

---

# Research on the Construction Path of the “Three Innovation Integration” Curriculum System of Tourism Management Vocational Undergraduate with Digital Cultural Tourism

He Jiong, Jingying Wang, Yawen Zhang

School of Finance and Economics, Hainan Vocational University of Science and Technology, Haikou 571126, Hainan, China

*\*Author to whom correspondence should be addressed.*

**Copyright:** © 2026 Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY 4.0), permitting distribution and reproduction in any medium, provided the original work is cited.

---

**Abstract:** Against the backdrop of deep integration between digital technology and the cultural tourism industry, vocational undergraduate education in tourism management faces the contemporary mission of cultivating interdisciplinary talents with innovative, creative, and entrepreneurial (collectively termed “Three Creations”) capabilities alongside digital literacy. Grounded in the core principle of “industry-education integration and knowledge-practice alignment” in vocational undergraduate education, this study systematically analyzes the current challenges in developing a “Three Creations Integration” curriculum system for tourism management programs. By examining four key dimensions—curriculum objectives, content design, teaching methodologies, and evaluation mechanisms—the research proposes a framework for constructing a “Three Creations Integration” curriculum system empowered by digital cultural tourism. This framework provides theoretical references and practical insights to optimize talent development programs and enhance industry service capabilities in vocational undergraduate education for tourism management.

**Keywords:** digital cultural tourism; tourism management; vocational undergraduate; integration of innovation; entrepreneurship and entrepreneurship; curriculum system; construction path

---

**Online publication:** January 26, 2026

## 1. Introduction

### 1.1. Research background

With the rapid advancement of digital technologies including 5G, big data, artificial intelligence, and virtual reality (VR), the cultural tourism industry is undergoing a profound transformation from traditional models to digital, intelligent, and personalized operations. Digital cultural tourism, with its immersive experiences, precision services, and diversified formats, has become a key driver for the sector’s high-quality development. This evolution has given rise to innovative models such as smart scenic spots, digital museums, online travel customization, and live-streaming cultural tourism experiences, all of which demand higher levels of digital skills, innovative thinking, and entrepreneurial capabilities from tourism professionals.

As a vital component of higher education, vocational undergraduate programs focus on cultivating high-level technical professionals, playing a pivotal role in aligning with industrial demands and supporting regional economic development. The Tourism Management program, a flagship vocational undergraduate discipline, directly impacts talent cultivation quality and industry relevance through its curriculum design. However, traditional Tourism Management curricula face challenges such as fragmented innovation, entrepreneurship, and creativity (the “Three Creations”) training, inadequate integration of digital technologies, and a disconnect between theory and practice—issues that fail to meet the needs of the digital cultural tourism industry for interdisciplinary professionals. Therefore, integrating the “Three Creations Integration” concept with digital cultural tourism development requirements to reconstruct the Tourism Management curriculum has become an essential strategy for enhancing program competitiveness and achieving synchronized growth between talent development and industrial progress.

## **1.2. Research significance**

**Theoretical Significance:** This paper, based on the intersection of digital cultural tourism and vocational undergraduate education, explores the construction logic and implementation path of the “Three Innovations Integration” curriculum system. It enriches the theoretical framework of vocational undergraduate education curriculum development and the cultivation of digital cultural tourism talents, providing new research perspectives and theoretical support for curriculum system reforms in similar disciplines.

**Practical Significance:** By establishing a “Three-Creation Integration” curriculum system tailored to the digital cultural tourism industry, this initiative effectively enhances the digital literacy, innovative mindset, creative capabilities, and entrepreneurial qualities of undergraduate tourism management students, thereby boosting their employability and career prospects. Simultaneously, it provides practical guidance for universities to optimize course structures, innovate teaching methodologies, and deepen industry-education collaboration, driving comprehensive improvements in tourism management talent cultivation and better serving the high-quality development of the digital cultural tourism sector.

