

Educational Suggestions for Rural Revitalization

Hailu Wan^{1,2}, Sakchai Sikka², Xuyan Huang³, Xiaodan Gan³

¹Guangxi Technological College of Machinery and Electricity, Nanning, 530007, China

²Faculty of Fine-Applied Arts and Cultural Science, Mahasarakham University, Kantharawichai, Maha Sarakham, 44150, Thailand

³Vocational Education Center of Du'an Yao Autonomous County, Hechi, 530799, China

Abstract: The release of the National 14th Five Year Plan in 2022 has made people realize the importance of coordinated urban-rural development from a strategic perspective. In the current period, a large number of rural areas have failed to develop in sync with cities, and the "rural disease" is becoming increasingly severe. The low efficiency of talent resource output and cultivation in rural areas is a major reason. Rural revitalization should take the lead in educating and cultivating rural talents, making up for the shortcomings of talents, and providing a continuous internal driving force for rural revitalization. Secondly, the optimization of rural resources and educational concepts can optimize the human environment and supporting policies, increase rural economic capacity from the inside out, and thus achieve the goal of attracting and retaining talents. In this way, continuous upgrading and transformation of rural industries can be achieved through talent, thereby promoting high-quality and orderly rural revitalization. In this paper, the qualitative research method is used to analyze and study the rural revitalization, and the educational factors affecting rural revitalization are obtained by literature survey and field research. Ultimately, solutions can be proposed by analyzing the problem.

Keywords: rural revitalization, resources of talents, vocational education, sustainable development

1. Introduction

In 2021, China achieved a comprehensive victory in poverty alleviation, with all 98.99 million rural impoverished people lifted out of poverty under current standards, and regional overall poverty was effectively resolved[1]. The strategy of rural revitalization is another important decision made by the Communist Party of China and the government after the fight against poverty, and it is a remarkable Chinese initiative. The implementation of China's rural revitalization strategy can enable the vast rural population to enjoy the benefits of socialist reform and opening-up, and better enjoy the superiority of socialism. With the deepening development of China's new industrialization, informatization, and agricultural modernization, as well as the implementation of urbanization policies for agricultural transfer population, the problem of dual distribution between urban and rural areas is becoming increasingly serious[2].

