

Research on the Integration of Teaching and Research: Cultivation Path of the Transformation Ability of Teachers in Culture and Tourism

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ABSTRACT

Under the policy framework of Guangdong Province's "High-Quality Development Project for Hundreds of Counties, Thousands of Towns, and Tens of Thousands of Villages" and the "Double Hundred Initiative" in higher education institutions, the implementation of rural revitalization strategies and the high-quality development of county-level cultural tourism economies have significantly increased demand for interdisciplinary talents with both theoretical depth and practical innovation capabilities. However, current applied undergraduate institutions' cultural tourism faculty face challenges such as theoretical-practical disconnection and weak research-to-education conversion capabilities, which hinder the efficiency of the "Double Hundred Initiative". Taking Zhaoqing University as a case study, this research establishes an "Integration of Research and Teaching" model to explore pathways for cultivating faculty's research-to-education conversion capabilities: breaking the inertia of "research-heavy but teaching-light" through a "mutually recognized" system for teaching-research integration; promoting bidirectional convergence between industrial practice and research topics, as well as transforming research outcomes into teaching resources; and building collaborative innovation platforms for teachers and students to form a closed-loop chain of "industrial practice → research topics → teaching content → innovation and entrepreneurship projects". This model significantly enhances faculty's research capabilities and students' innovation and entrepreneurship skills, providing replicable experiences for applied undergraduate institutions to serve the high-quality development of local cultural tourism economies.

KEYWORDS

Integration of Research and Education; Cultural Tourism Faculty; Teaching and Research Transformation Capability; Double Hundred Initiative; County-level Cultural Tourism Economic Development.

1. INTRODUCTION

The deep integration between Guangdong Province's "High-Quality Development Project for Hundreds of Counties, Thousands of Towns, and Tens of Thousands of Villages" and universities' "Double Hundred Initiative" is driving precise alignment between higher education resources and local economic needs. As key drivers in upgrading county-level cultural and tourism economies, applied undergraduate institutions must break through traditional faculty training models to establish a "dual-qualified" teacher development system capable of rapidly responding to industrial transformations. Under this policy framework, Zhaoqing University – as one of Guangdong's first pilot institutions for applied transformation – has proactively taken on the mission of supply-side reform in cultural and tourism talent development. By placing the cultivation of industry-practice capabilities at the core of institutional transformation, the university provides intellectual support for regional cultural and tourism revitalization through systematic institutional innovations. The cultural

and tourism industry is currently undergoing profound transitions from traditional sightseeing to smart tourism, rural tourism, and cultural creativity, with surging demand for interdisciplinary talents combining theoretical depth and practical innovation. This shift compels universities to restructure faculty training logic, shifting from single-focused teaching enhancement to comprehensive competency development integrating teaching, research, and practice. Facing the specific requirements of the "Double Hundred Initiative" – "universities connecting with counties and districts, experts serving grassroots communities" – how to break the inertia of "theoretical emphasis over practice" through research-teaching collaboration mechanisms, and efficiently convert industrial practical experience into teaching resources, has become a critical challenge for applied undergraduate institutions in serving high-quality local economic development.

2. LITERATURE REVIEW

The concept of "Research-Teaching Integration" (Yanjiao Ronghui) represents an educational philosophy and practice model that treats teaching research and instructional practice as an organic whole, achieving synergistic effects through two-way interaction [1]. Its core principle lies in breaking down the barriers between teaching research and classroom instruction, transforming the research process into a source of teaching content updates and teaching practice into a source of research questions, thereby forming a virtuous cycle of "research promoting teaching and teaching promoting research" [2]. In the context of cultivating cultural tourism educators, this concept emphasizes that teachers must not only possess solid teaching skills but also enhance their sensitivity to industry trends and innovative problem-solving capabilities through systematic research.

"Teaching and Research Competence" refers to the comprehensive qualities required for educators to conduct pedagogical research [3], encompassing four key dimensions: Topic Selection – identifying research themes with theoretical significance and practical applications from cultural tourism teaching practices; Design – developing scientific research frameworks and selecting appropriate methodologies (e.g., action research, case studies); Implementation – executing research processes including data collection, sample analysis, and process monitoring; and Synthesis – systematically organizing research outcomes into deliverables such as academic papers, reports, or instructional resources.

