

Research on the Collaborative Mechanism and Path of Industry-University Integration in Higher Vocational Tourism Management Specialty Under the New Development Pattern

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Abstract: *The new development pattern, guided by "taking the domestic big cycle as the main body and promoting the domestic and international double cycles to interact with each other", promotes the transformation of the tourism industry towards digitalization, quality-oriented development and integration. It puts forward new requirements for the talent training of higher vocational tourism management specialty, such as the integration of "posts, courses, competitions and certificates", prominent practical ability and adaptation to industrial needs. As the core path for vocational education to connect with industrial development, the improvement of the collaborative mechanism of industry-university integration directly determines the talent training quality and industrial adaptability of higher vocational tourism management specialty. Combined with the transformation characteristics of the tourism industry and the reform needs of higher vocational tourism education under the new development pattern, this paper analyzes the existing problems in the collaborative mechanism of industry-university integration in higher vocational tourism management specialty, such as unclear rights and responsibilities of collaborative subjects, weak interest linkage, insufficient resource integration and lack of evaluation system. It constructs a multi-party collaborative mechanism of "government guidance, school leadership, enterprise main body and industry coordination", and puts forward targeted optimization paths, providing theoretical support and practical reference for higher vocational tourism management specialty to deepen industry-university integration and cultivate high-quality technical and skilled talents adapting to the new development pattern.*

Keywords: New development pattern; Higher vocational tourism management; Industry-university integration; Collaborative mechanism; Talent training.

1. INTRODUCTION

1.1 Research Background

At present, China's economic development has entered a new development stage. The accelerated construction of the new development pattern has promoted in-depth adjustments in various industries. As an important carrier to stimulate domestic demand, promote consumption and link the domestic and international double cycles, the tourism industry is undergoing profound transformation. On the one hand, the domestic tourism market has continued to recover, and new formats such as smart tourism, rural tourism, health tourism and study tourism have developed rapidly, putting higher requirements on the professional skills, innovation ability and comprehensive quality of tourism practitioners. On the other hand, the international tourism market has gradually recovered, cross-border tourism and cultural tourism exchanges have become increasingly frequent, requiring compound tourism talents with cross-cultural communication ability and international service vision. Data show that in 2024, the number of inbound tourists in China reached 131.9 million, an increase of 61% year-on-year. The recovery and upgrading of the tourism industry have spawned a huge demand for high-quality technical and skilled talents.

As the core position for cultivating front-line technical and skilled talents in the tourism industry, the talent training quality of higher vocational tourism management specialty is directly related to the high-quality development of the tourism industry. Industry-university integration and school-enterprise cooperation are the basic school-running mode of vocational education, and also the key path for higher vocational tourism management specialty to realize "industry-education connection and post-course integration". However, under the new development pattern, the traditional industry-university integration mode can no longer adapt to the transformation needs of the tourism industry. School-enterprise cooperation has problems such as "enthusiastic schools but cold enterprises", insufficient collaboration and insufficient depth, leading to the disconnection between talent training and post needs, which is difficult to meet the urgent demand for talents in the digitalization and quality-oriented development of the tourism industry. Therefore, exploring the collaborative mechanism and

optimization path of industry-university integration in higher vocational tourism management specialty under the new development pattern has become an important topic in the reform of higher vocational tourism education, and also an inevitable requirement for promoting the high-quality development of the tourism industry.

1.2 Research Significance

1.2.1 Theoretical Significance

It enriches the theoretical system of industry-university integration in vocational education under the background of the new development pattern, clarifies the rights and responsibilities and operation logic of multiple collaborative subjects in industry-university integration, constructs a collaborative mechanism of industry-university integration adapting to the transformation of the tourism industry, and provides theoretical reference and paradigm for the research on industry-university integration of similar specialties. At the same time, it breaks through the traditional "supply-demand" dual analysis framework, expands the research dimension of industry-university integration in higher vocational tourism education from the perspective of multi-subject collaboration, and enriches the connotation of vocational education adaptability theory.

1.2.2 Practical Significance

Aiming at the prominent problems existing in the industry-university integration of higher vocational tourism management specialty, putting forward feasible collaborative paths can effectively promote in-depth school-enterprise cooperation, realize the organic connection of the education chain, talent chain, industrial chain and innovation chain, improve the quality of talent training, and make graduates better adapt to the needs of tourism industry posts. At the same time, through the collaborative development of industry-university integration, it helps tourism enterprises solve the problems of talent shortage and insufficient technological innovation, promotes the transformation and upgrading of the tourism industry, and serves the construction of the new development pattern. In addition, it can provide data support and practical reference for local governments to formulate plans for the coordinated development of vocational education and the tourism industry.