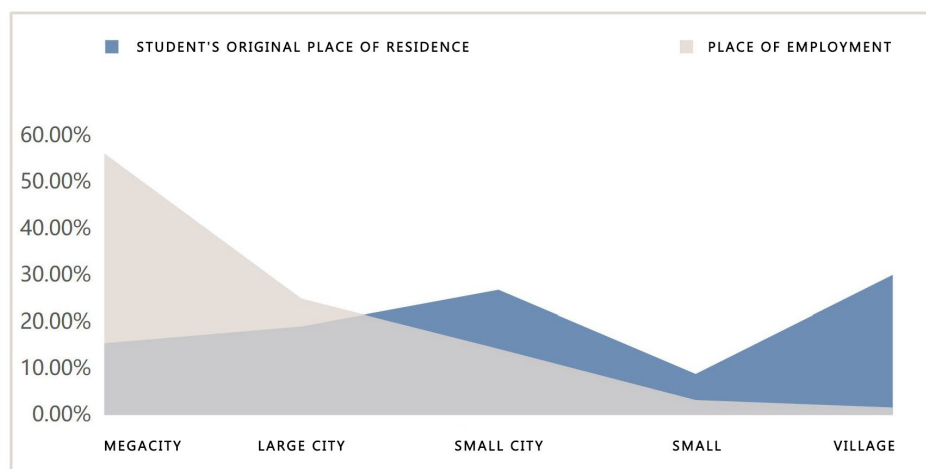


Figure 1: Employment distribution data of college students in 2019

The employment distribution data of college students in 2019 (as shown in Figure 1) shows that up to 85% of university graduates choose to work in first and second tier cities, while only a very small number of graduates choose to work in counties and townships. In addition, many registered residence students from counties and townships also flock to the first tier cities and provincial capital cities for employment, which leads to the shortage of young rural talents. The author found several reasons for this phenomenon through investigation. Firstly, employment opportunities in rural areas are limited, especially with relatively few knowledge-based and skilled positions, making it difficult for many university graduates to find suitable positions in these areas. Secondly, the infrastructure, medical security, culture and entertainment in rural areas are relatively poor, so some young people are unwilling to return to these areas. Thirdly, there are relatively few industries in rural areas, and the development paths available are relatively limited, which may also limit personal career development space. Fourthly, the social environment and culture in rural areas are different from those in cities, which may also make some young people feel uncomfortable or unwilling to return to these areas. Finally, some young people face pressure from their families and society, hoping to have better opportunities for life and development in cities, which may also make them unwilling to return to rural areas.

STEM education theory refers to an educational model that emphasizes science and technology, with the core of cultivating students' practical, innovative, and problem-solving abilities [3]. STEM education adopts project-based learning and interdisciplinary integration methods, allowing students to deeply learn the principles and applications of science, technology, engineering, and mathematics in practice. It emphasizes the combination of subject knowledge and practical application, which can cultivate students' creativity and innovative thinking, and improve their comprehensive quality and competitiveness. STEM education has received widespread attention and promotion worldwide, and is considered the trend and development direction of future education. This article uses STEM education theory to promote the development of rural revitalization in China.

2. Rural Revitalization and Rural Education

2.1. The Necessity of Education in Rural Revitalization

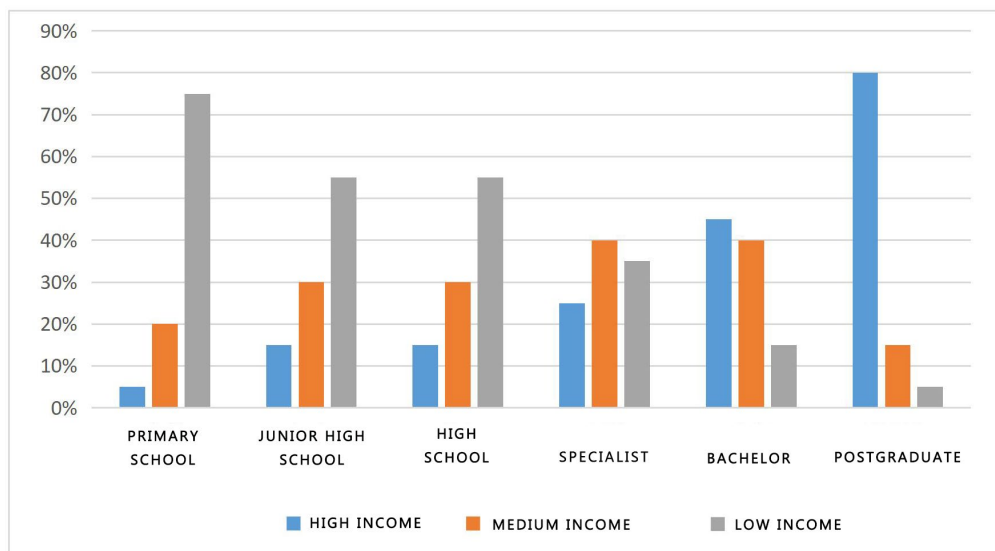


Figure 2: Bar chart of education level and income level

At the end of 2018, Ministry of Education of the People's Republic of China issued the "Action Plan for Science and Technology Innovation in Rural Revitalization of Higher Education Institutions [4]", which combines rural areas with technology creation to better serve the implementation of rural revitalization. By strengthening support for technology in rural areas in the form of guidance plans, it promotes the improvement of rural productivity. Ministry of Education of the People's Republic of China has also strengthened the targeted training system for outstanding rural teacher training talents, increased the training of rural teachers to adapt to local industrial development, and improved the shortage of rural education teachers. Research data shows a close positive correlation between the income level of adult labor and their level of education. As the fundamental cornerstone of rural education, rural teachers are

of great significance. After receiving high school or higher education, the proportion of middle-income and high-income individuals in adult labor force has significantly increased, as shown in Figure 2. Education can effectively block the transmission of poverty and improve the quality of income for rural residents.