The "Technology Transfer Capability" refers to the practical competence of converting academic research outcomes into practical applications [4]. It comprises three key dimensions: (1) Outcome Refinement – consolidating fragmented research findings into structured knowledge products (e.g., textbooks, training modules); (2) Application Integration – identifying applicable scenarios (e.g., classroom teaching, corporate training, policy formulation) and establishing transfer channels; (3) Value Realization – tracking application effects to drive iterative optimization, ultimately forming a complete "Research-Transfer-Application-Feedback" cycle [5].

Existing research exhibits three notable limitations: Firstly, studies on technology transfer predominantly focus on converting scientific achievements into practical applications, while insufficiently addressing how educational research outcomes can be transformed into teaching resources. Secondly, research on adapting cultural tourism industry characteristics to transfer mechanisms remains inadequate, with few studies exploring pathways to convert emerging sectors like smart tourism and intangible cultural heritage (ICH) creative industries into teaching materials and case studies. Thirdly, incentive mechanism research tends to emphasize macro-level policy recommendations, lacking actionable institutional innovation solutions. These gaps provide theoretical innovation space for this study to develop an "integration of research and education" model. Particularly within the policy context of Guangdong Province's "Double Hundred Initiative," exploring a closed-loop mechanism for cultural tourism educators-encompassing industrial practice, research transformation, and teaching application-holds significant research value.

3. FACING PROBLEMS

The current construction of cultural tourism faculty in colleges and universities still has the structural contradiction of the disconnection between the ability of research and teaching transformation and the industrial demand, which is mainly reflected in the ability shortage of three dimensions.

Firstly, there exists a disconnect between theoretical instruction and industrial practice. Some educators still adhere to traditional lecture-based teaching methods, with case studies predominantly sourced from textbooks or literature. This approach lacks in-depth analysis of emerging sectors like smart tourism and intangible cultural heritage (ICH) creative industries, leaving students with limited exposure to real-world operational scenarios.

Secondly, the pace of knowledge and skill updates lags behind industrial development. With the rise of new cultural tourism technologies like big data analytics and virtual reality, teachers' practical skills have not kept pace. About 40% of professional course content has yet to incorporate cutting-edge modules such as metaverse attractions and AI-powered hotel services.

Thirdly, the weak ability to translate teaching content into practical applications has become a critical bottleneck. Although teachers participate in corporate internships or local service programs, most remain at the level of experience accumulation. They fail to distill practical outcomes such as rural tourism planning proposals and homestay operation diagnostic reports into standardized teaching resources, resulting in a capability gap characterized by "abundant practical experience but insufficient teaching transformation." This deficiency in research-to-teaching conversion directly hinders the quality of applied talent cultivation, prolonging students' industry adaptation cycles. Approximately 30% of graduates require secondary corporate training to meet job requirements, which significantly deviates from the "seamless alignment between talent supply and industrial demand" goal proposed by the "Double Hundred Initiative."

4. PATHWAY RESEARCH

To address the challenges of insufficient research, teaching, and transformation capabilities among cultural tourism faculty in higher education institutions, this study developed an "Integration of Research and Teaching" model. It aims to cultivate a practical team of cultural tourism educators who excel in teaching, research, and transformation, thereby enhancing their research-teaching competencies and the efficiency of knowledge transfer.

4.1. Design of the "Mutual Recognition of Equivalent Credits" System for Teaching and Research.

The "Zhaoqing University Teaching and Research Workload Calculation and Reward Measures (Trial)" has been formulated, implementing the "mutual recognition of equivalent credits" policy for teaching and research activities, thereby enhancing the enthusiasm of cultural and tourism faculty members in academic endeavors.

To address the evaluation bias favoring research over teaching, Zhaoqing University has implemented the "Teaching and Research Workload Calculation and Reward Measures (Trial)", becoming the first institution in Guangdong Province to achieve equivalent recognition of teaching and research value. The core provision explicitly states that "teaching achievement awards carry equal weight with research awards." The workload calculation adopts a "quantitative equivalence" principle, converting teaching projects, educational resource development, and teaching reform practices into assessment units equivalent to research workloads. For instance, leading provincial-level teaching reform projects is treated as equivalent to leading provincial-level research projects, while editing applied textbooks is included in the research achievement statistics for professional title evaluations. This system design aligns with higher authorities' requirement to "strengthen the weight of teaching

performance in professional title evaluations." By restructuring the evaluation index system, it institutionalizes rewards for teachers' time and effort invested in teaching activities, fundamentally reversing the marginalization of teaching research.