## **1.3. Research status at home and abroad**

The current research landscape abroad shows that vocational education started earlier, accumulating rich experience in the construction of “three-creation” education and curriculum systems. Germany’s “dual system” vocational education emphasizes the coordinated cultivation of practical and innovative abilities, with its curriculum system focusing on enterprise participation and job demand orientation. The tourism management program at American community colleges highlights the integration of entrepreneurship education and vocational skills, offering a large number of interdisciplinary innovative practice courses. Meanwhile, the digital cultural tourism industry abroad is well-developed, with some universities incorporating digital skill courses such as virtual reality technology and big data analysis into the tourism management curriculum, emphasizing the cultivation of students’ technical application abilities and innovative thinking. However, most foreign research is based on their local industrial environment and educational systems, and the adaptability to China’s vocational undergraduate education requires further validation.

Current domestic research indicates that scholars have conducted extensive studies on digital cultural tourism and tourism management reform. Some researchers focus on the impact of digital technology on tourism management curricula, proposing the addition of digital cultural tourism-related courses and innovative teaching methods. Others explore the integration of “Three Creations” education (innovation, entrepreneurship, and creativity) into tourism management programs, discussing the design concepts and teaching models for “Three Creations” courses. However, existing research predominantly emphasizes single-dimensional reform efforts, lacking systematic and holistic studies on the “Three Creations Integration” curriculum system empowered by digital cultural tourism. There is insufficient attention to the coordinated development of core elements such as course objectives, content, teaching models, and evaluation systems, making it difficult to meet the practical needs of vocational undergraduate education in cultivating high-level technical and skilled talents.

## **2. Definition of core concepts and theoretical foundations**

### **2.1. Definition of core concepts**

Digital Cultural Tourism, a new form of cultural tourism driven by digital technology, integrates big data, artificial intelligence, VR/AR, cloud computing, and other technologies with the cultural tourism industry. It achieves digital transformation of cultural resources, intelligent services, personalized experiences, and precise marketing, covering fields like smart tourism, digital cultural innovation, and online cultural tourism services. Vocational Undergraduate Education, a higher education model, cultivates applied talents with solid theoretical foundations, strong technical skills, and innovative capabilities for frontline roles in production, construction, management, and service. Its core features are “vocational orientation, practical application, and comprehensive integration,” emphasizing industry-education collaboration and the unity of knowledge and practice. The “Three Creations Integration” (innovation, creativity, entrepreneurship) focuses on three interconnected aspects: innovation in technical application and methodology, creativity in cultural expression and product design, and entrepreneurship in market transformation and value realization. This integration organically combines these elements throughout talent development to achieve coordinated enhancement of knowledge, skills, and competencies. The curriculum system refers to a logical framework of interconnected courses designed to achieve specific educational goals, encompassing core components such as course objectives, content, structure, teaching models, and evaluation mechanisms.

### **2.2. Theoretical basis**

Constructivist learning theory posits that learning is an active process of knowledge construction rather than passive information absorption. This theory emphasizes context creation, collaborative learning, and practical exploration, providing a theoretical foundation for designing teaching models based on real digital cultural tourism projects within the “Three Creations Integration” curriculum system. Such an approach effectively stimulates students’ learning initiative and innovative thinking.

The Industry-Education Integration Theory advocates deep integration between education and industry, achieving precise alignment between talent cultivation and industrial demands through school-enterprise collaboration and work-study integration. This theory provides theoretical support for digital cultural tourism enterprises to participate in the “Three Innovations Integration” curriculum system construction, jointly establish training bases, and co-develop courses, serving as the core guiding theory for vocational undergraduate education.

The competency-based education theory centers on cultivating students’ professional skills, emphasizing the alignment between curriculum design and occupational demands while enhancing practical abilities and comprehensive competencies. This framework provides crucial guidance for the “Three-Creation Integration” curriculum system, which focuses on core competencies for digital cultural tourism roles and modularizes course content.

