RESEARCH ARTICLE

# The Application of Informatization Teaching Means in the Teaching of Tourism Specialties

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**Abstracts:** The advent of the information age not only profoundly affects people's lifestyles and consumption habits, but also puts forward brand-new requirements for the cultivation of tourism majors. As a comprehensive profession integrating culture, geography, management, and other fields of knowledge, tourism needs to adapt to the development trend of diversity and individualization in the information age. Therefore, the introduction of informatization teaching means has become an imperative initiative to meet the needs of tourism students and enhance their competitiveness in an increasingly competitive industry. This paper discusses the current situation of the development of tourism majors in the context of the informatization era and analyzes the urgency of introducing informatization teaching means, to comprehensively show how tourism majors can better adapt to the industry's needs and cultivate more innovative and practical professionals in the informatization era.

**Keywords:** informatization; teaching means; tourism; professional teaching

## Introduction

The global tourism industry is ushering in a golden period of vigorous development, and the popularization of new-generation information technology, such as smartphones, social media, cloud computing, etc., provides a broader expansion space for the tourism industry. Tourists can obtain all kinds of tourism information and real-time interactive socialization at any time during their journey, and tourism enterprises can also grasp the market demand more accurately through big data analysis. In this context, the training of tourism majors is no longer the traditional meaning of knowledge transfer, but more needs to focus on the student's practical ability and innovative thinking in the information technology environment.

## 1. Characteristics of Teaching Tourism Majors

### 1.1 Strong practical curriculum

Tourism majors are famous for their unique practical curriculum, which is designed to cultivate students' practical operation ability, comprehensive literacy, and the ability to solve practical problems in the tourism industry. The design of the practical curriculum includes various forms such as field trips, internships, and simulation experiences to ensure that students can gain an in-depth understanding of the operational mechanisms and business processes of the tourism industry. During the field trips, students have the opportunity to experience the actual operational environments of scenic spots, hotels, travel agencies, etc., to enhance their intuitive understanding of the industry and cultivate their practical skills and resilience (Zhou, 2022). The practical curriculum also focuses on cultivating students' teamwork spirit and practical problem-solving ability. Through simulated case analysis and actual project operation, students can coordinate with each other in group cooperation, give full play to their respective professional strengths, and solve the complex problems that may arise in the actual business, this kind of practical problem-oriented learning does not only help students to practically apply their theoretical

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knowledge, but also cultivates their abilities to quickly adapt and cope with problems in their future careers. This practical problem-oriented learning approach not only helps students to practically apply theoretical knowledge but also develops their ability to quickly adapt and cope with challenges in their future careers. Further, the practical curriculum emphasizes cooperation with enterprises and organizations in the tourism industry to enable students to connect with real business environments. Through the establishment of internship and training bases with enterprises in scenic spots, hotels, travel agencies, etc., students can enhance their professional skills, build up their professionalism, and learn about the latest industry developments in actual work scenarios. This in-depth cooperation with the actual industry not only expands students' practical experience but also provides them with broader opportunities for future employment.

## 1.2 Requirements of the industry for students

One of the teaching characteristics of tourism majors is to closely cater to the needs of the industry, thus requiring students to have professionalism and comprehensive ability in line with industry standards. The tourism industry, as a fast-growing and diversified field, has an increasingly diverse and specialized demand for professionals, and students need to have a deep cultural heritage and geographic knowledge to better understand and interpret the cultural, historical, and geographic characteristics of various tourist destinations, and to provide tourists with more comprehensive services (Xu & Li, 2022). The industry's requirements for students also include a deep understanding of the destination and the ability to grasp the tourism market, which means that students need to have strong market analysis skills to understand the tourism resources, characteristics, and market demand of different destinations, to make accurate industry choices and decisions for their future careers. Secondly, the industry puts forward higher requirements for communication, coordination, and teamwork ability. Students in tourism services may need to work closely with customers, tour guides, hotel management, and other aspects, so

students need to have good communication and coordination skills, and be able to work efficiently in a team to solve various problems in the actual work. In addition, the industry has put forward urgent requirements for students' innovative spirit and problem-solving ability. With the continuous development of the tourism industry, emerging tourism industry and service modes emerge one after another, which requires students to have innovative thinking and be able to flexibly respond to all kinds of problems and provide competitive solutions.

## 1.3 Diversified disciplinary knowledge structure

The diversified disciplinary knowledge structure of tourism majors stems from the comprehensive nature of the tourism industry itself, which covers geography, history, culture, management, marketing, and other fields, so students need to establish a diversified disciplinary knowledge structure in their professional learning. Geographic knowledge has an important position in tourism majors, and students need to have an in-depth understanding of the geographic features, climatic conditions, topography, and landforms of various tourist destinations to provide tourists with accurate destination information and travel advice. Meanwhile, geographic knowledge is also involved in tourism route planning, resource development, and protection, providing students with a deeper theoretical foundation. Historical and cultural knowledge is an important part of training tourism students. Understanding the historical and cultural background of a destination can better explain the cultural connotations of the attraction and provide tourists with a richer cultural experience, which involves the protection of cultural heritage, cultural communication strategies, and other aspects of the subject matter, to equip students with the ability to make in-depth interpretations of tourism destinations (Li, 2022). Management and market knowledge is also an indispensable part of tourism majors, students need to learn the management theory of tourism enterprises, operational strategies, market analysis, etc., to improve their management and operation level in the process of practice, to understand the market demand, to grasp the industry

development trend, it is an important link to train students to become the elite of tourism industry.