1.3 Research Status at Home and Abroad

1.3.1 Research Status Abroad

Against the background of globalization and industrial upgrading, the interactive development of vocational education and regional economy has become a hot international research topic. The integration of industry and education in foreign vocational education started early, forming mature models and experiences. For example, the German "dual system" model emphasizes the in-depth participation of enterprises in vocational education, embeds practical teaching into the industrial process, and enterprises participate in the whole process of talent training program formulation, curriculum development, practical teaching and other links, forming a "school + enterprise" dual-subject collaborative education mechanism. American community colleges adjust their professional settings dynamically according to local industrial needs through the "school-enterprise-government" tripartite cooperation mechanism, forming a closed loop of "demand identification - curriculum development - talent delivery". The British "apprenticeship system" reform formulates professional standards through industry associations, promotes the connection between vocational education and industrial certification system, and realizes the precise matching between talent training and post needs. On the whole, foreign research focuses on multi-subject collaboration, interest linkage, mechanism guarantee and other aspects, providing useful reference for the integration of industry and education in higher vocational tourism management specialty in China. However, foreign models are different from China's institutional environment, tourism industry characteristics and vocational education system, and cannot be directly copied and applied.

1.3.2 Research Status in China

In recent years, domestic scholars have carried out a lot of research on the integration of industry and education in higher vocational tourism management specialty. Some scholars focus on the innovation of industry-university integration models, proposing models such as "order-based", "modern apprenticeship system" and "school-enterprise co-construction of industrial colleges", which have effectively improved students' practical ability and employment quality. Some scholars have analyzed the problems existing in industry-university integration, and believe that insufficient depth of school-enterprise cooperation, loose interest linkage and

imperfect evaluation system are the main bottlenecks. Other scholars have put forward optimization paths from the policy level and resource integration level, emphasizing the importance of government guidance, school-enterprise collaboration and resource sharing. However, most of the existing research focuses on a single subject or a single link, pays insufficient attention to the changes in talent demand brought about by the transformation of the tourism industry under the new development pattern, and lacks systematic research on the multi-subject collaborative mechanism of industry-university integration. A comprehensive and multi-level collaborative mechanism and path system adapting to the new development pattern has not yet been formed, and the pertinence and practicality of the research still need to be improved.

1.4 Research Methods and Technical Route

1.4.1 Research Methods

This paper adopts a combination of multiple research methods to ensure the scientificity and practicality of the research. First, the literature research method, which systematically sorts out the policy documents, academic papers and monographs related to the new development pattern, industry-university integration and talent training of higher vocational tourism management specialty, laying a theoretical foundation for the research. Second, the questionnaire survey method, which selects 30 higher vocational tourism management specialties and 50 tourism enterprises in China to carry out a questionnaire survey to understand the current situation, existing problems and needs of the collaborative development of industry-university integration. Third, the interview method, which interviews the person in charge of relevant government departments, college teachers and enterprise managers to obtain first-hand data on the collaborative development of industry-university integration, enhancing the pertinence of the research.

1.4.2 Technical Route

This paper first sorts out relevant literature and policies, clarifies the research background, significance and research status at home and abroad. Secondly, it analyzes the existing problems and causes of the collaborative mechanism of industry-university integration in higher vocational tourism management specialty. Then, it constructs the collaborative mechanism of industry-university integration in higher vocational tourism management specialty under the new development pattern. Finally, it puts forward the optimization path of the collaborative mechanism, and summarizes the research conclusions and prospects.

2. REALISTIC DEMAND AND EXISTING PROBLEMS OF COLLABORATIVE DEVELOPMENT OF INDUSTRY-UNIVERSITY INTEGRATION IN HIGHER VOCATIONAL TOURISM MANAGEMENT SPECIALTY UNDER THE NEW DEVELOPMENT PATTERN

2.1 Realistic Demand for Collaborative Development of Industry-University Integration Under the New Development Pattern

2.1.1 New Demand for Talent Training from Industrial Transformation

Under the new development pattern, the tourism industry is transforming from traditional sightseeing tourism to leisure vacation tourism, smart tourism and cultural tourism, with new posts such as smart scenic spot operation, tourism e-commerce, health services and cross-border tourism services emerging. It puts higher requirements on talents' professional skills (such as digital operation and cross-cultural communication), innovation ability and comprehensive quality. This requires higher vocational tourism management specialty to carry out in-depth cooperation with tourism enterprises through industry-university integration, integrate enterprise post needs into the whole process of talent training, and cultivate compound technical and skilled talents who "understand technology, are good at service and can innovate".

