

Research on Innovation of Talent Training Model for Rural Tourism and Catering in Guangdong Province under Digital Empowerment

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Abstract:

In the context of the deep integration of digital transformation and rural revitalization strategy, the high-quality development of Guangdong's rural tourism and catering industry has put forward new requirements for the cultivation of composite talents. This article is based on the perspective of digital empowerment, systematically analyzing the ability characteristics and training needs of rural tourism and catering talents in Guangdong. Combining regional industrial characteristics and technological development trends, a talent training model of "digital technology + catering services + cultural inheritance" is constructed. Research has shown that by building digital teaching platforms, innovating school enterprise collaborative education mechanisms, optimizing curriculum system design, and improving quality evaluation systems, the adaptability and effectiveness of talent cultivation can be effectively enhanced, providing strong talent support for the sustainable development of Guangdong's rural tourism and catering industry.

Keywords:

Digital Empowerment, Guangdong Rural Tourism, Catering Talents, Cultivation Mode, Innovative Research

1. Introduction

With the deep integration of digital technology and the real economy, China's rural tourism industry is undergoing a critical stage of transformation from traditional service models to digital and intelligent ones. As a major economic and tourism province, Guangdong achieved a tourism revenue of 29.5 billion yuan in 2025, representing a year-on-year growth of 20.3%. Among them, the 100 monitored rural tourism spots and historical villages received 1.889 million visitors, a year-on-year increase of 15.5% [1]. With the in-depth implementation of the "Hundred-Thousand-Million Project", the integrated development of agriculture, culture, and tourism across the province has shown initial results, with the revenue of catering above

designated size in Foshan alone reaching 35.056 billion yuan. Catering consumption has become the core growth point of rural tourism economy [2]. However, the current rural tourism and catering industry is confronted with problems such as weak digital application capabilities, low standardization of services, and insufficient exploration of cultural connotations. The shortage rate of professional talents is as high as 35%, especially for compound talents who possess catering service skills, digital technology application capabilities, and local cultural inheritance awareness [3,4].

The “Implementation Opinions on Doing a Good Job in the Key Work of Comprehensive Rural Revitalization in 2023” issued by Guangdong Province in 2023 clearly states: “Vigorously promote the construction of digital villages and deeply implement the action of digital rural development.” In this context, how to rely on digital empowerment to innovate the cultivation mode of rural tourism and catering talents has become a key issue in breaking through the bottleneck of industrial development. This study is based on the digital transformation needs of Guangdong's rural tourism and catering industry, combined with the characteristics of regional food culture. The research is conducted from three dimensions: talent ability deconstruction, training system construction, and implementation path design, aiming to provide theoretical and practical references for the cultivation of rural tourism talents in the new era.

2. The Ability Characteristics and Training Demands of Rural Tourism Catering Talents in Guangdong Under Digital Empowerment

2.1. Multi-dimensional Deconstruction of Talent Capability Characteristics

2.1.1. Ability to Apply Digital Technology

Under the background of digital empowerment, rural tourism and catering talents in Guangdong need to possess core abilities such as basic digital tool operation, data analysis and application, and intelligent system management. For instance, proficiently using short-video platforms for live-streaming promotion of catering products, optimizing menu design through big data analysis of tourists consumption preferences, and using intelligent ordering systems to improve service efficiency, etc. The “robot restaurant” piloted by Haidilao has enabled users to customize dishes through VR, increasing the table turnover rate by 15% [3].

2.1.2. Composite Literacy of Catering Service and Management

Unlike traditional catering service personnel, rural tourism catering talents in the digital age need to possess both service skills and management thinking. On the one hand, one needs to be proficient in local characteristic catering skills such as Cantonese dim sum making and Chao-Shan beef hot pot service. On the other hand, one should possess comprehensive management capabilities such as tourism reception, customer relationship management, and supply chain optimization. The “Cantonese Cuisine Master” project in Zhongshan City has cultivated compound talents, showing that the salary level of practitioners with cross-disciplinary capabilities has significantly increased compared to those with single skills.

2.1.3. Local Cultural Inheritance and Innovation Capability

The rural food culture in Guangdong is profound and extensive, encompassing multiple branches such as the Guangfu food culture, Hakka food culture, and Chao-Shan food culture. Catering talents need to have a deep understanding of the local food culture connotation, be able to integrate cultural elements such as Lingnan food anecdotes and festival food customs into catering service scenarios, and achieve innovative cultural expression through digital means (such as AR cultural guidance and VR culinary culture experiences). Huanglong Village in Beijiao Town, Shunde District, Foshan City has created a full industry chain of black skinned winter melon specialty cuisine through the digitization of cultural IP, stimulating a significant increase in per capita consumption and repurchase rate among tourists [5].