## 2. The Construction of Informatization Teaching for Tourism Majors

### 2.1 Application of online education platform

The application of online education platforms, as a part that can not be ignored, provides students with convenient and flexible learning paths and creates a practical and diversified teaching environment. For example, the online education platform "Mucous.com", Mucous.com is an online learning platform launched by Robin Li's "Baidu Education", which aims to provide free large-scale online courses. As a well-known online education platform for tourism majors, Mucous.com has been successfully applied to the construction of informatization teaching means, and the platform provides convenient and rich learning resources for tourism majors. Taking the course "Tourism Planning and Management" as an example, MUZU.com attracts experienced and professional lecturers in the tourism industry to provide students with high-quality online courses, which not only cover the core areas of tourism planning, management, and marketing but also integrate real cases and the latest industry news, so that students can obtain in class the knowledge closely related to practical work. knowledge that is closely related to practical work. Secondly, through the way of online learning, MUZU.com breaks the time and geographical limitations of the traditional classroom, and students can study at the time and place of their choice, making full use of the fragmented time to improve the learning efficiency, which is in line with the characteristics of the actual work in the tourism industry, i.e., the need to flexibly cope with the work demands at different times and places. In addition, Catechism.com focuses on practicability in its curriculum, combining theoretical knowledge with practical application through simulated cases, field trip videos, etc., which helps students better understand and apply what they have learned, and enhances their ability to operate in practice. Most

importantly, Muzuzhan.com provides students with real-time feedback and interactive communication opportunities in the learning process through online quizzes, discussion forums, etc. Students can deepen their understanding of knowledge by participating in discussions, completing assignments, etc. At the same time, teachers can find students' problems and provide help on time.

### 2.2 Application of mobile learning tools

Students majoring in tourism usually need to frequently learn about the latest tourism information, market trends, and industry development dynamics, while mobile learning tools provide them with a convenient way to obtain such information anytime and anywhere. Given the actual situation of tourism majors, mobile learning tools provide students with highly customized learning resources through specialized APP platforms, which cover all aspects of the tourism industry, including geographic knowledge, cultural interpretation, marketing, tourism planning, and other professional fields, and students can access these resources at any time according to their own needs, which improves the real-time and personalized nature of learning (Fu, 2022). Considering that tourism majors emphasize practical learning, the application of mobile learning tools plays an important role in the simulation of field trips, through the simulation function of virtual field trips, students can experience a variety of tourism scenarios on their mobile devices to enhance the ability of practical operation, and this kind of learning not only enables students to better understand the actual working environment, but also promotes their adaptability in the future work. In addition, the practical application of mobile learning tools in tourism majors strengthens the interaction between students and teachers. Through the functions of online discussion, question and answer, and instant feedback, students can interact with teachers and classmates at any time to solve their learning queries.

### 2.3 Data analysis and decision support system

The application of data analysis and decision support systems is a key part of cultivating students'

practical problem-solving ability and improving teaching quality. The tourism industry involves numerous variables and factors, and data analysis and decision support system provides educators with powerful tools to help them better understand students' learning status, conduct teaching quality assessment, and provide personalized tutoring and support. By collecting a large amount of data generated during students' learning process, such as course grades, study time, and homework performance, educators can conduct in-depth analyses to understand students' subject strengths and weaknesses, providing powerful support for personalized tutoring (Wang, 2022). Meanwhile, by combining the results of data analysis, the decision support system can help educators make more scientific teaching decisions. For example, based on students' subject levels and learning preferences, the system can recommend personalized learning paths or resources to improve student's learning motivation and effectiveness, and the decision support system also provides education administrators with more comprehensive indicators for teaching quality assessment, to better monitor and improve the teaching process. In addition, data analysis and decision support systems in the actual teaching of tourism majors can also be used for market demand analysis and employment trend prediction, through the collection and analysis of industry employment data as well as student employment, the school can better adjust the professional settings and improve the competitiveness of students' employment, to better meet the industry's demand for professionals.

## 3. Specific Application of Informatization Teaching Means in Tourism Majors

### 3.1 Simulation of virtual field trip

The simulation of virtual field trips is a powerful tool that provides students with a more realistic learning experience by simulating real tourism scenes. For example, an online education platform has successfully used virtual field trip simulation in tourism majors, which effectively promotes the cultivation of students' practical ability and professionalism. The online education platform uses virtual reality (VR) technology to build a series of simulated tourism scenes, including scenic spots, hotels, travel agencies, and other links. Through the simulation of specific scenes, students can experience the feeling of field trips in the virtual environment, perceive the operation and management of various links, and have the ability to solve practical problems. In the virtual scenic area, students can simulate the work of tour guides, learn the skills of interacting with tourists, explain the history and culture of attractions, and improve the ability of communication and coordination. The simulation of virtual field trips not only enables students to gain practical experience in a simulated environment but also helps them better understand and adapt to the workflow of the tourism industry. In this case, students can immerse themselves in the atmosphere of the scenic area through the VR equipment, examine the process of tourist service, and propose solutions to possible problems. This kind of simulation teaching makes students more equipped with practical operation ability and helps to shorten the transition period from school to the workplace (Zhou & Guo, 2021).

