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Barriers and Breakthrough Paths for Integrating Digital Literacy into Higher Vocational Tourism Courses in the Digital Cultural Tourism Context

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Abstract: *The rapid development of the digital cultural tourism industry necessitates the cultivation of "digital+tourism" interdisciplinary talent through higher vocational tourism courses. Currently, these courses face several obstacles in integrating digital elements, including superficial learning objectives, outdated curriculum development, ineffective teaching implementation, and simplistic evaluation mechanisms. The proposed pathways to overcome these challenges are: deepening industry-education integration to establish a dynamic objective cultivation system; restructuring the curriculum into modular frameworks; innovating virtual-real integrated teaching models; and improving dynamic evaluation systems. This entails driving the comprehensive digital transformation of higher vocational tourism courses through collaborative industry-academia efforts, curriculum optimization, technological integration, and data-driven feedback.*

Keywords: *Digital Cultural Tourism; Higher Vocational Tourism Courses; Digital Integration; Industry-Education Integration; Curriculum Restructuring*

1. Problem Statement

Currently, with the widespread application of digital technologies such as 5G, big data, artificial intelligence (AI), and virtual reality (VR), the digital cultural tourism industry ecosystem is undergoing profound transformation. From a market demand perspective, there is a surge in consumer demand for personalized, interactive, and highly engaging cultural tourism products. Against this backdrop, China is accelerating the process of upgrading its digital cultural tourism industry. The “14th Five-Year Plan for Cultural and Tourism Development” explicitly proposes strategic deployments for the digitalization of the cultural and tourism sector, aiming to promote deep industrial integration and high-quality development, empowering the transformation of traditional cultural tourism formats through core technologies like 5G and AI, thereby addressing the persistent gap in the smart tourism market demand-supply and driving the restructuring of the cultural tourism industry towards digitalization and integration. This entails forming an innovative “tourism+technology” symbiosis through technological drivers, enabling multidimensional transformations such as innovating smart cultural tourism management and service systems, the creation of new cultural tourism product forms, and the delivery of immersive new cultural tourism experiences.

The implementation of the cultural tourism digitalization strategy, alongside the development and innovation of digital cultural tourism, fundamentally requires the support of “digital+tourism” interdisciplinary talent. However, a structural shortage of such composite professionals hinders the effective support for technological transformation and industrial upgrading needs. Specifically, digital cultural tourism still faces systemic issues across various domains, including insufficient innovation and institutional bottlenecks in technology R&D, product design, market operations, marketing strategies, and management mechanisms, which urgently need to be addressed. [1] This underscores the pressing need for “digital+tourism” interdisciplinary talent. Consequently, higher vocational tourism education and its curriculum must undergo supply-side reform, accelerating the cultivation of interdisciplinary talent equipped with both digital literacy and practical industry-applicable capabilities. This is essential to meet the urgent demand for enhanced effectiveness in the technology transfer process driven by industrial upgrading.

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2. Barriers to Digital Integration in Higher Vocational Tourism Courses

From the curriculum perspective, the barriers to integrating digital elements into higher vocational tourism courses manifest primarily in the following ways: First, there exists a superficial tendency in defining the cultivation objectives for "digital+tourism" interdisciplinary talent. Specifically, core competency requirements for target positions have not been incorporated into the top-level design. The curriculum fails to explicitly define what constitutes the digital core literacy or how it should be achieved at the program planning level. Second, there has been insufficient effective curriculum development specifically targeting digital core literacy. This essential literacy has not been organically embedded into the core courses of the tourism program. Furthermore, there is a lack of practical exchange platforms for smart tourism, resulting in ineffective pedagogical implementation of digitally-oriented cultural tourism courses. Finally, course evaluation suffers from a one-dimensional approach, lacking dynamic tracking of the cultivation status regarding digital thinking and innovation capabilities. To a certain extent, against the backdrop of digitalization, higher vocational tourism curricula lag behind the current demands of the tourism market.