2.1.2 Internal Demand for the Reform of Higher Vocational Education

The core goal of higher vocational education is to cultivate high-quality technical and skilled talents, and industry-university integration is the core direction of the reform of higher vocational education. Under the new development pattern, higher vocational tourism management specialty is facing problems such as backward talent

training mode, disconnection between curriculum system and industry, and weak practical teaching. It is urgent to optimize the talent training mode, update curriculum content and strengthen practical teaching through the collaborative development of industry-university integration, so as to improve professional competitiveness and talent training quality, and realize a virtuous cycle of "promoting education through industry and invigorating industry through education".

2.1.3 Talent and Technical Demand for Enterprise Development

In the process of transformation and upgrading, tourism enterprises are facing problems such as talent shortage and insufficient technological innovation. They need to carry out in-depth cooperation with higher vocational colleges, rely on the teachers and scientific research resources of higher vocational colleges to carry out staff training, technological research and development and other work. At the same time, they can reserve talents in advance through industry-university integration, alleviate the pressure of talent shortage and improve the core competitiveness of enterprises.

2.2 Main Problems Existing in the Collaborative Mechanism of Industry-University Integration in Higher Vocational Tourism Management Specialty at Present

2.2.1 Unclear Rights and Responsibilities of Collaborative Subjects and Insufficient Linkage Efficiency

At present, the industry-university integration of higher vocational tourism management specialty is mainly led by schools, with low participation of governments, enterprises and industry associations, and unclear rights and responsibilities of each subject. At the government level, there is a lack of effective guidance and overall coordination mechanism, insufficient policy support, and inadequate incentive measures for enterprises to participate in industry-university integration. At the enterprise level, most enterprises regard industry-university integration as a "social responsibility" rather than an internal demand for their own development, with low enthusiasm in participating in industry-university integration. They mostly stay in shallow cooperation such as providing internships and donating equipment, and have insufficient involvement in core links such as talent training program formulation, curriculum development and practical teaching, forming a situation of "enthusiastic schools but cold enterprises". At the industry association level, it has not fully played the role of a bridge and link, and lacks functions in standardizing industry standards, coordinating school-enterprise cooperation and carrying out skill evaluation. At the school level, there is a lack of awareness and ability to take the initiative to connect with the industry, and the talent training mode is disconnected from the industrial demand, making it difficult to meet the enterprise post needs. This unclear division of rights and responsibilities makes it difficult for all subjects to form a collaborative joint force, resulting in low linkage efficiency of industry-university integration.

2.2.2 Weak Interest Linkage Mechanism and Insufficient Cooperation Sustainability

The core of the collaborative development of industry-university integration is to establish a stable interest linkage mechanism to achieve mutual benefit and win-win results among all subjects. However, in the current industry-university integration of higher vocational tourism management specialty, the interest linkage mechanism is not perfect, and the interest demands of each subject have not been effectively met. The core demand of schools is to improve the quality of talent training and enhance professional competitiveness. The core demand of enterprises is to obtain high-quality talents, reduce talent training costs and solve technical problems. The core demand of the government is to promote industrial upgrading and employment. However, there is a lack of effective interest sharing and risk sharing mechanisms among the three. The investment of enterprises in industry-university integration is difficult to be converted into stable talent dividends or policy benefits, and schools cannot fully guarantee the right of speech of enterprises in teaching, leading to low enthusiasm of enterprises in participating in industry-university integration. Cooperation mostly stays in short-term cooperation, making it difficult to form a long-term and stable collaborative cooperation relationship. Industry-university integration presents the characteristics of "fragmentation" and "short-termization".

2.2.3 Insufficient Resource Integration and Low Allocation Efficiency

The core of industry-university integration is to realize the integration and sharing of educational resources and industrial resources. However, in the current industry-university integration of higher vocational tourism management specialty, the problem of insufficient resource integration is prominent. On the one hand, the teachers, teaching facilities and scientific research resources of schools have not been effectively integrated with the

practical resources, technical resources and post resources of enterprises, resulting in the coexistence of "idle resources" and "resource shortage": the training facilities of schools are disconnected from the actual industry and have low utilization rate; the practical post resources of enterprises have not been fully utilized, making it difficult to meet the needs of students' practical teaching. On the other hand, the integration of digital resources is insufficient. The digital transformation of the tourism industry under the new development pattern requires the introduction of digital resources into industry-university integration. However, at present, most higher vocational tourism management specialties and enterprises have not jointly built digital training platforms or shared digital teaching resources, resulting in students' difficulty in mastering digital operation skills and the disconnection between talent training and industrial needs. In addition, the sharing of resources between schools and enterprises in curriculum resource development and teacher training is insufficient, which further reduces the efficiency of resource allocation.