The Innovation Ecosystem Theory posits that innovation constitutes a dynamic system formed through the interaction of diverse entities and elements. This framework underscores the collaborative efforts of universities, enterprises, governments, and industry associations, offering theoretical guidance for establishing diversified support mechanisms within the “Three Creations Integration” curriculum system. Such an approach facilitates the creation of an optimal environment for innovative education.

## **3. The realistic dilemma of empowering the construction of the “three innovations integration” curriculum system for tourism management vocational undergraduate programs through digital cultural tourism**

### **3.1. Unclear course objectives and misalignment with industry demands**

Currently, many undergraduate tourism management programs still focus on traditional talent development models, lacking in-depth research into the digital cultural tourism industry’s needs. Their objectives for cultivating “three-creation” competencies (innovation, creativity, entrepreneurship) and digital literacy remain vague. These programs predominantly

emphasize theoretical knowledge and basic skill training, neglecting the development of higher-level capabilities like innovative thinking, creative design, and entrepreneurial practice. This results in a significant gap between talent cultivation and the industry's demand for interdisciplinary professionals. For instance, some institutions fail to specify clear standards for core digital cultural tourism technologies (e.g., big data analytics, VR/AR applications) and “three-creation” core competencies (e.g., creative design of cultural tourism products, online entrepreneurship operations), making their curriculum objectives both impractical and untargeted.

### **3.2. Outdated course content with insufficient integration of “three innovations” and digital elements**

Traditional courses dominate the curriculum, with content still primarily focusing on conventional subjects like Introduction to Tourism Studies, Travel Agency Management, and Tour Guiding. Digital cultural tourism-related courses (such as Smart Tourism Technology, Digital Cultural and Creative Design, and Cultural Tourism Big Data Analysis) are underrepresented and mostly offered as electives, lacking systematic depth. The “Three Innovations” (innovation, creativity, entrepreneurship) content remains fragmented, scattered across individual courses. For instance, while “Tourism Marketing” touches on innovative marketing methods and “Fundamentals of Tourism Entrepreneurship” introduces basic entrepreneurial knowledge, there is no independent “Three Innovations Integration” course module. This results in a lack of systematic cultivation of innovation, creativity, and entrepreneurial skills. Theoretical knowledge and practical application are disconnected, with course content overly emphasizing theoretical concepts that fail to align with real-world job requirements in digital cultural tourism enterprises. There is a lack of authentic project case studies and practical implementation components. For example, some institutions’ “Smart Tourism” courses only cover conceptual and technical principles, omitting practical aspects like smart scenic area operations and online tourism product design. This makes it difficult for students to translate theoretical knowledge into practical skills.

### **3.3. The teaching model is monotonous and rigid, lacking a collaborative innovation mechanism.**

Traditional teaching methods remain prevalent in most institutions, relying on the conventional “teacher-led lectures + student passive listening” model that lacks interactivity and practical application. Modern pedagogical approaches like case-based learning, project-based teaching, and flipped classrooms are underutilized, failing to stimulate students’ innovative thinking and practical enthusiasm. Digital teaching resources remain scarce. Although some institutions have adopted online platforms, existing digital materials primarily consist of digitized courseware and videos, lacking immersive and interactive resources such as virtual reality training software and cultural tourism big data analysis platforms. This inadequacy fails to meet the practical teaching demands of “Three-Creation Integration” courses. School-enterprise collaboration remains superficial, with partnerships often limited to providing internship positions and donating teaching equipment. A mechanism for enterprises to deeply participate in curriculum design, teaching implementation, and assessment evaluation has yet to be established. Furthermore, the participation rate of technical experts and industry elites from digital cultural tourism enterprises in teaching remains low, leaving students with limited access to cutting-edge technologies and real-world project cases.