2.1 Superficiality in Cultivation Objectives for "digital+tourism" Interdisciplinary Talent

Against the backdrop of restructured occupational chains in the digital cultural tourism industry, the digital literacy cultivation objectives of higher vocational tourism courses exhibit superficial characteristics. Fundamentally, this phenomenon reflects a structural contradiction between the supply side of vocational education curricula and the demand side of the digital cultural tourism industry. Presently, the industry has progressively formed a new occupational chain encompassing "smart scenic area operations-tourism big data analysis-digital marketing planning." However, the teaching objectives of higher vocational tourism education programs in the digital era remain confined to cultivating grassroots tourism workers, requiring only basic competencies for adapting to digitally transformed work environments. [2]Scholars Shi Zijiao, through a comprehensive analysis of job postings for the cultural tourism sector on recruitment platforms, examined the responsibilities and qualifications for positions such as business operations, product planning, and new media operations across four categories of tourism enterprises: scenic areas, travel agencies, online travel agencies (OTAs), and hotels. Their research distilled six core digital literacy requirements that tourism enterprises demand of employees: proficiency in internet operation protocols, mastery of operational skills for cultural tourism digital tools, ability to conduct data mining and analysis, competency in digital media planning, development of a user demand-oriented mindset for product development, and capacity for innovative collaboration. [3] However, examining the current cultivation system of higher vocational tourism programs reveals that their curriculum objectives remain entrenched in the traditional competency framework of "tour guide services+hotel management". Digital core competencies have not been effectively integrated into cultivation standards, manifesting a tendency toward superficiality in talent development objectives. This mismatch between supply and demand directly leads to a "competency chasm" between the cultivation objectives and the actual needs of enterprises.

2.2 Failed to incorporate digital literacy into the development of the tourism culture curriculum system

In response to the urgent demand for interdisciplinary talents brought about by the upgrading of digital cultural tourism, the tourism curriculum system of higher vocational colleges has encountered the following problems due to the lag in the development of digital technology. First, current course content remains centered on traditional service skills such as tour guiding and hotel operations, failing to integrate digital literacy and competency requirements. This results in severe misalignment with industry trends and core occupational competencies, constituting a critical bottleneck that constrains the quality of talent cultivation. At present, the tourism-related courses in most higher vocational colleges are still based on traditional subjects such as "Tourism Practice" and "Front Office Service and Management". Only some isolated modules have been added to the existing system, such as "Tourism E-commerce"-this reflects a problem of mechanically adding modules. This course structure has a significant gap compared to the rapid technological evolution in actual working environments such as intelligent scenic area management systems and tourism public sentiment big data analysis platforms. This fragmented course modification model enables students to come into contact with digital tools, but fails to cultivate a systematic digital thinking, ultimately resulting in their inability to meet the industry demand for interdisciplinary talents with the ability to "master tourism business logic and digital technology application". Second, although online teaching resources for cultural tourism courses

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exhibit diversity in presentation formats and richness in content, significant variations in resource quality hinder teachers from obtaining high-quality materials closely aligned with instructional objectives. [4] This has led to a low utilization rate of digital educational resources. Such resource allocation issues directly undermine the industry relevance of teaching content, thereby causing a mismatch between current tourism teaching methods and actual industry demands. Third, the lag in curriculum content system development extends beyond delayed content updates, revealing deeper structural deficiencies in the curriculum architecture on the supply side of vocational education. Regarding theoretical course development, teachers' lack of participation in authentic enterprise projects causes delayed content updates, preventing timely integration of emerging industry technologies. This exacerbates the misalignment between talent cultivation and market demands. Finally, cultural tourism curricula lack targeted design for emerging occupational requirements such as smart scenic area operations, tourism big data analysis, and digital marketing planning. They fail to incorporate the latest achievements in deep integration between digital technologies and the cultural tourism industry into curriculum development, resulting in inadequate integration between theoretical and practical courses.

Current digital cultural tourism curricula remain confined to superficial knowledge delivery, failing to establish pedagogical frameworks that cultivate students' creativity and design capabilities. Concurrently, the absence of authentic or simulated digital cultural tourism teaching scenarios prevents students from applying acquired digital technologies to practical contexts such as cultural tourism product design and tourism route planning. Consequently, this disconnect impedes the transition from knowledge acquisition to practical innovation, severely obstructing the enhancement and development of students' digital literacy.