2.2.4 Lack of Evaluation System and Inadequate Supervision and Guarantee

A sound evaluation system and supervision mechanism are important guarantees for the efficient operation of the collaborative mechanism of industry-university integration. However, the current industry-university integration of higher vocational tourism management specialty lacks a scientific and perfect evaluation system and supervision mechanism. First, the evaluation subject is single, mostly based on the school's self-evaluation, and governments, enterprises, industry associations and other subjects do not participate in the evaluation, resulting in the lack of objectivity and comprehensiveness of the evaluation results. Second, the evaluation content is one-sided, focusing more on surface indicators such as the number of talents trained and the internship employment rate, and insufficient attention to core indicators such as talent training quality, enterprise satisfaction and industrial service capacity. Third, the supervision mechanism is not perfect, and there is a lack of effective supervision over the cooperation process and results of industry-university integration, leading to some school-enterprise cooperation being a mere formality, which is difficult to achieve the core goal of industry-university integration. At the same time, the practical evaluation system has a tendency of "emphasizing form over effect", and the evaluation indicators are still mainly based on internship reports and attendance data, without incorporating enterprise post ability standards and professional quality requirements into the core evaluation dimensions.

2.2.5 Lagging Construction of Teachers' Team and Shortage of "Double-Qualified" Teachers

"Double-qualified" teachers are the core force of collaborative education through industry-university integration. However, the construction of teachers' team in higher vocational tourism management specialty is lagging behind, with insufficient number and low quality of "double-qualified" teachers. On the one hand, most on-campus teachers lack front-line practical experience in the tourism industry, have an in-depth understanding of the latest trends and post needs of the tourism industry, and are difficult to carry out targeted practical teaching. On the other hand, the number of part-time teachers from enterprises is insufficient, and they lack systematic teaching ability training, making it difficult to transform enterprise practical experience into standardized teaching content, leading to the disconnection between theoretical teaching and practical teaching. In addition, there is a lack of effective teacher exchange mechanism between schools and enterprises, and the channels for on-campus teachers to practice in enterprises and enterprise technical backbones to teach in schools are not smooth, which further exacerbates the shortage of "double-qualified" teachers.

2.3 Analysis of the Causes of the Problems

2.3.1 Imperfect Policy System

Although the state has issued a series of policy documents supporting industry-university integration, there are insufficient special policies for higher vocational tourism management specialty, and the supporting policies of local governments are not perfect. The implementation rate of incentive measures such as tax reductions and exemptions and financial subsidies for enterprises to participate in industry-university integration is low, and the policy dividend has not been effectively converted into the motivation for enterprises to participate. At the same time, the policy implementation lacks an effective supervision mechanism, making it difficult for the policies to be implemented effectively and to guide all subjects to take the initiative to participate in the collaborative development of industry-university integration.

2.3.2 Deviations in Ideological Cognition

At the school level, some higher vocational colleges still have the traditional concept of "emphasizing theory over practice", insufficient understanding of the importance of industry-university integration, and lack of awareness of taking the initiative to connect with and serve the industry. At the enterprise level, some tourism enterprises regard industry-university integration as an "additional burden", ignoring the important significance of industry-university integration for talent reserve and technological innovation, and lack the internal motivation to participate in industry-university integration. At the industry association level, it has insufficient understanding of its role as a bridge and link in industry-university integration, and has not taken the initiative to play a coordinating and guiding role.

2.3.3 Disconnection Between Talent Training and Industrial Demand

The talent training mode of higher vocational tourism management specialty is backward, and the curriculum system is not updated in a timely manner, failing to fully integrate the needs of new formats, new technologies and new posts in the tourism industry, leading to the disconnection between talent training and enterprise post needs, and the lack of substantial content support for industry-university integration. At the same time, the practical teaching link is weak, lacking in-depth cooperation with enterprises, and students' practical ability is difficult to meet the requirements of enterprise posts, which further reduces the enthusiasm of enterprises to participate in industry-university integration.