### **3.4. Inadequate evaluation mechanisms hinder the demonstration of “Three Innovations” and digital literacy**

The current evaluation system remains teacher-dominated, lacking diverse assessment mechanisms such as student self-assessment, peer evaluation, and industry feedback. This structural limitation impedes comprehensive and objective measurement of students’ “Three Innovations” competencies and digital literacy. Evaluation criteria predominantly focus on theoretical knowledge mastery, with final exam scores being the primary metric. Practical and innovative outcomes—including creative thinking, original projects, and entrepreneurial practices—are given insufficient weight, failing to effectively motivate students to engage in “Three Innovations” initiatives. The evaluation methods mainly rely on closed-book exams and written assignments, lacking process-oriented assessments of practical operations, project deliverables,

and creative designs. This approach makes it difficult to dynamically track students' skill development, resulting in evaluation outcomes that lack scientific rigor and fairness.

### **3.5. Lagging faculty development and insufficient support capacity**

The current digital literacy and “Three Creations” (innovation, entrepreneurship, and creativity) capabilities remain inadequate. Many teachers lack technical expertise and practical experience in digital cultural tourism, with insufficient proficiency in big data analysis and VR/AR applications. Moreover, their “Three Creations” teaching competencies require enhancement, as they often lack hands-on entrepreneurial experience and creative design guidance, hindering effective implementation of “Three Creations Integration” pedagogy. The two-way faculty exchange mechanism between universities and enterprises is underdeveloped, leaving university teachers with limited opportunities for on-the-job training in digital cultural tourism enterprises, thus failing to grasp industry frontiers and job market demands. Channels for corporate technical experts and industry elites to participate in teaching remain inadequate, while the development of part-time faculty lags behind. Consequently, the faculty's structure and qualifications fall short of meeting the requirements for “Three Creations Integration” course instruction.

## **4. The construction principles of the “three innovations integration” curriculum system for tourism management vocational undergraduate programs empowered by digital cultural tourism**

### **4.1. Principle of industrial orientation**

The curriculum system should be closely aligned with the development needs and job standards of the digital cultural tourism industry. Through in-depth research on talent demands, current technological applications, and future trends in digital cultural tourism enterprises, we must define the digital literacy and ‘three-creation’ competencies students should possess. This ensures precise alignment between curriculum objectives, content, and teaching methods with industry requirements, thereby achieving synchronized growth between talent cultivation and industrial development.

### **4.2. Principle of synergy in the “three creations” initiative**

We integrate innovation, creativity, and entrepreneurship organically, embedding the “Three Creations” philosophy throughout curriculum development. Innovation serves as the core, emphasizing technological application and methodological innovation; creativity forms the foundation, focusing on cultural expression and product design; entrepreneurship represents the ultimate goal, concentrating on market transformation and value realization. Through curriculum integration and innovative teaching approaches, we synergistically cultivate the “Three Creations” competencies.

### **4.3. Principle of digital empowerment**

Leveraging digital technologies, we will fully integrate big data, artificial intelligence, VR/AR, and other digital tools into curriculum objectives, content, teaching models, and evaluation mechanisms. By developing digital cultural tourism courses, creating digital teaching resources, and innovating digital teaching methods, we aim to enhance students' digital technology application skills and innovative thinking, thereby meeting the evolving demands of the digital cultural tourism industry.

### **4.4. Principle of unity of knowledge and action**

We emphasize the practical orientation of vocational undergraduate education, integrating theoretical learning with hands-on practice. By establishing a comprehensive curriculum system that combines theoretical courses, practical training, project-based exercises, and entrepreneurial incubation, we incorporate real-world digital cultural tourism projects and

develop industry-academia collaborative training platforms. This approach enables students to enhance their innovation, entrepreneurship, and creativity (the ‘three Cs’) capabilities and digital literacy through practical experience, effectively bridging knowledge acquisition with real-world application.

#### **4.5. Dynamic optimization principle**

The digital cultural tourism industry is developing rapidly, with frequent technological iterations and business model innovations. A dynamic optimization mechanism for the curriculum system must be established. Regular tracking of industry development trends and changes in talent demand, combined with student employment feedback and teaching effectiveness evaluations, should be conducted to promptly adjust curriculum objectives, update course content, and innovate teaching models. This ensures the scientific rigor, foresight, and adaptability of the curriculum system.

