

Research on the Reform of the “Ecotourism” Course Based on the OBE Concept in the Context of Intelligent Education

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Abstract: Under the background of intelligent education, the traditional teaching model of “ecotourism” has become increasingly problematic and is no longer able to meet the needs of talent cultivation. Based on the OBE (Outcomes-Based Education) concept, this study explores the necessity, pathways, and methods for the reform of the “ecotourism” course. By reconstructing the teaching objective system oriented towards student learning outcomes, optimizing teaching content and methods, and innovating the evaluation mechanism; and by integrating teaching resources with intelligent education technologies to build a blended online-offline teaching model, the course can better meet industry needs and student development, thereby cultivating high-quality talents that can adapt to the new era of ecotourism development.

Keywords: Intelligent education; OBE concept; “Ecotourism” course

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1. Introduction

With the development of information technology, intelligent education, as an emerging model, is driving the transformation of traditional education. The “14th Five-Year National Information Plan” has proposed that education and teaching should integrate intelligent and information technologies ^[1,2]. Intelligent education is student-centered. Teachers create intelligent teaching models through information technology means to form a personalized, intelligent, and experiential learning environment, which greatly enriches teaching methods and learning resources. However, this requires students to have the ability of lifelong learning. The OBE (Outcome-Based Education) concept, which is also student-centered and outcome-oriented. It emphasizes starting from the needs of students and determining what teachers “teach” through what students “learn” to enable students to master knowledge and skills ^[3,4]. Therefore, the OBE concept can promote the reform and improvement of intelligent teaching models ^[5].

“Ecotourism” is one of the core courses in the tourism management major of universities. However, the

traditional teaching model suffers from problems, such as the disconnection between theory and practice, the misalignment between content and industry needs, and a singular evaluation system, which makes it difficult to meet the talent cultivation needs of the information age ^[6,7]. Intelligent education, with the help of technologies, such as artificial intelligence and big data, can achieve precise teaching and personalized learning, providing an innovative path for course reform ^[8]. The OBE concept, which is oriented towards student learning outcomes, helps to clarify teaching objectives, improve teaching methods, and perfect the evaluation system ^[9]. The combination of the two provides a theoretical framework and practical approach for the reform of the “Ecotourism” course.

Taking “ecotourism” as an example, this paper combines intelligent education with the OBE concept to reform course teaching. By optimizing teaching content, enriching teaching methods, and innovating the evaluation system, the traditional model that “emphasizes theory but neglects practice” is changed. A teaching model centered on student development is constructed, thereby improving the teaching quality of the “ecotourism” course.

2. Current status of “ecotourism” course teaching

Ecotourism is an emerging course with strong comprehensiveness and practicality, involving multiple disciplines, such as ecology, tourism studies, and geography ^[7,8]. It is characterized by its integrative, practical, and innovative nature. With the advancement of ecological civilization construction, especially the impetus of policies like “National Parks” and the “Two Mountains Theory,” the content and practice of this course are continuously being updated. The teaching content and focus need to be adjusted in line with the times so that students can grasp the current issues in the ecotourism industry and their solutions. However, there are still some pressing problems that need to be solved in actual teaching.

2.1. Relatively outdated teaching content

The content of “ecotourism” textbooks is updated lagging behind. Teachers mostly continue to use old textbooks, presentations, and data, which led the students’ understanding of ecotourism stuck in the past. However, the field of ecotourism is constantly evolving, with new content and practical cases emerging frequently. This results in a significant gap between what students learn and what is actually applied. For example, current textbooks have not supplemented content related to the construction of national parks in China.

2.2. Outdated teaching methods, concepts and weak practical components

The teaching of the “Ecotourism” course often relies on traditional lecture methods, with teachers as the dominant force, neglecting the students’ principal status. Moreover, it places excessive emphasis on basic theory while undervaluing the cultivation of practical skills. As a result, students’ enthusiasm is low, classroom interactivity is poor, and their interest and initiative in learning are hard to arouse. Additionally, many universities lack sufficient practical teaching resources and partnerships with ecotourism companies for internship bases, limiting students’ practical opportunities and causing a disconnect between theory and practice.

2.3. Singular teaching evaluation method

The assessment of the “ecotourism” course mainly relies on the final theoretical examination, with a singular set of evaluation criteria. Taking our university as an example, the course assessment is based on attendance and the final exam score (accounting for 80%). Students can achieve good grades by rote memorization, but they tend to forget the content quickly after the exam, as they have not deeply understood the knowledge. This one-sided evaluation method fails to comprehensively reflect students’ learning outcomes and capability development, and

is not conducive to objectively and fairly assessing students

3. The necessity of reforming the “ecotourism” course in the context of intelligent education

With the advancement of information technology, intelligent education has become a development trend in modern education ^[10,11]. Intelligent education integrates technologies such as artificial intelligence, big data, and cloud computing which provide a wealth of teaching methods and learning resources for education, and constructing an innovative educational model ^[12,13]. In this context, the reform of the “ecotourism” curriculum has significant practical significance and necessity.

Ecotourism is the practice of the sustainable development concept in the tourism field. With the impetus of policies such as China’s “National Park System” and the “Two Mountains Theory,” the content and practical models of the “ecotourism” curriculum have been continuously evolving. However, traditional course content lags behind industry development and fails to meet the needs of students for cutting-edge knowledge and high-quality talent cultivation. In contrast, intelligent education offers abundant resources and diverse methods for curriculum reform. Teachers can upload short videos and practical case studies to intelligent platforms for students’ self-directed learning. Meanwhile, by leveraging virtual simulation technology and project-based practical teaching methods, a realistic learning environment can be created for students to facilitate knowledge acquisition and application. Therefore, intelligent education provides technological support and innovative ideas for the reform of the “ecotourism” curriculum. By optimizing the teaching process, it can better meet the needs of high-quality talent cultivation in the ecotourism industry.