3. CONSTRUCTION OF THE COLLABORATIVE MECHANISM OF INDUSTRY - UNIVERSITY INTEGRATION IN HIGHER VOCATIONAL TOURISM MANAGEMENT SPECIALTY UNDER THE NEW DEVELOPMENT PATTERN

Combined with the transformation needs of the tourism industry and the current situation of industry-university integration in higher vocational tourism management specialty under the new development pattern, a multi-party collaborative mechanism of "government guidance, school leadership, enterprise main body and industry coordination" is constructed, clarifying the rights and responsibilities of each subject, establishing an operation mechanism of interest sharing and risk sharing, realizing the organic connection of the education chain, talent chain, industrial chain and innovation chain, and promoting the in-depth development of industry-university integration.

3.1 Core Goal of the Collaborative Mechanism

The core goal of the collaborative mechanism of industry-university integration in higher vocational tourism management specialty under the new development pattern is to adapt to the digitalization, quality-oriented development, integration and internationalization transformation needs of the tourism industry. Through multi-subject collaboration, optimize the talent training mode, improve the quality of talent training, and cultivate high-quality technical and skilled talents with practical ability, innovation ability and cross-cultural communication ability. At the same time, promote school-enterprise cooperation in technological research and development, staff training and other work, improve the school's ability to serve the industry and the enterprise's core competitiveness, realize a virtuous cycle of "symbiosis between school and region, win-win between school and enterprise, and integration between industry and education", and provide talent support and intellectual guarantee for the high-quality development of the tourism industry under the new development pattern.

3.2 Collaborative Subjects and Their Rights and Responsibilities

3.2.1 Government

Play a guiding, overall planning and guarantee role. It is responsible for formulating relevant policies on industry-university integration, increasing policy support and capital investment, improving incentive mechanisms, and guiding enterprises, schools and industry associations to participate in industry-university integration. It coordinates the tourism industry resources and higher vocational education resources in the region, builds an industry-university integration docking platform, and standardizes the behavior of industry-university integration cooperation. It supervises the implementation of industry-university integration policies and the operation of the collaborative mechanism, and protects the legitimate rights and interests of all subjects.

3.2.2 Schools

Play a leading role and assume the core responsibility of talent training. According to the needs of the tourism industry and enterprise posts, formulate talent training programs, optimize the curriculum system, and carry out teaching reform. Strengthen the construction of "double-qualified" teachers' team, promote on-campus teachers to practice in enterprises and enterprise technical backbones to teach in schools. Co-build training bases and industrial colleges with enterprises to carry out practical teaching and technological research and development. Connect with enterprise talent needs, transport high-quality technical and skilled talents for enterprises, and provide technical support and staff training services.

3.2.3 Enterprises

Play the main role and deeply participate in talent training and industrial cooperation. According to the enterprise post needs, participate in the formulation of talent training programs, curriculum development, practical teaching and other links, and provide practical posts, training equipment, enterprise tutors and other resources. Accept students for internships and employment, and participate in the construction of "double-qualified" teachers' team. Carry out cooperation in technological research and development and product innovation with schools, and use the school's scientific research resources to solve enterprise technical problems. Enjoy relevant government incentive policies, reduce talent training costs, and improve the core competitiveness of enterprises.

3.2.4 Industry Associations

Play a coordinating, bridging and standardizing role. Formulate tourism industry professional standards and talent training standards, and guide schools to optimize talent training programs and curriculum systems. Coordinate school-enterprise cooperation, build a school-enterprise docking bridge, and solve contradictions and problems in school-enterprise cooperation. Carry out industry skill evaluation, vocational skill competitions and other activities to improve the professional skills of students and teachers. Feedback the latest industry development trends and talent demand information, and provide reference for government policy formulation, school talent training and enterprise talent recruitment.

3.3 Core Content of the Collaborative Mechanism

3.3.1 Communication and Coordination Mechanism

Establish a four-party communication and coordination mechanism of "government-school-enterprise-industry association", hold regular collaborative work meetings, inform the progress of industry-university integration, communicate talent training needs and problems in the cooperation process, and consult and solve relevant issues. Build a digital communication platform to realize information sharing and efficient linkage between all subjects, ensuring the efficient operation of the collaborative mechanism.