2.3 Ineffective Implementation of Digitally-Based Cultural Tourism Course Teaching

Although higher vocational tourism courses actively promote digital transformation, the pedagogical implementation of digitally-based cultural tourism courses remains generally ineffective, with its root cause lying in multidimensional deep-seated barriers. In terms of the course structure and teaching mode, there are structural contradictions in the current integrated design of theoretical teaching and practical training for higher vocational tourism majors. This is mainly manifested through a mechanical combination form with features such as "module assembly" and "additional training weeks". For instance, the "32hours theoretical teaching+1week practical training" design commonly adopted in tourism big data analysis courses leads to a disconnection between the Python data cleaning techniques students acquire in class and the actual industry requirements for visitor profiling. Such mechanically superimposed course module designs inevitably result in fragmented and disconnected teaching processes. Within tourism programs, higher vocational institutions often prioritize operational training in technical tools during classroom instruction, reducing digital literacy to the mechanical acquisition of software operation skills. This approach neglects the more in-depth cultivation of digital thinking, data-based decision-making abilities, and industry innovation application capabilities. In terms of teaching implementation and teacher capabilities, many teachers overly emphasize instrumental rationality while neglecting value rationality. Their excessive focus on applying informational teaching tools in courses diminishes the transmission of curricular values, fostering utilitarian and mechanical tendencies that ultimately result in deficiencies in students' professional competencies. [5] Furthermore, some teachers lack sufficient understanding of emerging issues such as digital ethics and data privacy, which hinders the effective integration of relevant competence-building content into teaching. This further limits the improvement of students' comprehensive professional abilities. In lesson preparation, teachers fail to effectively utilize technologies like big data to optimize instructional design. Instruction remains predominantly lecture-based with inadequate teacher-student interaction and insufficient pedagogical innovation. Crucially, they underutilize intelligent technologies such as virtual simulation and big data analytics to refine teaching processes, severely limiting the quality of cultivating students' digital practical abilities and resulting in deficient outcomes for innovation capability development. More critically, the widespread lack of enterprise practical experience among instructors impedes accurate comprehension of new technical standards and practical competency requirements in the digital cultural tourism industry. Consequently, teaching content exhibits severe disconnection from industry advancements.

In terms of the actual training outcomes, the aforementioned issues manifest as two distinct contradictions. On one hand, there is a disconnection between the digital tool application skills of tourism students and their tourism service innovation capabilities, presenting a widespread phenomenon of "only having the ability to operate the system but lacking an overall understanding of

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the business". On the other hand, the cultivation of students' data thinking has failed to effectively integrate with the disciplinary characteristics of cultural tourism, hindering the development of the comprehensive ability of "telling captivating cultural tourism stories through data". This structural imbalance in competency cultivation ultimately causes significant deviation between talent development outcomes and the cultivation objectives for "digital+tourism" interdisciplinary talent.

2.4 Challenges in the Evaluation Mechanism for Digital Literacy Cultivation Systems

The existing evaluation system exhibits deficiencies in assessment entities, processes, and content, constituting a significant barrier to integrating digital literacy into higher vocational tourism courses. Regarding evaluation entities, digital literacy assessment in higher vocational institutions remains predominantly led by internal faculty, with insufficient participation from diverse stakeholders such as industry enterprises and third-party certification bodies. Consequently, a multidimensional, multi-stakeholder evaluation system has yet to be established. Given that digital literacy requirements in the cultural tourism industry demand high practical relevance and sector-specific alignment, evaluation mechanisms lacking deep industry engagement fail to dynamically anchor to actual industry demands. Moreover, they cannot provide effective goal orientation or demand feedback for curriculum development, resulting in disconnection between assessment outcomes and industry needs.Regarding evaluation processes, current assessment methods over-rely on instructor-led summative evaluations. This results in two critical shortcomings: On one hand, there is a failure to establish process-oriented evaluation mechanisms incorporating diverse stakeholders such as enterprise mentors, industry experts, and technical service providers. Consequently, real-time, multi-perspective assessment of students' digital literacy performance during project implementation and problem-solving becomes unattainable. On the other hand, effective tools are generally lacking to dynamically track and record students' competency trajectories across key developmental stages of digital literacy: from tool application and data analysis to innovative transfer. Concerning evaluation content, some institutions erroneously equate software operation proficiency with core indicators of digital literacy, severely neglecting higher-order competencies that reflect core occupational competitiveness. These include digital marketing planning, big data analysis, cross-platform data integration, and intelligent decision-making. This misalignment causes disconnection between talent cultivation and actual industry demands, failing to meet interdisciplinary talent requirements in the digital economy era. Simultaneously, assessment content still primarily evaluates basic digital tool usage through written examinations, without establishing a closed-loop system incorporating formative evaluation methods such as authentic project implementation and complex case resolution. Therefore, although the students have mastered the basic knowledge, they still cannot effectively apply or innovatively utilize the skills they have learned in the actual working environment.