### **5. The construction path of the “three innovations integration” curriculum system of tourism management vocational undergraduate with digital culture and tourism empowerment**

#### **5.1. Clarifying the dual-core curriculum objectives of “three innovations + digital”**

Based on the needs of the digital cultural tourism industry and the positioning of vocational undergraduate talent cultivation, we have established a dual-core curriculum system focusing on “innovation capability + digital literacy,” clearly defining training priorities and specific standards at each stage. The foundational phase (first and second semesters) centers on cultivating digital literacy and “innovation awareness,” aiming to equip students with fundamental concepts of digital cultural tourism, core technical principles, and basic theories of “innovation.” Students will develop preliminary digital application skills and innovative thinking awareness. Specific objectives include: understanding application scenarios of digital technologies such as big data, artificial intelligence, VR/AR in the cultural tourism industry; mastering basic methods of innovative thinking and developing initial creative design capabilities; fostering entrepreneurial awareness and understanding the basic processes and policy environment of tourism entrepreneurship. The core phase (third and fourth semesters) focuses on enhancing “innovation capability” and digital skills, aiming to enable students to proficiently master core digital cultural tourism technologies and key “innovation” competencies, allowing them to creatively design and innovatively implement cultural tourism products using digital technologies. Specific objectives include: skillfully applying cultural tourism big data analysis tools for market research and demand analysis; mastering VR/AR-based cultural tourism product design and development skills; developing capabilities in cultural tourism product innovation design, brand planning, and marketing promotion; and being able to draft business plans and conduct preliminary entrepreneurial practices. The advanced phase (fifth and sixth semesters) emphasizes comprehensive application of “innovation” and career development, aiming to equip students with project operation, entrepreneurial incubation, and sustainable development capabilities in digital cultural tourism, enabling them to adapt to job requirements and industry trends in this field. The specific objectives include: possessing operational management, team collaboration, and risk prevention capabilities for digital cultural tourism projects; being able to integrate resources for entrepreneurial project incubation and achieve market transformation of creative outcomes; demonstrating lifelong learning and continuous innovation capabilities to adapt to industrial technological iteration and business model innovation demands.

#### **5.2. Building a modular and interdisciplinary curriculum content system**

Following the “basic module + core module + expansion module + practice module” framework, we have developed a modular and interdisciplinary curriculum system for “Three Creations Integration” (innovation, entrepreneurship, and creativity), achieving deep integration of digital technology with “Three Creations” education. The basic module primarily includes general foundation courses and professional foundation courses, laying the groundwork for students’ “Three Creations” capabilities and digital literacy. General foundation courses such as “Fundamentals of University Computing,”