3.3.2 Interest Sharing Mechanism

Clarify the interest demands of each subject, and establish an interest sharing mechanism of "talent sharing, resource sharing and achievement sharing". Schools improve the quality of talent training and professional competitiveness through industry-university integration, and obtain enterprise resource support and government policy support. Enterprises obtain high-quality talents, technical support and policy preferences through industry-university integration, and reduce talent training costs. The government promotes industrial upgrading and employment through industry-university integration, and achieves the goal of economic and social development. Industry associations improve the overall quality and competitiveness of the industry through industry-university integration. At the same time, establish an interest distribution mechanism to reasonably distribute the technical achievements and training benefits generated by school-enterprise cooperation, and protect the legitimate rights and interests of all subjects.

3.3.3 Resource Integration Mechanism

Establish a school-enterprise resource integration and sharing mechanism to realize the optimal allocation of educational resources and industrial resources. Schools open their teachers, teaching facilities and scientific research resources to provide enterprises with staff training, technological research and development and other services. Enterprises open their practical posts, training equipment and technical resources to provide schools with practical teaching, teacher training and other support. The government coordinates the resources in the region,

builds an industry-university integration resource sharing platform, and promotes the sharing and utilization of digital resources, training resources and teacher resources.

3.3.4 Evaluation and Supervision Mechanism

Establish a multi-evaluation system with "four-party participation and multi-dimensional evaluation", clarify the evaluation subject, evaluation content and evaluation standards, and comprehensively evaluate the operation effect of the collaborative mechanism of industry-university integration, the quality of talent training and the effect of school-enterprise cooperation. The evaluation subjects include the government, schools, enterprises and industry associations. The evaluation content covers core indicators such as talent training quality, enterprise satisfaction, industrial service capacity and resource integration efficiency. Establish a regular supervision mechanism. The government is responsible for supervising the implementation of industry-university integration policies and the operation of the collaborative mechanism. Industry associations are responsible for supervising school-enterprise cooperation behavior. Schools and enterprises supervise each other to ensure that the industry-university integration cooperation is implemented in place and achieves actual results.

3.3.5 Risk Prevention and Control Mechanism

Establish a risk prevention and control mechanism for industry-university integration, clarify the risk responsibilities of each subject, and prevent various risks in the cooperation process. Formulate response measures for risks such as contract disputes in school-enterprise cooperation, substandard talent training quality and waste of resource investment. Establish a risk early warning mechanism to timely discover and solve problems in the cooperation process, ensuring the stable operation of the collaborative mechanism of industry-university integration.

4. OPTIMIZATION PATH OF COLLABORATIVE DEVELOPMENT OF INDUSTRY - UNIVERSITY INTEGRATION IN HIGHER VOCATIONAL TOURISM MANAGEMENT SPECIALTY UNDER THE NEW DEVELOPMENT PATTERN

4.1 Strengthen Government Guidance and Improve the Policy Guarantee System

4.1.1 Improve the Policy Support System

The government should formulate targeted industry-university integration policies according to the transformation needs of the tourism industry and the reform needs of higher vocational education under the new development pattern, clarify the rights and responsibilities of each subject, increase capital investment in the industry-university integration of higher vocational tourism management specialty, and set up a special fund for industry-university integration to support the co-construction of training bases, the development of characteristic courses and the training of "double-qualified" teachers by schools and enterprises. At the same time, improve the incentive policies, give preferential treatment such as tax reductions and exemptions, financial subsidies and professional title evaluation to tourism enterprises participating in industry-university integration, and stimulate the enthusiasm of enterprises to participate in industry-university integration.

4.1.2 Strengthen Overall Coordination

The government should coordinate the tourism industry resources and higher vocational education resources in the region, build an industry-university integration docking platform, promote the precise docking between schools, tourism enterprises and industry associations, and guide schools and enterprises to carry out in-depth cooperation. Establish an industry-university integration coordination organization to be responsible for overall planning and coordinated promotion of industry-university integration work, solve contradictions and problems in school-enterprise cooperation, and ensure the effective implementation of industry-university integration policies.

4.2 Deepen School Reform and Improve the Ability of Industry-University Integration

4.2.1 Optimize the Talent Training Mode

Schools should reconstruct the talent training mode according to the needs of the tourism industry and enterprise posts under the new development pattern, implement the "integration of posts, courses, competitions and certificates" education mode, and integrate enterprise post standards and vocational skill level certificate requirements into the whole process of talent training. Co-build industrial colleges and order classes with enterprises, carry out "modern apprenticeship system" training, and realize "enrollment is employment, class is on-the-job, and graduation is employment".

