Reconstruction of Teaching Mode for Tourism Management Major in Universities Driven by AI: Curriculum System, Teaching Methods, and Assessment Mechanism

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ABSTRACT
With the rapid development of AI (Artificial intelligence) technology, it has a far-reaching impact on the teaching of tourism management. This article focuses on the reconstruction of the teaching mode of tourism management major driven by AI, aiming at improving the teaching quality and cultivating professionals to meet the needs of the industry. Based on the methods of literature study, case analysis and data comparison, this article takes the course of "Tourism Planning and Development" as a specific case, and deeply analyzes the differences between the teaching mode of AI-driven and traditional tourism management specialty in curriculum system, teaching methods and assessment mechanism. The traditional teaching mode is insufficient in content updating, interactivity and comprehensive assessment, while the AI-driven teaching mode shows significant advantages. Based on this, this article proposes to reconstruct the curriculum system, update the curriculum content, and strengthen interdisciplinary integration and practice courses; Innovating teaching methods to realize personalized, interactive and situational simulation teaching; improve the assessment mechanism, construct diversified indicators, strengthen the process assessment and realize the diversification of assessment subjects.

Keywords: *AI technology, Tourism management major, Teaching mode, Curriculum system, Assessment mechanism.*

1. INTRODUCTION

With the rapid development of science and technology, AI technology is infiltrating into various fields in an unprecedented situation, and the field of tertiary education is also deeply affected by it. Tourism management major in universities is an important position to train professionals in tourism industry, and the reform of its teaching mode is imminent [1]. In the long-term development process, the traditional teaching mode of tourism management specialty has formed a relatively fixed system [2]. In terms of curriculum system, the content update is relatively slow, and it is difficult to keep up with the ever-changing changes in the tourism industry. For example, the emerging business models such as smart tourism and customized tourism in the tourism market have not been fully reflected in the curriculum in time [3]. In terms of teaching methods, teachers mainly teach in class, students passively accept knowledge, and lack sufficient interaction and practical operation, which leads to students' lack of ability to solve practical problems [4]. However, the assessment mechanism relies too much on the test results, which cannot comprehensively and objectively assess students' comprehensive quality and practical skills.

With the rise of AI technology, its powerful functions such as data analysis, simulation and personalized push have brought new opportunities for the reconstruction of teaching mode of tourism management specialty in universities [5]. Through AI technology, we can collect and analyze massive data information in the tourism industry in real time, so that the curriculum system can be updated quickly and accurately meet the needs of the industry [6]. In terms of teaching methods, with the

help of AI's virtual reality, intelligent tutoring and other functions, personalized teaching and interactive learning can be realized, which greatly enhances students' learning enthusiasm and participation [7]. In terms of assessment mechanism, AI can record students' learning process data in an all-round way, build a diversified and procedural assessment system, and measure students' comprehensive ability more accurately.

At present, some universities have tried to introduce AI technology into the teaching of tourism management, but the whole is still in the exploration stage. At present, there is still a lack of in-depth and comprehensive research on how to systematically use AI to reconstruct teaching mode, including curriculum system, teaching methods and assessment mechanism [8]. The purpose of this study is to compare and analyze the AI-driven and traditional teaching modes of tourism management major, take the course of "Tourism Planning and Development" as a specific case, and combine the actual data and cases to deeply explore the application and optimization path of AI in all dimensions of tourism management major teaching.

2. AI-DRIVEN AND TRADITIONAL TEACHING MODES OF TOURISM MANAGEMENT SPECIALTY

In order to deeply explore the differences between AI-driven and traditional teaching modes of tourism management major, the relevant data of tourism management major in several universities were collected and sorted out. Through comparative analysis, this article studies from several dimensions, such as curriculum system, teaching methods and assessment mechanism. The specific contents are shown in the following Table 1:

Table 1. Comparison between AI-Driven and Traditional Teaching Modes in Tourism Management

Comparison Dimension	Traditional Teaching Mode	AI-Driven Teaching Mode
Curriculum System	Course content updates every 3-5 years, with shallow interdisciplinary integration; practical courses account for about 30%, with relatively simple scenarios	Real-time course content updates, deep interdisciplinary integration across multiple fields; practical courses increase to 50%, with diverse virtual scenarios constructed via AI
Teaching Methods	Teacher-centered lectures, with classroom interaction accounting for about 20%; fixed teaching resources	Interactive and personalized teaching, with classroom interaction reaching 60%; rich and diverse personalized resources pushed via AI
Assessment Mechanism	Emphasis on final exams, with exam scores accounting for 70%; mainly teacher-based assessment	A diversified assessment system is established, with final exam scores reduced to 40%; multiple assessment indicators are added, and assessment subjects are diversified; process-based assessment is realized via AI
Technology Application	Rare use of advanced technologies to assist teaching	Extensive application of AI technologies in all teaching aspects, such as intelligent tutoring and virtual simulations
Student Engagement	Students mostly passively receive knowledge, with low active participation	High active participation among students, who actively engage in interactive and practical learning

As can be seen from Table 1, the traditional teaching mode has many shortcomings in the face of the fast-developing tourism industry, while the AI-driven teaching mode shows obvious advantages, which can better meet the needs of the industry and improve the teaching quality.