3. Breakthrough Pathways for Integrating Digital Literacy into Curricula

3.1 Deepening Industry-Education Integration to Construct Digital Literacy-Oriented Cultivation Objectives for Interdisciplinary Talent

Against the backdrop of the digital cultural tourism era, constructing digital literacy-oriented cultivation objectives for interdisciplinary talent necessitates systematically deconstructing their core components across three dimensions: knowledge, competencies, and attributes. This deconstruction process follows the methodological principle of "demand orientation, evidence-based practice." Through comprehensive occupational demand surveys and analysis, it dynamically anchors to industry-specific talent competency requirements, establishing a scientifically complete objective system for higher vocational tourism curricula. Specifically, within the knowledge dimension, objectives should encompass a composite knowledge system integrating "digital technology knowledge -cultural tourism expertise-interdisciplinary knowledge": Mastery must include both the core principles and application scenarios of technologies such as big data analytics, artificial intelligence, and digital twins, and proficiency in frontier developments within specialized domains like tourism destination management and digital preservation of cultural heritage. Concurrently, interdisciplinary knowledge from communication studies, psychology, and design must be synthesized to address innovative demands in cultural tourism formats. The competency dimension requires a hierarchically designed structure of "Generic Competencies-Professional Competencies-Developmental Competencies": Generic Competencies include fundamental digital survival skills such as digital tool operation, information retrieval, and data filtering. Professional Competencies focus on digital technology

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application capabilities within cultural tourism contexts, exemplified by OTA data-based market forecasting and virtual reality tourism product development. Developmental Competencies emphasize innovative problem-solving abilities for complex challenges, such as enhancing coordination efficiency across cultural tourism industry chains through digital technologies. The attribute dimension must transcend the instrumental rationality of technology tools, strengthening: digital ethics awareness, digital social responsibility, and lifelong learning capacity to adapt to technological iterations. This preserves humanistic care and sustainable development principles during digital transformation. Such multidimensional objective setting must be grounded in systematic cultivation frameworks. However, current educational practices often result in objectives detached from practical realities due to supply-demand disjunction.

Consequently, there is an urgent need to construct a dynamic digital literacy cultivation system guided by industry demands, implementing objectives through a closed-loop mechanism of "demand anchoring-standard transformation-curriculum restructuring." First, during the initial phase of establishing the cultivation objective system, core digital literacy competencies must be precisely extracted based on occupational requirements. This involves: Crawling recruitment data for emerging positions (e.g., digital marketing specialists, smart scenic area administrators) from platforms like Zhaopin and BOSS Zhipin, Applying text mining techniques to identify high-frequency skill demands, Integrating format analysis from the Ministry of Culture and Tourism's Digital Cultural Tourism Industry Development Report with corporate internship requirements to distill core digital literacy elements, Collaboratively developing forward-looking and industry-specific talent cultivation objectives with industry experts and corporate executives. Second, establish industry-education collaborative competency framework conversion standards. Reference the Ministry of Education's requirements for the new "Tourism Digital Operations" specialization, Jointly develop the Digital Cultural Tourism Occupational Competency Standards with enterprises like Ctrip and Qunar, Refine digital skills for cultural tourism professionals into observable indicators such as: "Ability to perform tourist source market forecasting using OTA data analysis tools" "Ability to create digital twin models for scenic areas" Align these with course modules like "Smart Tourism Technology Application" and "Tourism Big Data Analysis" to form a competency-to-curriculum mapping matrix, implement a dynamic curriculum update mechanism through industry-academia collaboration to ensure synchronization with emerging fields like smart tourism and virtual tourism.

