rural areas, and contributing to the promotion and realization of common prosperity.

3.3 It helps to discover the local cultural genes

Natural research plays a positive role in the inheritance of local culture. Through the implementation and development of natural research in villages, on the one hand, helps to cultivate participants' understanding of Chinese local culture and spread and inherit rural traditional characteristics and culture in this way. On the other hand, calling on villagers to participate in nature research will help strengthen rural residents' sense of identity in their own culture, explore local cultural genes, popularize various knowledge to villagers, and promote rural co-construction and sharing. Nature research and ecological education will promote the sustainable development of rural areas.
4. How does rural revitalization help rural revitalization - A case study of Nature Research in Dazhuyuan Village in Anji

Natural research contributes to the revitalization of rural areas and plays an important role in promoting rural economy, culture, and people's health. However, some implementers of research education in the current market lack the grasp of the concept of research education, so they fall into the task-type vortex and rush to complete the established task through the packaging of colorful activities, which is far from the feelings and mission that educators should have. At present, the supervision mechanism of the research market is relatively lacking. Natural studies should be a new form of education as a supplement to school education.[4] Rousseau's concept of natural education, emphasizes the harmonious unity of education of nature, education of people, and education of things.[5] At present, it is necessary to face educational problems such as poor educational design, outdated educational methods, and limited educational content, and carry out targeted optimization and improvement.

In August 2023, the author and my classmates formed a team to explore and think about the combination of Dazhuyuan Village and nature research in Anji under the opportunity of the first "Liangshan Cup" rural revitalization competition for college students.

4.1 Preliminary analysis

Dazhuyuan Village is located in Anji County, Zhejiang Province, which is known for the concept of "two mountains" - clear water and green mountains are the birthplace of Jinshan and silver mountains. Dazhuyuan Village has a superior geographical location, good traffic advantages, ecological advantages, and policy advantages. There are 61 rural houses in northern Zhejiang designed by Shanghai Jiao Tong University, with white walls gray tiles, and bluestone alleys, which complement the green waters and mountains. Dazhuyuan Village in 2008 to create a "beautiful livable model village" opportunity to improve the environment, industry, local culture, villagers' lives, and other aspects of the improvement. The following is the analysis chart made by the team after in-depth research on Dazhuyuan Village. (Figure 1)

4.2 According to the current situation of Dazhuyuan Village in Anji, the course design in three directions is carried out

In the early stage, according to the site and plant status of Dazhuyuan Village, the team designed and explored the course scheme from three directions, namely: the characteristic plant engine course "Lotus and Culture", the characteristic...
plant science popularization course "Ecological Messenger", and the fundamental course of people's livelihood development "Beautiful Agriculture Research".

4.2.1 Featured Plant Engine Course "Lotus and Culture"

"Lotus and Culture" is designed according to the characteristic industry of Dazhuyuan Village - Lotus Pond. It will expand the research of lotus in various directions such as science, art, culture, and spirit, and combine with the local intangible cultural heritage clay sculpture culture of Dazhuyuan Village, using lotus as a medium to inherit and carry forward various cultures and connotations. (Figure 2)

Figure 2. “Lotus and Culture” sample course

4.2.2 Plant Science Specialty Course "Ecological Messenger"

The team screened 108 kinds of characteristic plants in the village and divided them into 10 categories to form 108 interesting plant topics. The rich and diversified plants can be used as the characteristic material library of nature research, and the ecological wisdom of plants can be transmitted through ecological messengers and the forest culture can be experienced. (Figure 3)

Figure 3. "Ecological Messenger" curriculum significance

4.2.3 Basic course of People's Livelihood Development "Beauty Research Agriculture"

Agriculture is one of the characteristic industries of rural areas. Dazhuyuan Village is taken as a model of beautiful countryside, and corresponding natural study courses are designed for it. Through researching farming, rural areas, and agricultural history, participants can establish correct food concepts and work concepts, and understand various knowledge of farming, rural areas, and agricultural history. We should not only base on the local perspective but also have the vision of global exchange and harmonious coexistence of multi-cultures and understand the global brief history of vegetables through immersive interaction. (Figure 4)
The curriculum design of these three directions starts from the scientific theory of "harmonious development of man and nature", implements different plant themes, and takes cultivating cultural self-confidence, promoting rural revitalization, and promoting common prosperity as the curriculum objectives. At the same time, these three courses can also be specially designed for other villages.

4.3 Curriculum implementation and feedback

In August 2023, the team implemented two natural study activities in Dazhuyuan Village with the theme of the seasonal characteristic plant Lotus, namely, "Ink and Lotus Painting Training Camp" and "Youth Nature Study and Public Welfare Class", which were well received.

Through the preliminary course design and the implementation of these two landing research activities, many inspirations and experiences have been gained for the study of natural research as a way to help rural revitalization. Natural research activities can promote the B&B and catering economy in rural areas during non-weekends, and natural research has won the attention and participation of many villagers, which has a definite effect on promoting rural economic development, enhancing local identity, and enriching rural life. Secondly, the course of natural studies has a wide range of materials and a large number of market gaps. The course design helps to stimulate participants' curiosity about nature, improve ecological awareness, inspire innovative thinking, and broaden the scope of knowledge. The course is of great significance. Immersive participation in and experience of natural studies courses helps to pass on traditional culture, explain modern ideas, provide multicultural perspectives, and cultivate cultural self-confidence. In different villages, teams can conduct targeted curriculum research and analysis to build targeted curriculum libraries. Rural nature research also needs cooperation between research teams and village leaders to tell good rural nature stories and help rural revitalization.

5. Peroration

Natural research to help rural revitalization is a natural and sustainable development path. With abundant natural resources, diverse ecosystems, and a systematic farming environment, the countryside is one of the most suitable places to carry out nature research, and the practice case of Dazhuyuan Village proves that there is a rich natural material base for carrying out nature research in the countryside. At the same time, natural research can promote the economic development of rural areas, and inject fresh and colorful vitality into rural development. However, given some existing problems, natural research to help rural revitalization still has a long way to go. Through the comprehensive application of natural research, it is helpful to cultivate the comprehensive literacy of rural youth, and through activities such as competitions, it is helpful to call for more colleges and more young people to get involved in rural revitalization, and ultimately promote the comprehensive development of rural revitalization. Through the combination of natural research and rural revitalization, we can create a rural natural research and development community of all times, and all ages and meeting the needs of multiple subjects, help the continuous development of rural revitalization, optimize the rural population structure, promote rural economic development, explore local cultural genes, promote common prosperity, achieve the second centennial goal, and finally realize the comprehensive modernization of the country.

References

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