4.2.2 Improve the Curriculum System

Connect with the new formats, new technologies and new posts of the tourism industry, optimize the curriculum system, and add characteristic courses such as smart tourism, health tourism, tourism e-commerce and cross-cultural communication. Co-develop curriculum resources with enterprises, compile school-based textbooks and practical teaching guides, and integrate enterprise practical cases into curriculum teaching to improve the pertinence and practicality of the courses. Increase the proportion of practical courses, improve the practical teaching content system, and ensure that the teaching content is in line with the actual needs of the industry. At the same time, integrate the nationally certified professional skill level certificates such as Hotel Manager and Tour Guide Qualification Certificate with theoretical courses, and add pre-exam tutoring courses.

4.2.3 Strengthen the Construction of "Double-Qualified" Teachers' Team

Establish a "double-qualified" teacher training system of "on-campus training + enterprise practice + off-campus introduction", encourage on-campus teachers to take temporary posts in tourism enterprises, participate in enterprise project research and development, and improve practical ability. Introduce technical backbones and industry experts from tourism enterprises as part-time teachers to enrich the teachers' team. Establish a school-enterprise teacher exchange mechanism, carry out joint school-enterprise teaching and research, teaching training and other activities, and improve the overall quality of the teachers' team.

4.2.4 Promote the Construction of Training Bases

Co-build on-campus and off-campus training bases with enterprises, build digital and intelligent training facilities according to the standards of tourism enterprise posts, simulate relevant post scenarios, and provide students with a real practical environment. Strengthen the management of training bases, establish practical teaching management systems, and ensure the orderly development of practical teaching. Promote the sharing of training base resources, carry out staff training and technical services for tourism enterprises, and improve the utilization rate and social benefits of training bases.

4.3 Strengthen the Leading Position of Enterprises and Improve the Depth and Breadth of Cooperation

4.3.1 Change the Cooperation Concept

Tourism enterprises should change their ideological understanding, regard industry-university integration as an internal demand for their own development, take the initiative to participate in the collaborative development of industry-university integration, deeply participate in the whole process of talent training, and realize school-enterprise collaborative education from the formulation of talent training programs, curriculum development, practical teaching to student employment. Establish a cooperation concept of "symbiosis between school and enterprise, mutual benefit and win-win", increase investment in industry-university integration, and improve the depth and breadth of cooperation.

4.3.2 Deepen the Content of School-Enterprise Cooperation

Enterprises should carry out all-round and in-depth cooperation with schools. In addition to providing internships and training equipment, they should also participate in core links such as the formulation of talent training programs, curriculum development, teaching implementation and skill evaluation. Co-build research and development platforms with schools, carry out tourism product innovation, technological research and development and other work, and use the school's scientific research resources to solve enterprise technical problems. Accept students for internships and employment, provide students with career development guidance, and improve students' post adaptability and professional quality.

4.3.3 Improve the Internal Incentive Mechanism of Enterprises

Enterprises should establish an internal incentive mechanism to encourage enterprise technical backbones and managers to participate in industry-university integration work, and commend and reward employees who participate in school-enterprise cooperation, carry out teaching guidance and train students, so as to improve the enthusiasm of employees to participate in industry-university integration. At the same time, optimize the enterprise internship management, improve the internship treatment and working environment of intern students, protect the legitimate rights and interests of intern students, and attract more students to work in enterprises after graduation.

4.4 Give Play to the Role of Industry Associations and Strengthen the Bridge Function

4.4.1 Formulate Industry Standards

Industry associations should formulate tourism industry professional standards and talent training standards according to the transformation needs of the tourism industry under the new development pattern, and guide schools to optimize talent training programs and curriculum systems to ensure the precise docking between talent training and industry needs. Carry out industry skill evaluation, vocational skill competitions and other activities to improve the professional skills of students and teachers, and promote the connection between vocational skill level certificates and academic certificates.

4.4.2 Build a Docking Platform

Industry associations should play the role of a bridge and link, build a school-enterprise docking platform, organize schools and tourism enterprises to carry out cooperation negotiations, exchanges and discussions and other activities, and promote precise docking and in-depth cooperation between schools and enterprises. Timely feedback the latest industry development trends and talent demand information, provide reference for school talent training and enterprise talent recruitment, and solve the problem of information asymmetry in school-enterprise cooperation.

4.4.3 Standardize Cooperation Behavior

Industry associations should formulate industry-university integration cooperation norms, standardize school-enterprise cooperation behavior, coordinate and solve contradictions and problems in school-enterprise cooperation, and protect the legitimate rights and interests of all subjects. Strengthen the evaluation of the effectiveness of industry-university integration cooperation, promote the implementation of school-enterprise cooperation and achieve actual results, and improve the overall level of industry-university integration.