3.2 Restructuring Modular Curriculum Systems to Integrate Core Digital Literacy Elements

A modular curriculum system serves as the functional conduit bridging industry demands and talent cultivation. It enables timely content adjustments through adding new modules or updating existing ones in response to evolving tourism sector requirements. This maintains instructional timeliness and cutting-edge relevance, thereby enhancing students' employ ability. [6] The construction of a "4+3+N" model for tourism management curricula involves establishing: Foundational Core Courses, Professional Core Courses, and Specialized Track Course Systems. Implementation framework: Foundational Core Courses must reflect tourism industry practices through three pillars: tourist behavior analysis (psychological-behavioral logic); destination spatial aggregation-dispersion analysis; and operational management analytics. Professional Core Courses should cover three domains: tourism enterprise operations, scenic area management, and tourism community development. Specialized Track Courses require: deep excavation of regional advantages; continuous integration with industrial strengths; active incorporation of disciplinary expertise; and sustained development of academic traditions. [7] Take Zhejiang University of Tourism as an example. This institution has reorganized its curriculum system through the method of subject clusters. It has upgraded the traditional linear framework of "basic courses+discipline foundation courses+professional courses" into a multi-dimensional structure of "general education courses+basic courses+platform courses+module courses". Courses are designed through integrated cultural-tourism and education-research perspectives, establishing curriculum-centered interdisciplinary convergence, cultural-tourism fusion, and skill interaction to achieve simultaneous advancement in knowledge structures and professional competencies. During the process of launching the humanities education courses, the college collaborated with the Liangzhu Site Management Committee (a member organization of this institution)to obtain valuable teaching resources related to the Liangzhu culture. The jointly developed "Chinese Liangzhu Culture" course not only enhanced the uniqueness of the school but also strengthened the integration of industry, academia and research.

The efficacy of modular curriculum systems relies not only on structural optimization but crucially on competency transformation through practical teaching frameworks. Firstly, when constructing such

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a framework, it is necessary to follow the principle of "certification integration after industry competition", converting real industry scenarios into teaching tools in order to establish a comprehensive ability cultivation matrix that combines virtual and reality, as well as integrates industry and education. Higher vocational institutions should adopt technological tools like VR scenic area management systems and cultural tourism digital twin platforms to create highly simulated smart tourism operation environments. This enables students to master digital technology application logic within cultural tourism contexts through immersive experiential learning. Secondly, through the integration of education and industry, a "industry-post-competition-certification" curriculum system covering four stages is established for each professional discipline group. This involves: Adopting project-based productive activities as instructional units, Converting occupational standards (e.g., OTA operations, tourism short video production) into teachable modules, Constructing vertically and horizontally integrated specialized cluster curriculum systems, Refining curriculum standards for disciplinary clusters.[8] Finally, deepen international perspectives within industry-education integration by: exploring transnational digital literacy cultivation platforms co-built with global cultural tourism enterprises and vocational institutions, Introducing cutting-edge international technical standards and curriculum frameworks, Cultivating technically skilled talent with global competitiveness.