4. Reform ideas for “ecotourism” course teaching based on the OBE concept

The OBE concept, which is student-centered and outcome-oriented, has become an effective approach to enhancing teaching effectiveness and talent-cultivation quality by designing the teaching process in reverse and innovating teaching methods through the use of modern technological means ^[14]. Integrating the OBE concept, into the teaching of “ecotourism” and guiding students’ learning process is the key to promoting curriculum reform. This paper takes students’ graduation requirements and professional practice as the starting point, designs the course system in reverse, optimizes the course syllabus and objectives, adjusts the teaching content and models, and improves the diversified evaluation system to facilitate students’ capability enhancement and goal achievement (**Figure 1**), thereby constructing an intelligent teaching model for the “ecotourism” course.

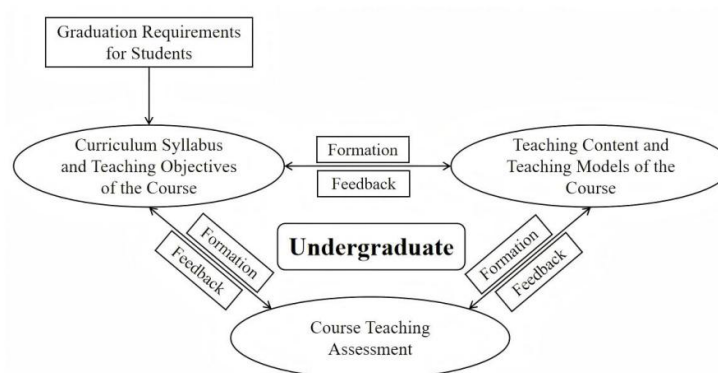


Figure 1. Overall plan for the teaching reform of the ecotourism course.

4.1. Outcome-oriented, revision of syllabus and teaching objectives

Under the OBE concept, in combination with the needs of the nation, industry and society, and in accordance with the requirements for student development and professional talent cultivation, the syllabus for the “ecotourism” course has been revised to clarify the course objectives and carry out teaching activities. The revision includes the following aspects: Firstly, in terms of learning objectives, emphasis is placed on the cultivation of students’ practical abilities, with the integration of ideological and political education elements to achieve the unity of knowledge transmission and value guidance. Secondly, regarding the allocation of class hours, the combination of theory and practice is optimized, and the class hours for different chapters are adjusted. Online resources are provided through intelligent teaching platforms, and interactive teaching methods such as group discussions and case analyses are adopted to enhance teaching interaction and increase student participation. Thirdly, cooperation with local ecological tourist attractions is established to organize student field investigations and research, thereby applying the knowledge learned to practice. Finally, a diversified and process-oriented assessment system is constructed. Elements such as online learning, classroom interaction, group presentations, and assignment completion are included in the process-based assessment, while the weight of the final exam is reduced. This approach is designed to motivate students’ initiative in practical learning and to promote the improvement of their overall quality and practical abilities.

4.2. Student-centered, optimization of course resources and innovation of teaching methods

The content of the “ecotourism” course is closely linked to social development. In order to enhance the teaching effectiveness, it is necessary to systematically integrate and optimize the teaching content based on the OBE concept. Firstly, be bold in innovation and expand teaching resources. In addition to the fixed textbooks, it needs to deconstruct and reconstruct the teaching content, design the knowledge points meticulously, highlight case-based teaching in combination with the current state of social and economic development, and closely connect the teaching content with the development of the discipline and social needs. Secondly, delve into case studies to enrich the teaching content. Update the teaching content according to the development needs of ecotourism, and introduce new theories and local cases such as “China’s National Park Construction” and “The Two Mountains Theory” to stimulate students’ interest. Finally, center on students and innovate teaching methods. Adopt a blended online/offline teaching model, use intelligent education platforms to flexibly arrange learning time and content, monitor students’ learning progress and effectiveness in real-time, and precisely adjust the offline teaching segments. Additionally, employing teaching strategies such as the flipped classroom, seminar-style teaching, and case-based instruction, this study explore interactive methods between teachers and students to enhance the classroom’s interest and appeal, and gradually build an efficient “ecotourism” teaching system.

4.3. Using diversified assessment as a means to improve the teaching evaluation system

Under the OBE concept, course evaluation needs to leverage the leading role of teachers and the principal role of students, establishing a diversified evaluation system that includes teacher assessment, peer assessment among students, and self-assessment by students. A combination of process-oriented evaluation and final examination is adopted to strengthen process management and reduce the weight of the final exam. Process-oriented evaluation covers pre-class online learning, attendance, classroom performance, after-class assignments, and practical reports, with clear evaluation criteria. Meanwhile, students are encouraged to conduct self-assessment to enhance their principal awareness and self-reflection abilities, promoting fairness, justice, and objectivity in evaluation. Compared with a single method evaluation, this system can comprehensively reflect

students' learning development and knowledge acquisition, which is conducive to timely feedback on teaching design and process, and helps promote students' learning and improve teaching quality.

5. Conclusion

Under the background of intelligent education, reforming the “ecotourism” course based on the OBE concept is an inevitable choice to meet the educational development needs of the new era and to cultivate high-quality ecotourism talents. Integrating intelligent education and the OBE educational concept into the revision of the course syllabus and the setting of teaching objectives, reconstructing online and offline teaching resources, innovating teaching methods, and perfecting the evaluation mechanism can effectively enhance students' practical abilities and innovative thinking, cultivate their comprehensive quality, and train more outstanding professional talents for the development of China's ecotourism industry. However, curriculum reform is a long term and dynamic process that requires continuous exploration and improvement in practice to meet the ever-changing educational and social development needs.

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