2.2. Analysis of Cultivation Needs in the Context of Digital Transformation

2.2.1. The Talent Matching Demand for Industrial Digital Upgrading

With the popularization of technologies such as 5G, Internet of Things, and artificial intelligence in the field of rural tourism, Guangdong's rural tourism and catering industry is accelerating its transformation towards "smart catering". The Guangdong Provincial Government has released the "Pilot Plan for Digital Rural Construction in Guangdong Province" and "Several Measures to Promote High Quality Development of Service Consumption in Guangdong Province", etc., encouraging catering enterprises to introduce intelligent devices, develop digital management platforms, and simultaneously promote digital rural pilot projects (such as Fogang in Qingyuan and Jinyi Village in Guangzhou), providing infrastructure support for smart catering. This requires talent cultivation to closely follow the trend of technological development and strengthen the integrated teaching of digital skills and catering services.

2.2.2. Talent Supply and Demand for Regional Cultural Industrialization

The core competitiveness of Guangdong rural tourism catering lies in the differentiated presentation of cultural characteristics. The industrial development of characteristic catering such as Meizhou Hakka salt-baked chicken and Zhanjiang oyster banquet requires a large number of talents who not only understand traditional skills but also can use digital technology for cultural dissemination. Guangdong Province has implemented the "One Village, One Product" project, and the catering teams with cultural creativity and digital communication capabilities have become the main force in promoting the project.

2.2.3. The Demand for Diversified Talent Growth in Career Development

In the digital age, the career paths of rural tourism and catering talents are becoming more diverse. In addition to traditional positions such as chefs and waiters, new professions such as digital catering operators, rural food anchors, and cultural experience planners have emerged. These new professions have promoted rural revitalization and talent growth by integrating technology, culture, and marketing elements. The proportion of graduates majoring in tourism and catering engaged in emerging positions related to digital technology has significantly increased compared to the past.

3. Analysis of the Current Situation and Problems in the Cultivation of Catering Talents for Rural Tourism in Guangdong

3.1. Development Effectiveness of the Training System

3.1.1. The Policy Support System has been Gradually Improved

Guangdong Province has successively issued policy documents such as the “Guangdong Cuisine Master” Project Implementation Plan and the Guangdong Digital Rural Development Action Plan, which have included the training of rural tourism and catering talents as a provincial key project. By 2024, Guangdong Province has invested a total of 320 million yuan to build over 100 “Cantonese Cuisine Master” training bases, cultivating over 498,000 rural tourism and catering talents [6].

3.1.2. The Initial Model of School-enterprise Cooperation Has Taken Shape

Some vocational colleges have cooperated with rural tourism enterprises, and the school-enterprise cooperation model has been initially formed. Guangdong Ecological Engineering Vocational College has cooperated with Guangzhou Tianyuan Pastoral Agriculture and Forestry Co., Ltd. and other units, adopting the “school-enterprise integration, industry-university-research-innovation integration” model led by Party developing. By integrating teaching reforms, it has promoted the development of southern medicine resources and agricultural structural adjustment, serving the development of rural cultural tourism [7].

3.1.3 Preliminary Accumulation of Digital Teaching Resources

Colleges and training institutions within the province have developed a number of digital teaching resources, such as the “Lingnan Catering Culture Museum” built by Shenzhen Vocational and Technical College and the “Catering Intelligent Management Training System” built by Guangzhou Engineering and Technical Vocational College, providing technical support for practical teaching.

3.2. Existing Problems and Challenges

3.2.1. Lack of Alignment Between Training Objectives and Industry Demands

The traditional cultivation of catering talents focuses on cooking skills training, lacking systematic cultivation in digital technology application, cultural and creative development, and other abilities. According to relevant research, most rural tourism enterprises believe that the digital skills and cultural innovation capabilities of current graduates cannot meet the job requirements [8].

3.2.2. Insufficient Digital Integration of the Curriculum System

The curriculum design of most colleges still follows the traditional teaching framework. The proportion of digital technology-related courses needs to be improved, and there are also problems such as outdated content and weak practical links, which are difficult to meet the demands of the industry [9].

3.2.3. The Mechanism for Collaborative Education Between Schools and Enterprises Is Not Sound

Most school-enterprise cooperation remains at the level of internships and employment, with insufficient in-depth collaboration. The proportion of enterprises participating in course design is relatively low, and the matching degree between the on-campus practical training equipment and the digital systems actually applied by enterprises is insufficient, resulting in a disconnection between students' practical training and job requirements [10].

3.2.4. The Digital Capabilities of the teaching Staff Are Weak

Among the current professional teachers, the proportion of those with a combined background in digital technology and catering services is relatively low, and the frequency of part-time teachers from enterprises participating in teaching is insufficient, making it difficult to meet the needs of digital teaching [11].