“Introduction to Big Data,” “Innovation Thinking Training,” and “Entrepreneurship Fundamentals” cultivate students’ digital foundational skills and “Three Creations” awareness. Professional foundation courses like “Introduction to Tourism Studies,” “Digital Cultural Tourism,” “Tourism Economics,” and “Tourism Psychology” equip students with essential theories of tourism management and fundamental knowledge of the digital cultural tourism industry. The core module focuses on core digital cultural tourism technologies and “Three Creations” competencies, offering interdisciplinary core courses. Digital technology courses include “Cultural Tourism Big Data Analysis and Application,” “VR/AR Cultural Tourism Product Design,” “Smart Scenic Area Operation Management,” and “Online Tourism Marketing Practices,” enhancing students’ digital technology application skills. “Three Creations” courses such as “Cultural Tourism Product Creative Design,” “Tourism Innovation Methods and Practices,” “Cultural Tourism Entrepreneurship Project Planning and Operations,” and “Tourism Brand Creativity and Promotion” improve students’ innovation, creativity, and entrepreneurial abilities. Additionally, interdisciplinary courses like “Digital Cultural and Creative Design and Entrepreneurship” and “Smart Tourism Project Management” are introduced to achieve synergistic cultivation of digital technology and “Three Creations” capabilities. The expansion module integrates digital cultural tourism industry trends with students’ career development needs, offering flexible and personalized extension courses. Industry-focused courses include “Metaverse Cultural Tourism Applications,” “Cultural Tourism Live Streaming Operations,” and “Digital Cultural Tourism Copyright Protection”; vocational skills courses cover “Tourism E-commerce Operations,” “Advanced Cultural Tourism Data Analysis Tools,” and “Entrepreneurial Financing Practices”; while comprehensive quality courses include “Team Collaboration and Communication,” “Business Negotiation,” and “Professional Competency Enhancement” to meet students’ individualized development needs. The practical module strengthens hands-on teaching through a three-tiered curriculum system combining “course training + project practice + entrepreneurship incubation”. Core courses like “Cultural Tourism Big Data Analysis” and “VR/AR Cultural Tourism Product Design” are complemented by practical training to develop students’ operational skills. Project practice incorporates real-world digital cultural tourism initiatives such as smart scenic area planning and digital cultural product development, enabling students to enhance their “Three Creativities” (innovation, creativity, and entrepreneurship) in real-world scenarios. The entrepreneurship incubation platform establishes on-campus incubation bases and industry-academia collaboration hubs, providing students with entrepreneurial guidance, resource connections, and project incubation services to facilitate the market transformation of their creative achievements.

### **5.3. Innovative “digital + practice” integrated teaching model**

The project-based teaching model utilizes real digital cultural tourism projects as platforms to organically integrate curriculum content with project tasks. For instance, through initiatives like “Smart Scenic Area Upgrades” and “Digital Cultural Product Development,” students work in teams to complete market research, creative design, technical development, and marketing promotion. This process enables them to master digital technology application skills and “Three Creativities” competencies. In this approach, teachers act as facilitators, breaking down project tasks, providing technical guidance, and supervising progress, while students take the lead in collaborative task completion to develop teamwork and problem-solving abilities. The immersive teaching model leverages VR/AR and metaverse technologies to create virtual learning environments. For example, VR simulates smart scenic area tours and cultural product design scenarios, allowing students to practice and innovate in virtual settings. Metaverse platforms establish digital cultural tourism communities, enabling real-time interaction and collaborative learning among teachers and students, enhancing both engagement and effectiveness. The industry-academia collaborative teaching model deepens partnerships by forming “dual-mentor” teams consisting of university faculty and corporate experts. University instructors focus on theoretical instruction and learning guidance, while corporate mentors provide practical skill training, case studies, and entrepreneurial experience sharing. Additionally, joint training bases are established with real digital cultural tourism projects and technology platforms, enabling students to gain hands-on experience in authentic corporate environments and achieve the integration of teaching, learning, and practice. The blended learning model integrates online and offline teaching resources to build a

comprehensive platform. Online components include a digital resource library with course videos, e-textbooks, practical training software, case studies, and quizzes, facilitating self-directed and personalized learning. Offline activities such as project discussions, hands-on workshops, and entrepreneurship salons enhance teacher-student interaction and practical experience. By leveraging the complementary strengths of both online and offline approaches, the model significantly improves teaching effectiveness and learning efficiency.

#### **5.4. Establishing a multi-dimensional curriculum evaluation mechanism**

The evaluation system adopts a multi-stakeholder approach, integrating “teacher assessment, student self-evaluation, peer review, industry evaluation, and corporate assessment.” Teachers primarily evaluate theoretical knowledge, project progress, and outcomes. Student self-evaluation and peer review focus on learning engagement, teamwork, and innovative performance. Corporate assessment emphasizes practical skills, job fit, and professional ethics. Industry evaluation uses methods like vocational certifications and competition reviews to objectively assess students’ professional competence and “three-creation” (innovation, entrepreneurship, and creativity) capabilities.