4.2. Promoting Bidirectional Integration of Industry Practice and Teaching Research Content

First, we facilitate the transformation of industrial dynamics into teaching research topics. Through deep engagement in industry practices, teachers identify signals of sectoral changes and establish a topic generation mechanism of "practice observation-problem refinement-research topic design". During corporate internships, teachers are embedded in core positions such as hotel operations and scenic area management, converting technological applications like smart room system upgrades and big data analysis of cultural tourism consumption into teaching research themes. In local service processes, projects such as rural tourism planning and intangible cultural heritage creative development provide fresh materials for teaching research topics. After completing corporate production and operation services, the team focused on the "talent supply-demand mismatch" issue and applied for the Ministry of Education's supply-demand alignment project titled "New Business Model Talent School-Enterprise Co-cultivation Empowerment Plan". The project application process established a "dual-subject collaboration" mechanism, where corporate mentors participated in topic validation and local cultural tourism departments provided data support. Real corporate investment cases were transformed into teaching simulation system development requirements, forming a closed-loop conversion of "practice issues-policy demands-teaching research topics".

Secondly, we establish a three-stage transformation process from research findings to teaching resources through "research discovery-resource development-classroom validation", ensuring deep integration of academic achievements into teaching content. During the refinement phase, scattered research conclusions are consolidated into modular knowledge products. For instance, the research outcomes from the Ministry of Culture and Tourism's project "Research on Enterprise Internship Models for Tourism Management Faculty in Applied Undergraduate Institutions" were systematically transformed into core teaching modules for the "Hotel Investment and Construction Strategy" course, covering hotel brand classification, business format selection, investment site selection, and hotel construction operations. The application alignment phase emphasizes scenario adaptability, developing differentiated resource packages for different teaching objectives: case collections like "100 Innovative Cases in Cultural Tourism Industry" for theoretical teaching, and training programs for social services such as the senior management leadership development course developed for Zhaoqing Cultural Tourism Group. In the value realization phase, resource quality is continuously improved through "teaching application-effect feedback-iterative optimization". After introducing "Cultural Tourism IP Incubation" research outcomes, the "Innovation and Entrepreneurship Course" updates 20% of teaching cases per semester based on student submissions to the National College Students' Innovation and Entrepreneurship Competition and actual corporate operation cases, forming a dynamically adjusted loose-leaf course resource library.

4.3. Promoting Collaborative Development of Practice and Innovation Platforms by Teachers and Students

First, establish a transformation chain integrating industrial practice, innovation and entrepreneurship cases, and teaching content. The "Teacher-Student Co-creation" initiative starts with frontline industry challenges, building a comprehensive value conversion system from practical exploration to educational application. Teachers transform real-world industrial issues encountered during corporate internships and local service engagements—such as crowd management challenges at a 4A-rated scenic spot in Zhaoqing during holidays or homogenized competition among homestay clusters in Dinghu District—into collaborative research topics. Taking the "Homestay Brand Development" case as an example, the team first conducted a two-month field survey at 12 homestays in Yanqian Village,

Zhaoqing. Through operator interviews, consumer surveys, and OTA platform data analysis, they identified three breakthrough strategies: "Cultural IP integration," "community engagement," and "cross-industry collaboration." Subsequently, using the "Problem Tree Analysis Method," they structured the findings into teaching cases comprising four modules: background description, conflict analysis, solutions, and implementation outcomes. After three rounds of campus trial lectures (for third-year tourism management students) and two rounds of expert reviews (with participation from the Zhaoqing Homestay Association President), the "Homestay Brand Upgrade Workshop" teaching unit was developed for the "Innovation and Entrepreneurship Course." This chain has successfully created 18 teaching cases, including "Smart Scenic Spot Traffic Early Warning System Design" and "Rural Tourism Cultural and Creative Product Development," with six cases included in the Guangdong Provincial Department of Education's "Industry-Education Integration Typical Case Database."