Education plays a very important role in rural revitalization. In China's 14th Five Year Plan, it is explicitly required to broaden the path of rural talent cultivation. Modern vocational education can cultivate new types of vocational farmers, carry out agricultural technology research and innovation, and provide public services for agricultural technology. At present, the channels for Chinese higher vocational colleges to directly recruit agricultural students are not yet smooth, which will inevitably change in the future development process of universities [5]. At present, there is a lack of a new generation of professional farmers specialized in agriculture in rural China. In the future, higher vocational colleges are expected to cultivate a new generation of professional farmers, making them the navigators leading rural revitalization. Higher vocational education enables new professionals specializing in agriculture to understand new technologies such as the agricultural internet, big data, VR/AR technology, and enhances the economic benefits of the agricultural industry.

2.2. The Combination of Rural Revitalization and STEM Education Theory

The cultivation of rural talents in rural revitalization can be combined with STEM education methods. Applying STEM education to talent cultivation and education in rural areas can promote the development of rural areas and improve educational conditions, thereby promoting rural revitalization.

The STEM education concept includes the application of technological means to improve agricultural production efficiency. For example, using intelligent agricultural mechanization and automation technology can improve agricultural production efficiency, reduce labor costs and waste of human resources, and thereby increase farmers' income. Interdisciplinary communication and cooperation can also be used to solve the problem of low agricultural production efficiency. For example, applying knowledge from fields such as science and engineering to agricultural production and combining agricultural production with ecological environment protection can improve the sustainability and environmental protection of agricultural production. STEM education solves the problem of low agricultural production efficiency through practice. For example, students can experience firsthand in agricultural production to understand the actual situation of agricultural production, improve their practical ability, problem-solving ability, innovative thinking and practical ability, and thus promote technological innovation and development of agricultural production.

The combination of rural revitalization and STEM education theory can propose various solutions to low agricultural production efficiency, including the application of technology, interdisciplinary learning cooperation, and practical and experiential learning. These methods can promote the development of rural areas and improve the quality of life of local residents. This educational model will help rural students better adapt to the development and changes of modern society, and also help rural areas integrate into the overall development of the country and the world.

2.3. Vocational Education in Rural Revitalization

The transformation of surplus rural labor is also an important issue in rural revitalization. In the process of rural revitalization, with the improvement of production efficiency of rural enterprises, more surplus rural labor will inevitably be generated. And this surplus labor force, after receiving higher education, will be a rare talent for the implementation of rural revitalization strategy. Vocational education guides farmers to step out of rural areas and enter cities for targeted learning, transforming them into professional and skilled talents, thereby gradually achieving the cultivation of "high skilled" and "professional" farmers. After they have achieved success in their studies, they will return to the countryside and transform it according to local conditions, applying what they have learned. On the other hand, it is also necessary to attract urban populations of all levels and types to enter rural areas and participate in rural development and construction. Rural areas are fertile land waiting for development, and comprehensive and rational utilization will gradually promote the healthy development of these areas. At that time, a livable ecological, natural, and simple living environment will attract more people to settle in for a long time. At present, the low income level in rural areas and the lack of economic benefits in enterprises make it difficult for talents to root in the countryside. If only rural internal personnel participate, the implementation of rural revitalization strategy will appear weak. The joint participation of various external talents can achieve long-term operation of rural revitalization. Therefore, it is

necessary to introduce, retain and stabilize professional talents, and gradually explore a suitable talent management system for rural areas. To solve the important problem of talent shortage in rural areas, it is necessary to cultivate more high-quality local talent reserves and accelerate the attraction of foreign talents. Only by combining these two aspects can rural areas have more advantages for long-term development.