3.3 Innovating Digital Teaching Models to Construct Virtual-Real Integrated Pedagogical Systems

The implementation of modular curriculum systems necessitates deep industry-education integration as its foundation. Through bidirectional empowerment between institutions and industries, systematic reconstruction of curriculum structures must explore innovative models for fusing emerging technologies with courses. First, leverage metaverse and generative AI technologies to create interactive virtual-physical learning scenarios: Use metaverse platforms to build immersive environments like digital twin scenic areas and virtual cultural heritage spaces, Develop course modules such as "Virtual Scenic Area Operations" and "Digital Tour Design", Enable students to master full-process smart cultural tourism services within highly simulated digital contexts. Simultaneously, employ generative AI tools to enhance educational content production: Automatically generate personalized case libraries, Intelligently simulate tourist inquiry scenarios, Increase instructional relevance and interactivity. Second, drive pedagogical implementation through deep industry-education integration. Drawing on the "teaching factory" concept of Singapore Institute of Technology, higher vocational colleges should: jointly establish on-campus enterprise training platforms with enterprises such as Ctrip and Wuzhen Tourism, integrate intelligent scenic area management systems and online tourism data analysis modules into the teaching process, and establish a real-time data sharing and teaching scenario linkage mechanism. For instance, deploy a virtual reality scenic area management system to simulate the scheduling decisions during peak hours, utilize the cultural tourism digital twin platform for destination marketing simulations, and enable students to master the digital operation logic through practical experiences combining virtual and reality. Third, establish a digital literacy improvement mechanism for teachers based on the "Lausanne Model". Reference the Qualified Learning Facilitator (QLF) certification system of Switzerland's École hôtelière de Lausanne (EHL) to redefine teachers' role positioning and competency standards. QLF training content primarily covers: Role positioning of instructors and students, Questioning techniques in classroom settings, Classroom time management strategies, One-on-one instructional methodologies, One-to-many teaching approaches, Development of teaching plans, Examination formats and test item selection.[9] The training emphasizes transitioning teachers from knowledge transmitters to learning facilitators. Through modules on questioning techniques optimization, instructional scenario design, and personalized tutoring, it cultivates educators' capacity to conduct blended learning using digital tools. In practice, Establish Dual-Teacher Collaborative Innovation Classes comprising enterprise technical experts and faculty. Implement a project-based+apprenticeship-based training model. Example applications, Teachers leading cultural tourism enterprise digital transformation projects may adopt project-based teaching. Students participate as project assistants in authentic tasks, with outcomes convertible into course cases or vocational skills competition entries. Concurrently, curricular design must prioritize ethical objectives: Embed data privacy protection and digital ethics into AR/VR application courses. Integrate compliance checks (e.g., digital copyright, online speech norms) into practical projects like tourism livestreaming.

3.4 Refining Dynamic Evaluation Systems to Establish Multi-Dimensional Industry Demand Feedback Mechanisms

The 2025 Guidelines on Accelerating Educational Digitalization issued by the Ministry of

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Education and eight other ministries call for strengthening: Digital education governance frameworks, Operational mechanisms, Evaluation systems. Within the implementation process of integrating digital literacy into higher vocational tourism curricula, an industry demand feedback mechanism must be established. This requires constructing a multi-dimensionally linked evaluation system to achieve precise alignment between educational chains and industry chains through data-driven dynamic feedback. First, semantic analysis technology is employed to extract high-frequency digital skill demands from corporate reports. This data is then cross-validated with course objective achievement data to identify lags between the curriculum system and industry requirements. Second, a two-way comparison mechanism is constructed between enterprise talent quality reports and educational quality annual reports. Data mining technology is used to analyze disconnections between course modules and gaps in digital literacy dimensions, forming the basis for the dynamic adjustment of training programs. Building on this, an enterprise-participated course certification system is introduced. Stakeholders such as cultural tourism enterprises and digital technology service providers are invited to conduct third-party evaluations of course objectives, content structure, and practical projects. The results of this corporate certification serve as crucial evidence for course iteration, ensuring that digital literacy cultivation resonates with genuine industry needs. At the same time, it is necessary to establish a digital literacy growth tracking system based on blockchain. This system records students' competency performance in scenarios like virtual simulation training and digital project implementation, creating a traceable "Digital Literacy Growth Portfolio". Furthermore, intelligent diagnostic models analyze learning behavior data to generate personalized capability enhancement recommendations, pinpointing students' specific digital skill deficiencies.