Secondly, it involves organizing and implementing teacher-student collaborative projects. The project adopts a "dual-mentor + three-phase" management model: university faculty provide research methodology guidance and theoretical enhancement, while industry mentors (e.g., Zhaoqing Xinghu Scenic Area Operations Director, Duanzhou Grand Hotel General Manager) offer practical resources and industry standard oversight. The process management is divided into three phases: 1) Topic Incubation Phase (Months 1-2), where faculty and students conduct immersive field research at enterprises, with weekly "Practice Log Sharing Sessions" focusing on problem-solving; 2) Project Intensive Phase (Months 3-5), employing agile development methods with biweekly phase reviews and industry expert evaluations of feasibility; 3) Achievement Transformation Phase (Month 6), prioritizing partnerships with platforms like "Internet+" and "Climbing Plan". In 2023, the team-guided "Digital Dissemination of Duan Inkstone Culture IP" project won a silver award in Guangdong Province's "Internet+" College Students Innovation and Entrepreneurship Competition. Student participation earns 2-4 credits for practical courses, with outstanding project outcomes incorporated into the innovation and entrepreneurship credit exchange system. When applying for patents or publishing papers, students are listed as core members. From 2022 to 2024, eight students have published case study papers as first authors.

5. IMPLEMENTATION PHASE AND STEPS

Since 2016, this initiative has systematically implemented off-campus training and practical experiences for cultural and tourism faculty. Through a decade of exploration and practice, it has advanced the cultivation of dual-qualified industry practice capabilities for our school's cultural and tourism faculty across four distinct phases.

5.1. Launch Phase (2016-2017)

The Ministry of Education, National Development and Reform Commission, and Ministry of Finance jointly issued the "Guiding Opinions on Transforming Some Local Regular Undergraduate Universities into Applied Institutions." Addressing structural contradictions in China's higher education system and severe homogenization issues, this policy aimed to transform certain regular undergraduate universities into applied institutions. It proposed "planned faculty deployment to enterprises for training, job rotation, and practical experience." In response, Guangdong Provincial Department of Education, Provincial Development and Reform Commission, and Provincial Department of Finance jointly released the "Implementation Opinions on Guiding the Transformation of Some Regular Undergraduate Universities into Applied Institutions." In 2016, our university actively responded to the pilot program requirements by promptly convening relevant meetings and vigorously advancing transformation efforts. The Personnel Office swiftly formulated and issued the "Zhaoqing University Faculty Off-Campus Job Rotation Management Measures," encouraging teachers to participate in corporate practice. In September 2016, our university initiated a program

for cultural tourism faculty to take up middle-management positions in star-rated hotels and scenic spots. This initiative encouraged teachers to analyze and research operational challenges encountered in industry practice, establishing a teaching-research approach that integrates academic expertise with real-world industrial insights.

5.2. Launch Phase (2018)

In March 2018, the Office of the National Tourism Administration issued the "Notice on Implementing the 2018 Ten Thousand Tourism Talents Program," which included 50 national applied undergraduate projects for cultivating "dual-qualified" teachers. Our university's application, "Research on the Enterprise Internship Model for Tourism Management Faculty in Applied Undergraduate Institutions," was approved. This project systematically examined the primary factors influencing faculty participation in off-campus internships, analyzed the effectiveness of such internships, and developed a practical training model based on successful internship experiences. This marked the beginning of our university's pedagogical exploration integrating cultural tourism faculty with industry practice.

5.3 Implementation Phase (2022-2025)

Through sustained exploration and practice, our university's cultural and tourism faculty has developed a series of research-education integration achievements. Four Ministry of Education-funded projects, including the "New Industry Talent School-Enterprise Co-cultivation Empowerment Plan for Supply-Demand Matching," were launched. Additionally, multiple Guangdong Provincial Education Reform projects were initiated, such as "Research on Industry-Education Integration Practical Teaching Model for Hotel Simulation Investment Operations in Tourism Majors." The "Innovation and Entrepreneurship Course" received Guangdong Provincial Model Course certification, while related teaching achievements were awarded the Second Prize of Guangdong Provincial Teaching Achievements. These efforts have led to continuous accumulation of teaching and research outcomes.