4. Innovative Path of Guangdong Rural Tourism Catering Talent Training Model under Digital Empowerment

4.1. To Build A “Three-Dimensional Integration” Training Objective System

4.1.1. Digital Technology Dimension

Set up core courses such as “Digital Operation of Rural Tourism Catering”, “Big Data Analysis and Application”, and “Intelligent Catering System Management” to cultivate students' ability to use digital technology so as to solve catering service problems. If the certification of digital skills such as Python data analysis and short video production are included in the credit system, students are required to master at least multiple digital technology tools.

4.1.2. Dimension of Catering Services

Strengthen the inheritance of Cantonese catering skills and construct a curriculum module of “traditional skills + modern services”. For example, 3D food printing technology can be integrated into the course of Cantonese Dim sum Making, and AR cultural explanations can be combined into the course of Chaoshan Kung Fu Tea Service to achieve the integration of traditional skills and digital technology.

4.1.3. Cultural Inheritance Dimension

Develop characteristic courses such as “Digital Communication of Lingnan Food Culture” and “Creating Rural Cuisine IP”, and cultivate students' ability to explore and innovate local food culture through field surveys, cultural and creative workshops, and other forms. A “cultural mentorship system” can also be established, inviting intangible cultural heritage inheritors to serve as off-campus mentors to guide students in carrying out cultural digitalization projects.

4.2. To Build A “Four-In-One” Digital Teaching Platform

4.2.1. Online Teaching Platform

Construct the “Guangdong Rural Tourism Catering Cloud Classroom”, integrate high-quality course resources, and develop virtual simulation experiment projects. For instance, VR training module can be designed for the production process of Hakka Stuffed tofu, so that students can master key techniques through virtual operation, and the system will automatically feed back the operating standard.

4.2.2. School-enterprise Collaboration Platform

Cooperate with local digital platform enterprises and leading rural tourism enterprises to build a "digital catering industry Internet platform" to achieve real-time connection between teaching resources and enterprise needs. Students can participate in real project operations on the platform, such as designing digital catering packages for rural homestays, planning live-streaming food activities, etc.

4.2.3. Practical Training Platform

Build a "Smart Catering Training Base", equipped with intelligent ordering systems, food traceability management systems, catering big data analysis platforms, and other devices, to simulate real rural tourism catering operation scenarios. Immersive practical training can effectively shorten students' adaptation period to their jobs.

4.2.4. Evaluation and Feedback Platform

Develop a "digital portrait system for catering talents", and construct a student ability development model through learning behavior analysis, project practice data collection, and other methods to provide data support for personalized training. The system can automatically generate a report on the shortcomings of abilities and recommend targeted learning resources.

4.3. To Innovate School-Enterprise Collaborative Education Mechanism

4.3.1. Jointly Build Industrial Colleges

Based on the successful experience of the "Cantonese Cuisine Master" project, 5-8 "Digital Rural Tourism and Catering Industry Colleges" will be established in the eastern, northwestern regions of Guangdong, jointly managed by universities, enterprises, and industry associations, implementing a "dual" training model. Industrial colleges can establish digital catering research and development centers to carry out technological breakthroughs and talent cultivation.

4.3.2. Promote Modern Apprenticeship System

Implement the "one student, two teachers" training model, with each student equipped with on-campus professional mentors and enterprise practice mentors. Enterprise mentors participate in the entire teaching process, such as in the course of "Rural Tourism Catering Operation Management", where enterprise mentors lead students to complete real catering digital transformation projects, achieving "learning by doing, and learning while doing".

4.3.3. Carry Out Order-Based Cultivation

Sign talent training agreements with key rural tourism enterprises and customize course modules according to their needs. If colleges cooperate with Shaoguan Danxia Mountain Tourist Scenic Area to establish the "Danxia Cuisine Digital Operation Class", the course content will cover targeted content such as digital management of scenic area's catering and e-commerce sales of local specialty ingredients.

4.4. To Optimize the Curriculum System and Teaching Content

4.4.1. Build A Modular Curriculum System

Divide the course into five modules: “Basic Literacy,” “Digital Technology,” “Catering Services,” “Cultural Innovation,” and “Practical Application,” and increase the proportion of digital technology modules to 25%. The specific course offerings can be as follows:

Table 1. Modular curriculum system.

Module	Core Courses
Basic literacy	Introduction to Rural Tourism, Psychology of Catering Services, History of Lingnan Food Culture
Digital technology	catering big data analysis, short video marketing and live streaming operations, intelligent catering system applications
Catering services	Cantonese cooking techniques, catering services and management, food safety and nutrition
Cultural Innovation	IP Design of Rural Cuisine, Digital Dissemination of Food Culture, Development of Cultural and Creative Products
Practical application	Digital training in rural catering, practical experience in enterprise projects, graduation project

4.4.2. Strengthen The Digital Integration of Course Content

Integrate “digital technology elements into traditional courses, such as adding a chapter on Digital Service Process Design” in “Catering Service and Management” and introducing “Application of Intelligent Cooking Equipment” in “Cantonese Cooking Techniques”. Simultaneously develop interdisciplinary courses, such as “Digital Technology and Lingnan Food Culture Innovation”, to cultivate students’ cross-border thinking.