2.4. Talent Resources Promote Rural Development

In the allocation of rural talent resources, it is necessary to fully mobilize the enthusiasm of talents at all levels and types to join the countryside. At present, the rural revitalization and assistance teams selected by research institutes of universities at all levels have increased the think tank resources of universities in rural areas, achieving a true close connection between rural areas and higher education institutions. At the same time, the corresponding support from various levels of government agencies and units can also bring various project support to rural areas. Higher education institutions and various research institutes should also sort out the local rural characteristic agricultural industry system, and combine industrial clustering with local characteristics [6]. For example, in order to help rural areas in this region embark on a unique path of rural revitalization, Guangxi Technological College of Machinery and Electricity has established multiple industrial colleges to promote regional development through the cultivation of industrial talents. It adopts a collaborative education model and a new pattern of innovative talent cultivation that coordinates the integration and development of multiple disciplines and majors, thus cultivating a large number of young talents closely connected with Guangxi's rural industries.

The combination of rural revitalization and talent assistance can introduce excellent young talents to promote the development of rural areas and improve the quality of talents. The professional knowledge and technology brought by talent resources can bring new impetus to the development of rural areas. They provide professional knowledge and technical support to enhance agriculture, animal husbandry, ecological and environmental protection in rural areas, which can promote the economic development of rural areas and improve the quality of life of local residents. At the same time, talent resources can also bring improvements to the education industry in rural areas, improving the quality of education and knowledge level of local students. Therefore, attracting talents to enter rural areas for in-depth development can promote rural revitalization and improve the quality of local talents, promote communication and cooperation between urban and rural areas, and promote the overall development of the country's urban and rural areas.

Education is an important way to solve the problem of rural talent loss. The government should increase investment in vocational education in rural areas, cultivate more skilled talents, and improve their competitiveness in local employment. In addition, the government can also carry out entrepreneurship training and guidance in rural areas to help young people understand the relevant knowledge and skills of entrepreneurship, stimulate their entrepreneurial enthusiasm, and thus start businesses and find employment locally. Schools can establish career planning and career guidance mechanisms to help students understand their strengths and weaknesses, develop personal career plans, and provide guidance and assistance for their future career choices. In addition, the government should increase investment in educational resources in rural areas, enrich them, build more schools and educational facilities, improve the level of education in rural areas, provide better educational resources for young people, and enhance their sense of belonging in the local area. Finally, the government can encourage the promotion of online education and distance learning, establish more online education platforms and learning centers, and enable young people to receive high-quality education at their doorstep. These educational measures can help young people better adapt to the living and working environment in rural areas, improve their professional abilities and competitiveness, and thus be more likely to stay in rural areas for development.

3. Conclusion

Rural revitalization should take the path of urban-rural integration development through talent cultivation and education. We hope to reduce the development gap between urban and rural areas with the joint efforts of the whole society. We call on rural areas to actively explore measures suitable for rural development in their respective regions. At the same time, higher education should also cultivate more high-level, wide interface, and service-oriented talents to serve the economic development of rural areas. Education provides talent and intellectual support for rural revitalization, and talent cultivation in universities should align with the needs of rural industries, cultivate technical and skilled composite

talents, and promote the innovation and entrepreneurship ability of professional farmers.

Education is the foundation of rural revitalization, and its improvement can promote the development of rural economy and society. Therefore, measures such as improving rural education facilities, improving education quality, and strengthening the construction of teaching staff should be taken to effectively improve the cultural and technological level of farmers, and promote agricultural production, rural economy, and social development. However, the current gap in educational resources between urban and rural areas is significant, and the development of rural education faces many difficulties and challenges. To promote rural revitalization, it is necessary to increase investment and support in rural education, narrow the urban-rural education gap, and break the "urban-rural dual structure" of educational resources. At the same time, explore various forms of education models, such as "Internet plus education", "integration of industry and education", "vocational education", etc., to provide more flexible and diversified choices for rural talent training, so as to promote the development of rural economy and society. Through these measures, the quality and skills of farmers can be improved, their innovation ability and competitiveness can be enhanced, and the realization of rural revitalization can be promoted.

All types of village workers should enter high-level vocational colleges in the local area for short-term vocational training in agriculture, rural areas, and farmers before being selected to enter rural areas, so that these workers can understand the skills and policies of modern agriculture and rural industries. This kind of training can enable resident staff to better play their role in rural areas, thereby promoting the development of rural industrial clusters and enhancing rural agricultural production.

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