The evaluation framework is comprehensive, covering multiple dimensions including theoretical knowledge, digital skills, “Three Innovations” capabilities, and professional ethics. The theoretical knowledge assessment focuses on the mastery of fundamental concepts and core principles. Digital skills evaluation includes proficiency in digital technology applications and operational capabilities in digital cultural tourism projects. The “Three Innovations” capability assessment encompasses innovative thinking, quality of creative works, and the feasibility and market potential of entrepreneurial projects. Professional ethics evaluation covers teamwork, communication skills, sense of responsibility, and professional ethics.

The evaluation system adopts a diversified approach, integrating formative and summative assessments with quantitative and qualitative methods. Formative evaluation dynamically tracks students’ learning progress and skill development through classroom participation, project milestones, practical reports, and creative proposals. Summative evaluation comprehensively assesses learning outcomes via final exams, project presentations, business plan defenses, and skill certifications. Furthermore, digital evaluation tools are implemented to analyze students’ online learning behaviors and project operation data through big data analytics, ensuring precise and scientific assessment.

#### **5.5. Improving the guarantee mechanism for curriculum system implementation**

Enhance in-house teacher development by implementing a digital literacy and “Three Creations” (innovation, entrepreneurship, and creativity) competency enhancement program. Regularly organize teachers to participate in digital cultural tourism technology training and “Three Creations” education workshops. Encourage teachers to gain hands-on experience through internships in digital cultural tourism enterprises, engaging in real project development to accumulate practical expertise. Support teachers in conducting teaching research and project applications related to “Three Creations integration” to boost their teaching and research capabilities. Optimize the faculty structure by establishing a recruitment mechanism for technical experts, industry elites, and entrepreneurship mentors from digital cultural tourism enterprises, inviting them to serve as part-time instructors to participate in curriculum design, teaching implementation, and evaluation. Build “dual-qualified” teaching teams that require teachers to possess both solid theoretical knowledge and rich practical experience, as well as “Three Creations” guidance skills.

To deepen the connotation of school-enterprise collaboration, we will establish long-term partnerships with leading digital cultural tourism enterprises and small-to-medium innovative firms. This includes co-building platforms such as industry colleges, training bases, and entrepreneurship incubation centers. Jointly developing talent cultivation plans, curriculum standards, and teaching programs, we will co-create course content and educational resources. Through customized training programs tailored to corporate needs, we aim to achieve seamless alignment between talent development and job requirements. A collaborative mechanism will be established: a school-enterprise cooperation committee will be formed to hold regular meetings for industry-academia dialogue, while a resource-sharing mechanism

will facilitate joint development of teaching materials, technical platforms, and practical training equipment. Incentive policies will be formulated to encourage enterprises' active participation in teaching processes and talent cultivation.

We will establish a digital teaching resource repository to integrate premium digital resources, including VR/AR training software, cultural tourism big data analytics platforms, digital creative design tools, online courses, and case libraries, providing technical support for the "Three Creations Integration" teaching model. We will develop a school-enterprise collaborative resource repository by incorporating real corporate project cases, technical documentation, and training materials to enhance the practicality and relevance of teaching. A practical training platform will be built, featuring an on-campus digital cultural tourism training center equipped with advanced digital technology devices and training software to meet the needs of course training and project implementation. Off-campus training bases will be established in partnership with enterprises to provide students with internship opportunities, project practice, and entrepreneurial incubation. Additionally, a "Three Creations" competition platform will be created to organize student participation in digital cultural tourism creativity contests and tourism entrepreneurship competitions, fostering learning and innovation through competition.

Refine the teaching management system by establishing detailed implementation rules for the "Three-Creation Integration" curriculum framework, credit recognition protocols, and teaching quality evaluation standards to standardize instructional processes and administration. Implement a dynamic curriculum adjustment mechanism to regularly optimize course offerings and teaching content based on industry trends and pedagogical feedback. Increase funding allocation by establishing a dedicated "Three-Creation Integration" curriculum development fund, which will support faculty training, resource development, platform construction, practical training equipment procurement, and entrepreneurial incubation initiatives. Secure multi-source funding from government agencies, enterprises, and social organizations to ensure adequate financial support for the curriculum system's implementation.