4.5 Improve the Evaluation and Supervision Mechanism and Strengthen Collaborative Guarantee

4.5.1 Construct a Multi-Evaluation System

Establish a multi-evaluation system with "four-party participation and multi-dimensional evaluation", clarify the evaluation content, evaluation standards and evaluation methods, and comprehensively evaluate the operation effect of the collaborative mechanism of industry-university integration, the quality of talent training and the effect of school-enterprise cooperation. The evaluation content should cover core indicators such as talent training quality, enterprise satisfaction, industrial service capacity, resource integration efficiency and policy implementation. The evaluation results should be used as an important basis for government policy support, school professional construction and enterprise evaluation and commendation.

4.5.2 Strengthen Supervision and Management

Establish a regular supervision mechanism. The government is responsible for supervising the implementation of industry-university integration policies and the operation of the collaborative mechanism, conducting regular special inspections on industry-university integration, and urging the rectification of school-enterprise cooperation projects that are a mere formality and have poor results. Industry associations are responsible for supervising school-enterprise cooperation behavior and standardizing the school-enterprise cooperation process. Schools and enterprises supervise each other, establish a school-enterprise cooperation integrity file, and ensure that the industry-university integration cooperation is implemented in place.

4.5.3 Strengthen Achievement Transformation

Establish an industry-university integration achievement transformation mechanism, promote the timely transformation of technical achievements and talent training achievements generated by school-enterprise cooperation into actual productivity, and improve the economic and social benefits of industry-university integration. Encourage schools and enterprises to jointly apply for scientific research projects and patents, carry out technology promotion and achievement transformation, and realize a virtuous cycle of "promoting education through industry and invigorating industry through education".

5. CONCLUSION AND PROSPECTS

5.1 Research Conclusions

Under the new development pattern, the digitalization, quality-oriented development, integration and internationalization transformation of the tourism industry put forward higher requirements for the collaborative development of industry-university integration in higher vocational tourism management specialty. At present, the collaborative mechanism of industry-university integration in higher vocational tourism management specialty has problems such as unclear rights and responsibilities of collaborative subjects, weak interest linkage, insufficient resource integration, lack of evaluation system and lagging teachers' team. The main causes include imperfect policy system, deviations in ideological cognition and disconnection between talent training and industrial demand. Constructing a multi-party collaborative mechanism of "government guidance, school leadership, enterprise main body and industry coordination", clarifying the rights and responsibilities of each subject, and establishing five core mechanisms of communication and coordination, interest sharing, resource integration, evaluation and supervision, and risk prevention and control can effectively solve various problems in industry-university integration and improve the collaborative efficiency of industry-university integration. Through optimizing paths such as strengthening government guidance, deepening school reform, strengthening the leading position of enterprises, giving play to the role of industry associations and improving the evaluation and supervision mechanism, we can promote the in-depth development of industry-university integration in higher vocational tourism management specialty, realize the precise docking between talent training and industrial needs, and provide talent support and intellectual guarantee for the high-quality development of the tourism industry under the new development pattern.

5.2 Research Prospects

This paper conducts a preliminary study on the collaborative mechanism and path of industry-university integration in higher vocational tourism management specialty under the new development pattern. Due to the limitations of the research scope and research methods, some research contents still need to be further deepened. In the future, follow-up research can be carried out from three aspects: first, carry out relevant research combined with the characteristics of the specific regional tourism industry and the actual situation of higher vocational tourism management specialty, refine the operation mode and optimization path of the industry-university integration collaborative mechanism, and enhance the practicality and pertinence of the research. Second, focus on the background of the digital transformation of the tourism industry, explore the construction and implementation of the digital industry-university integration collaborative mechanism, and promote the development of industry-university integration towards digitalization and intelligence. Third, strengthen international comparative research, learn from the advanced experience of industry-university integration in foreign vocational education, and optimize the industry-university integration collaborative mechanism of higher vocational tourism management specialty in combination with China's actual situation, so as to improve the internationalization level of industry-university integration. With the deepening of the new development pattern and the continuous upgrading of the tourism industry, the collaborative development of industry-university integration in higher vocational tourism management specialty will face new opportunities and challenges. It is necessary for the government, schools, enterprises and industry associations to work together to continuously innovate the collaborative mechanism and optimize the development path, so as to promote the high-quality development of industry-university integration.

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