4. Conclusion and Outlook

This study systematically analyzes barriers to integrating digital literacy into higher vocational tourism curricula against the backdrop of rapid digital cultural tourism industry development, proposing targeted breakthrough pathways. Key findings reveal four core contradictions in current higher vocational tourism education: the training objective of "digital+tourism" for comprehensive talents is too simplistic, resulting in a mismatch between the curriculum and the industry; the traditional course content is outdated and lags behind the technological iteration of the industry, and the element of digital literacy is insufficiently integrated; teaching models prioritizing tool operation over cognitive development, leading to ineffective pedagogical implementation; a static and single-dimensional assessment mechanism lacking dynamic feedback from industry participation. To address these challenges, this study proposes the following suggestions: deepen the integration of education and industry, and restructure the training goals based on capabilities; build a modular curriculum system that includes core digital literacy elements; innovate teaching models that combine virtual and real-world elements to enhance practical skills; improve the dynamic assessment system to strengthen the connection with industry demands. These approaches provide a systematic solution for the digital transformation of higher vocational tourism education by strengthening industry-education cooperation, optimizing the curriculum structure, integrating technological resources, and using data-driven feedback. They have significant practical significance for promoting the integration of the education chain and the industry chain.

Looking to the future, the continuous development of the digital cultural tourism industry will constantly give rise to new forms and occupations. Higher vocational tourism education must maintain dynamic adaptability in the cultivation of digital literacy: it needs to respond to the impact of technology on courses, such as generative artificial intelligence and the metaverse, which may reshape the cultural tourism service scenarios. This requires the curriculum system to have a rapid response mechanism. Deepen the integration of education and industry: Solving practical problems such as benefit distribution and intellectual property rights between institutions and enterprises is crucial for building a sustainable collaborative ecosystem. Institutionalize teacher development: Establish institutionalized mechanisms for enterprise practice and incentive plans to facilitate teachers' transformation from knowledge transmitters to dual-qualified learning guides. Strengthen digital ethics education: Cultivate capabilities in data security and ethical awareness to reduce potential risks in technology application. Future research should further explore: The effectiveness assessment of modular courses, longitudinal tracking of students' digital literacy development, and innovative models for cultivating digital cultural tourism talents with global competitiveness. This will provide continuous theoretical and practical guidance for the high-quality development of higher vocational tourism education.

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References

[1] Xu Feifei, He Yunmeng. New Opportunities, Challenges and Ideas for the Innovation and Development of Digital Tourism and Culture [J]. Tourism Tribune, 2021, 36(07): 9-10.
[2] Guo Shanshan, Yan Xiaoyan, Wu Yanyan. Talent Training Strategy of Higher Vocational Tourism Education Based on Study Tourism [J]. Journal of Shanxi University of Finance and Economics, 2020, 42(S2): 91-94.
[3] Shi Zijiao, Zhang Ying, Wang Zhenkun. Research on the Cultivation Path of Digital Literacy for Vocational College Tourism Majors from the Perspective of Industry-Education Integration [J]. Tourism Overview, 2024, (13): 58-60.
[4] Sun Wenxiao. Reform of Tourism Education Practice in the Digital Age——A Case Study of the "Tour Guide Operations" Course [J]. Journal of Yantai Vocational College, 2024, 19(02): 75-79.
[5] Zhou Jinrong, Luo Tongbiao, Tang Zhihong, et al. Research on Information-Based Teaching from the Perspective of Value Rationality [J]. Journal of Tianshui Normal University, 2020, 40(02): 114-117.
[6] Chen Yaping. Research on the Construction of Modular Curriculum System for Higher Vocational Tourism Management Major under the Background of Study Tours——Taking Suzhou College of Information Technology as an example [J]. Journal of Multimedia and Network-based Education in China (Mid-Year Edition), 2025, (01): 43-46.
[7] Tian Li, Si Pu Hai, Liu Liang. Cognitive and Reconstruction of the Undergraduate Curriculum System for Tourism Management [J]. China University Teaching, 2023, (05): 28-34.
[8] Zhou Hong, Chen Yunsheng, Zhang Jinlong, et al. On Strategies for the Tourism Major Cluster Coupled with Industrial Chain under the Background of Production-education Integration——Taking Xinjiang Vocational University as an Example [J]. Journal of Xinjiang Vocational University, 2023, 31(04): 12-18.
[9] Wang Pengfei, Wu Qiongyao. Application of QLF Training from Lausanne School of Hotel Management in Classroom Teaching of Hotel Management Major [J]. Tourism Review (Second Half Issue), 2014, (02): 285-286+288.