3. RECONSTRUCTION OF THE CURRICULUM SYSTEM OF TOURISM MANAGEMENT SPECIALTY DRIVEN BY AI

With the empowerment of AI technology, the reconstruction of the curriculum system of tourism management major has become a key measure to adapt to the development of the industry and improve the quality of personnel training [9]. The reconstructed curriculum system should closely focus on the needs of the industry, and realize the timely updating of curriculum content, the deep integration of interdisciplinary subjects and the

strengthening of practical courses. The specific contents are shown in Table 2 below.

Table 2. Comparison of Curriculum System Reconstruction in Tourism Management under AI Drive

Course Category	Traditional Curriculum System	Reconstructed Curriculum System under AI Drive
Basic Courses	Cover conventional management and economics, with weak connections to the tourism industry	Incorporate basic AI knowledge, such as "AI and the Basics of the Tourism Industry," to strengthen industry relevance
Professional Core Courses	Primarily traditional professional courses, with slow knowledge updates and limited explanations of emerging business formats and technologies	Optimize traditional courses, such as adding AI-related content to "Tourism Planning and Development"; introduce new courses like "AI and Tourism Product Innovation"
Interdisciplinary Courses	Only a small number of crossovers with geography and history, with limited integration	Construct a cluster of multidisciplinary integrated courses, such as "Tourism Big Data Analysis and Application" and "Tourism Psychology and AI Personalized Services"
Practical Courses	Simple forms, mainly field trips and on-campus simulations, with large gaps from real environments	Increase the proportion of practical courses, construct highly simulated virtual scenarios via AI, and add a combination of corporate internships and AI-assisted practical sessions
Course Linkage	Loose connections between courses, lacking systematicness	Use AI applications as clues to tightly link courses and form an organic whole

Through the reconstruction of the above curriculum system, students majoring in tourism management can get in touch with a more advanced and comprehensive knowledge system, not only master solid professional core knowledge, but also have interdisciplinary thinking ability and strong practical skills. AI technology runs through all aspects of the curriculum system, building a bridge between theoretical knowledge and the actual needs of the industry for students, so that the trained talents can better meet the requirements of the era of rapid development of the tourism industry and can quickly adapt to and lead the industry in the future career.

4. INNOVATION OF TEACHING METHODS OF TOURISM MANAGEMENT SPECIALTY DRIVEN BY AI

With the deep application of AI technology in the field of education, the teaching methods of tourism management specialty are undergoing unprecedented changes. With its powerful data analysis and intelligent interaction capabilities, AI provides strong support for the innovation of teaching methods. See Figure 1 below for specific innovation contents.

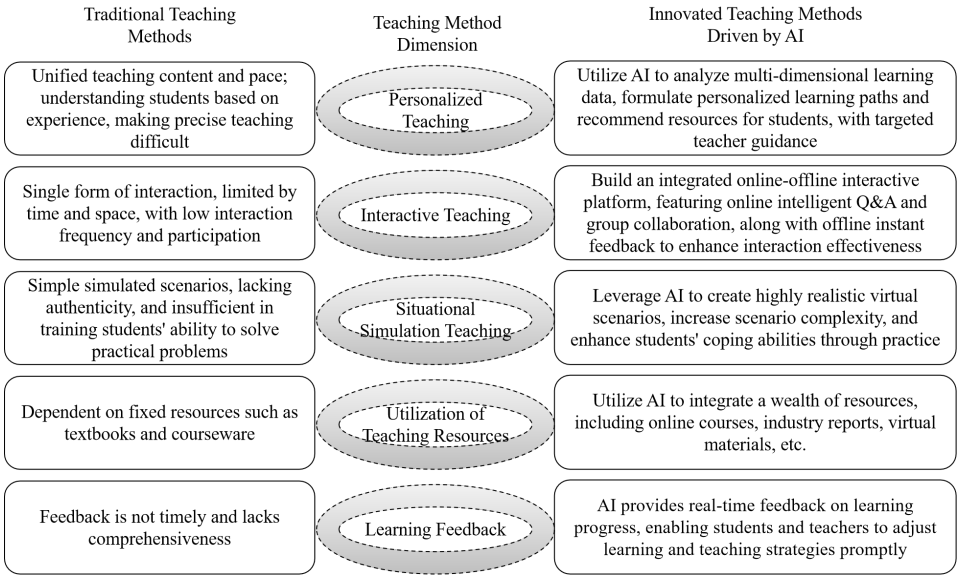


Figure 1 Comparison of teaching methods innovation of tourism management specialty driven by AI.

In terms of personalized teaching, AI has broken the traditional "one size fits all" mode of teaching, truly teaching students in accordance with their aptitude and meeting the learning needs of each student. Through accurate data analysis, students can make up for the shortcomings of knowledge at their own pace and improve the learning effect.