4.4.3. Enrich The Forms of Practical Teaching

Carry out a hybrid practical teaching approach of “online + offline”. Online, conduct simulation training through virtual simulation platforms, and offline, organize students to carry out on-the-job internships at rural tourism catering enterprises. Establish practical platforms such as the “Rural Tourism Catering Digital Innovation Competition” to encourage students to use digital technology to solve practical problems.

4.5. To Improve the Quality Assessment System for Talent Cultivation

4.5.1. Construct Multiple Assessment Indicators

Establish a diversified assessment system that includes "digital skills," "professional abilities," "cultural literacy," "innovation capabilities," and "practical achievements." Introduce third-party evaluation entities such as enterprises and industry associations to comprehensively evaluate students' abilities and practical achievements. Specific indicators can be referred to as follows:

- a. Digital skills: short video playback volume, data analysis report quality, and proficiency in intelligent system operation
- b. Professional competence: standardization level of catering services, innovation ability of dishes, and cost control level
- c. Cultural literacy: Test on local food culture knowledge and quality of cultural and creative solutions

d. Innovation capability: Innovative digital solutions, and patent or software copyright applications

e. Practical achievements: enterprise project performance, internship assessment results, and entrepreneurial practice results

4.5.2. Establish a Dynamic Feedback Mechanism

Through the closed-loop management of “teaching-practice-evaluation-improvement”, regularly collect feedback from enterprises, students, and graduates, and adjust the training plan in a timely manner. Conduct a “Talent Training Quality Diagnosis Meeting” every semester and invite industry experts to participate in the assessment.

4.5.3. Implement the Capability Certification System

The joint industry association can develop the “Guangdong Rural Tourism Catering Digital Skills Certification” system, featuring three levels: primary, intermediate, and advanced. The certification will include practical abilities such as digital tool application and cultural digital dissemination. Students who have obtained advanced certification can be given priority in entering high-quality enterprises for employment.

5. Guarantee Measures and Implementation Suggestions

5.1. Strengthen Policy and Financial Support

It is suggested that relevant departments jointly formulate a special action plan, establish special support funds, and provide subsidies to colleges that carry out digital teaching reform. Incorporate the training of rural tourism catering talents into the upgraded version of the “Cantonese Cuisine Master” project and improve the funding standards for digital training projects [5].

5.2. Strengthen the Construction of The Teaching Staff

Implement the “dual teacher” teacher training program, and annually select professional teachers to practice and train in digital technology enterprises and rural tourism and catering enterprises for a period of no less than 3 months. Establish an “Industry Mentor Library” and hire digital experts from companies such as Meituan and Ctrip as part-time teachers to undertake teaching tasks for a certain number of hours.

5.3. Promote Regional Coordinated Development

Establish the “Guangdong-Hong Kong-Macao Greater Bay Area Rural Tourism and Catering Talent Training Alliance” with the Pearl River Delta region as the core, integrating resources from colleges, enterprises, research institutions, etc., and jointly building and sharing a digital teaching resource library. Build sub-centers in eastern, western, and northern Guangdong, and carry out differentiated training based on regional food culture characteristics. For example, eastern Guangdong focuses on the integration of Chaoshan food culture and digital technology, while northern Guangdong highlights the digital inheritance of Hakka cuisine.

5.4. Deepen International Exchanges and Cooperation

Drawing on the digital talent cultivation experience of foreign colleges and universities, establish cooperative projects with them, and introduce advanced teaching concepts and technologies. Organize teachers and students to participate in the International Rural Tourism Catering Digital Innovation Competition to enhance the internationalization level of talent cultivation.

6. Conclusions

Under the dual drive of digital empowerment and rural revitalization, the innovation of talent cultivation mode for rural tourism and catering in Guangdong is an inevitable choice to adapt to industrial transformation. By building a composite talent training system of “digital technology + catering services + cultural heritage”, promoting the deep integration of education chain, talent chain and industry chain, not only can it provide talent guarantee for the high-quality development of Guangdong’s rural tourism catering industry, but it will also provide a “Guangdong solution” for the training of rural tourism talents nationwide. In the future, it is necessary to further deepen the integration of industry and education, strengthen technological innovation, continuously optimize talent training models, and assist in the digital transformation and cultural revitalization of rural tourism industry.

Conflicts of Interest

The author declares that there is no conflict of interest regarding the publication of this article.

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