## **6. Conclusion and outlook**

The rapid development of the digital cultural tourism industry presents both opportunities and challenges for undergraduate education in tourism management. Establishing an "innovation, entrepreneurship, and creativity (3C) integration" curriculum system has become a critical measure to enhance talent cultivation quality and support industrial development. This paper analyzes the current practical challenges in constructing such curriculum systems for tourism management majors. Based on constructivist learning theory and industry-education integration theory, it proposes principles and pathways for developing a 3C-integrated curriculum system empowered by digital cultural tourism. The study suggests clarifying dual-core course objectives of "3C + digital technology", building modular and interdisciplinary curriculum content systems, innovating an integrated "digital + practice" teaching model, establishing multi-dimensional course evaluation mechanisms, and improving support mechanisms through faculty development, school-enterprise collaboration, resource platforms, and policy frameworks. These measures aim to achieve deep integration of digital technology with 3C education, cultivating high-level interdisciplinary technical talents that meet the demands of the digital cultural tourism industry.

With the continuous advancement of digital technologies and the ongoing evolution of the cultural tourism industry, the development of the "Three-Creation Integration" curriculum system for undergraduate tourism management programs represents a dynamic and continuously optimized process. Higher education institutions should proactively align with industry demands, deepen educational reforms, and persistently explore talent cultivation models that integrate "Three-Creation Integration" with digital cultural tourism. This approach will provide a solid talent foundation for the high-quality development of the digital cultural tourism sector.

## Funding

2025 Industry-University-Research Collaboration and Collaborative Education Project (Project No: 250600234285910)  
-Research on the Construction of “Three Innovations Integration” Curriculum System for Tourism Management Undergraduate Programs Driven by Digital Cultural Tourism

## Disclosure statement

The author declares no conflict of interest.

## References

- [1] Tao Z, Li XH, Liang XP, 2025, Construction of a Modern Industrial College Curriculum System Based on the Integration of Specialization and Innovation. *Journal of Nanning Normal University (Natural Science Edition)*, 42(04): 99-104.
- [2] Yang KJ, 2025, Construction of an Innovation and Entrepreneurship Curriculum System in Higher Vocational Colleges Based on the “Five Innovations Integration”. *Talent Intelligence*, (12): 140-144.
- [3] Sheng ZW, Xu LL, 2024, Research on the Construction of the “Three Innovations Integration” Innovation and Entrepreneurship Education Curriculum System in Higher Vocational Colleges. *Modern Vocational Education*, (17): 1-4.
- [4] Wang YM, Chen X, 2024, Research and Practice on the Construction of a Three-Creation Integration Curriculum System in Higher Vocational Colleges: Creative Cultivation, Innovative Practice, and Entrepreneurship Incubation-A Case Study of the Modern Logistics Management Program at Nanjing Jiaotong University. *Modern Vocational Education*, (16): 73-76.
- [5] Yu R, 2024, Integration and Breakthrough: Constructing the ‘Three Creations’ Education Curriculum System under the New Liberal Arts Framework. In *2024 Zhengzhou Forum Proceedings of the Political Education Forum*, 164-165.
- [6] Yan SP, Yan W, 2026, Research on the Restructuring of Tourism Management Master’s Curriculum and Quality Evaluation System Construction Driven by ‘AI + Tourism’ Integration Scenarios. *Business Economics*, (02): 192-196.
- [7] Liang QP, Wu QJ, 2025, Research on the Construction and Optimization of Innovation and Entrepreneurship Education Curriculum System for Tourism Majors in Vocational Undergraduate Programs. *Tourism and Photography*, (19): 109-112.
- [8] Cheng YY, Tang FM, 2025, Construction and Practice of Curriculum System for Tourism Specialty Cluster Based on Innovative Allocation of Production Factors. *Tourism Review*, (10): 36-38.

### Publisher’s note

Whioce Publishing remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.