The innovation of interactive teaching makes the communication between educators and learners more convenient and in-depth. The interactive platform that breaks through the limitation of time and space allows students to participate in discussions at any time, share opinions and cultivate teamwork and communication skills. The immediate feedback mechanism also enables teachers to adjust teaching strategies in time and improve teaching quality.

Situational simulation teaching makes students feel as if they are in a real tourism industry environment with the help of realistic scenes created by AI. In the face of complex and changeable virtual situations, students need to use what they have learned to solve practical problems. This immersive experience has greatly exercised students' practical operation ability and adaptability.

The innovation of teaching methods of tourism management specialty driven by AI provides an effective way to cultivate high-quality talents to meet the needs of modern tourism industry. In application, AI promotes students' learning enthusiasm, participation and practical problem-solving ability through the comprehensive upgrade of personalized, interactive and situational simulation teaching, so that students can better adapt to the future development of tourism industry.

5. PERFECTION OF THE ASSESSMENT MECHANISM OF TOURISM MANAGEMENT SPECIALTY DRIVEN BY AI

In the teaching of tourism management specialty, the assessment mechanism plays a key role in measuring students' learning effect and feeding back the teaching quality. At present, the limitations of the traditional assessment mechanism are increasingly prominent and need to be improved. Table 3 compares the traditional and AI-driven assessment mechanisms, and elaborates its perfection in detail.

Table 3. Comparison of Assessment Mechanisms in Tourism Management under AI Drive

Assessment Dimension	Traditional Assessment Mechanism	Assessment Mechanism under AI Drive
Assessment Indicators	Emphasis on knowledge memorization, with theoretical exam scores accounting for 70% and low assessment of other abilities	Reduce the proportion of knowledge assessment to 40%, and add multi-dimensional indicators such as practical ability (30%), innovative thinking (20%), and teamwork (10%)
Assessment Methods	Mainly summative assessment with single means, mostly written exams	Strengthen process-based assessment combined with summative assessment, with diversified assessment means including online practical assessments and virtual project defenses
Assessment Subjects	Single assessment subject (teachers), with few opportunities for student self-assessment and peer assessment	Teacher assessment accounts for 50%, student self-assessment accounts for 20%, and student peer assessment accounts for 30%, with diversified assessment subjects
Assessment Data Processing	Manual processing of assessment data, with low efficiency and a high risk of errors	Automatically collect and analyze assessment data via AI, with high efficiency and accuracy
Assessment Feedback	Delayed feedback with general content	Real-time and detailed feedback, enabling students to clarify improvement directions and teachers to adjust teaching accordingly

In terms of assessment indicators, the assessment mechanism driven by AI has got rid of the traditional model of focusing solely on knowledge memory and paid more attention to the development of students' comprehensive ability. Diversified indicators can comprehensively measure the performance of students in the learning process of tourism management major, making the assessment results more scientific and convincing.

In terms of assessment methods, the strengthening of process assessment enables teachers to keep abreast of students' learning progress, find problems and adjust teaching strategies. Diversified assessment methods adapt to the characteristics of paying equal attention to practice and theory in tourism management specialty, and assess students' ability more accurately. The diversification of assessment subjects makes the assessment results

more objective and fair. Students' participation in self-assessment and mutual assessment can not only enhance their self-awareness and critical thinking, but also cultivate their teamwork and communication skills. Teachers' scores can better reflect students' real level after comprehensive assessment from all sides.

The improvement of the assessment mechanism of tourism management specialty driven by AI is an important measure to meet the demand of tourism industry for all-round development of talents in the new era. Through scientific and reasonable assessment, students are encouraged to improve their own quality in an all-round way and cultivate more competitive professionals for the tourism industry.

6. CONCLUSION

Based on the in-depth study of the teaching mode of tourism management specialty in universities driven by AI, this article comprehensively discusses the reconstruction path of curriculum system, teaching methods and assessment mechanism. In terms of curriculum system, real-time updating of curriculum content, deep interdisciplinary integration and strengthening of practical courses are realized with the help of AI, which makes students' knowledge closely connected with the forefront of the industry and effectively improves students' interdisciplinary literacy and practical operation ability. In terms of teaching methods, AI-driven personalized, interactive and situational simulation teaching fully meets the individual differences of students, greatly improves students' participation and enthusiasm, and significantly enhances students' ability to solve practical problems. The improvement of the assessment mechanism is reflected in the diversification index, process assessment and subject diversification. This comprehensive and scientific assessment method can reflect students' comprehensive level more accurately and provide strong support for improving teaching quality.

The research shows that AI technology has brought unprecedented opportunities for the optimization of the teaching mode of tourism management specialty, and can effectively make up for many shortcomings of the traditional teaching mode. However, at present, the application of AI in the teaching of tourism management specialty is still in the exploratory stage, and it may face challenges such as technical cost and teachers' adaptability in the actual promotion process. In the future, we should further strengthen the research on the application of AI technology in teaching, explore more effective implementation strategies and improve teachers' ability to use AI technology, so as to promote the continuous improvement of teaching quality of tourism management specialty in universities and cultivate more high-quality professionals who can adapt to the rapid development of tourism industry.

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