### 3.2 Interactive subject knowledge test

Interactive subject knowledge testing is an effective teaching tool that promotes student participation, deepens understanding of knowledge points, and improves learning by providing real-time feedback and personalized testing (Huang, 2021). For example, an online education platform for tourism majors introduced an interactive subject knowledge test to provide students with a more flexible and effective learning experience. On this platform, regular interactive knowledge tests are set up for different specialized courses, covering a wide range of fields such as geography, culture, and marketing. Through online tests, students can comprehensively test their mastery of relevant knowledge without being restricted by time and place, and this design meets the requirements of flexibility and practicality for students in tourism majors. The advantage of the interactive subject knowledge test lies in its real-time

feedback mechanism. Immediately after students complete the test, the system will provide detailed analysis and assessment reports, including data on the correct rate, answer time, error-prone topics, etc. This enables students to immediately understand their subject strengths and weaknesses, make targeted adjustments to their study plans, and improve their learning efficiency. In addition, the platform also provides personalized subject advice based on students' test results. If students score low in a certain area, the system will recommend relevant online courses or learning resources to help students strengthen their weak points, and this personalized tutoring program helps to improve students' professionalism in a specific area, and better adapt to the diversified development needs of the tourism industry.

### 3.3 Integration and presentation of multimedia materials

In the informatization teaching of tourism majors, the integration and presentation of multimedia materials is a key teaching tool, that enriches the teaching content and improves the learning experience of students by integrating multimedia forms of materials such as images, videos, and audio (Chen, 2021). For example, the teacher of a university specializing in tourism has integrated a large number of tourism-related multimedia materials through an online teaching platform, including pictures of tourist destinations, cultural videos, and market research reports. By integrating these multimedia materials, the teacher can show the customs, cultural characteristics, and tourism resources of the destination more vividly, so that students can understand the subject knowledge more intuitively and enhance their understanding of the actual situation. In the classroom, teachers use multimedia materials to carry out case studies and fieldwork simulations. By showing tourism promotion films and real-life pictures of the destination, teachers can simulate the marketing and promotion aspects of the real tourism industry, and guide students to analyze the effectiveness of various marketing tools. At the same time, by showing short

videos of local customs and traditions, teachers can enable students to understand the culture of the destination more comprehensively and cultivate their cultural interpretation skills. The integration of multimedia materials can also expand students' disciplinary horizons. By introducing professional tourism photography, industry reports, and other materials, teachers can stimulate students' interest in the tourism industry and improve their knowledge of their future careers, and this kind of interdisciplinary multimedia integration helps to cultivate students' more comprehensive professionalism.

### Summarize

To summarize, the development of tourism majors has been revitalized in the transformation of teaching methods, and through the introduction of multimedia materials, virtual field trips, interactive tests, and other information technology teaching methods, teachers provide students with a richer and more flexible learning experience, which not only enables students to better understand and apply their subject knowledge but also cultivates their practical ability and innovative thinking (Zhou, 2022). The continuous evolution of information technology has injected new impetus into the cultivation of tourism professionals, making them more adaptable to the changes and diversified needs of the industry. Information technology teaching methods will continue to play a leading role in tourism majors, contributing to more possibilities for the cultivation of tourism professionals with more comprehensive qualities.

### Conflict of Interest

The author declares that he has no conflicts of interest to this work.

### References

Zhou, C. (2022). Analysis of teaching innovation of tourism specialties based on practical talent cultivation. *Tourism and Photography*, *2022*(15), 131–133.

Xu, J., & Li, Z. (2022). Study on the change of tourism talent demand and response strategy of vocational education under the background of "internet+tourism." *Tianjin Economy*, *2022*(09), 32–38.

Li, J. (2022). Digital construction strategy of tourism teaching classroom under informationization. *Journal of Jilin Radio and Television University*, *2022*(03), 59–61.

Fu, L.(2022). Analysis of the teaching reform of tourism management courses in the information age. *Contemporary Tourism*, *20*(10), 82–84.

Wang, S.(2022). The construction path of secondary tourism flipped classroom under the background of "internet+." *Contemporary Tourism*, *20*(10), 85–87.

Zhou, N., & Guo, S. (2021). The application of informatization teaching in the teaching of tourism majors. *Green Technology*, *23*(23), 268–271.

Huang, L. (2021). Analysis of talent cultivation of tourism professionals in the era of "internet + big data." *Tourism Overview*, *2021*(22), 54–56.

Chen, X. (2021). Exploration of teaching methods of secondary tourism management under the background of education informatization. *Guangxi Education*, *2021*(38), 60–61.