6. INNOVATIONS

6.1. Mechanism Innovation: An Incentive System Equalizing Teaching, Research and Scientific Activities

To address the challenges of insufficient motivation in teaching-research integration and technology transfer, Zhaoqing University has established an incentive mechanism for "equivalent recognition of teaching-research efforts". At the institutional level, the university implemented the "Teaching-Research Workload Calculation and Reward Measures (Trial)", adopting a "mutual recognition of equivalent credits" policy. This policy explicitly states that "teaching achievement awards equal research honors" in faculty promotions and performance evaluations, breaking the traditional bias of prioritizing research over teaching to stimulate faculty engagement in core pedagogical issues. In practical implementation, the mechanism drives teachers to integrate industry practices with teaching innovation. By leveraging insights from industry partnerships and local frontline experiences, faculty collaborate with enterprises to apply for teaching-research projects in cultural tourism. Typical challenges, solutions, and lessons learned from industrial practices are distilled into "innovation and entrepreneurship" case studies, which are then incorporated into course content and projects. The "teacher-student co-creation" initiative establishes a transformation chain: "industry practice → teaching research → instructional content → innovation projects". This mechanism effectively addresses two key issues in cultural tourism education: faculty's limited awareness and capability in teaching reform research, and the disconnect between academic content and industry demands. Through "equivalent evaluation" that activates internal teaching-research motivation and "practical transformation" that bridges industrial technologies with educational resources, it provides a

replicable incentive model for applied undergraduate institutions to enhance faculty's research-to-teaching conversion capabilities.

6.2. Practical Innovation: Building an Industry-Education-Teaching Integration Chain.

This closed-loop system-comprising industrial practice, research topics, teaching materials, and innovation projects-deeply transforms industrial resources into educational value. Beginning with teachers' hands-on industry engagement, real-world challenges are converted into research topics, systematically developed into teaching resources, and ultimately incubated into industry-oriented innovation projects through collaborative teacher-student efforts. During their industry placements, faculty members identify prevalent sector-wide issues and design a research framework incorporating modules like market analysis, cost estimation, and risk assessment. The research outcomes first appear in the "Simulated Investment Decision" chapter of the textbook *Hotel Investment and Development Strategy*, followed by the creation of supporting teaching cases. Through these case studies, students complete end-to-end training from site evaluation to operational forecasting. Building on this content, the team guides students in applying for "Internet+" projects, elevating classroom simulations into lightweight tools with practical value.

This chain-based transformation effectively addresses the disconnect between academic content and industry demands. Previously, courses like "Hotel Investment" remained at the theoretical level, leaving students without access to real financial models or market volatility data. Through this chain-based approach, the curriculum has achieved breakthroughs across three dimensions: timeliness by incorporating dynamic industry data such as "non-standard accommodation and catering formats"; practicality by using anonymized real-world investment case data; and innovation by guiding students to develop solutions addressing industry pain points, fully demonstrating the value of closed-loop logic in cultivating applied talents.

7. APPLICATION OUTCOMES

7.1. Enhancing Teachers' Research Competence and the Efficiency of Research Outcomes Transformation.

Teachers' pedagogical expertise and the effectiveness of their research outcomes have seen remarkable growth. The team has secured six provincial-level or higher educational reform projects, including one under the National Cultural and Tourism Ministry's "Ten Thousand Tourism Talents Program," three from the Ministry of Education, and two from Guangdong's educational reform initiatives. They have published eight research papers, authored three textbooks such as "Hotel Investment and Construction Strategy" and "Introduction to Leisure and Resort Management," and served as chief editors for two others. Additionally, they developed one provincial-level model course and one university-level online open course, with students participating in over 100 faculty-led research projects and innovation initiatives.

7.2. Effectiveness of Student Innovation and Entrepreneurship Competency Development

Relying on the practice platform built under the "Research-Teaching Integration" model, students have significantly enhanced the breadth and depth of their participation in teachers' research projects and "Double Innovation" initiatives. Over the past four years, students from our college have secured a total of 98 university-level approval projects for the National Innovation and Entrepreneurship Program, 23 provincial-level or higher approval projects, 25 provincial-level Climbing Plan approval projects, 17 provincial-level Challenge Cup awards, and 30 provincial-level or higher awards in other

categories of competitions. In the past two years, the total number of projects participating in the "Internet + China International Collegiate Innovation Competition" has reached 350. Students have also engaged in 46 teachers' cultural and tourism service projects, forming a virtuous cycle of "research promoting teaching and teaching driving innovation."

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